



BUREAU OF FIRE PROTECTION

VOLUME 2

# Fire Safety *for* Teenagers





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Standardized Public Fire Education Manual



BUREAU OF FIRE PROTECTION

**Volume 2: Fire Safety for Teenagers**  
**Standardized Public Fire Education Manual**

The BFP Standardized Public Fire Education Manual will serve as a reference guideline in conducting fire safety education lectures and seminars in the community.

**Module 3: Fire Safety Seminars for Secondary School Students**  
This module will include areas and development focuses in general Fire Education and general Fire Prevention subjects that a junior secondary learner can comprehend.

**Module 4: The Fire Square Challenge**  
This Fire safety module will provide a set of games and interactive activities for high school students that can be performed during scouting activities and other school events were the BFP is invited.

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**Standardized  
Public Fire  
Education  
Manual**

# Preface

## Volume Overview

Discussion of fire safety measures for teenagers is especially challenging considering that for many Gen Z's, these kinds of topics are boring and unappealing. The importance of imparting fire safety consciousness to this age group, however, cannot be understated for this age group composes 24% to 28% of the total population, a reasonable aliquot of the targeted audience for the widest dissemination of fire safety awareness. In addition, Psychologists also agree that this age group is prone to emotional suggestions, with an egocentric perspective towards the world, making it truly challenging to impart selfless consciousness. Yet, with persistence, the values carried out throughout this awareness campaign will undeniably leave a lasting impact. Thus, the challenge will be the strategic approach that will engage the teenagers embodied in the topics that has been carefully laid out accordingly with their respective methods of delivery.

Teenagers, likewise congeal into each other out of common interests, associates themselves into youth groups, fraternities, and "barkadahan" simply out of the need to bond. This is a potential market for the BFP in the effective delivery of the public fire education, these groups can be tapped through the interactive activities specially designed to establish a connection with fire safety as the primary catalyst.

Fire Safety subjects are naturally technical because of the scientific nature of fire, its causes, growth, and extinguishment. Hence, in this module, due diligence in the selection of only the basic subjects necessary to be learned by teenagers was strictly observed. The method of delivery is imperatively with the use of the simplified terminologies, with visual examples to elaborately explain the context of the subjects.

Simple demonstrations are also introduced to provide for an interactive learning experience for some of the topics. This way, it is with the highest hope that the audience will be kept interested and engaged all throughout the session.

## **Volume Objective**

In this volume, the objectives are the following:

1. Describe and discuss the basic concepts of fire, its causes and methods of extinguishment using common household materials, and the fire extinguisher.
2. Introduce the concept of fire safety to teenagers in an interesting and age-relevant presentation.
3. Encourage teenagers to take an active role in the promotion of fire safety awareness in their homes, community, and schools through simple acts and initiatives.
4. Promote fire safety consciousness through interactive fire safety games and activities targeting their natural drive for bonding and adventure.

## **Audience and Specific Use**

This module targets the conduct of fire safety awareness seminars to teenage groups such as:

1. Junior and Senior High School Students
2. Sangguniang Kabataan
3. Youth Organizations (Religious or Civic)
4. And other similar age-bracket audience

# Acknowledgment

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**Volume 2: Fire Safety for Teenagers  
Standardized Public Fire Education Manual**

**Module 3: Fire Safety Seminars for Secondary School Students  
Module 4: The Fire Square Challenge**

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## **MODULE 3**

# **Fire Safety Seminars for Teenagers**



**SPFE** Standardized  
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**MODULE 3 OUTLINE**

# Fire Safety Seminars for Teenagers

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## Scope

This module addresses the need for a standardized lecture material for teenage groups normally between the ages of 13 to 18. Commonly, lectures and seminars concerning this age group happen within the confines of schools during scheduled school events and activities. However, by expanding the coverage to all other groups within the same age bracket, the delivery of fire education likewise reaches out to religious or civic youth groups, Sanguniang Kabataan and other organization or forums.

This module includes eight (8) subjects that ideally should all be discussed in the arrangement listed in this module. However, the subjects are also designed that individually, can be independently delivered or in a cluster of aligning subjects depending on the schedule secured by the lecturer or set by the requesting entity. This can be noticed through subjects' maximum delivery time of 25 minutes to 45 minutes. It will be the discretion of the lecturer which subject to deliver given the time provided by the organizers.

The module provided thorough article type discussions accompanied with facilitator's notes to make the delivery of the subjects easier on the part of the lecturer. The use of words should be simple and vernacular and should incorporate visually appealing presentation. The lecture can incorporate simple drills and demonstrations to allow the audience a first-hand experience to fire safety.

## **Delivery Methodology**

Interactive Lecture and Controlled Demonstrations

## **Learning Objectives**

At the end of the module, the participants will:

1. Understand the Origin of Fires, its causes and growth;
2. Know the simple fire suppression methods using ordinary household materials and fire extinguishers;
3. Learn good housekeeping practice for fire safety in the homes and classrooms; and
4. Learn the common causes of fires in the schools and other fire prevention tips.

## **Learning Materials Needed**

- Visual Aides and Visual Cards
- Multimedia Projectors
- Demonstration Materials as maybe required per subject

#### **4 MODULE 3 Fire Safety for Teenagers**

# Subject 1

Fire Safety for Teenagers

## Origin of Fire



ILLUSTRATION BY: FO1 Ken Dominic M Mordeno

# In this Subject 1...

## Goal

For the participants to understand the basic concepts of fire, how it occurs, its causes, and risk.

## Objectives

At the end of the session, the participants will be able to:

Explain the simplified terms of the origin of fire;

Name the common causes of fire and

Understand the scenario of how fire spreads.

---

### Subject Aids Needed:

#### A. Primary Tools

- Multimedia Projector
- Powerpoint Presentation
- Visual Examples
- Candle
- Lighters
- Piece of Crumpled Scratch Paper
- Any useable means of making an example

#### B. Alternative Tools

- Flip Cards
- Visual Examples
- Candle
- Lighters
- Piece of Crumpled Scratch Paper
- Any useable means of making an example

---

### Total Time of Delivery:

*45 minutes*

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## Subject Overview

**Purpose:** To introduce the concepts behind fire's origin, probable causes, and how heat transfers from one object to another. The participants will be made aware of how fire starts using common items that may cause it through visual examples.

**General Guidance:** In this subject, the facilitator must deliver to the participants. Thus, participants must ensure that the lecture is delivered in a fun and enthusiastic manner to capture the participants' attention.

**Things to Consider:** The participants are teenagers, around the age of 12 to 17; hence, the delivery of the subject must be done with due care and perseverance. In reconsideration, direct interaction with the participants is highly informed; the facilitator must engage the participants by constantly moving around the venue and keeping a sense of humor. Utmost compassion for this age bracket is reminded to cite examples and associate details that may be personal. Finally, they must stay on the topic and always see the scheduled timeline.

# Cheat Sheet

## Subject Outline

Audio/Visual Aids	Outline	Notes
<b>1. PREPARATORY</b>		
PPT cover  LG 1-1  PPTS-3	<p>1.1 Greet the participants and start by introducing your name and your teammates.</p> <p>1.2 Engage the participants by asking the following prompt questions:</p> <ul style="list-style-type: none"><li>• Have you seen a fire?</li><li>• Have you touched it? What did you feel?</li><li>• What is fire to you?</li><li>• What are the uses of fire? Can anyone give an example?</li><li>• Do you think it is okay to play with fire?</li></ul>	<p><i>Following questions are not suggestions and must be asked in the suggested detail.</i></p>
<b>2. MOTIVATION</b>		
LG 1-1  PPTS-4-7	<p>2.1 Start by showing flip cards as presented in the lecture guide (page 3).</p> <p>2.2 Follow the arrangement of photos as presented in the lecture guide (page 3).</p> <p>2.3 Present subject goals.</p>	<p><i>Give the participants time to interact and give their answers to the questions. on the flip cards shown. Entertain and acknowledge all their answers until one gives the correct answer. If no one can give the correct answer, the facilitator may reveal the correct answer after several attempts by the participants.</i></p> <p><i>Refer to Goals and Subject Objectives.</i></p>
<b>3. LESSON PROPER</b>		
LG 1-1  PPTS-9-13	<p>3.1 Start by discussing the topic, what makes a fire? And discuss the components of fire, such as:</p> <ul style="list-style-type: none"><li>• Fuel</li><li>• Heat</li><li>• Oxygen</li></ul> <p>3.2 Proceed to development demonstration.</p>	<p><i>Utilize flip cards for the presentation.</i></p> <p><i>Allow the participants to express their examples, such as how they have experienced the components of fire.</i></p> <p><i>The lecturer may take a piece of paper and a lighter and set the paper on fire to explain the point. Then, ask what the representations of the items used are. Likewise, ask what happens to the paper.</i></p>

# Cont.

Audio/Visual Aids	Outline	Notes
 <b>LG 1-1</b> <b>PPTS 15-17</b>		<i>The lecturer may ask the participants to give examples of potential causes of fire and show the audience a photo of the mentioned example, if available.</i>
 <b>LG 1-1</b> <b>PPTS 18-24</b>		<i>The audience must be engaged in sharing some examples.</i>
	<p>3.3 Discuss the common and potential fire causes in the household and school grounds.</p> <p>3.4 Discuss how fire spreads.</p> <ul style="list-style-type: none"><li>• Conduction</li><li>• Convection</li><li>• Radiation</li></ul> <p>3.5 Discuss the effects of fires.</p> <ul style="list-style-type: none"><li>• Losing your home</li><li>• Getting burned</li><li>• Suffocated by the smoke</li><li>• Death if you cannot evacuate</li></ul>	<i>These effects of fire should be emphasized to the audience by giving photographic examples.</i>

## 4. GENERALIZATION



4.1 Summarize the lesson and provide a generalization of the details that the participants must remember.

- What have you learned in our lesson today?

## 5. CLOSING EVALUATION



5.1 Review the objectives by asking the questions.

1. What is fire?
2. What are the possible causes of fire at home and school?
3. How does fire spread at home and school?

5.2 Ask if there are questions or clarifications.

5.3 End of subject.

## What is FIRE?

The First step in preventing fires is to understand exactly what it is. The Fire Code of the Philippines (RA9514) defines fire as the active principle of burning, characterized by heat and light of combustion.

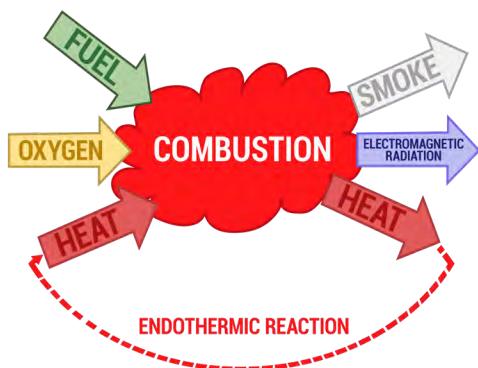
It is a rapid oxidation of a material in the exothermic chemical processes of combustion, releasing heat, light, and various reaction products. It is neither solid nor liquid. Fire is a chemical reaction that results in light and heat and it usually occurs only in the gas phase. Solids must be heated first, to decay and produce gases, a process called pyrolysis. Liquids must be heated to produce ignitable mixtures in air (vaporization).

Combustion or “burning” on the other hand is a high-temperature exothermic (heat-producing) reaction between a fuel, oxidizer (oxygen), and an initial heat source.

Combustion occurs when a fuel or other materials chemically react with available oxygen and in the process, produce light, heat, and a flame. The visible, gaseous part of a fire resulting from the heat produced during the reaction is called the flame and consists primarily of carbon dioxide, water vapor, oxygen, and nitrogen.

### Facilitator's Note

- ▶ Utilize flip cards or multimedia for the presentation.
- ▶ Allow the participants to express their examples such as how they experienced the components of fire.



**IN THE ILLUSTRATION:** It shows the process of combustion.

#### Facilitator's Note

- ▶ Perform this activity in front of the participants.
- ▶ Make sure to observe safety precautions in doing the activity.

#### The Elements of Fire



**IN THE ILLUSTRATION:** It shows the elements of fire.

For the initial combustion to occur, three essential components needed, we often refer to this as the three elements of fire: Fuel, Heat and, Oxygen. These elements are interdependent with each other where all three are constantly

consumed during the combustion process. The absence or removal of one or more these elements will break the combustion cycle and lead to the extinguishment of the fire.

### **Fuel**

It is anything that can burn and contains the chemical potential energy released during combustion. Initially, the fuel may be in the form of a solid, liquid, or gas at the ambient temperature.

### **Heat**

It is the energy component of the combustion process and is responsible for the initial ignition.

When heat comes into contact with a fuel, energy imparted supports the initial combustion reaction. Heat also allows fire to spread by drying out and preheating nearby fuel (pyrolysis) as well as warming the surrounding air.

The amount of heat required to start the reaction largely depends on the type of fuel and its fire point.

Heat/ignition sources include anything capable of generating heat for example lightning, cigarettes, powerlines, catalytic converters, small engine sparks, matches, and sunlight hitting a magnifying glass.

### **Oxygen**

It is present in the air we breathe and serves as the oxidizing agent for the combustion process.

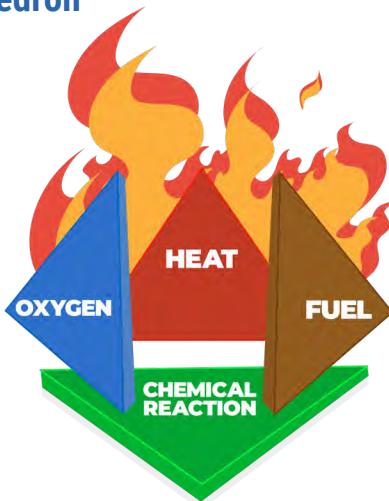
Because combustion or “burning” is essentially oxygen combining with fuel through the application of heat, the amount of oxygen available controls the speed of the reaction.

With a diminished amount of oxygen, the combustion process is slowed (i.e., Rusting). With an abundant amount of oxygen, the chemical reaction is accelerated. (i.e., when fanning flames)

More oxygen means a fire will burn hotter

Air contains about 21 percent oxygen, and most fires require at least 16 percent oxygen content to burn. When fuel burns, it reacts with oxygen from the surrounding air, releasing heat and generating combustion products (gases, smoke, embers, etc.) in a process known as oxidation.

### The Fourth Component and the Fire Tetrahedron



**IN THE ILLUSTRATION:** It shows the Fire Tetrahedron.

## The Chemical Chain Reaction

While it is true that fire cannot exist without each of the three elements present, simply combining them at random does not guarantee ignition. Otherwise, everything would ignite spontaneously seeing that each element is constantly present at varying levels in our surroundings.

For combustion to occur, requires that the three elements combine in the correct ratio to initiate and sustain combustion — this is called the chemical chain reaction and is the most essential component of the burning process.<sup>1</sup>

## The Fire Tetrahedron

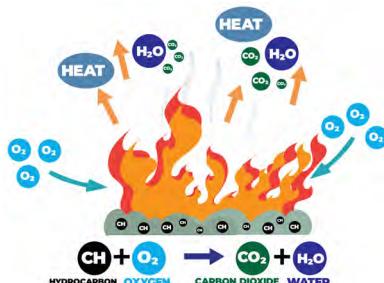
In addition to the elements of fire, the fire tetrahedron introduces the fourth component – Chemical Chain Reaction. Each face of the tetrahedron represents the interdependent elements needed to ignite and sustain fire. At its base is the chemical chain reaction which brings together the other components to create fire. Having this fourth component together with the three elements of fire provides a clearer understanding of what causes fires to ignite and continue to burn over time.

## How the Chemical Chain Reaction Happens

When the three elements of fire coalesce in the correct ratio, initial ignition occurs, the chemical chain reaction then continues to support the burning process by providing enough heat to sustain the fire. To do this, the combustion

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<sup>1</sup>Picture Source: <https://fire-risk-assessment-network.com>



**IN THE ILLUSTRATION:** It shows how chemical reaction works.

must produce more heat than it loses to the environment and is achieved by having fuel at their ignition temperature and enough oxygen to support the reaction. As long as this golden ratio is sustained, the fire grows and continues to burn until one or more of the elements run out.

### Combustion - A Closer Look

Combustion occurs when the products of a series of chemical reactions contribute to another reaction. This transformation of products to reactants allows a reaction to continue with minimal or no outside influence. These chain reactions are generally triggered by a single initial reaction where an unstable product from the first reaction becomes the reactant ( $\text{CO}_2 + \text{Heat}$ ). This is how fire propagates over a larger area.

There are three “phases” to a chemical chain reaction: the first is the initiation or the initial spark, the next is the propagation, and the final state is the termination where the system reaches a stable state.

Let's take a lit campfire as a way of illustrating the processes taking place during combustion.

When a piece of wood or other flammable material is surrounded by enough oxygen and is exposed to a source of heat bringing it to a temperature above its flash point, a fire is then ignited. This process will continue as long as there is enough oxygen, fuel, and heat to maintain the chemical reaction of the fire.

Additionally, in this example the products of combustion (Heat + CO<sub>2</sub>) act against other nearby sources of fuel by preheating them, eventually leading to further spread of the fire until such time that all available fuel is consumed.

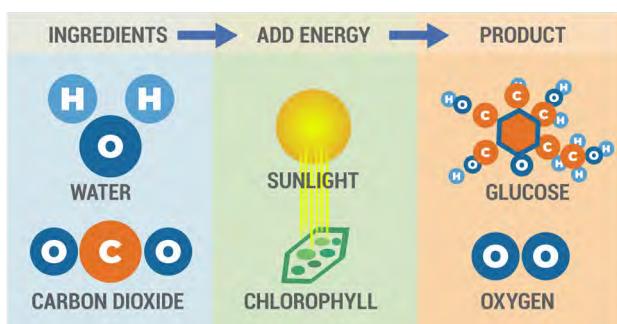
### Different Fuels, Different Products of Combustion

Typically, during complete combustion, when there is enough oxygen available to react with all the fuel, very few byproducts are left over. For instance, take hydrocarbons such as wood or gasoline (CHO). When these undergo complete combustion, the reaction will primarily yield carbon dioxide and water. The same is true when elements burn, only that they mainly produce oxides of the original reactant element. Burning Carbon will yield carbon dioxide, sulfur will produce sulfur dioxide and iron-iron oxide. This is the reason why, some fires have toxic smoke, while others chemicals release acids when burned. Some Fires More Toxic than Others. An example of this happens in the case of refrigerator fires, specifically the refrigerant (cooling agent) they contain. Did you know that the most common commercial refrigerant (R134A) releases, hydrogen fluoride in addition to the other products of combustion? And when

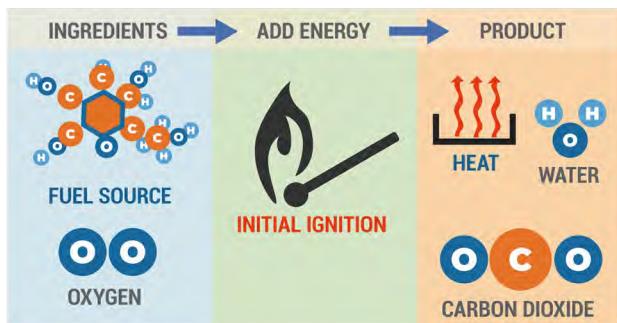
this gas makes contact with the moisture in your lungs it creates HYDROFLOURIC ACID. So yes, next time your refrigerator goes up in flames, close the door and stay away.

**Trivia:** Did you know that combustion is the opposite process of photosynthesis? Combustion is the process of breaking apart the building blocks put together during photosynthesis, thereby releasing the stored chemical energy within the fuel to create the byproducts of combustion plus heat.

#### Photosynthesis:



#### Combustion:



**IN THE ILLUSTRATION:** It shows the Photosynthesis and Combustion Process.



## *Development Activity*

### Demonstration

Take out a piece of paper and matchstick/lighter. Ask the participants the following questions:

What do you think they stand for?

What do you think will happen if we lit the paper using the matchstick/lighter?

Then set the paper on fire while observing the safety precautions.

#### Facilitator's Note

- ▶ Utilize flip cards or multimedia for the presentation.
- ▶ Give the participants time to interact and give their answers to the questions on the flip cards.
- ▶ Entertain and mention all their answers until one gives the correct answer.
- ▶ If no one can answer, the facilitator may reveal the correct answer after several attempts by the participants.



## *Motivational Activity*

### “Let’s find it out!”

Observe keenly the illustrations below. What do you see?

We can see a child trying to touch the flame of the candle.



In this illustration, we can see a boy playing a lighter.



#### Facilitator's Note

- ▶ The lecturer/facilitator may use this as an alternative to the motivational activity.



We can see in this illustration a mother and a child crying because their house is on fire.

After seeing the illustrations above, we can say that playing with candles, matches, and lighters may cause fire at home. Furthermore, it is sad to lose our properties or loved ones because of fire.



### *Alternative Motivational Activity*

Below is a short story of a “Gamu-Gamo.”

#### **“Ang Kwento ng Gamu-Gamo”**



Pinagsabihan ng inang gamu-gamo ang kanyang anak na huwag lumapit sa apoy ng lampara para hindi siya masunog ngunit hindi nakinig ang anak. Siya ay lumipad at naglaro malapit sa apoy ng lampara at walang anu-ano ay nahagip siya ng apoy at namatay. Kung nakinig sana ang anak sa kanyang ina, sana ay hindi siya napahamak.<sup>2</sup>

What was the lesson of the story?

Call participants to share their insights based on the story

## Common and Possible Causes of Fire in the Household and School Grounds

For the fire to start, there must be sufficient heat from an initiator or ignition source. Sources of ignition can be found everywhere, such as in the workplace, school, and home. These ignition sources could be open flames, hot surfaces, electrical sparks, electrically generated bends, friction, chemical reactions, or even compression of gases.

The following are common sources of ignition, especially at home and school, that could start a fire:

### Candles

A candle is an open flame. It can easily ignite all combustible materials nearby. Candles should always be out of the reach of children and pets and be placed on heat-resistant surfaces away from walls and combustible materials.<sup>3</sup>

### Facilitator's Note

- ▶ The lecturer may ask the participants to give examples of probable causes of fire and show the participants a photo of the mentioned examples, if available.



### Matches

Matches create fire using friction and simple chemical reactions. When a match is struck, friction creates heat and a flammable compound (sulfur and red phosphorus) that ignites in the air.<sup>4</sup>



<sup>3</sup><https://www.apexnc.org/337/Candle-Safety#:~:text=General%20Candle%20Safety,Christmas%20trees%2C%20flammable%20decorations>

<sup>4</sup><https://chem.washington.edu/lecture-demos/match-head-reaction#:~:text=The%20heat%20generated%20by%20friction,fire%20and%20ignites%20the%20wood>

Matches must be kept out of reach and sight of children. Please keep it away from an open flame or heat source and dispose it properly when you have finished using it to avoid the start of unwanted fire.

## Lighters



A lighter has butane gas as a fuel and a sparking friction wheel. When you turn the friction wheel with your thumb, a small stream of gas is released, which is then ignited by a spark. Lighters like matches should always be put in places not reachable by young children.<sup>3</sup>

## Lighted Charcoal (Uling)



Charcoal is traditionally and commonly used in rural areas as the main fuel in cooking. It is made from wood that has been heated in the absence of oxygen, which drives off the water and other volatile compound, leaving a lightweight, porous material with high carbon content.<sup>5</sup> When lighted, it can reach extremely high emperatures.

Never use any volatile fluids, such as gasoline or kerosene, as a starter. Put out the fire when done using it by sprinkling some water.<sup>6</sup>

## Lighted Cigarettes



Ideally, cigarettes should neither be smoked inside the home nor on school premises. However, if someone smoked, they must be responsible to discard properly their cigarette butts.

<sup>5</sup>Charcoal Suppliers in Namibia - 2023/2024 decorations

<sup>6</sup><https://americanmadegrills.com/blogs/grilling-tips/what-is-charcoal#:~:text=Charcoal%20is%20made%20from%20wood,high%20temperatures%2C%20ideal%20for%20grilling>

## Plugged Appliances

Electricity in the form of house wiring and electrical equipment left unattended to age and combined with a lack of maintenance, over time, can quickly become the spark that sets the fire triangle into motion.<sup>7</sup>



## Lamps

Lamps can be a source of heat and fire. It is commonly used in rural areas or in times of brownout. It uses fuel such as very flammable kerosene. When using it, make sure that you put it in a stable place and away from walls or curtains and any combustible materials.



## Mosquito Coils

Mosquito coils are commonly used inside the household, especially at night when mosquitoes are active. We usually lit the coil and put it everywhere in the house. When doing so, make sure that you place the mosquito coils on a heat-resistant surface, away from walls or curtains and any combustible materials.



In addition to these sources of heat, fire can also occur in the presence of various fuel loads, such as:

1. Scattered papers
2. Clutters at home
3. Plastics
4. Tall and dry grasses

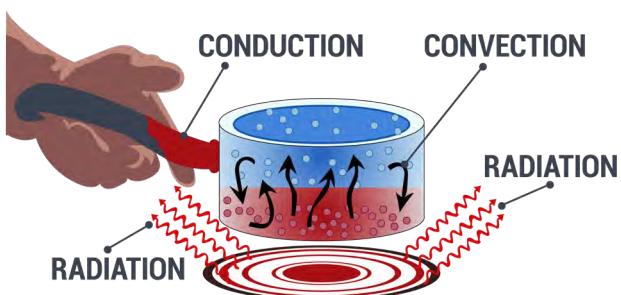
<sup>7</sup><https://lippoliselectric.com/electrical-fire-safety-prevention-home>

**Facilitator's Note**

- ▶ Encourage participants to actively engage in the discussion by giving examples.
- ▶ Use flip cards if multimedia presentation is not available.

**▶ HOW FIRE SPREADS**

Understanding heat transfer is important because a major aspect of fire dynamics (how fires begin, grow, and evolve) is to understand how heat is transferred to and from a fire. Heat spreads through 3 methods: convection, conduction, or radiation.



**IN THE ILLUSTRATION:** It shows the different types of heat transfer.

**Conduction**

It is the transfer of heat from one body to another by direct contact of the two bodies or by an intervening heat-conducting medium. For example, a flame touching and lighting a candle wick is an example of conductive heat.

This is regarded as the slowest method for heat transfer because the heat needs to travel from particle to particle.

**Trivia:** Did you know that even air can conduct heat? This is because conduction is defined as the transfer of heat through particles of matter without bulk motion.

Conduction contributes to the spread of fires either by:

1. Conduction via Direct Contact with Flames

This process is directly affected by proximity or how close other burnable materials are to the fire.

(Example: Flames Directly Touching Objects in the vicinity of a fire)

2. Conduction through objects via a Medium with High Thermal Conductivity

Thermal Conductivity is defined as the ability of any material to conduct/transfer heat. Because some materials conduct heat better, fires can spread faster depending on the material being burned.

(Example: A Steel pipe going through the floor of a multi-story building can spread the heat throughout the building during a fire.)

## Convection

It is the transfer of heat energy by the movement of fluids from the source of heat to a cooler part of the environment. It is the most common method of heat transfer; when liquids or gases are heated, they become less dense and will expand and rise.

(Example: In a hot air balloon air is heated making it less dense than the surrounding air and causes the balloon to rise.)

### Convection Heat Transfer During Fires

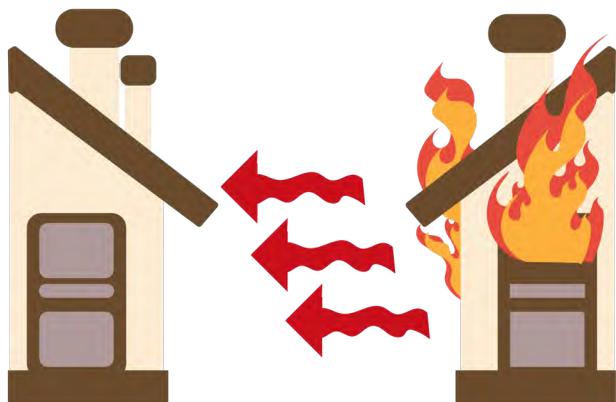
In a typical fire, the heated air continues to rise,

creating a plume of heat, smoke, and ash which dissipates into the atmosphere. In enclosed fires however, this heated air makes contact with the ceiling, where it is trapped causing it to move horizontally throughout the structure creating currents of hot air. Because the heated air is trapped, it eventually becomes denser, which is then forced down through the air column increasing ambient room temperatures by hundreds of degrees in a matter of minutes.

This is the most dangerous way a fire can spread through a structure since this method of heat transfer tends to dry and preheat fuels faster.

### Radiation

This is the transfer of heat by infrared radiation (heat waves, e.g., the sun) which generally is not visible to the naked eye. Radiant heat generally travels from the sides or edges of a fire until the heat waves reach another object. It is the least efficient method of heat transfer to fuels and is greatly affected by distance.



**IN THE ILLUSTRATION:** It shows heat is transferred through radiation.

## Radiated Heat During Fires

Because radiated heat moves in all directions away from the initial fire, a sufficiently hot fire may spread to any burnable material close enough to absorb enough heat. In extreme cases, burnable object my spontaneously combust when subjected to enough heat for it to reach its fire point.

## EFFECTS OF FIRE

Fire is a crucial tool in our lives since it provides energy. It also allows us to cook food and illuminate our night by producing light and warmth during cold seasons. Moreover, fire has been a cornerstone of our technological advancement.

It can be produced in many ways, but most commonly by wood combustion, which changes the surrounding materials.<sup>8</sup> It helped us progress over time because of its many uses.



However, fire can also be destructive and can cause severe injury such as the following:

### You might lose your homes and properties.

“When a fire occurs, there is little time to escape.”<sup>9</sup> Sometimes, fire can spread, doubling

<sup>8</sup>Essay on Fire | Uses, Value & Importance of Fire – Student Essays

<sup>9</sup>Dangers of Fire – Fire Department – Purdue University



its size in seconds. In less than 30 seconds, a fire can rage out of control and fill the area with heat and toxic-thick smoke. Remember, when a fire is discovered, it is critical to get out quickly.<sup>10</sup>

### You might get suffocated by smoke.



The thick, black smoke from a fire can make it extremely difficult to see where one is going. Crawling low may help visibility, and the air is usually cooler towards the floor. It is important to remember that if the smoke is too thick in the hallway to escape, sheltering-in-place may be necessary. Try to find another way out, through a window or another exit; always plan for at least two ways out. Closing doors can help reduce the spread of smoke and fire.<sup>10</sup>

### You might get burned.



A fire can give off an incredible amount of heat. “A room fire can range from 100 degrees at floor level to 1,200 or more degrees at the ceiling.”<sup>10</sup> Skin can burn with permanent injuries at 160 degrees. The heat given off by a fire can kill. If super-heated air is inhaled, it can scorch the lungs.<sup>10</sup>

### You might die if you cannot evacuate



Most people who die in a fire die from toxic gases, thick smoke, and lack of oxygen. In a fire, breathing even the same amounts of these toxic elements can be disorienting, which causes some people to pass out.

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<sup>10</sup>Dangers of Fire – Fire Department – Purdue University <https://www.uclm.es/en/Misiones/LaUCLM/Institucional/UCLMSaludable/Servicio de Prevención/PROTECCIÓN CONTRA INCENDIOS>

Remember, smoke detectors save lives. The time to react to a fire/smoke alarm is when it first goes off.<sup>10</sup>

## EVALUATION QUESTIONS

1. What is Fire?
2. What are the possible cause of fire at home and school?
3. How does fire spread at home and in school?

### Facilitator's Note

- ▶ To provide a generalization of what the participants must remember, ask the question: What have you learned in our lesson today?
- ▶ Finally, encapsulate the lesson by asking the participants the following questions:

## POWERPOINT AND VISUAL AIDS

COVER PAGE

1

ORIGIN OF FIRE

2

### PROMPT QUESTIONS

- Have you seen a fire?
- Have you touched it? What did you feel?
- What is fire for you?
- What are the uses of fire? Can anyone give an example?
- Do you think it is okay to play with fire?

3

What do you see in this photo?



We can see a child trying to touch the flame of the candle.

4

How about in this photo, what do you see?



In this photo, we can see a boy playing with a lighter.

5

Finally in this photo, what do you see?



We can see in this photo a mother and child crying because their house is on fire.

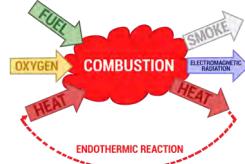
6

### What makes a fire?

The first step in preventing fires is to understand exactly what it is. The Fire Code of the Philippines (RA9514) defines fire as the active principle of burning, characterized by heat and light of combustion.

9

Combustion or "burning" on the other hand is a high-temperature exothermic (heat-producing) reaction between a fuel, oxidizer (oxygen), and an initial heat source.



10

After seeing these pictures, what can you say?



- Playing with candle can cause fire at home.
- Playing with lighters or matches can cause fire at home.
- It is sad and dangerous if our home catches fire.

7

### Elements of Fire



11

### Lesson Objectives

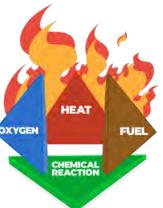
Essentially, at the end of this lesson, you will be able to:

- Explain the simplified terms of the origin of fire;
- Identify the common causes of fire;
- Understand the scenario of how fire spreads.

8

### The Fourth Component and the Fire Tetrahedron

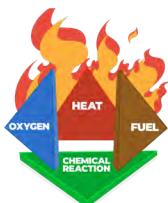
In addition to the elements of fire, the tetrahedron introduces the fourth component - Chemical Chain Reaction. Each face of the tetrahedron represents the interdependent elements needed to ignite and sustain fire.



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**The Fourth Component and the Fire Tetrahedron**

At its base is the chemical chain reaction which brings together the other components to create a fire. Having this fourth component together with the three elements of fire provides a clearer understanding of what causes fires to ignite and continue to burn over time.



13

In addition to these sources of heat, fire can also occur in the presence of various fuel loads such as:

- Scattered papers
- Clutters in the home
- Plastics
- Tall and dry grasses

17

**Development Demonstration**

We have a piece of paper and a matchstick/lighter here.

- What do you think they represent?
- What do you think will happen if we lit the paper using the matchstick/lighter?

14

**How Fire Spreads?**

Understanding heat transfer is important because a major aspect of fire dynamics (how fires begin, grow, and evolve) is to understand how heat is transferred to and from a fire. Heat spreads through 3 methods: convection, conduction, or radiation.

18

**Common and Possible Causes Fire in the Household and School Grounds**

Candles



Matches



Lighters



Lighted Charcoal (uling)

15

**How Fire Spreads?****Conduction**

It is the transfer of heat from one body to another by direct contact of the two bodies or by an intervening heat-conducting medium.

For example, a flame touching a lighting a candle wick is an example of conductive heat.

19

**Common and Possible Causes Fire in the Household and School Grounds**

Lit Cigarettes



Plugged Appliances



Lamps



Mosquito Coils

16

**How Fire Spreads?**

**Conduction contributes to the spread of fires either by:**

1. Conduction via Direct Contact with Flames. This process is directly affected by proximity or how close other burnable materials are to the fire.

(Example: Flames Directly Touching Objects in the vicinity of a fire)

20

## How Fire Spreads?

**Conduction contributes to the spread of fires either by:**

2. Conduction through objects via a Medium with High Thermal Conductivity.

Thermal Conductivity is defined as the ability of any material to conduct/transfer heat. Because some materials conduct heat better, fires can spread faster depending on the material being burned.

(Example: A steel pipe going through the floor of a multi-story building can spread the heat throughout the building during a fire.)

21

Fire is a very important tool in our lives since it provides energy. It also permits us to cook our food and illuminate our night by producing light and gives us warmth during cold seasons. Moreover, fire has been a cornerstone in our technological advancement.



25



## How Fire Spreads?

### Convection

It is the transfer of heat energy by the movement of fluids from the source of heat to a cooler part of the environment. It is the most common method of heat transfer; when liquids or gases are heated, they become less dense and will expand and rise.

22

## Effects of Fire

However, fire can also be destructive and can cause serious injury such as the following:



You might lose your homes



26

You might get burned and properties

## How Fire Spreads?

### Convection

Example: In a hot air balloon air is heated making it less dense than the surrounding air and causes the balloon to rise.

23

## Effects of Fire

However, fire can also be destructive and can cause serious injury such as the following:



You might get suffocated by the smoke



You might die if you cannot evacuate

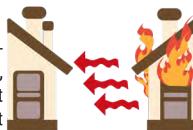
27

## How Fire Spreads?

### Radiation

This is the transfer of heat by infrared radiation (heat waves, e.g., the sun) which generally is not visible to the naked eye. Radiant heat generally travels from the sides or edges of a fire until the heat waves reach another object. It is the least efficient method of heat transfer to fuels and is greatly affected by distance.

24



## GENERALIZATION

Let's answer this!

- What have you learned in our lesson today?

28

## EVALUATION

- What have you learned in our lesson today?
- What are the possible causes of fire at home and in school?
- How does fire spread at home and in school?

29

THANK YOU 😊

30

## **Subject 2**

Fire Safety for Teenagers

# **Good Housekeeping Practices for Homes**



ILLUSTRATION BY: FO1 Ken Dominic M Mordeno

# In this Subject 2...

## Goal

For the participants to apply good housekeeping practices at home and understand their importance.

## Objectives

At the end of the session, the participants will be able to:

1. Cite examples of good housekeeping practices at home;
2. Demonstrate good housekeeping practices at home through roleplay
3. Understand the importance of good housekeeping practices at home.

---

### Subject Aids Needed:

#### A. Primary Tools

1. Multimedia Projector
2. Powerpoint Presentation
3. Activity Cards
  - Reporting
  - Role Playing

#### B. Alternative Tools

1. Flip Cards
2. Activity Cards
  - Reporting
  - Role Playing

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### Total Time of Delivery:

*30 minutes*

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## Subject Overview

**Purpose:** To impart good housekeeping practices to the participants, to fully understand why it must be observed in significance to safety, and to appreciate its importance in our daily lives. The participants will be made aware through interactive discussion and role-playing that will be given in the examples of good housekeeping practices at home.

**General Guidance:** In this subject, the facilitator must deliver the lesson in the simplest terms possible that are easier to understand by the participants. The facilitator should ensure that the lecture is delivered in a fun and enthusiastic manner to capture the participants' attention.

**Things to Consider:** The participants are teenagers, ages 12 to 17. Care and effort must be considered when it comes to delivering the subject. In this subject, direct interaction with the participants is advised, such as moving around the lecture venue and making jokes. Sensitivity should be kept in mind in making or citing examples, especially in matters that might involve personal details. Stay on the topic and the schedule as much as possible.

# Cheat Sheet

## Subject Outline

Audio/Visual Aids	Outline	Notes
<b>1. PREPARATORY</b>		
PPT cover  LG2-1 PPTS-3	<p>1.1 Greet the participants and start by introducing your name and your teammates.</p> <p>1.2 Elicit presents ideas and concepts of the participants in good housekeeping practices at home and engages them by asking the following prompt questions:</p> <ul style="list-style-type: none"><li>1. Do you organize the things at your home properly?</li><li>2. What do you think is the usual appearance of a fire-free home?</li><li>3. What will happen if you have a messy and dirty home?</li></ul>	<p><i>The following questions are not suggestions to choose one, but should all be asked in the presented manner.</i></p>
<b>2. EXPLORATION</b>		
LG2-1  PPTS-4-5	<p>2.1 Group activity: Cite and demonstrate good housekeeping practices at home.</p> <p>2.2 Discuss the general guidelines of the activity. (Refer to the Lesson Guide page.)</p> <p>2.3 Guide Questions:</p> <ul style="list-style-type: none"><li>1. What are the good housekeeping practices that we must observe at home?</li><li>2. What is the importance of observing good housekeeping practices at home?</li></ul> <p>2.4 Present subject and objectives.</p>	<p><i>Give the participants time to interact and show their presentations to the questions on the activity cards given to them.</i></p> <p><i>Participants may use the guide questions in the activity.</i></p> <p><i>Validate the participants' answers, and facilitators may reinforce their excellent performance by giving prizes.</i></p> <p><i>Refer to Goals and Subject Objectives.</i></p>
<b>3. LESSON PROPER</b>		
LG2-2  PPTS-8-11	<p>3.1 Start by discussing the topic: "Cleanliness and Orderliness at Home."</p> <p>3.2 Discuss: "What makes a good electrical connection at home?"</p>	<p><i>Utilize flip cards or PowerPoint presentations for the presentation.</i></p>

# Cont.

Audio/Visual Aids	Outline	Notes
 <b>LG 2-3</b> <b>PPTS-12-17</b>	3.3 Discuss: "What makes a safe kitchen?" 3.4 Discuss: "What are the characteristics of a fire-free exit at home?" 3.5 Lastly, discuss "What is the importance of observing good housekeeping practices at home?"	<i>The audience must be engaged in giving examples. The effects of fires must be emphasized to the participants by giving examples.</i>
 <b>LG 2-3</b> <b>PPTS-18-22</b>		
<b>4. Generalization/Application</b>		
 <b>LG 2-4</b> <b>PPTS-27</b>	4.1 Exploration Activity: "Can you find poor household management shown in the picture?" 4.2 After naming poor household management from the given picture. Ask the following questions: 4.2.a Can you give good housekeeping management that you practice in your homes?	<i>The facilitator will give the participants a picture that shows poor household management.</i>
<b>5. Closing Evaluation</b>		
 <b>LG 2-5</b> <b>PPTS-28</b>	5.1 Finally, the facilitator will end the lesson and assess participants' learning by asking a series of questions: • Why is it essential to observe good housekeeping practices in our homes?  5.2 Ask if there are questions or clarifications.  5.3 End the subject.	

**GOOD HOUSEKEEPING** is essential to fire safety for each occupancy type, from the simplest home to the most sophisticated industrial complex.<sup>1</sup> Housekeeping is the maintenance of an orderly, clean, and neat home. “Good housekeeping practices, both indoors and outdoors, reduce the danger of fire.”<sup>1</sup> They can control the presence of unwanted fuels, obstructions, and sources of ignition that can create extremely hazardous exposures both to life and property.

There are basic fire safety measures you can take at home. Following some simple steps and being aware of obvious dangers can help reduce the risk of an accidental fire and prevent damage and potential loss of life.

A fire-safe home should be clean, neat, and free from any unnecessary things. The electrical structures should be installed, and exits are free from obstructions.

On the other hand, a messy house can limit mobility and be hazardous, especially to the old and incapacitated. Excessive clutter can lead to inadequate cleaning. Rotting food items can attract bugs and rodents, leading to health hazards. Litter can block doorways and windows, making leaving a home exceedingly difficult. Boxes, paper, clothing, and other items are extremely flammable and will add fuel to a fire.<sup>3</sup> Further, it can create other problems, such as falling and breaking bones, social isolation,

#### Facilitator's Note

- ▶ Suggested Discussion Questions:
1. Do you organize the things at your home properly?
  2. What do you think is the common appearance of a fire-free home?
  3. What will happen if you have an unorganized home?

#### Facilitator's Note

- ▶ In this part, let the participants cite and demonstrate good housekeeping practices at home using the following guide questions in group activity.

<sup>1</sup>17-A Housekeeping Practices

<sup>2</sup>[https://www.mml.org/insurance/risk\\_resources/publications/s\\_and\\_h\\_manual/17A.pdf](https://www.mml.org/insurance/risk_resources/publications/s_and_h_manual/17A.pdf)

<sup>3</sup>Consequences of Having Too Much Clutter

and problems with neighbors, family, and friends.<sup>4</sup>

**Facilitator's Note**

- ▶ Utilize flip cards or multimedia for the presentation.
- ▶ Allow the participants to express their thoughts and encourage active participation.



*Group Activity*



Guide Questions

1. What are the good housekeeping practices that we should see at home?

2. What is the importance of observing good housekeeping practices at home?

Each group may have a different activity to work on to supply a good learning environment for the multiple intelligences and different learning styles participants may have.



General Instructions

1. The participants will be divided into two (2) groups.
2. The participants will then choose their leader for a smooth preparation and presentation.
3. Each group will be given a task to complete or perform.

<sup>4</sup><https://www.mentalhealthsf.org/what-are-some-consequences-of-having-too-much-clutter>

4. Each group will be given 5 minutes to work on their task/s.
5. After the time given, each group will present their work in front of at most 1 minute.

Note: For large group participants, the lecturer/facilitator may group the participants into multiple groups and may select what task to give them. All guidelines will apply to all groups.

### Task 1: (Reporting)

*Instruction: Cite examples of good housekeeping practices at home that we should observe and discuss their importance.*

### Task 2: (Role Playing)

*Instruction: Show good housekeeping practices at home and discuss their importance through role play.*

## Cleanliness and Orderliness at Home

The essential protection against unpleasant and unsafe accumulations of excess things and trash is every individual's sense of responsibility and desire to keep the surroundings clean and in order.

To make our homes safe from the dangers of fire, here are the following things that we should remember:

**Keep your house clean and always organized.**  
Arrange your things in order and have a sweeping and wiping routine to avoid dust and dirt building up inside the house.





**Flammables should be placed properly and away from sight of the children.** It would be best to put proper labels to avoid confusion and accident.



**Put away litter waste near the electric outlet.** If the outlet happens to spark, the litter waste nearby will become the fuel and will cause the fire to start.



**Throw away garbage that could start a fire.** A regular schedule of disposing of garbage is recommended to avoid its accumulation inside the house and promote health practices as well.



**Keep all stuff properly arranged to avoid hazards and accidents.** Ensure your clothes are properly folded and arranged inside the drawer or cabinet.

**No smoking inside the house.** If you do so, make sure to put your ashes in an ashtray properly and make sure to extinguish them, like dipping them in the water, for example.



### What makes a good electrical connection at home?

Every day, we use electricity; we use appliances that require electricity. Sometimes, we must pay more attention to the proper installation and safety measures while we enjoy using it. Because of this, electrical fire is the common cause of fire at home. However, we cannot live today without electricity. So, what can we do?

Here are the following things that we should remember to avoid electrical fire at home:

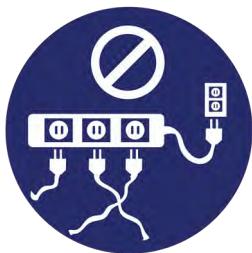
**There must be a circuit breaker in your electrical connections.** It will protect the electrical circuit from damage caused by overcurrent/overload or short circuits.<sup>5</sup> Without a circuit breaker, the circuit wiring will overheat, making the wire insulation melt, which can cause fire.



**The electrical panels, junction boxes, outlets, and switches must be properly covered.** It will shield the energized circuits, avoid creating arc flash and shock, and prevent electrocution hazards.



<sup>5</sup>What Causes a Circuit Breaker to Trip? | Appliance Teacher



**Avoid using outlet extenders or plug-in power bars:** they can quickly overload an electrical circuit and cause a fire. Replace old, damaged, or frayed appliance cords, and never force a three-pronged plug into a two-slot outlet or extension cord.<sup>6</sup>



**Do not plug multiple appliances into one outlet.** Overloaded outlets will carry too much electricity, which generates heat in undetectable amounts. The heat causes wear on the internal wiring system and can ignite a fire.<sup>7</sup>



**The outlet and switch of light must be neat.** The dust can cause dust traps, which could function as kindling to live plug, causing fire and even small explosions in the outlet.



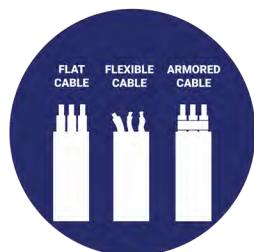
**Major appliances must be directly plugged into the outlet.** Never use an extension cord with a major appliance because it can easily overheat and start a fire.<sup>8</sup>

<sup>6</sup>How to prevent fires at home - Co-operators

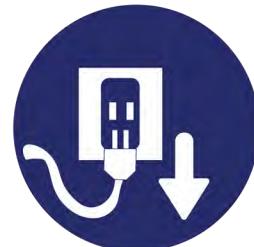
<sup>7</sup>Maui Devastation – (((Who))) is Responsible?

<sup>8</sup>Electrical Fire Safety handout (vertical) - U.S. Fire Administration

**The cable wires should be in a standard size** to ensure that your wire can meet certain requirements such as fire resistance, temperature resistance, and insulation properties



**Remove all unused appliances from the outlet** to save electricity and to avoid sparks that may cause fire.



**There must be an electrical safety switch.** It will protect you from electric shock. “They turn off the electricity within milliseconds when a current leak is detected.”<sup>9</sup>



### What makes a safe kitchen?

Kitchen fire is also one of the common causes of fire in our homes. As one of the favorite places in our home, it must be taken care of properly, but how?

Here are the things that we should remember to make our kitchen fire-safe:

**Stay in the kitchen with pots and pans cooking on the stove.** Unattended cooking is a common cause of kitchen fires.



<sup>9</sup>Ever Safety Switch Fuse Box 2 Pole Single Throw Fusible 60-A ...



**Put the LPG in a proper place and turn off gas tanks when not in use.** “It only takes an errant spark to cause your gas tank to ignite.”<sup>10</sup> If you smell any gas leak, do not switch on the light or plug any electrical appliances. Switch off the valve and the knob of the stove. Then, open the windows and doors to let the gas escape.



**There should be no water leakage in the kitchen.** “It may cause accidents or electrocution if there are open wires nearby.



**There must be no materials in the kitchen that can ignite or start a fire.** “Materials like paper, clothes, and plastics are highly flammable. It must not be present in the kitchen or near the fire.



**Do regular inspections of all the kitchen equipment.** Regular inspection could help keep the proper condition of the things and appliances in the kitchen, which could prevent any accident or development of fire.



**There is enough smoke exhaust/ventilation in the kitchen.** In some urban houses, they use automatic kitchen exhaust, placed above the stovetop, that removes the airborne cooking byproducts from the air in the kitchen.

In rural houses, some use kitchen exhaust fans,

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<sup>10</sup>10 Fire Prevention Tips for Protecting Lives and Properties - Moneymax

which reduce cooking emissions by increasing overall air exchange inside, and some use windows for free air exchange.

**Lighters and candles must be in their proper places.** Do not place it near the stove or source of heat or ignition since they are highly flammable.



**Do not use gasoline, charcoal-started fluid, or other flammable liquids to start a fire.** Flammable liquids tend to create instant big fires if not controlled, leading to accidents or uncontrolled fires.



### **What are the characteristics of a fire-free exit at home?**

In emergencies, EXITS play the most significant role because it is the part of the house that will save your life from danger. In most cases, people get trapped inside their burning houses because they do not have clear and proper exits. It could be that their exits are blocked with unnecessary clutters or locked/meshed because they want to protect their house from other dangers, such as the attack of thieves. Nevertheless, we should think of our overall safety.

Here are the things that we should remember to make our exits free from any obstruction and free from fire:



**Avoid unnecessary obstructions in the doorway and windows.** Clutters in the doorway or windows, such as cabinets, tables, or boxes, can hinder moving out of your house, especially during emergencies. Make it a habit to clear the exits with obstructions.



**“Keep firewood, piles of leaves and garbage away from the home.”**<sup>11</sup> If a grass fire starts nearby, these items next to your home could easily become kindling.



**Easy exit access.** Make sure that exits are available in your house, especially if you are living on a higher floor area.



**There is enough lighting coming from the windows.** Lights from the windows will help you see even without electricity.

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<sup>11</sup>How to prevent fires at home - Home Advice - Guest Advice



## *Let Us Exercise*

### Exploration Activity

#### Facilitator's Note

- ▶ The facilitator may give positive reinforcement, like giving simple prizes and gifts to participants who conducted the activity with excellent performance.

The lecturer/facilitator will then elaborate on the lesson through an activity. Let the participants name the faults or wrongs in good housekeeping practices based on the given picture of the house. Give positive reinforcement, like prizes (candies, chocolates, and the like), if possible, who could give the correct answer.

Can you find poor household management in the picture?



**IN THE ILLUSTRATION:** It shows some poor housekeeping practices inside the home.

### EVALUATION QUESTIONS

1. Can you name some good housekeeping practices in your home?
2. What is the importance of observing good housekeeping practices in our homes?

## POWERPOINT AND VISUAL AIDS

### COVER PAGE

1

### GOOD HOUSEKEEPING PRACTICES IN THE HOMES

2

### PROMPT QUESTIONS

- Do you clean or arrange the things at your home properly?
- What could possibly be a typical look of a fire-free home that you could think of?
- What do you think can be the worst possible thing that could happen if you have a messy home environment?

3

### GROUP ACTIVITY

#### Guide Questions:

- What are the good housekeeping practices that we should observe at home?
- What is the importance of observing good housekeeping practices at home?

#### General Instructions:

- The participants will be divided into two (2) groups
- The participants will then choose their leader to have a smooth preparation and presentation
- Each group will be given a task to complete or perform
- Each group will be given 5 minutes to work on their task/s
- After the time given, each group will present their work in front in not more than 1 minute

4

**GROUP ACTIVITY****Task 1: (Reporting)**

*Instruction: Cite examples of good housekeeping practices at home that we should observe and discuss their importance.*

**Task 2: (Role Playing)**

*Instruction: Show good housekeeping practices at home and discuss their importance through role play.*

5

**LESSON OBJECTIVES**

Essentially, at the end of this lesson, you will be able to :

- Cite examples of good housekeeping practices at home
- Demonstrate good housekeeping practices at home through a role play
- Understand the importance of good housekeeping practices at home

6

**GOOD HOUSEKEEPING PRACTICES IN THE HOMES**

Good housekeeping is:

- Essential to fire safety for each of occupancy
- The maintenance of an orderly, clean and neat work place
- To reduce the danger of fire
- To control the presence of unwanted fuels, obstructions, and sources of ignition that can create extremely hazardous exposure both to life and property

7

**GOOD HOUSEKEEPING PRACTICES IN THE HOMES**

Cleanliness and Orderliness at Home

The most essential protection against unpleasant and unsafe accumulations of excess things and trash is every individual's personal sense of responsibility and desire to keep the surroundings clean and in order

8

**GOOD HOUSEKEEPING PRACTICES IN THE HOMES**

Cleanliness and Orderliness at Home



Keep your house clean and organized at all times

9

Flammables should be placed at proper places and away from sight of the children

**GOOD HOUSEKEEPING PRACTICES IN THE HOMES**

Cleanliness and Orderliness at Home



Put away litter waste near the electrical outlet

10

Throw away garbage that could start a fire

**GOOD HOUSEKEEPING PRACTICES IN THE HOMES**

Cleanliness and Orderliness at Home



Keep all stuff properly arrange to avoid hazards and accidents

11

No smoking inside the house

**GOOD HOUSEKEEPING PRACTICES IN THE HOMES**

Cleanliness and Orderliness at Home

The most essential protection against unpleasant and unsafe accumulations of excess things and trash is every individual's personal sense of responsibility and desire to keep the surroundings clean and in order

**GOOD HOUSEKEEPING PRACTICES IN THE HOMES**

Good Electrical Connection at Home

Every day of our lives we use electricity; we use appliances that require electricity in order to operate. Sometimes, we often neglect the proper installation and safety measure while we enjoy using it. Because of this, electrical fire is the common cause of fire at home

12

### GOOD HOUSEKEEPING PRACTICES IN THE HOMES

Good Electrical Connection in Your House



There must be a circuit breaker in your electrical connections

13



The electrical panels, junction boxes, outlets and switches must be properly covered

### GOOD HOUSEKEEPING PRACTICES IN THE HOMES

Good Electrical Connection in Your House



Remove all unused appliances from the outlet

17



There must be an electrical safety switch

### GOOD HOUSEKEEPING PRACTICES IN THE HOMES

Good Electrical Connection in Your House

Avoid using outlet extenders or plug-in power bars: they can quickly overload an electrical circuit and cause a fire



Do not plug multiple appliances in one outlet

14

### GOOD HOUSEKEEPING PRACTICES IN THE HOMES

Safety in Your Kitchen

Kitchen fire is also one of the common causes of fire in our homes. As one of the favorite places in our homes, it must be taken care of properly

18

### GOOD HOUSEKEEPING PRACTICES IN THE HOMES

Good Electrical Connection in Your House



There must be no protuding electrical cords or wiring

15



The outlet and switch of light must be neat

### GOOD HOUSEKEEPING PRACTICES IN THE HOMES

Safety in Your Kitchen



Don't leave the kitchen with pots and pans cooking on the stove



Put the LPG in a proper place and turn off

19

### GOOD HOUSEKEEPING PRACTICES IN THE HOMES

Good Electrical Connection in Your House



Major appliances must be directly plugged in to the outlet

16



The cable wires used should be in standard size

### GOOD HOUSEKEEPING PRACTICES IN THE HOMES

Safety in Your Kitchen



There should be no water leakage in the kitchen



There must be no materials in the kitchen that can ignite or start a fire

20

**GOOD HOUSEKEEPING PRACTICES IN THE HOMES**

Safety in Your Kitchen



Do regular inspection of all kitchen equipment

21



There's enough smoke exhaust/ventilation in the kitchen

**GOOD HOUSEKEEPING PRACTICES IN THE HOMES**

Safety in Your Kitchen



Lighters and candles must be in their proper places

22



Do not use gasoline, charcoal started fluid or other flammable liquids to start a fire

**GOOD HOUSEKEEPING PRACTICES IN THE HOMES**

Fire Free Exit at Home

In case of any emergencies, EXITS play the most significant role because it is the portion of the house that will save your life from danger.

23

**GOOD HOUSEKEEPING PRACTICES IN THE HOMES**

Fire Free Exit at Home



Avoid unnecessary obstruction in doorway and windows

24



Keep firewood, pile of leaves and garbage away from the home

**GOOD HOUSEKEEPING PRACTICES IN THE HOMES**

Fire Free Exit at Home



Easy exit access



There is enough lighting coming from the windows

25

**WHAT IS THE IMPORTANCE OF GOOD HOUSEKEEPING PRACTICES AT HOME?**

Following some simple steps and being aware of obvious dangers can help reduce the risk of an accidental fire, prevent damage, and potential loss of life.

26

**What's Wrong in this House?**

27

**GOOD HOUSEKEEPING PRACTICES IN THE HOMES**

Fire Free Exit at Home



Avoid unnecessary obstruction in doorway and windows

24



Keep firewood, pile of leaves and garbage away from the home

**EVALUATION**

- What are the good housekeeping practices that we should observe in our homes?
- What is the importance of observing good housekeeping practices in our homes?

28

THANK YOU 😊

# **Subject 3**

Fire Safety for Teenagers

# **Classes of Fire**

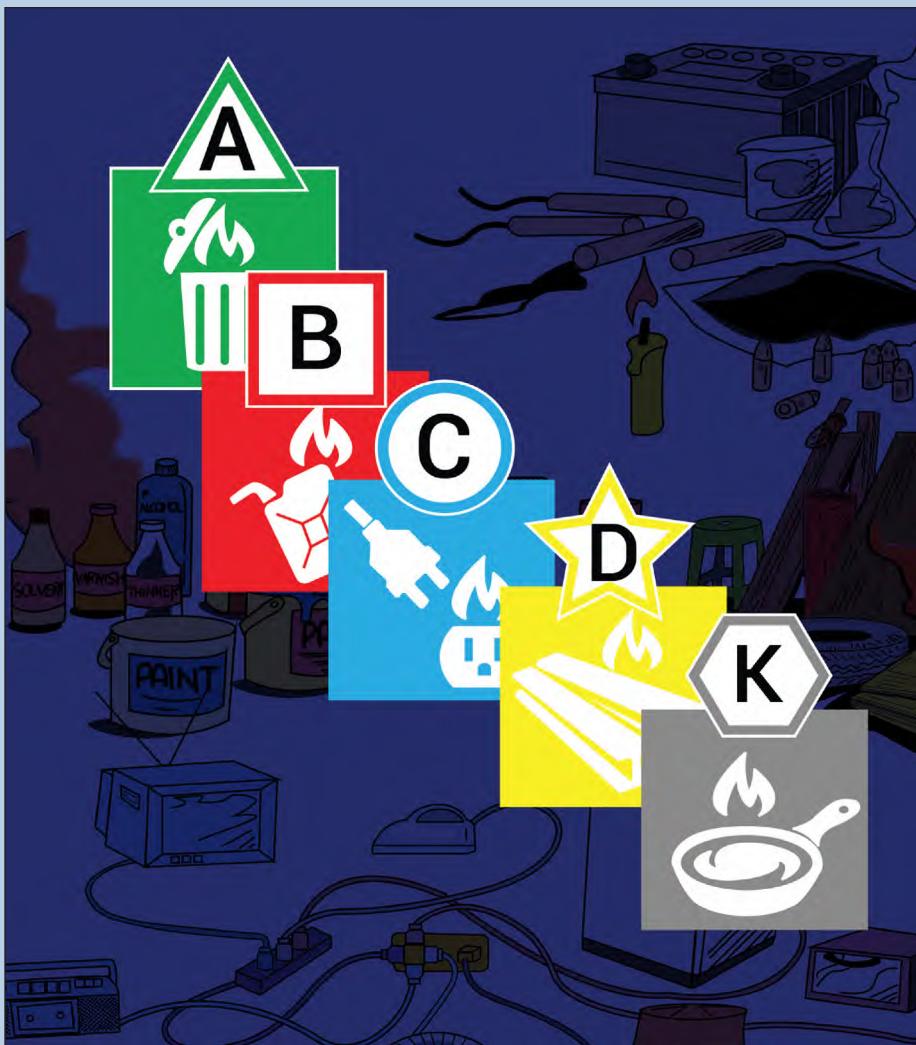


ILLUSTRATION BY: FO1 Ken Dominic M Mordeno

# In this Subject 3...

## Goal

For the participants to efficiently classify fires according to the fuel/materials involved and to completely understand that recognizing the fuel is essential in choosing the proper extinguishing agent to suppress fires effectively.

## Objectives

At the end of the session, the participants will be able to:

1. Name the classes of fires.
2. Differentiate the classes of fire according to the materials involved.
3. Appreciate the importance of classifying fires.

### Subject Aids Needed:

#### A. Primary Tools

1. Multimedia Projector
2. Powerpoint Presentation
3. Visual examples
  - Picture of burning wood
  - Picture of burning paper
  - Picture of grease fires or cooking fires.
  - Classes of fires, its materials, and its pictograph label

#### B. Alternative Tools

1. Visual examples
  - Flashcards
  - Classes of fires, its materials, and its pictograph label
  - Board

### Total Time of Delivery:

*35 minutes*

## Subject Overview

**Purpose:** The purpose of this session is to impart classifying fires to the participants. Fire classification is essential in selecting the right firefighting agent and equipment to extinguish fires. Participants will gain more information and appreciate the importance of classifying fires and will be made mindful through visual examples and interactive games.

**General Guidance:** In this subject, the facilitator must deliver the lesson in the simplest terms that are understandable to the participants. Facilitators should ensure the lecture is delivered through a modulated voice and promote an enjoyable and enthusiastic method to capture the participants' attention. For a spontaneous, motivated atmosphere, facilitators may also prepare a simple token, tagline, or icebreaker clap. In addition, the facilitator should prepare the given primary tools or alternative tools for effective instruction.

**Things to Consider:** The participants are teenagers, around the age of 12 to 17; hence, the delivery of the subject must be done with due care and perseverance. In retrospect, direct interaction with the participants is highly informed; the instructor/facilitator must engage the participants by constantly moving around the venue and keeping a sense of humor. Utmost compassion for this age bracket is reminded in citing examples and associating details that may be personal. Finally, they must stay on the topic and observe the scheduled timeline.

# Cheat Sheet

## Subject Outline

Audio/Visual Aids	Outline	Notes
<b>1. PREPARATORY</b>		
PPT cover	1.1 Greet the participants and start by introducing your name and your teammates.	<i>If the participants have arrived at the expected answer, give assurance and applaud, then go ahead to motivation proper.</i>
<b>2. MOTIVATION</b>		
LG 3-1 PPTS-2	2.1 Show a picture of burning wood.  2.2 Ask the following question: <ul style="list-style-type: none"><li>• What do you see in the picture?</li><li>• How do you put out a fire of burning wood?</li></ul>	<i>In the first question of the first example, participants must distinguish that it is burning wood, which can be extinguished through water, and when it is burnt, it produces Ash.</i>
PPTS-3  LG 1-3 PPTS 4-5	2.2 Show a picture of burning paper.  2.2 Ask the following question: <ul style="list-style-type: none"><li>• What do you see?</li><li>• How do you put out a fire in a burning paper?</li><li>• When paper burns, what does it produce?</li></ul> 2.3 Show a picture of a cooking grease fire.  2.4 Ask again the following series of questions: <ul style="list-style-type: none"><li>• How about this one? What do you see?</li><li>• How do you put out a cooking grease fire?</li></ul>	<i>In the first question of the first example, participants must distinguish that it is burning wood, which can be extinguished through water, and when it is burnt, it produces Ash.</i>  <i>The last example is expected to be answered by cooking grease fire.</i>
LG 3-2 PPTS-6	2.5 Discuss the gist/ general picture from the given example.  2.6 Ask the following question: <ul style="list-style-type: none"><li>• Based on the given illustrations, what do we call these burning materials in the elements of fire?</li></ul>	<i>The facilitator should explain to the participants the risk of unattended cooking. It is necessary to emphasize that extinguishing a cooking grease fire using water is dangerous.</i>  <i>From this point, participants are expected to answer FUEL. Emphasize that recognizing the fuel is essential in choosing the proper extinguishing agent.</i>

# Cont.

Audio/Visual Aids	Outline	Notes
	2.7 Present subject objectives.	<i>Refer to Goals and Subject Objectives</i>
	<b>3. LESSON PROPER</b>  3.1 Discuss classes of fire. The ABCs of Fire 3.1.a. Class A Fire 3.1.b. Class B Fire 3.1.c. Class C Fire 3.1.d. Class D Fire 3.1.e. Class K Fire	<i>Utilize primary tools or alternative tools.</i>
	3.2 Use mnemonics for memory retention: 3.2.a. Class A Fire - for Ash 3.2.b. Class B Fire - for Boil 3.2.c. Class C Fire - for Current 3.2.d. Class D Fire - for Dent 3.2.e. Class K Fire - for Kitchen	<i>Facilitators can incorporate these mnemonics during the discussion of different classes of fires.</i>
	<b>4. ENRICHMENT ACTIVITY</b>  4.1 From the above classes of fire, how about if you were the one caught by a fire? What will you do?  4.2 Can you perform STOP, DROP, and ROLL?  4.3 Perform the STOP, DROP, and ROLL.  4.4 Ask if there are questions or clarification	<i>Facilitators may perform the STOP, DROP, and ROLL or call for a volunteer to perform STOP, DROP, and ROLL.</i>  <i>The facilitator must encourage participants' questions about the topic to give further explanation and information.</i>
	<b>5. APPLICATION/ GAME ACTIVITY</b>  5.1 Discuss the game's mechanics: "Choose it too, to Win it!"  5.2 Continue to the game.	<i>Refer to the mechanics of the game in the Lesson Guide.</i>  <i>The facilitator may prepare a simple token for the winner.</i>
	<b>6. GENERALIZATION/EVALUATION</b>  6.1 Review the objectives by asking the questions: 1. Can you give and differentiate the classes of fire? 2. Why do we need to classify fires?	<i>In this part of the session, the facilitator will be able to confirm the knowledge gained by the participants by giving simple to</i>

# Cheat Sheet

Audio/Visual  
Aids

Outline

Notes

6.2 End of the session.

*higher-level questions based on the objectives. It also allows the participants to express their insights and immerse themselves in learning.*

**Facilitator's Note**

- ▶ In the last illustration above, which is the grease fire, the facilitator may use a short video of unattended cooking that shows the rapid burning of cooking oil and the risk that may take place when extinguishing it with water.
- ▶ From that, participants will lead to the idea that it is unsafe to extinguish a grease fire with water and can even present a risk to lives.



## *Engagement Activity*

“Exploration Ideas!”

The following is a series of pictures with corresponding questions. Allow participants to express their ideas based on what they will see in the given pictures. Give the questions one at a time and gather their answers at the end of the activity.



### Examine The Picture Below

**IN THE ILLUSTRATION:**

It shows burning wood.<sup>8</sup>

What do you see in the picture?

How do you put out a fire of burning wood?

When wood encounters fire, it sets off a series of complex chemical reactions. The combustion of wood results in the release of carbon dioxide, water vapor, and various gaseous products, as well as the formation of black solid residues like charcoal and Ash.<sup>1</sup>

To put out a fire of burning wood is to extinguish it with water. The wood, when burned, produces ashes. Any combustible materials that, when burned, produce ashes that can be extinguished with water.

<sup>1</sup>[www.scienceabc.com/pure-sciences/what-happens-to-wood-when-it-burns.html](http://www.scienceabc.com/pure-sciences/what-happens-to-wood-when-it-burns.html)

<sup>8</sup><https://www.istockphoto.com/illustrations/firewood>

How about this one? What do you see in the picture?



**IN THE ILLUSTRATION:** It shows burning paper.

What is burning?

How do you put out a fire of burning paper?

This picture shows a burning paper. As such, one of the best and most effective ways to extinguish a burning paper is to use water. It will cause the fire to cool down and eventually go out, stopping its spread or development. It can be done by spraying the burning paper with water (such as a hose or sprinkler system) or using a water fire extinguisher.<sup>2</sup>

How about this illustration? What do you see?



**IN THE ILLUSTRATION:** It shows a cooking grease fire.

<sup>2</sup>How to Detect and Extinguish a Class A Fire (Paper / Wood

### How to put out a grease fire in the Kitchen?

“Grease fires are caused by cooking oil that becomes too hot.”<sup>3</sup> It only takes minutes for an unattended pot of oil to catch fire, so never turn your back on it! If a grease fire does erupt on your stove, turn off the heat right away. Cover the flames with a metal lid or cookie sheet. Never throw water on a grease fire. If the fire looks out of hand, get your family out of the house and call emergency services.<sup>3</sup>

Don’t try to fight a fire on your own. Do not try to put the fire out yourself. If you cannot at once put out the fire while it is small, get out of the building and call emergency services.

Based on the above illustrations, what do we call these burning materials in the elements of fire?

These burning materials are the FUEL in the elements of fire. Fuel wherein FIRE can be classified.

#### **Facilitator’s Note**

- ▶ In this part, facilitators may use funny and entertaining mnemonics of their own to engage participation. Make sure not to use sexually offensive words in delivering the mnemonics.
- ▶ Consider the settings and participants

## ► THE ABCs OF FIRE

Fires are classified according to the type of fuel that is burning. It is particularly important to understand the different classifications of fires to know how to extinguish them. It is also essential in choosing the type of fire extinguisher because fire extinguishers are classified according to the fires they extinguish. Using the right substance on a particular fire class is useful and may worsen the damage. Hence, it is crucial to know the fuel source for a fire before fighting it. Here are the classes of fire.

<sup>3</sup>3 Ways to Put Out a Grease Fire - wiki How <https://www.wikihow.com/Put-Out-a-Grease-Fire>

## CLASS A FIRES

These are **Solid Combustible Materials** of organic nature such as wood, cardboard, paper, hardboard, rubber, and soft furnishings such as carpets and curtains, in which combustion normally occurs with the formation of glowing embers.<sup>4</sup> Fuel in this class of fire, when burned, produces ashes.

Class A fires are the most common of the five different classes of fires. “They occur when common combustible materials like wood, paper, fabric, trash, and light plastics catch fire.”<sup>5</sup>

These accidental fires are abundant across various industries, so it is recommended to have adequate protection against “ordinary” fires in addition to other condition-specific fires.<sup>5</sup> Despite being “or minimal risk, do not rule this fire class as insignificant risk. If fuel present is abundant, these fires can intensify quickly.



**IN THE ILLUSTRATION:** It shows examples of fuel/materials under the Class A Fires.

<sup>4</sup>BFP Oplan Ligtas na Paaralan, Safe School Initiative, Implementing Guidebook 2019

<sup>5</sup>There are 5 Classes of Fires, do you know the right Fire Extinguisher ... Dickinson, M, 2021, Fire Safety, <https://vanguard-fire.com/what-are-the-5-different-classes-of-fires>

It is best to put out a Class A fire quickly before it spreads using water or monoammonium phosphate.<sup>5</sup>

## CLASS B FIRES



These are **Flammable Gases And Liquids** such as solvents, oil, gasoline, paint, lacquers, tars, and other synthetic or oil-based products. This type often spreads rapidly and, unless properly secured, can rekindle after extinguishing flames.<sup>4</sup>

Class B fires involve flammable liquids and gases, especially fuels like petroleum or petroleum-based products such as gasoline, paint, and kerosene. Other gases that are highly flammable are propane and butane, which are common causes of Class B fires.<sup>6</sup> The best way to deal with these fires is by smothering them or removing oxygen using foam or CO<sub>2</sub> fire suppression equipment.<sup>5</sup>



**IN THE ILLUSTRATION:** It shows examples of fuel/materials under the Class B Fires.

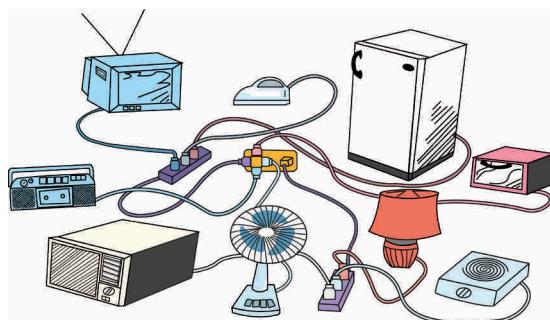
Be aware that Class B fires do not include grease or cooking fires, which belong to their class, Class K.

## CLASS C FIRES

These are **Electrical Fires** involving energized electrical equipment, such as wiring, controls, motors, data processing panels, or appliances. They can be caused by a spark, power surge, or short circuit and typically occur in locations that are difficult to reach and see.<sup>4</sup>

Electrical fires fall under Class C and are common in facilities that make heavy use of electrical equipment.

Electrical fires require non-conductive materials to extinguish the flame, so water alone is not a helpful solution. Facilities with sensitive equipment may prefer clean agent suppression because it won't leave residue or damage electrical equipment.<sup>5</sup>



**IN THE ILLUSTRATION:** It shows examples of fuel/materials under the Class C Fires.

## CLASS D FIRES



These are **Combustible Metals**, such as magnesium, sodium, and potassium. They are unique industrial hazards that require special dry powder agents.<sup>4</sup>

Class D fires require special attention because they can be especially difficult to extinguish, and they are less common than the other classes. Metallic fires involve flammable materials like titanium, aluminum, magnesium, and potassium — all commonly occurring in laboratories.<sup>5</sup>



**IN THE ILLUSTRATION:** It shows examples of fuel/materials under the Class D Fires.

## CLASS K FIRES

These are **Grease Fires Or Cooking Fires**, which involve combustible cooking oils and fats. Class K fires involve flammable liquids, similar to Class B fires, but are specifically related to food service and the restaurant industry. These common fires start from the combustion of liquid cooking materials, including grease, oils, and vegetable and animal fats.<sup>7</sup> Because they can spread quickly and be difficult to manage.<sup>5</sup>

Class K fires are some of the most dangerous. “Water can make the situation worse, but smothering the flames or using a wet agent fire extinguisher is effective.”<sup>5</sup>



**IN THE ILLUSTRATION:** It shows examples of fuel/materials under the Class K Fires.

### Here's How to Remember Fire Classes!

For memory retention, we usually use signs or reminders to remember things easily. When we hear those cues, we can certainly recall the

<sup>7</sup>Technical Drawing Fundamentals | PDF | Firefighting | Fires - Scribd

matter. Here are some mnemonics for memory retention.

It starts with the question, What's BURNING?

The pictograph label was also designed to inform which fire classifications the extinguisher is intended to fight, just like the one below.

				
<b>What is Burning?</b> Wood, Paper. When you burn wood or paper, it leaves Ash.  <b>A is for ASH</b>	<b>What is Burning?</b> Liquids (petroleum). When you heat liquids on the stove, they Boil.  <b>B is for BOIL</b>	<b>What is Burning?</b> Electrical. Electricity has Current.  <b>C is for CURRENT</b>	<b>What is Burning?</b> Metal. If you hit your metal truck with a hammer, it puts a Dent in it.  <b>D is for DENT</b>	<b>What is Burning?</b> Cooking oils, animal fats.  <b>K is for KITCHEN</b>



### Enrichment Activity

From the above classes of fire, how about if you were the one caught by a fire?

Based on what you have learned from the fire drill activities, if a fire catches somebody, the first thing they should do is to perform the STOP, DROP, and ROLL!

## Can you perform the STOP, DROP and ROLL?



**IN THE ILLUSTRATION:** It shows the STOP, DROP, and ROLL performed during a fire emergency.



Let us exercise!  
*Game Activity*  
“Choose it to Win it!”



Materials Needed

### Facilitator's Note

- ▶ The facilitator can print the flashcards into whole bond papers.
- ▶ Make sure to prepare all needed materials before the activity.

Facilitators may prepare the following materials before the session begins. The flash card has:

- different pictograph labels of fire classes
- different mnemonics of fire classes
- different pictures of examples of fire classes



Mechanics Of The Game

Read the mechanics loud and clear.

1. The mode of the game is elimination in nature.
2. Before the game starts, select five students to stand in front to serve as five stations: classes

of fire.

3. Flash one picture within ten (10) seconds; enough time is given to the participants to think and choose either of the five classes of fire that fit the flashed picture.

4. As soon as the flashcard is shown, this will automatically be a “GO” signal and start the 10-second time limit.

5. Participants can change their chosen station before the time stops.

6. Participants who got the wrong answer will be eliminated.

7. The game’s twist will take place after the third picture. In the fourth flash card, you will announce that the first ten players will only remain at one station. In this case, you will drop most participants, leaving the remaining ten as the final participants.

8. From the ten participants, the next card would be for the first five participants. And then, for the first three participants.

9. When three participants are left, announce that only one participant is allowed per station.

10. In this manner, only one participant will be declared as winner.

11. Remember to get your ten-second timer at every game twist.

### **How much have you learned?**

Can you give and differentiate the classes of fire?  
Why do we need to classify fires?

## POWERPOINT AND VISUAL AIDS

### COVER PAGE

1



What do you see in the illustration?

How do you put out a fire of a burning wood?

2



How about this one, what do you see?

How to put out a fire of a burning paper?

3



How about this illustration, what do you see?

What is Burning?

And how to put out a grease fire?

4

If you have a grease fire in the kitchen, turn off the heat source and take steps to cut off air of the fire by sliding a cover on top of the pan or using salt or baking soda.

5

### REMINDER!

**Don't try to fight a fire on your own.**

Do not attempt to put the fire out yourself.

If you can't immediately put out the fire while it is very small, get out of the building and call emergency services.

6

Based on the given illustrations, what do we call these burning materials in the elements of fire?

7

### The ABC's of Fire

Fire are classified to the **type of fuel that is burning**.

8

### CLASS A FIRES:



#### SOLID COMBUSTIBLE MATERIALS

of organic nature

- Wood
- Cardboard
- Paper
- Hardboard
- Rubber
- Soft furnishings

Fuel in this class of fire when burned produce ashes.

9

### CLASS B FIRES:

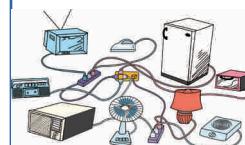


#### FLAMMABLE GASES AND LIQUIDS

- Solvent
- Soil
- Gasoline
- Paint
- Lacquers
- Other synthetic or oil-based products

10

### CLASS C FIRES:



#### ELECTRICAL FIRES

- Energized electrical equipment
- Wirings
- Controls
- Motors
- Data processing panels or appliances

Caused by a spark, power surge or short circuit and typically occur in locations that are difficult to reach and see

11

### CLASS D FIRES:



#### METALIC FIRES

- Combustible Materials
- Magnesium
- Sodium
- Potassium

Combustible metal fires are unique industrial hazards which require special dry powder agents

12

### CLASS K FIRES:



### GREASE FIRES OR COOKING FIRES

- Combustible cooking oil and fats



13

### Here's How to Remember Fire Classes!

Pictograph label was also design for fire extinguisher to inform what classes of fire it is intended.



14

### Here's How to Remember Fire Classes!

It also starts with the question WHAT's BURNING?

<b>What is Burning?</b> Wood, Paper. When you burn wood or paper, it leaves Ash.	<b>What is Burning?</b> Liquids (petroleum). When you heat liquids on the stove, they Boil.	<b>What is Burning?</b> Electrical. Electricity has Current.	<b>What is Burning?</b> Metal. If you hit your metal instrument with a hammer, it puts a Dent in it.	<b>What is Burning?</b> Cooking oils, animal fats. Just like in your Kitchen.
A is for ASH	B is for BOIL	C is for CURRENT	D is for DENT	K is for KITCHEN

15

How about if you were the one caught by fire?

What will you do if your clothing caught by fire?

16

Can you perform the **STOP, DROP, and ROLL?**

### STOP, DROP & ROLL



17

Any questions about the topic?

18

### Let's have an exercise!



**"Choose it,  
to Win it!"**

19

### How much have you learned?

Can you give and differentiate the classes of fire?

Why do we need to classify fires?

20

**THANK YOU** 😊



# Subject 4

Fire Safety for Teenagers

## Simple Fire Suppression Methods Using Ordinary Household Materials



ILLUSTRATION BY: FO1 Ken Dominic M Mordeno

# In this Subject 4...

## Goal

To equip the participants with the knowledge and skills in the effective use of ordinary household materials for simple fire suppression, promote an understanding of fire safety, and empower the participants with the confidence to extinguish small fires.

## Objectives

At the end of the session, the participants will be able to:

1. Understand and define what fire safety means;
2. Explain the importance of using safe and proper methods in handling fires;
3. Name the proper household materials to use for the diverse types of fires;
4. Simulate the use of common household items like baking soda, salt, sand, damp cloth table cloth, or a pot of lid to smother a small fire and
5. Participate in role plays in pairs or group activities in the simulation of real-life fire emergencies and choose suitable suppression methods to put out simulated fires effectively.

---

### Subject Aids Needed:

#### A. Primary Tools

1. Multimedia Projector
2. Powerpoint Presentation
3. Powerpoint Presentation
4. Firsthand Materials
  - Baking Soda
  - Salt
  - Sand
  - Damp cloth/table cloth
  - Pot lid

#### B. Alternative Tools

1. Safety Posters
2. Video Demonstration

---

### Total Time of Delivery:

*1 hour*

---

## Subject Overview

**Purpose:** To instruct participants about the fundamentals of fire safety, including types of fires and the importance of preparedness. It includes instructing them on how to name and effectively respond to common fire emergencies using everyday household materials. The goal is to promote a culture of safety and responsibility, empowering students to protect themselves, their families, and their communities from fire-related risks.

**General Guidance:** In this subject, the lecturer/facilitator should use simple language and relatable examples to connect with the participants, encourage participation through questions, discussions, and group activities, ensure that every participant gets a

# Cheat Sheet

chance to practice suppression techniques, maintain a friendly and approachable attitude throughout the session, and adapt the teaching approach to align with the participants' learning styles while ensuring that the content remains engaging and easy to comprehend for them.

**Things to Consider:** The participants are junior and senior high school students who may have different learning needs and capabilities. Be aware of cultural differences that can influence the beliefs of the targeted participants on fire safety, and adapt your teaching approach accordingly.

To ensure that all participants can fully engage in the firsthand activities and discussions, provide accommodations as needed. Consider the availability of resource materials for firsthand demonstrations, and ensure all the necessary equipment is in place. Teach participants not only how to suppress fires but also how to respond to emergencies, including alerting adults about the situation. Please encourage students to share their knowledge with their families and communities, thereby extending the dissemination of fire safety education. Lastly, stay updated on current fire safety guidelines and recommendations.

## Subject Outline

Audio/Visual Aids	Outline	Notes
<b>1. PREPARATORY</b>		
PPT cover	1.1 Greet the participants with a smile and a friendly 'Good [morning/afternoon]' to create a welcome atmosphere.	<i>Begin by introducing yourself to your teammates and the topic of fire safety and suppression using ordinary household materials. Emphasize the importance of the session for practical, everyday life situations.</i>
LG4-1 PPTS-1-2	1.2 Engage the participants by asking the following questions. <ul style="list-style-type: none"><li>• What is one thing you have always wanted to know or learn about fire safety? Why is it important to you?</li><li>• Imagine you are cooking in the kitchen, and suddenly, a small fire starts on the stove. What will you do?</li></ul>	<i>The following questions are not suggestions to choose from; rather, they should all be asked in the presented manner.</i>

# Cont.

Audio/Visual Aids	Outline	Notes
 <b>LG 4-2</b> <b>PPTS-3</b>	<b>2. MOTIVATION</b>  2.1 Compelling Fact or Personal Connection  2.2 Transition to the main lesson	<i>Share a compelling fact related to fire safety, a short personal anecdote or story related to fire safety, and engage participants by incorporating discussions, personal anecdotes, and relatable scenarios. Emphasize the importance of fire safety.</i>
 <b>LG 4-3</b> <b>PPTS-4-7</b>   <b>PPTS-8-9</b>	<b>3. LESSON PROPER</b>  3.1 Could you give examples of everyday items we can use to stop a fire? Discuss how these materials can help put out the small fire, which is as follows: <ul style="list-style-type: none"><li>• Baking Soda</li><li>• Salt</li><li>• Sand</li><li>• Damp cloth/table cloth</li><li>• Pot lid</li></ul> 3.2 Proceed to Demonstration and Firsthand Activity Setup <ul style="list-style-type: none"><li>•Baking Soda</li><li>•Salt</li><li>•Sand</li><li>•Damp cloth/table cloth</li><li>•Pot lid</li></ul> 3.3 Demonstration and Firsthand Activity Station	<i>Show an image of baking soda, salt, sand, damp cloth/tablecloth, and pot lid. If PPT is not available, show the actual example of the materials.</i>  <i>The lecturer shall prepare a controlled demonstration area with a small, controlled fire source (e.g., a controlled flame in a safe container). Ensure safety measures are in place and have a fire extinguisher on standby.</i>  <i>The lecturer shall show each method one at a time, providing explanations. Participants are encouraged to ask questions during the demonstrations. After each demonstration, the firsthand activity will follow.</i>
 <b>LG 4-4</b> <b>PPTS-10</b>	<b>4. GENERALIZATION</b>  4.1 Summarize the lesson and provide a generalization of the things the participants need to remember.	

# Cheat Sheet

Audio/Visual Aids	Outline	Notes
<b>5. CLOSING EVALUATION</b>		



- 5.1 Ask a series of questions to review the objectives.
- Can you name the household materials we demonstrated for fire suppression, and which types of fires are they effective against?
  - How do these fire suppression methods work, and why is safety a top priority when using them?
  - What are some scenarios in which you may apply the knowledge and skills you have gained today in real-life situations?
- 5.2 Ask if there are questions or clarifications.
- 5.3 End of subject.

## INTRODUCTION

Fires are relentless and unpredictable forces of nature that can strike when least expected. Whether it is a kitchen mishap while cooking, an electrical malfunction, or a natural disaster, the potential for fires exists everywhere and at any time. The damage they leave in their wake can be catastrophic, affecting lives, property, and the environment. However, there is a beacon of hope amidst this uncertainty: preparedness.

In a world where fire emergencies can strike unexpectedly, being equipped with the knowledge of simple fire suppression methods using ordinary household materials can be a notable change. Remembering the proper materials for diverse types of fires and understanding how they work is the first step toward ensuring your safety and the safety of your loved ones.

### Facilitator's Note

- ▶ The facilitator should ask the following questions to the participants and accept all the answers given by the participants.
- ▶ Emphasize the importance of fire suppression using ordinary household materials.a
- ▶ What is the one thing you have always wanted to know or learn about fire safety? Why is it important to you?
- ▶ Imagine you are cooking in the kitchen, and suddenly, a small fire starts on the stove. What will you do?
- ▶ Conclude this segment by saying, “By the end of our session, you will not only know how to manage such situations but also understand how everyday items or ordinary household materials can be used for fire suppression.



## To Remember

Fire safety is not just a concept; it is a practical skill that can be applied in everyday life. By harnessing the power of everyday materials, you can be better prepared to respond to fires and contribute to a culture of safety and responsibility within your family and community. So, keep these household materials in mind – they might save the day when the unexpected happens.



## Compelling Fact

Did you know that baking soda, a common household ingredient, can suppress small grease fires in the kitchen? It is a simple and effective fire suppression method that can prevent a minor kitchen mishap from turning into a dangerous situation.

### Facilitator's Note

- The facilitator may use a Short Personal Anecdote to add spice to the discussion. For example:

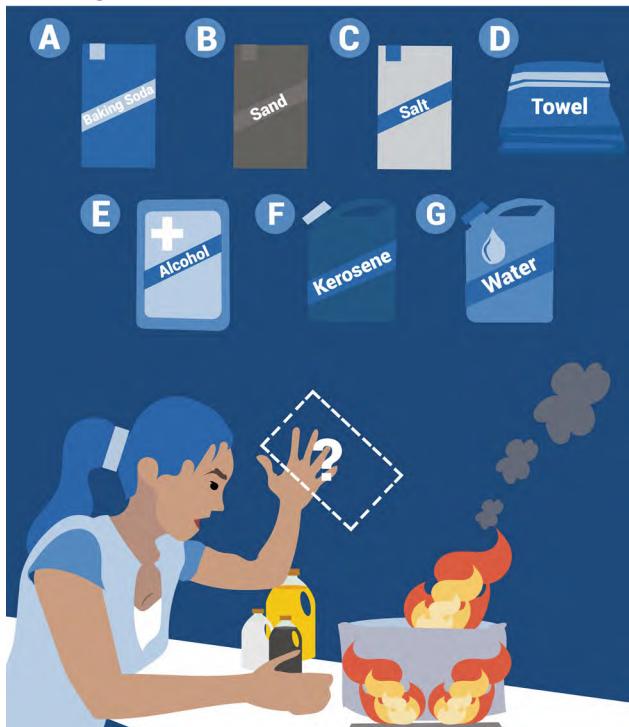
When I was your age, my family experienced a small kitchen fire while my mom cooked. She accidentally left a pan with oil on the stove unattended, and it caught fire. What do you think happened next? Look at this picture. What do you think my mom used to put the fire out? Instead of panicking, my mom remembered a simple fire safety tip she had read about using baking soda. She calmly grabbed a box of baking soda from the pantry and sprinkled it over the flames, quickly smothered the fire. It was a relief to see how a common household item could save the day and teach us the importance of being prepared for such situations.

What else can we use to put the fire out using household materials?

## Can Baking Soda extinguish Class A Fires?



First, there is the heat. Baking soda is a white powder, and when you throw it onto a fire, it does something cool. It gives off a special gas called carbon dioxide (CO<sub>2</sub>), which you cannot see, but it is great at soaking up the fire's heat. Think of it like a refreshing breeze on a scorching day – it cools the fire down, making it less hot and less likely to spread.



**IN THE ILLUSTRATION:** It shows that some of these items here can put out a small fire. What do you think these materials are?

Next, think about the fuel. In Class A fires, the bad guys are materials like wood, paper, or cloth – stuff you find around the house. Here is the impressive part: when baking soda joins the firefight, it does not add more fuel to the fire. It is like having a firefighter who does not accidentally make things worse – it just works to put the fire out.

Finally, there is oxygen, like the air that makes the fire breathe. Baking soda is a true superhero in this department. When it gets into action, it releases that CO<sub>2</sub> gas we mentioned earlier. This CO<sub>2</sub> gas is a friendly superhero blocking the oxygen, like a shield. And guess what? Fire needs oxygen to stay alive, so when you take that oxygen away, the fire cannot keep burning.

To sum it up in simple words, baking soda cools down the fire, does not make it bigger, and steals its oxygen. That is why it is a fantastic way to stop Class A fires and keep everyone safe, whether you are in the kitchen or anywhere else where things might catch on fire.<sup>1</sup>

### **Can salt be used to extinguish Class B fires?**

No, salt is not effective for extinguishing Type B fires. Type B fires involve flammable liquids and gases, and salt is not suitable for smothering or suppressing these types of fires.

Why do you think salt can also extinguish Class A fires?

Salt can be effective in extinguishing Class A fires for several reasons.

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<sup>1</sup><https://rainbowrestores.com/blog/put-out-a-grease-fire-with-these-kitchen-ingredients>



**Smothering Effect:** When salt is applied to a Class A fire, it covers the burning material and smothers the flames. This action cuts off the fire's oxygen supply, one of the key elements needed to sustain combustion.

**Cooling Effect:** Salt can absorb heat from the fire, causing the temperature of the burning material to decrease. Lowering the temperature is essential in preventing the fire from reigniting.

**Non-Flammable:** Salt is not flammable, so it does not contribute to the fire. It is a stable substance that can safely suppress fires involving common combustibles like wood, paper, and textiles.<sup>1</sup>

#### How does sand work to suppress Class A fires?

Sand works to suppress Class A fires through a combination of smothering and cooling effects.



**Smothering Effect:** When sand is applied to a Class A fire, it blankets the burning material, effectively creating a barrier between the flames and the surrounding air. This layer of sand acts as a physical barrier that prevents the fire from accessing the oxygen it needs to continue burning. Without an adequate supply of oxygen, the fire cannot sustain itself and is extinguished.

**Cooling Effect:** Besides smothering the flames, sand can absorb and dissipate heat. As it covers the burning material, it absorbs the heat generated by the fire, reducing the temperature is critical in preventing the fire from reigniting once the oxygen supply is restored.

What other scenarios can you think of where sand might be useful for fire suppression?

**Campfires:** When camping, carrying a bag of sand can be useful to ensure your campfire is fully extinguished before leaving the site.

**BBQ Grills:** Keeping a container of sand nearby when grilling can help in case of flare-ups or grease fires.

**Garage or Workshop:** If you have a workshop or garage where flammable materials are stored, having sand on hand can be a precautionary measure.

**Fire Pits:** Sand can be used in backyard fire pits to control and extinguish fires safely.<sup>2</sup>

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<sup>2</sup><https://byjus.com/question-answer/how-is-sand-useful-for-extinguishing-fire-it-limits-the-supply-of-oxygen-it-limits-1/>

## How does a damp cloth/table cloth suppress fires by smothering and why is this method effective?



A damp cloth/tablecloth works to suppress fires by smothering them. When a tablecloth is placed over a fire, it forms a barrier between the flames and the surrounding air. This barrier effectively cuts off the fire's access to oxygen, one of the essential elements needed for combustion. Without a steady oxygen supply, the fire cannot continue to burn and is extinguished.

**No Additional Fuel:** A tablecloth itself is not flammable, so it does not add any fuel to the fire. It is important because adding more fuel can make the fire more intense and difficult to control. **Readily Available:** Tablecloths are common household items, and they are often found in homes, restaurants, and other places. It means that in case of a fire emergency, a tablecloth can be a readily available tool for suppression.<sup>3</sup>

### Summary

A damp cloth/tablecloth effectively suppresses fires by smothering them because it creates a barrier that blocks the fire's access to oxygen, preventing it from continuing to burn. This

<sup>3</sup><https://utv44.com/news/local-15-today/part-1-ways-to-put-out-a-grease-fire-03-29-2016>

method is practical, safe, and accessible, especially for small fires involving Class A materials like wood or paper.

What are some scenarios in daily life where a damp cloth/tablecloth might come in handy for fire safety?

**Kitchen Fires:** In case of a small kitchen fire, such as a stovetop flare-up caused by cooking oil, a tablecloth can smother the flames quickly. However, it is crucial to remember to turn off the heat source before trying to suppress the fire. Safety should always be the top priority.

**Candle Safety:** If a candle's flame becomes too large or starts to burn nearby objects, placing a tablecloth over it can help extinguish it safely. This action effectively blocks the oxygen supply to the flame and prevents potential fire hazards.

**Material Spills:** If flammable liquids are accidentally spilled, a tablecloth can be used to cover the spill, reducing the risk of ignition.

**Decoration Safety:** In homes or event venues with decorative candles or open flames, having a tablecloth nearby can be a precautionary measure for fire safety.



### To Remember

It is important to emphasize that while a tablecloth can be a handy tool for fire safety in certain situations, it should only be used when it is safe to do so, and safety protocols should

always be followed. In the case of larger or more dangerous fires, it is essential to contact emergency services for help.

### Pot Lid

Using a pot lid to suppress fires by smothering is effective for the following reasons:



**Smothering Effect:** When a pot lid is placed over a fire, it is a physical barrier between the flames and the surrounding air. This barrier effectively cuts off the fire's access to oxygen, one of the essential elements needed for combustion. Without oxygen, the fire cannot sustain itself and is extinguished.

**Quick and Accessible:** Pot lids are readily available in most kitchens and easily accessible in a fire emergency. They do not require specialized equipment or training, making them a practical choice for fire suppression.

**Versatility:** Pot lids come in many sizes and can cover fires of varied sizes, from small stovetop flare-ups to larger kitchen fires.

### Summary

Using a pot lid to suppress fires smothers the flames by cutting off their oxygen supply. This method is quick, accessible, and practical,

especially for kitchen fires involving Class A materials like wood, paper, or cooking oils.<sup>4</sup>

Advantages of using pot lids for fire suppression

**Quick and Accessible:** Pot lids are readily available in most kitchens, making them a readily accessible tool for suppressing fires in emergencies. Simplicity: Using a pot lid is easy to remember in high-stress situations.

**Versatility:** Pot lids come in diverse sizes, allowing them to be used for fires of varied sizes, from small stovetop flare-ups to larger kitchen fires.



### To Remember

While pot lids are helpful for certain types of fires, it is essential to remember that they may not be suitable for all fire scenarios, particularly those involving flammable liquids or electrical fires. Always prioritize safety and call emergency services if a fire cannot be safely contained.

#### Facilitator's Note

- Flour, sugar, cornstarch, and baking powder are common kitchen ingredients, and it is important to understand their flammability to ensure safety in the kitchen. Here is a discussion of the flammability of each of these substances:
  - Flour:  
Flammability: Flour is considered highly flammable. It can form explosive dust clouds when dispersed in the air and exposed to

<sup>4</sup><https://www.lincolncountync.gov/DocumentCenter/View/7740/How-to-Put-Out-a-Grease-Fire>

an ignition source due to its fine particle size and the presence of carbohydrates, which are combustible.

**Safety Precautions:** it is important to store flour in a cool, dry place away from potential ignition sources, such as open flames or hot appliances, to minimize the risk of flour-related fires or explosions. Additionally, keeping the kitchen clean and free of flour dust can help reduce the risk of accidental ignition.

► **Sugar:**

**Flammability:** Sugar is explosive, but it requires higher temperatures to ignite compared to flour. Granulated sugar, for instance, will melt and caramelize before it ignites. However, powdered or confectioners' sugar can still pose a fire hazard when dispersed as dust particles.

**Safety Precautions:** Like flour, it is essential to keep sugar away from open flames or hot surfaces. Store sugar in a cool, dry place and avoid creating dust clouds when using powdered sugar.

► **Cornstarch:**

**Flammability:** Cornstarch is also flammable when dispersed in the air. It can form dust clouds that are combustible under the right conditions.

**Safety Precautions:** When using cornstarch in cooking or baking, avoid creating dust by managing it carefully. Please keep it in a sealed container to prevent dusting, and store it in a cool, dry location.

► **Baking Powder:**

**Flammability:** Baking powder is not considered highly flammable. It combines an acid (cream of tartar) and a base (usually baking soda), which can undergo a chemical reaction when exposed to moisture or heat. While this reaction can release carbon dioxide gas, it is not typically associated with significant flammability.

## Firsthands Activity Guidelines

### Facilitator's Note

- **Lecturer:** Now, let us put what we have learned into practice. We have set up multiple stations corresponding to each material we have shown. You will be divided into smaller groups to ensure that everyone takes part actively. Before we begin, let us go through a safety briefing. Safety is paramount. Handle materials carefully, follow safety guidelines, and wear safety gear if needed.

**Firsthands Activity Stations:**

Lecturer: At each station, you will find a controlled, small-scale fire setup using our household materials. We have a baking soda station, a salt station, a sand station, a damp cloth/tablecloth station, and a pot lid station.

**Rotation:**

We will rotate groups through each station so that everyone gets a chance to practice with unconventional materials. Feel free to ask questions and seek guidance. Safety is our priority.

**Observation and Guidance:**

Lecturer: While you are engaged in the firsthands activity, our team members will go around to see and help as needed.

**Debrief:**

After the firsthands activity, we will gather for a debriefing session. Share your experiences, what you have learned, and any insights you gained from the practical exercises.



## *Let Us Exercise*

### Demonstration Activity



## Practicing with Salt



## Materials Needed

- Small controlled Class A fire setup (e.g., a small tray with controlled fire source using wood, paper, or cardboard)

- Table Salt
- Safety gear (fire-resistant gloves and safety goggles)
- Fire extinguishing equipment (in case of emergencies)

### **Setting up the Fire Scenario:**

Create a controlled Class A fire scenario using a small tray with wood, paper, or cardboard. Ensure that the fire is manageable and safely contained for the demonstration.

### **Practice Rounds:**

Divide students into small groups, each with their part of table salt. Instruct the students to approach the controlled Class A fire scenario one group at a time. Each group should carefully sprinkle enough salt onto the fire to extinguish it. Emphasize the importance of keeping a safe distance and using fire-resistant gloves when approaching the fire.

### **Observation and Discussion:**

After each group has had the opportunity to use salt to extinguish the Class A fire, discuss their observations. Please encourage students to describe how salt affected the fire and what they learned from the experience.



## Practicing with Sand



### Materials Needed

- Small controlled Class A fire setup (e.g., a small tray with controlled fire source using wood, paper, or cardboard)
- Clean, dry sand (ensure it is free of contaminants)
- Safety gear (fire-resistant gloves and safety goggles)
- Fire extinguishing equipment (in case of emergencies)

### Setting up the Fire Scenario:

Create a controlled Class A fire scenario using a small tray with wood, paper, or cardboard. Ensure that the fire is manageable and safely contained for the demonstration.

### Practice Rounds:

Divide students into small groups, each with clean, dry sand. Instruct the students to approach the controlled Class A fire scenario one group at a time. Each group should carefully sprinkle enough salt onto the fire to extinguish it. Emphasize the importance of maintaining a safe distance and using fire-resistant gloves.

when approaching the fire.

#### Observation and Discussion:

After each group has had the opportunity to use clean, dry sand to extinguish the Class A fire, discuss their observations. Please encourage students to describe how salt affected the fire and what they learned from the experience.



#### Practicing with Damp Cloth/Table Cloth



#### Materials Needed

- Small controlled Class A fire setup (e.g., a small tray with controlled fire source using wood, paper, or cardboard)
- Clean damp cloth/table cloth
- Safety gear (fire-resistant gloves and safety goggles)
- Fire extinguishing equipment (in case of emergencies)

#### Setting up the Fire Scenario:

Create a controlled Class A fire scenario using a small tray with wood, paper, or cardboard.

Ensure that the fire is manageable and safely contained for the demonstration.

### Practice Rounds:

Divide students into small groups, each with a damp cloth/tablecloth, to approach the controlled Class A fire scenario one group at a time. Each group should carefully sprinkle enough salt onto the fire to extinguish it. Emphasize the importance of keeping a safe distance and using fire-resistant gloves when approaching the fire.

### Observation and Discussion:

After each group has had the opportunity to use a damp cloth/tablecloth to extinguish the Class A fire, discuss their observations. Please encourage students to describe how salt affected the fire and what they learned from the experience.



### Practicing with Pot Lids



#### Materials Needed

- Small controlled Class A fire setup (e.g., a small tray with controlled fire source using wood, paper, or cardboard)
- Pot lids of diverse sizes (ensure they have handles)

- Safety gear (fire-resistant gloves and safety goggles)
- Fire extinguishing equipment (in case of emergencies)

### Setting up the Fire Scenario:

Create a controlled Class A fire scenario using a small tray with wood, paper, or cardboard. Ensure that the fire is manageable and safely contained for the demonstration.

### Practice Rounds:

Divide students into small groups, each with a different-sized pot lid. Instruct the students to approach the controlled Class A fire scenario one group at a time. Each group should carefully sprinkle enough salt onto the fire to extinguish it. Emphasize the importance of keeping a safe distance and using fire-resistant gloves when approaching the fire.

### Observation and Discussion:

After each group has had the opportunity to use a different-sized pot lid to extinguish the Class A fire, discuss their observations. Please encourage students to describe how salt affected the fire and what they learned from the experience.

This firsthand activity allows students to practice using baking soda, salt, sand, damp cloth/tablecloth, and pot lids for fire suppression in a controlled and supervised environment. It reinforces the practical application of fire safety knowledge gained during the lesson while always prioritizing safety.

**Facilitator's Note**

- ▶ Things the participants need to remember:

**Use of Baking Soda:** Baking soda is a versatile and effective tool for suppressing small fires, especially grease fires in the kitchen. Remember to keep a box of baking soda readily accessible in the kitchen.

**Never Use Water on Grease Fires:** Stress the importance of never using water to extinguish grease fires, as it can worsen the situation by causing splattering and spreading the fire.

**Stay Calm and Call for Help:** Encourage participants to remain calm in a fire emergency and to call for help at once. Dialing emergency services is a critical step in fire safety.

**To Remember**

- 1. Safety First** – Remember that safety should always be our top priority.
- 2. Everyday Heroes** – By learning these simple fire suppression methods, you have taken the first step toward becoming everyday heroes in your homes and communities. You now have the knowledge and skills to respond to small fires and prevent them from becoming disasters.
- 3. Practice Makes Perfect** – Like any skill, practice is essential. Regularly review and practice these methods to ensure you can confidently use them when needed.
- 4. Share the Knowledge** – Don't keep this knowledge to yourself. Please share it with your family, friends, and neighbors. You can make a real difference in your community's safety.

### How much have you learned?

Let us evaluate our understanding of the key concepts covered in this session. Please take a moment to answer the following questions.

1. Can you name the household materials we have shown for fire suppression and which types of fires they are effective against?
2. How do these fire suppression methods work, and why is safety a top priority when using them?
3. What are some scenarios in which you may apply the knowledge and skills you have gained today in real-life situations?

## POWERPOINT AND VISUAL AIDS

### COVER PAGE

1

### OBJECTIVES

1. Understand and define what fire safety means;
2. Explain the importance of using safe and proper methods in handling fires;
3. Name the proper household materials to use for the diverse types of fires;
4. Simulate the use of common household items like baking soda, salt, sand, damp cloth/table cloth, or a pot of lid to smother a small fire and
5. Participate in role plays in pairs or group activities in the simulation of real-life fire emergencies and choose suitable suppression methods to put out simulated fires effectively.

2

### QUESTIONS

- What's one thing you've always wanted to know or learn about fire safety? Why is it important to you?
- Imagine you're cooking in the kitchen, and suddenly, a small fire starts on the stove. What would you do?

3



What do you think my mom used to put the fire out?

4



Can Baking Soda extinguish Class A Fires?

5



Can Salt be used to extinguish Class B Fires?

6



How does Sand work to suppress Class A Fires?

7



How does a damp cloth / table cloth work to suppress fires by smothering and why is this method effective?

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### To Remember

It's important to emphasize that while a **table cloth** can be a handy tool for fire safety in certain situations, it should only be used when it is safe to do so, and safety protocols should always be followed. In the case of larger or more dangerous fires, it's essential to contact emergency services for assistance.

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How a Pot Lid suppress fire?

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### To Remember

Fire safety is not just a concept; it's a practical skill that can be applied in everyday life. By harnessing the power of everyday materials, you can be better prepared to respond to fires and contribute to a culture of safety and responsibility within your family and community. So keep these household materials in mind; they might just save the day when the unexpected happens.

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### Generalization

- Use of Baking Soda: Baking soda is a versatile and effective tool for suppressing small fires, especially grease fires in the kitchen. Remember to keep a box of baking soda readily accessible in the kitchen.
- Never Use Water on Grease Fires: Stress the importance of never using water to extinguish grease fires, as it can worsen the situation by causing splattering and spreading the fire.
- Stay Calm and Call for Help: Encourage participants to remain calm in a fire emergency and to call for help at once. Dialing emergency services is a critical step in fire safety.

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## EVALUATION

1. Can you name the household materials we demonstrated for fire suppression, and which types of fires are they effective against?
2. How do these fire suppression methods work, and why is safety a top priority when using them?
3. What are some scenarios in which you might apply the knowledge and skills you've gained today in real-life situations?

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## To Remember

1. *Safety First* - Remember that safety should always be our top priority.
2. *Everyday Heroes* - By learning these simple fire suppression methods, you have taken the first step toward becoming everyday heroes in your homes and communities. You now have the knowledge and skills to respond to small fires and prevent them from becoming disasters.
3. *Practice Makes Perfect* - Like any skill, practice is essential. Regularly review and practice these methods to ensure you can confidently use them when needed.
4. *Share the Knowledge* - Don't keep this knowledge to yourself. Please share it with your family, friends, and neighbors. You can make a real difference in your community's safety.

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THANK YOU 

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# Subject 5

Fire Safety for Teenagers

## Types of Fire Extinguisher



ILLUSTRATION BY: FO1 Ken Dominic M Mordeno

# In this Subject 5...

## Goal

For the participants to differentiate types of fire extinguishers according to its identification, description and recommended usage and appreciate its importance.

## Objectives

At the end of the session, the participants will be able to:

1. Give diverse types of fire extinguisher.
2. Differentiate types of fire extinguisher according to its identification and usage
3. Realize the importance of familiarizing types of fire extinguisher.

### Subject Aids Needed:

#### A. Primary Tools

1. Multimedia Projector
2. Powerpoint Presentation
3. Visual Examples
  - Pictures of drill activities
  - Picture of diverse types of fire extinguishers
4. Flash cards for application proper
  - Name of distinct type of fire extinguishers
  - Picture of types of fire extinguishers
  - Description of distinct types of fire extinguishers
  - Recommended usage of distinct types of fire extinguishers
5. Simple token for the winner of the game during application (optional)

#### B. Alternative Tools

1. Laminated Flash Cards
  - Pictures of drill activities
  - Pictures of distinct types of fire extinguishers

### Total Time of Delivery:

*35 minutes*

## Subject Overview

**Purpose:** To equip the participants with the knowledge of fire extinguisher's diverse types, and they differ according to its recommended usage, content, and identification. The participants will be made mindful through visual examples and mastery games.

**General Guidance:** In this subject the facilitator must deliver the lesson in the simplest terms possible that is comprehensible to the participants. Facilitators should ensure that the lecture is delivered through a modulated voice and promote an enjoyable and enthusiastic method to capture the attention of the participants. For a spontaneous motivated atmosphere, facilitators may also prepare a simple token, tagline, or ice breaker clap. In addition, the facilitator should prepare the given primary tools or alternative tools for effective instruction.

# Cheat Sheet

**Things to Consider:** The participants are teenagers, around the age of 12 to 17, care and effort must be considered when it comes to delivering the subject. In this subject, direct interaction with the participants is advised such as moving around the lecture venue and making jokes. The facilitator must keep this in mind in making or citing examples that involve personal details. Stay on the topic and the schedule as much as possible.

## Subject Outline

Audio/Visual Aids	Outline	Notes
<b>1. PREPARATORY</b>		
PPT cover	1.1 Greet the participants and start by introducing your name and your teammates.	
PPTS-1-3		
	1.2 Engage the participants by showing pictures of fire drill activities and ask the following questions: <ul style="list-style-type: none"><li>• What did you see in the picture?</li><li>• What did he use to extinguish the fire?</li></ul>	<p><i>The first questions will allow the participants to arrive at various answers and concepts based on the picture.</i></p> <p><i>The expected answer should be FIRE EXTINGUISHER. In this manner, the participants will be able to figure out what the topic is all about and connection to the discussion is well presented.</i></p>
<b>2. MOTIVATION</b>		
LG 5-1 PPTS-4	2.1 Ask the following question: <ul style="list-style-type: none"><li>• Have you seen a real/actual fire extinguisher?</li></ul>	<p><i>Start by showing an actual fire extinguisher after the first question.</i></p>
	2.2 Show the actual fire extinguisher. <ul style="list-style-type: none"><li>• Where can you find a fire extinguisher?</li><li>• Can you describe the fire extinguishers that you see?</li><li>• Do you know that fire extinguishers have distinct colors?</li><li>• And do you know that they have several types and usage?</li></ul>	<p><i>Give the participants time to interact and give their answers to the questions.</i></p> <p><i>Allow the participants to share their experience from where they can find fire extinguishers.</i></p>
	2.3 Present subject goals.	<p><i>Assess the participants if they have concepts about the assorted colors of the fire extinguishers.</i></p> <p><i>Refer to Goals and Subject Objectives</i></p>

# Cont.

Audio/Visual Aids	Outline	Notes
	<b>3. LESSON PROPER</b>	
	<ul style="list-style-type: none"><li>3.1 Discuss what is a fire extinguisher.</li><li>3.2 Discuss the general usage of a fire extinguisher.</li><li>3.3 Discuss diverse types of fire extinguishers.<ul style="list-style-type: none"><li>• HCFC (Hydrochlorofluorocarbon) 123 Fire Extinguisher</li><li>• Dry Chemical (Mono Ammonium Phosphate) Fire Extinguisher</li><li>• Carbon Dioxide (CO<sub>2</sub>) Fire Extinguisher</li><li>• Aqueous Film Forming Foam (AFFF) Fire Extinguisher</li><li>• Wet Chemical Fire Extinguisher</li><li>• Dry Powder Extinguishers</li></ul></li></ul>	<p>The discussion should be presented in a sequential format: description, recommended usage, and identification.</p>
	<b>4. APPLICATION</b> <ul style="list-style-type: none"><li>4.2 Introducing the title of the game; "The More We Get Together, the Happier We Are!"</li><li>4.3 Discuss the mechanics and game scoring.</li><li>4.4 Announce the winner.</li></ul>	<p>Engage the participants by asking them to read the content of the slides before discussing and allow them to describe the physical appearance of the fire extinguisher.</p>
	<b>5. GENERALIZATION/EVALUATION</b> <ul style="list-style-type: none"><li>5.1 Review the objectives by asking the questions:<ul style="list-style-type: none"><li>• How do fire extinguishers differ?</li><li>• In your point of view, why do we need to familiarize the usage, identification, and description of fire extinguishers?</li></ul></li><li>5.2 Ask if there are questions or clarification.</li><li>5.3 End of the session.</li></ul>	<p>In this part, the facilitator will also meet his aim to his participants to differentiate types of fire extinguisher according to its description, identity, and usage.</p> <p>Facilitator may also prepare simple tokens as extrinsic motivation for the winner to add excitement and challenge.</p> <p>In this part of the session, the facilitator will be able to confirm the knowledge gained by the participants by giving simple to higher-level of questions based on the objectives. This is to allow the participants to express their insights and immersed belief of what they had learned.</p>



## *Engagement Activity*

**"Fire Extinguisher – A Firefighting Tool"**



### Examine The Picture Below

Look at the picture below. Examine the picture and answer the following questions.



**IN THE ILLUSTRATION:** It shows a fire drill activity using a portable fire extinguisher to extinguish a simple fire.

What did you see in the picture?

In the picture, you will see a man extinguishing a fire in a burning pit. This illustration shows the scenario of fighting simple fires using a firefighting tool.

What did he use to extinguish the fire?

Based on the given illustration, a man is smothering a fire using a fire extinguisher. If a fire is controllable, you can fight it with a portable fire extinguisher. Make sure that the

### **Facilitator's Note**

- The facilitator will engage the participants through flashing pictures of fire drill scenarios showing extinguishing simple fires.
- In this manner, use the guide questions below to interact and assess the prior knowledge of the participants.

fire extinguisher that will be used is suitable for the type of burning materials or fuel.

### Guide Questions:

Have you seen a real/actual fire extinguisher? Where can you find a fire extinguisher? Can you describe the fire extinguishers that you see? Do you know that fire extinguisher has distinct colors? Do you know that they have diverse types and usage?

#### Facilitator's Note

- Before discussing the types of fire extinguishers, participants must have a prior knowledge of Classes of Fires to familiarize the correct extinguisher for the type of fuel.

### What is a Fire Extinguisher?

“A fire extinguisher is a handheld active fire protection device usually filled with a dry or wet chemical used to extinguish or control small fires, often in emergencies.”<sup>1</sup>

“Fire extinguishers are designed to tackle specific types of fire.”<sup>2</sup> There are several types of fire extinguishers used for different classes of fire.<sup>3</sup>



Each type of extinguisher is ergonomically designed for the safe and effective discharge of its contents. Extinguishers have varied materials that make them suitable for fighting certain types of fires.<sup>4</sup> For them to be effective, they should be used appropriately, or they may prove ineffective or in fact aggravate the fire if not used properly.<sup>5</sup>

**IN THE ILLUSTRATION:** It shows sample of a portable Fire Extinguisher

<sup>1</sup>Fire extinguisher - Wikipedia

<sup>2</sup>Fire Extinguisher Classes and Their Color Codes – HSE Watch

<sup>3</sup>CCOHS: Fire Extinguishers - Portable

<sup>4</sup>5 Types of Fire Extinguishers | Which Do You Need? | Safety

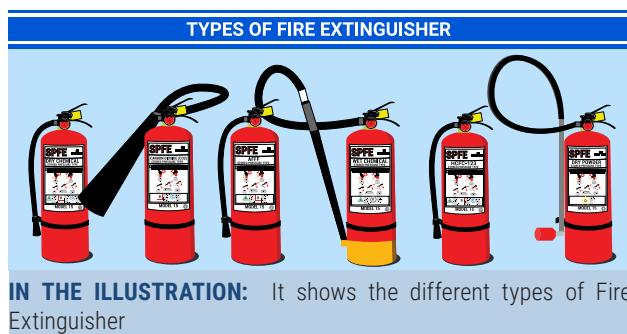
<sup>5</sup>Burton, 2015

Fire extinguishers can be seen at different establishments and occupancies. They have different identification, description, and recommended usage.

## Finding Different Types of Fire Extinguishers

“There are different types of fire extinguishers because there are various types of fires.”<sup>6</sup> Each extinguisher is suitable for fighting a certain type and it is important to know the differences of fire extinguisher to at once distinguish which extinguisher you need in an emergency and to make a lifesaving difference.

Each type of fire extinguisher has different compounds that make them suitable for fighting certain types of fires and is designed to discharge its contents safely and effectively. “The correct one must be used for the right class of fire, otherwise they may prove ineffective or worsen the situation.”<sup>7</sup>



**IN THE ILLUSTRATION:** It shows the different types of Fire Extinguisher

<sup>6</sup>Fire Safety Courses | Accredited Online Training

<sup>7</sup>Types of Fire Extinguishers - Colors, Signage & Fire Classes

**Facilitator's Note**

- ▶ During the discussion, the facilitator should not forget to emphasize the downside or warning of a specific type of fire extinguisher.

## ► What are the Different Types of Fire Extinguishers?

Fire extinguishers are also identifiable by their colors, names and in some cases their hoses depending on their size and usage.

The following are the several types of fire extinguisher and are presented according to their description, recommended usage, identification, and their risks.



### 1. HCFC(HYDROCHLOROFLUOROCARBON) 123 Fire Extinguisher

**Description:** Is a clean extinguishing agent that removes heat and displaces oxygen from the combustion zone by cooling and smothering.

**Recommended Usage:** This type of fire extinguisher is suitable for:

- Class A Fires: “Ordinary” Fires such as solid materials such as wood or paper, fabric, and some plastics.<sup>8</sup>

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<sup>8</sup>What Are the 5 Different Classes of Fires? - Vanguard

- Class B Fires: Liquids & Gases such as alcohol, ether, gasoline, or grease.<sup>8</sup>
- Class C Fires: Electrical Fires such as electrical failure from appliances, electronic equipment, and wiring.

**Hydrochlorofluorocarbons (HCFCs)** are chemical compounds commonly used in the foam, refrigeration, and air conditioning sectors that destroy the protective ozone layer and contribute to climate change. This type of fire extinguisher is commonly found to have a green cylinder, others are red, and sometimes yellow cylinders.



## 2. Dry Chemical (Mono Ammonium Phosphate) Fire Extinguisher

**Description:** Powder type. Less toxic, non-corrosive, and non-conductor of electricity.

**Recommended Usage:** Multipurpose fire extinguisher suitable for:

- Class A Fires: “Ordinary” Fires such as solid materials such as wood or paper, fabric, and some plastics.<sup>8</sup>

- Class B Fires: Liquids & Gases such as alcohol, ether, gasoline, or grease.<sup>8</sup>
- Class C Fires: Electrical Fires such as electrical failure from appliances, electronic equipment, and wiring.

Extinguish the fire primarily by interrupting the chemical reaction of the elements of fire. It is the most widely used type of fire extinguisher today. It works by creating a barrier between the oxygen element and the fuel element on Class A fires.<sup>9</sup>

Ordinary dry chemical is for Class B & C fires only and found to have a red color cylinder. “Using the incorrect agent can allow the fire to reignite after being extinguished successfully.”<sup>9</sup>

Warning: The downside to ABC powder extinguishers is that they pose a danger of inhalation when used in confined spaces, so they must not be used in them. They also leave residue behind that is difficult to clean up and causes damage to soft furnishings, carpets, and electrical equipment.<sup>10</sup> “This is why it’s advised you use a different type of extinguisher for fires involving electronics, such as in an office with computers.”<sup>11</sup>

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<sup>8</sup>How to use a Portable Fire Extinguisher - Washington State University

<sup>10</sup>Classification of fire extinguishers - New life firefighting Dubai

<sup>11</sup>Becky Plunkert, 2021 | Types of Fire Extinguishers - Colors, Signage & Fire



### 3. Dry Chemical (Mono Ammonium Phosphate) Fire Extinguisher

**Description:** A snowlike liquefied gas-type chemical. Less toxic and non-conductor of electricity.

**Recommended Usage:** Primarily intended for use on

- Class B Fires: Liquids & Gases such as alcohol, ether, gasoline, or grease.<sup>8</sup>
- Class C Fires: Electrical Fires such as electrical failure from appliances, electronic equipment, and wiring.

Generally, carbon dioxide fire Extinguisher has a red cylinder with black band and big air nozzle (horn). Ideal for places with a lot of electrical equipment such as offices or server rooms because they are safe to use on fires involving electrical apparatus. Carbon dioxide extinguishers do not leave any residue, unlike a foam extinguisher. They can also be used on Class B fires, those involving flammable

liquids such as paraffin or petrol.<sup>12</sup> CO<sub>2</sub> extinguishers work by smothering the fire and cutting off the supply of air.<sup>13</sup>

Warning: They must not be used on hot cooking oil and fat (class K) fires. The strong jet from the extinguisher would push the burning oils or fats and spread the fire to surrounding areas.<sup>11</sup> Also bear in mind that while carbon dioxide is effective at smothering fires, once the gas has floated away, the fire may reignite if the source has not been removed.<sup>11</sup>



#### 4. Aqueous Film Forming Foam (AFFF) Fire Extinguisher

**Description:** Water-based with 3% or 6% concentration. Not recommended on Class C fires. It has a smothering and cooling effect.

**Recommended Usage:** Suitable for

- Class A Fires: “Ordinary” Fires such as solid materials such as wood or paper, fabric, and some plastics.<sup>8</sup>

<sup>12</sup>Fire Extinguishers -

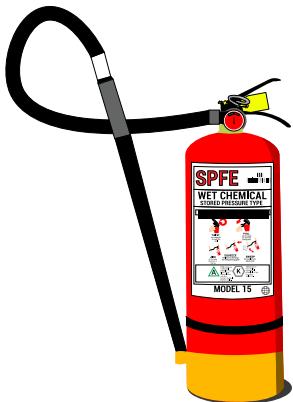
Marsden

Website

<sup>13</sup>BFP Guide for Fire Safety and Prevention Seminar, 2017

- Class B Fires: Liquids & Gases such as alcohol, ether, gasoline, or grease.<sup>8</sup>

They are most suited to extinguishing liquid fires such as petrol or diesel and are more versatile than water jet extinguishers because they can also be used on solids such as wood and paper.<sup>14</sup> The foam extinguishes liquid fires by sealing the surface of the liquid, preventing flammable vapor reaching the air and starving the fire of fuel.<sup>13</sup> This type of fire extinguisher commonly found to have a Blue cylinders or stainless steel.



## 5. Wet Chemical Fire Extinguisher

**Description:** The ingredients of a wet chemical fire extinguisher can consist of a few different chemical combinations: water and potassium acetate, potassium carbonate, and potassium citrate. These ingredients help to combat the high temperatures of cooking oils by quickly reducing heat and sealing the oil within the soapy solution to prevent the oil or grease from reignition.<sup>15</sup>

<sup>14</sup>Types of Fire Extinguishers Explained - Blaze Guard

<sup>15</sup>Becky Plunkert, 2021 | What are Wet Chemical Fire Extinguishers? - WFX

**Recommended Usage:** Suitable for class A, and K fires.

- Class A Fires: “Ordinary” Fires like solid materials such as wood or paper, fabric, and some plastics.<sup>8</sup>
- Class K Fires: Grease Fires or Cooking Fires involving cooking oils and fats, such as lard, olive oil, sunflower oil, maize oil, and butter.  
<sup>16</sup> They are extremely effective, when used correctly.

It rapidly knocks the flames out, cools the burning oil and chemically reacts to form a soap-like solution, sealing the surface and preventing re-ignition. Although they are primarily designed for use on Class K fires, cooking oils and deep fat fryers, they can also be used on Class A fires (wood, paper, and fabrics) and Class B fires (flammable liquids).<sup>17</sup> Typically, it has a long hose to allow the user to stand back at a safe distance from the fire.

Warning: Wet chemical fire extinguishers have electrically conductive ingredients and should not be used on kitchen appliances with an active electrical current. Doing so could result in severe injury or death.<sup>18</sup>

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<sup>16</sup>Fire extinguishers | Hereford & Worcester Fire and Rescue Service

<sup>17</sup>Azar Safety | Walid Azar | Fire extinguishers and safety in Lebanon

<sup>18</sup>Becky Plunkert, 2021



## 6. Dry Powder Extinguishers

**Description:** They are often referred to as special powder. It has a low velocity applicator to ensure that the M28 or L2 powder is applied gently and efficiently to burning metal and to prevent the swarf from spreading. When sprayed, it forms a 'crust,' which insulates the metal. This prevents the fire from spreading to other flammable materials and smothers the fire to prevent oxygen from reacting with the metal again.<sup>7</sup>

**Recommended Usage:** Dry powder extinguishers are ONLY for Class D Fires or Combustible Metal fires or metallic substances such as sodium, titanium, zirconium, or magnesium. They are ineffective on all other classes of fires.

These types of extinguishers are best shown by their unique hose, though they will also say 'powder' in white text in a signal violet rectangle.<sup>13</sup>

“Dry Powder extinguishers are similar to dry chemical except that they extinguish the fire by separating the fuel from the oxygen element or by removing the heat element of the fire triangle.”

**Warning:** Do not use on any other fire type, especially live electrical fires. Also, bear in mind that water should not be allowed to come in to contact with burning metal.<sup>7</sup>

#### Facilitator's Note

- ▶ The facilitator can print the flashcards into half a legal-sized (extended) bond paper.
- ▶ Two flashcards on one piece of paper, then cut in the middle to produce two flashcards.



#### Let us exercise! *Game Activity*

“The More We Get Together,  
the Happier We Are!”



#### Materials Needed

A flash card which has the following:

- a. Six (6) names of several types of fire extinguishers.

HCFC  
(HYDROCHLORO-  
FLUOROCARBON)

Dry Chemical  
(Mono Ammonium  
Phosphate)

Carbon Dioxide  
(CO<sub>2</sub>) Fire  
Extinguisher

Aqueous Film  
Forming Foam  
(AFFF) Fire  
Extinguisher

Wet Chemical Fire Extinguisher

Dry Powder Extinguishers

b. Six (6) pictures of fire extinguishers types are needed.



c. Six (6) descriptions of several types of fire extinguishers

It is a clean extinguishing agent that removes heat and displaces oxygen from the combustion zone by cooling and smothering.

A snowlike liquefied gas-type chemical. Less toxic and non-conductor of electricity.

They are often referred to as special powders.

Ordinary Dry Chemical. Powder type. Less toxic, non-corrosive, and non-conductor of electricity

Water-based with 3% or 6% concentration. It is not suitable for Class C fires. It has a smothering and cooling effect.

These types of extinguishers are best found by their unique hose, though they will also say 'powder' in white text in a signal violet rectangle.

d. Six (6) recommended usage of several types of fire extinguishers are needed.

Class A, B, and C fires by cooling and smothering.

Multipurpose fire extinguisher suitable for class A, B, and C fires.

Primarily intended for use on Class B and Class C Fires.

Suitable for class A and B fires only.

Suitable for class A and K fires.

They are suitable for Class D or combustible metal fires.

Note: Some of the fire extinguishers are identical

Note: Some of the fire extinguishers are identical in the recommended usage. Participants should go separately among the stations.



*Instructions To The Facilitator*

Note: Some of the fire extinguishers are identical in the recommended usage. Participants should go separately among the stations.

1. The number of participants in this game is based on the number of flashcards.

2. (See materials above).

3. Request the participants to leave the space in the middle of the game.

4. Place six stations in front. It can be participants or chairs. Make sure that it is well separated.

5. Before the game starts, the facilitator will place the different flash cards upside down in the open space and ensure the participants cannot see what is on the card.

6. The facilitator revealed that among the participants, six of them will have different pictures of fire extinguishers. The participants who have pictures of the fire extinguisher should run first to each station to serve as a guide for the remaining cues.



### *Mechanics Of The Game*

Read the rules of the game to the participants.

1. The game will last for three (3) minutes.

2. There are six stations in front: Stations A, B, C, D, E, and F.

3. Each participant will get one (1) flashcard in the middle and then put it at once on their chest to ensure the other participants cannot see the flashcard.

4. At the signal “GO,” participants will open the flashcards.
5. Participants should group themselves or gather at the different stations according to what types of fire extinguishers they should go.
6. The first group or station to complete the game with the highest score will be declared the winner.
7. There are instances when the cards are the same, and participants should go separately among the stations.
8. In any case, if the given three (3) minutes lapsed and there were staying participants who could not find their group, they would be excluded from the scoring.
9. The team who garnered the highest score will be the winner.

**Game Scoring:**

1. The team’s score will be calculated through points. Each correct information will have five (5) points.
2. If the participant mistakenly places themselves at the wrong station, one point will be deducted from the team’s scores.

## How much have you learned?

How do fire extinguishers differ?

In your point of view, why do we need to familiarize ourselves with the usage, identification, and description of fire extinguishers?

## POWERPOINT AND VISUAL AIDS

### COVER PAGE

1



What did you see in the picture?

What did he use to extinguish the fire?

2



- Have you seen a real/actual fire extinguisher?
- Where can you find a fire extinguisher?
- Can you describe the fire extinguishers that you, see?
- Do you know that fire extinguisher has distinct colors?
- Do you know that they have diverse types and usage?

3

What is a fire extinguisher?



-Fire extinguisher is a handheld active fire protection device usually filled with a dry or wet chemical used to extinguish or control small fires, often in emergencies.

-different types of fire extinguishers used for different classes of fire.

4

There are different types of fire extinguishers because there are various types of fires.



Each extinguisher is suitable for fighting certain types, and it's important to know the differences of fire extinguisher to immediately distinguish which extinguisher you need to an emergency and to make a lifesaving difference.

5

#### TYPES OF FIRE EXTINGUISHER



What are the different types of fire extinguishers?

6

#### 1. HCFC (HYDROCHLOROFLUOROCARBON) 123 Fire Extinguisher



Description: Is a clean extinguishing agent that removes heat and displaces oxygen from the combustion zone by cooling and smothering.

Recommended Usage:

- Class A Fires: "Ordinary" Fires such as solid materials such as wood or paper, fabric, and some plastics.
- Class B Fires: Liquids & Gases such as alcohol, ether, gasoline, or grease.
- Class C Fires: Electrical Fires such as electrical failure from appliances, electronic equipment, and wiring.

7

#### 2. Dry Chemical (Mono Ammonium Phosphate) Fire Extinguishers



Description: Powder type. Less toxic, non-corrosive, and non-conductor of electricity

Recommended Usage:

- Class A Fires: "Ordinary" Fires such as solid materials such as wood or paper, fabric, and some plastics.
- Class B Fires: Liquids & Gases such as alcohol, ether, gasoline, or grease.
- Class C Fires: Electrical Fires such as electrical failure from appliances, electronic equipment, and wiring.

8

#### 3. Carbon Dioxide (CO<sub>2</sub>) Fire Extinguisher



Description: A snowlike liquefied gas-type chemical. Less toxic and non-conductor of electricity.

Recommended Usage:

- Class B Fires: Liquids & Gases such as alcohol, ether, gasoline, or grease.
- Class C Fires: Electrical Fires such as electrical failure from appliances, electronic equipment, and wiring.

9

#### 4. Aqueous Film Forming Foam (AFFF) Fire Extinguisher



Description: Water-based with 3% or 6% concentration. Not recommended on Class C fires. It has a smothering and cooling effect.

Recommended Usage:

- Class A Fires: "Ordinary" Fires such as solid materials such as wood or paper, fabric, and some plastics.
- Class B Fires: Liquids & Gases such as alcohol, ether, gasoline, or grease.

10

#### 5. Wet Chemical Fire Extinguisher



Description: The ingredients of a wet chemical fire extinguisher can consist of a few different chemical combinations: water and potassium acetate, potassium carbonate, and potassium citrate. These ingredients help to combat the high temperatures of cooking oils by quickly reducing heat and sealing the oil within the soapy solution to prevent the oil or grease from reigniting.

Recommended Usage:

- Class A Fires: "Ordinary" Fires like solid materials such as wood or paper, fabric, and some plastics.
- Class K Fires: Grease Fires or Cooking Fires involving cooking oils and fats, such as lard, olive oil, sunflower oil, maize oil, and butter. They are extremely effective, when used correctly.

11

#### 6. Dry Powder Fire Extinguishers



Description: They are often referred to as special powder. It has a low velocity applicator to ensure that the M28 or L2 powder is applied gently and efficiently to burning metal and to prevent the swarf from spreading. When sprayed, it forms a 'crust,' which insulates the metal. This prevents the fire from spreading to other flammable materials and smothers the fire to prevent oxygen from reacting with the metal again.

Recommended Usage:

- Dry powder extinguishers are ONLY for Class D Fires or Combustible Metal fires or metallic substances such as sodium, titanium, zirconium, or magnesium. They are ineffective on all other classes of fires.

12



Let us exercise!  
**Game Activity**  
“The More We Get Together,  
the Happier We Are!”

13

### How much have you learned?

How do fire extinguishers differ?

In your point of view, why do we need to familiarize ourselves with the usage, identification, and description of fire extinguishers?

14

**THANK YOU** 😊

15

# Subject 6

Fire Safety for Teenagers

## Parts of Fire Extinguisher

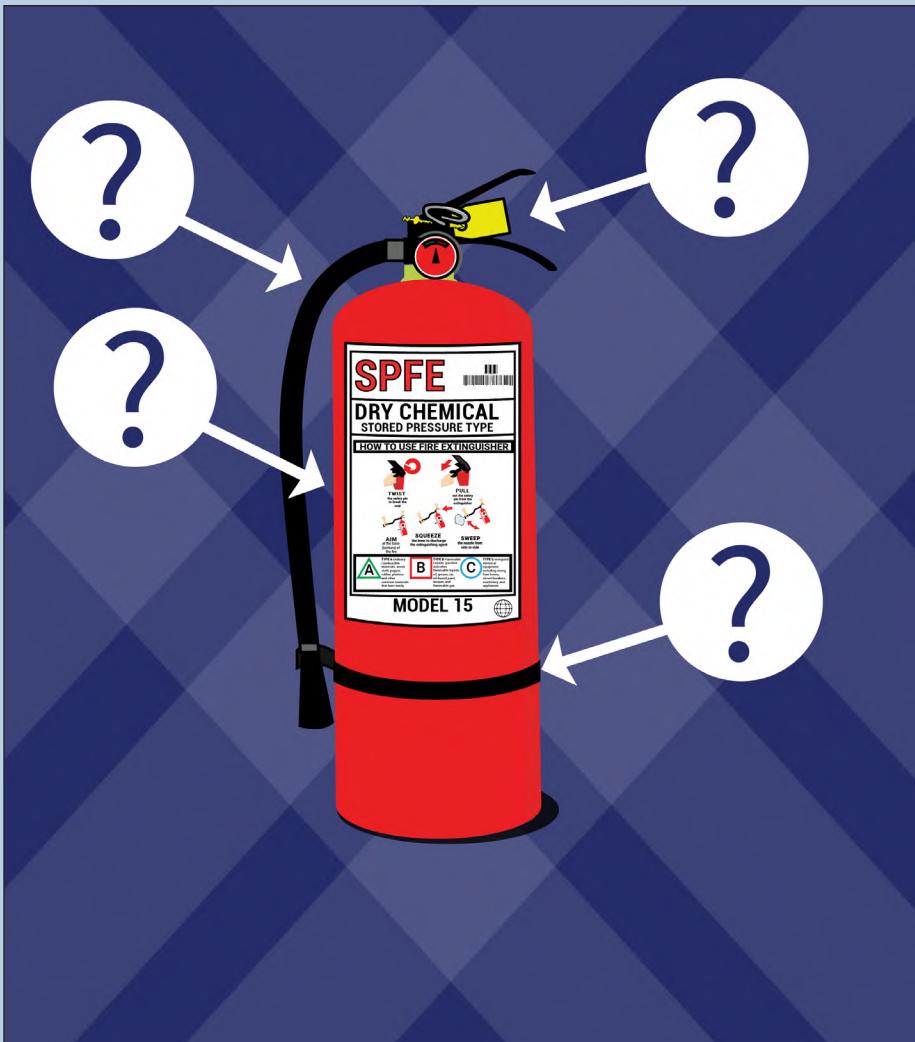


ILLUSTRATION BY: FO1 Ken Dominic M Mordeno

# In this Subject 6...

## Goal

For the participants to distinguish and familiarize themselves with various parts of the fire extinguisher each function, and appreciate its importance.

## Objectives

At the end of the session, the participants will be able to:

1. Name Various parts of the fire extinguisher;
2. Draw and label distinct parts of the fire extinguisher;
3. Cite different functions of parts of fire extinguishers
4. Appreciate the importance of familiarizing parts of fire extinguishers.

---

### Subject Aids Needed:

#### A. Primary Tools

1. Multimedia Projector
2. Powerpoint Presentation
3. Visual Examples
  - Pictures of Fire Extinguisher
4. Picture Puzzle (see Lesson Guide)
5. Actual Fire Extinguisher
6. Bond papers
7. Simple token for the winner of the game during application (Optional)

#### B. Alternative Tools

1. Picture of fire extinguishers and cut arrows

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### Total Time of Delivery:

*35 minutes*

## Subject Overview

**Purpose:** To impart the various parts of the fire extinguisher and its function to the participants. To help them understand that distinct parts of a fire extinguisher play a vital role in the effective discharge of water or a chemical agent to suppress a fire before it can spread out of control. To make them aware that efficient firefighting during emergencies saves property and prevents loss of life.

**General Guidance:** In this subject, the facilitator must deliver the lesson in the simplest terms that are understandable to the participants. Facilitators should ensure that the lecture is delivered through a modulated voice and promote an enjoyable and enthusiastic method to capture the attention of the participants. For a spontaneous, motivated atmosphere, facilitators may also prepare a simple token, tagline, or icebreaker clap. In addition, the facilitator should prepare the given primary tools or alternative tools for effective instruction.

**Things to Consider:** The participants are teenagers, ages 12 to 17. Care and effort must be considered when it comes to delivering the subject. In this subject, direct

# Cheat Sheet

interaction with the participants is advised, such as moving around the lecture venue and making jokes. Sensitivity should be kept in mind in making or citing examples, especially in matters that might involve personal details. Stay on the topic and the schedule as much as possible.

## Subject Outline

Audio/Visual Aids	Outline	Notes
<b>1. PREPARATORY</b>		
PPT cover	1.1 Greet the participants and start by introducing your name and your teammates.	
<b>2. MOTIVATION</b>		
LG 6-1 PPTS-1-2	2.1. Introduce the subject through a puzzle game. 2.2. Discuss the mechanics of the game.	Establish an enthusiastic environment by engaging the participants in a game activity before the lesson.
LG 6-1 PPTS-3	2.3 Present subject objectives.	Facilitators may give simple tokens/prizes to the winner to encourage participation.  Refer to Goals and Subject Objectives
<b>3. LESSON PROPER</b>		
LG 6-2 PPTS-4-7	3.1. Discuss three primary roles of fire extinguisher parts. <ul style="list-style-type: none"><li>• Storing</li><li>• Expelling</li><li>• Informing</li></ul>	The facilitator may prepare a PowerPoint Presentation with animations to introduce each part of the fire extinguisher.
LG 6-2 PPTS-8	3.2 Discuss various parts of the fire extinguisher. <ul style="list-style-type: none"><li>• Cylindrical Tank</li><li>• Valve</li><li>• Carry Handle</li><li>• Operating Lever</li><li>• Pull Pin</li><li>• Tamper Seal</li><li>• Pressure Gauge</li><li>• Discharge Hose</li><li>• Discharge Nozzle</li><li>• Instruction Label</li></ul>	Discussion may be done through team teaching or two facilitators simultaneously discussing each part and its function and then showing each part of the fire extinguisher using ICT equipment and the actual fire extinguisher.

# Cont.

Audio/Visual Aids	Outline	Notes
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- Monthly inspection tag
- Annual inspection tag
- Extinguishing Agent and Propellant

3.3 Demonstrate parts of the fire extinguisher.

3.4 Discuss the role of each part of the fire extinguisher.

## 4. GENERALIZATION/APPLICATION



4.1. Discuss the game with the participants.

"Ready Set Draw!"

*In the drill activity facilitator can choose either of the activities (see lesson guide)*

4.3 Discuss the mechanics of the drawing activity.

4.4 Discuss the directions of the drill activity.

## 5. CLOSING EVALUATION



- 5.1. Review the objectives by asking the questions:
- Why do we need to familiarize the various parts of fire extinguishers?
  - Is it necessary to educate students like you on various parts of fire extinguishers? Why?

*In this part of the session, the facilitator will be able to confirm the knowledge gained by the participants by giving simple to higher-level questions based on the objectives. Allow the participants to express their insights and immersed belief in what they had learned.*



5.2 Ask if there are questions or clarification.

5.3 End of the session.



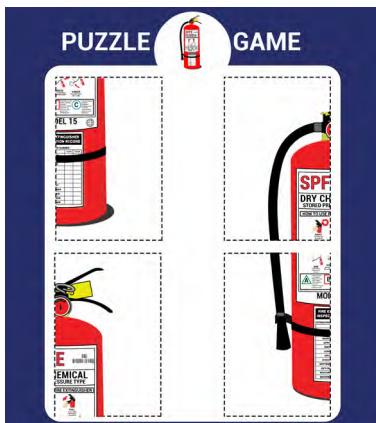
## *Engagement Activity*

“Empowering Minds, One Puzzle at a Time”



## Instructions To The Facilitator

The mode of the activity is a puzzle in nature, and participants are not expecting the puzzle pieces from their seats. Before the arrival of participants, the facilitator will put the puzzle pieces under their chairs or tables. Make sure to hide it safely so that participants will not have the idea that the puzzle pieces are intentionally placed under their chairs/tables. The facilitator may prepare puzzle pieces and choose three diverse types of fire extinguishers with distinct colors from the lesson. Before the announcement of the mechanics of the game, I introduced the picture puzzle activity entitled “Empowering Minds, One Puzzle at a Time!”



**IN THE ILLUSTRATION:** It shows a sample of a printable picture puzzle.



### Materials Needed

You will need the following materials before the game begins.

- The participants will need three puzzles, which contain diverse types of fire extinguishers.
- The picture should be cut into 6-10 pieces to produce puzzle pieces depending upon the allowable time.
- Scotch tape and board for posting.



### Mechanics Of The Game

Make sure that the puzzle pieces are already in various places and that participants have finally arrived and had their seats. Introduce the game activity and discuss the mechanics below.

1. In this game, there will be three pictures of Firefighting tools (Do not mention that these are fire extinguishers).
2. But first, strictly tell the participants that look directly at the facilitator while discussing the mechanics. Movements Are Strictly Prohibited.
3. Announce that under the chairs, there are puzzle pieces. Participants who have it under their chairs will go ahead in front to complete the puzzle with the other participants.

4. Participants are allowed to move and to look under the chairs after the signal “GO.”
5. The game will end after the three fire extinguishers will complete.

## Get To Know Your Fire Extinguisher

### Parts and Functions

Do you have fire extinguishers at home?

At school? Have you seen one?

Everyone can see fire extinguishers everywhere. You are wondering why different establishments in our community must have one. Fire safety enforcers in the community required fire extinguishers for safety in case of any emergencies. It is a firefighting tool that can quickly extinguish simple fires when appropriately used. Residential areas, several types of occupancies, business establishments, and even cars must have this to have a firsthand tool in case of fires!

The fire extinguisher is a firefighting tool designed to fight fires! One must know its distinct parts to use it effectively. This is because all factors of a fire extinguisher play a significant role in extinguishment. Familiarizing its components and how they work together will guide you safely in putting out the fire.

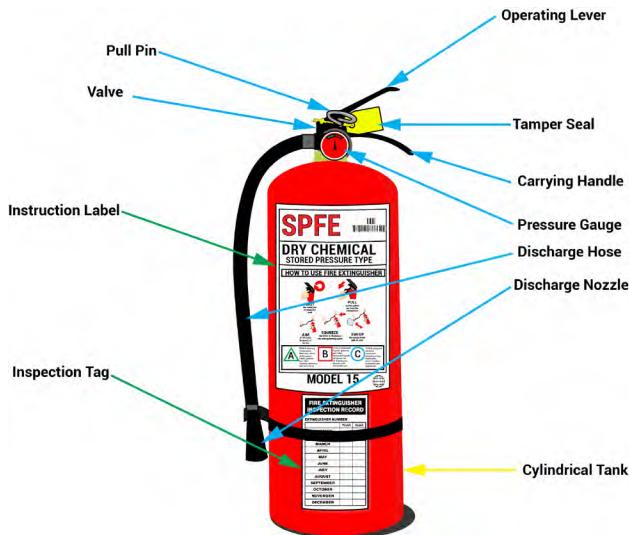
To provide you with a comprehensive understanding of the fire extinguishers, information about the parts of fire extinguishers and how they work are discussed here.

### The Parts of the Fire Extinguisher

There are many types of fire extinguishers everywhere! Various extinguishers have similar parts and alike on how to use them and how to discharge their chemicals. The fire extinguisher should have the following regardless of the class:

STORING	EXPELLING	INFORMING
Cylindrical Tank	Valve Carry Handle Operating Lever Pull Pin Tamper Seal Pressure Gauge Discharge Hose Discharge Nozzle	Instruction Label Monthly Inspection Tag Annual Inspection Tag

**IN THE ILLUSTRATION:** It shows distinct parts of fire extinguishers separated into three prominent roles: STORING, EXPELLING, and INFORMING



**IN THE ILLUSTRATION:** It shows distinct parts of the fire extinguisher.

#### The Function of Each Part

The functions of each part of a fire extinguisher are grouped into three leading roles: storing, expelling, or informing.

#### STORING

Cylindrical tank: the tank of any fire extinguisher handles storing the extinguishing agent and the fuel under the correct amount of pressure. Typically made of steel, even small tanks can be surprisingly heavy.<sup>1</sup>

#### EXPELLING

Valve Assembly: these parts of the fire extinguisher are responsible for the act of expelling the extinguishing agent together, and these parts include:

<sup>1</sup>Get to Know Your Fire Extinguishers: Fire Extinguisher Parts & Usage | Koorsen, 2020,| Get to Know Your Fire Extinguisher, <https://blog.koorsen.com/get-to-know-your-fire-extinguishersfire-extinguisher-parts-usage>

1. Valve: responsible for controlling the flow of the agent. The valve is the mechanism connecting the carry handle and the operating lever around which they function.
2. “Carry Handle: simply that, the handle allows for easy grasping, lifting, and carrying of the extinguisher.”<sup>1</sup>
3. Operating lever: the lever is a metal piece that can be pressed or squeezed to use the extinguisher. However, the operating lever will not be able to be pushed/squeezed unless the pull pin has first been removed.<sup>1</sup>
4. Pull pin, known as the locking pin, a metal pin is inserted into the valve part of the fire extinguisher and prevents accidental discharge (for instance, accidentally squeezing the operating lever down when you are only meant to carry the extinguisher to a different location).
5. “Tamper seal: a plastic tamper seal is placed to keep the pull pin from falling out accidentally.”<sup>1</sup>
6. Pressure gauge: the pressure gauge is a small, circular gauge attached to the outside of the valve assembly to show whether the fire extinguisher has proper pressure to expel the agent in case of a fire. If the arrow of the gauge is in the green, it is adequately charged. If it is to the left of the green, it is undercharged and will not have enough pressure to work correctly.<sup>1</sup> If the gauge needle is to the right of the green, it is overcharged and is a hazard at risk of exploding. CO<sub>2</sub> extinguishers do not have pressure gauges.
7. Discharge hose: the discharge hose is the

hose that allows the extinguishing agent to travel from the tank to the base of the fire and enables the user to aim the flow of the agent.

8. Discharge nozzle: the nozzle is the hose's conical end, out of which the extinguishing agent disperses.

## INFORMING

Fire extinguishers also have a functioning element, the informative parts, which include the following:

9.“Instruction label: all properly operating fire extinguishers should have a legible instruction label on the extinguisher’s tank that provides instructions for proper use & which type of fire it is intended to be used on.”<sup>1</sup>

10. “Monthly inspection tag: this tag allows the owner or person responsible for the monthly inspection to record the date of the monthly check as well as the initials of the individual who inspected it.”<sup>1</sup>

11. Annual inspection tag: this tag is where your professional fire and security provider records the date and essential information behind the required yearly maintenance inspection. This tag will help prove compliance with local codes and ensure that the extinguisher is receiving the proper care that it needs to be used correctly when required.<sup>1</sup>

12. “Extinguishing agent – the chemical or substance stored inside the tank capable of suppressing or extinguishing a fire – and the Propellant – the gas responsible for expelling

the extinguishing agent out of the tank when activated.”<sup>1</sup>

**Facilitator's Note**

- ▶ From the two exercises, choose either the drawing activity or the drill activity.

**Let Us Exercise!  
*Drawing Activity*  
“Ready, Set, Draw!”**

Now that the parts of the fire extinguisher and its functions have already been discussed ask the participants to draw a fire extinguisher and label its parts. Give the participants ten (10) minutes to finish the drawing activity. Remind them to sign their names on the upper piece of the paper. Then, collect the documents after the time has elapsed.

***Drill Activity*  
“Let’s do this!”**

Select five participants in front and ask them to name the parts of the fire extinguisher using the actual fire extinguisher or the slides from the PowerPoint. Below is a sample of the falls from PowerPoint.

**PARTS OF THE FIRE EXTINGUISHER**

### **How much have you learned?**

Why do we need to familiarize the various parts of fire extinguishers?

Aside from familiarizing its parts, is it necessary to know the role of its features? Why?

Is it necessary to educate students like you on various parts of fire extinguishers? Why?

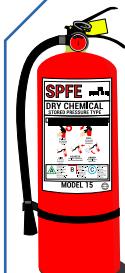
## POWERPOINT AND VISUAL AIDS

COVER PAGE

1

ENGAGEMENT ACTIVITY  
*Empowering Minds,  
One Puzzle at a Time!*

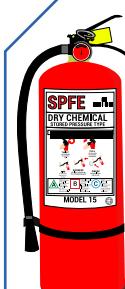
2



Get to know your fire extinguisher:

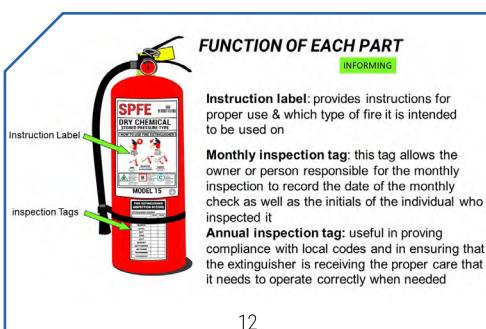
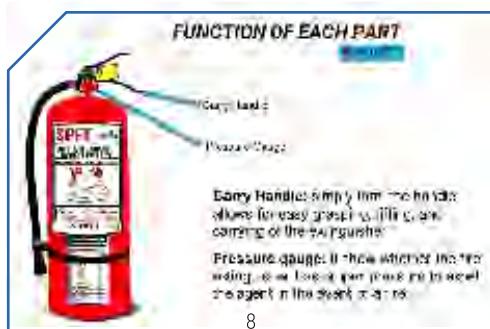
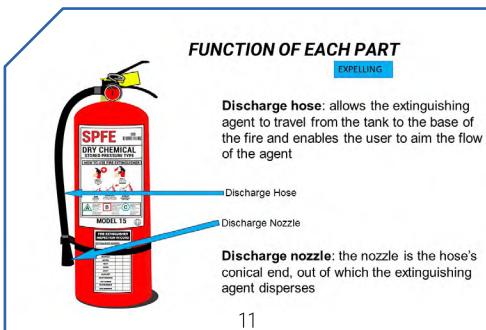
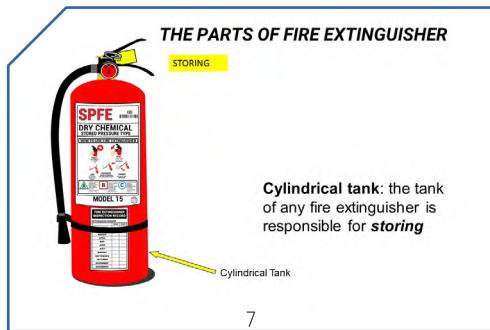
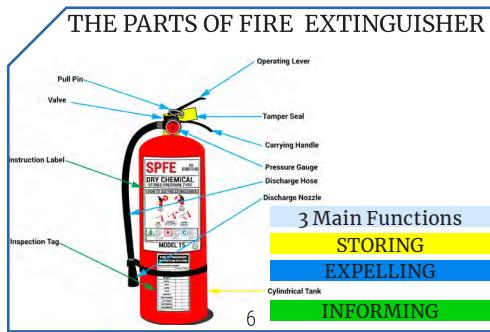
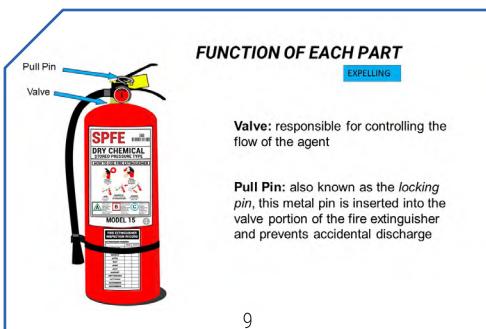
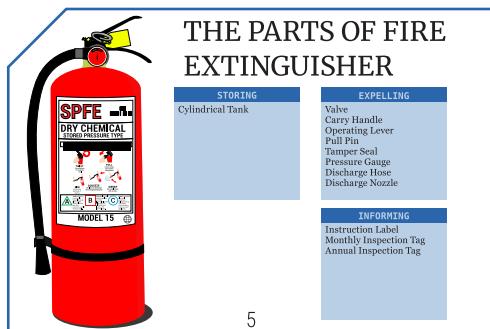
PARTS AND FUNCTIONS

3



THE PARTS OF FIRE EXTINGUISHER

4





**FUNCTION OF EACH PART**

Extincting agent – the chemical or substance stored inside the tank capable of suppressing or extinguishing a fire – and the Propellant – the gas responsible for expelling the extinguishing agent out of the tank when activated.

13

Is there any question?

17

**Let's have an exercise!**  
**"Ready Set Draw!"**



On a bond paper, draw a fire extinguisher and label its parts.

14

**How much have you learned?**

Why do we need to familiarize the various parts of the fire extinguishers?

Aside from familiarizing its parts, is it necessary to know the role of its features? Why?

Is it necessary to educate students like you on various parts of the fire extinguishers? Why?

18

**Let's have an exercise!**  
**"Let's do this!"**



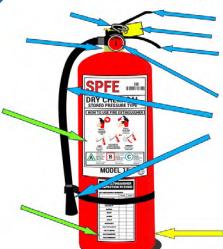
Identify the parts of fire extinguisher using the actual fire extinguisher.

15

**THANK YOU** 😊

19

**THE PARTS OF FIRE EXTINGUISHER**



16

# Subject 7

Fire Safety for Teenagers

# Fire Extinguisher Proper Usage - TPASS



ILLUSTRATION BY: FO1 Ken Dominic M Mordeno

# In this Subject 7...

## Goal

To impart to the learners the proper procedures of fire extinguisher usage following the acronym TPASS.

## Objectives

At the end of the session, the participants will be able to:

1. Enumerate the procedures of fire extinguisher usage with the acronym TPASS.
2. Demonstrate the fire extinguisher's proper use;
3. Understand safety measures and precautions for handling fire extinguisher

---

### Subject Aids Needed:

#### A. Primary Tools

1. Multimedia Projector
2. Powerpoint Presentation
3. Video Clips of fire drill activity
4. Visual examples - TPASS pictures
5. Actual Fire Extinguisher
6. Burning Pit and Fuel
7. Safety goggles and facemask

#### B. Alternative Tools

1. Visual Examples
2. Laminated flash cards - TPASS

---

### Total Time of Delivery:

*35 minutes*

## Subject Overview

**Purpose:** To impart to the participants that fire extinguishers have proper usage that they must observe. Those participants will engage through demonstration and experience firsthand practice of actual fire extinguishers while performing the appropriate procedure: TPASS. Aside from familiarizing the fire extinguisher with proper procedures, participants will be made aware of the safety measures for managing the fire extinguisher.

**General Guidance:** In this subject, the facilitator must deliver the lesson in the simplest terms that are understandable to the participants. Facilitators should ensure the lecture is delivered through a modulated voice and promote an enjoyable and enthusiastic method to capture the participants' attention. For a spontaneous, motivated atmosphere, facilitators may also prepare a simple token, tagline, or icebreaker clap. In addition, the facilitator should prepare the given primary tools or alternative tools for effective instruction beforehand. Safety measures must be observed at all times of actual demonstration. During this session, a real fire extinguisher may be used and requested by the venue's coordinator and must be taken through proper coordination before the activity.

**Things to Consider:** The participants are teenagers, ages 12 to 17. Consider care and effort when it comes to delivering the subject. In this subject, direct interaction with

# Cheat Sheet

the participants is advised, such as moving around the lecture venue and making jokes. Sensitivity should be kept in mind in making or citing examples, especially in matters that might involve personal details. Stay on the topic and the schedule as much as possible. Since participants will be experiencing manipulation of actual fire extinguishers, the facilitator should consider a wide and open space for demonstration to avoid suffocation.

## Subject Outline

Audio/Visual Aids	Outline	Notes
<b>1. PREPARATORY</b>		
	1.1 Greet the participants and start by introducing your name and your teammates.	<i>The facilitator can use 2-3 pictures of the fire drill activity if the video clip is unavailable.</i>
	1.2 Watch a short video of the fire drill activity.	
		
<b>2. MOTIVATION</b>		
	2.1 Ask the following questions: <ul style="list-style-type: none"><li>• What did you see in the short video/picture?</li><li>• What does it show?</li><li>• What firefighting tool did they use?</li><li>• Who among you knows how to use a fire extinguisher?</li><li>• Do you want to experience performing an actual fire extinguisher?</li></ul>	<i>From this point, participants are expected to answer that the short video shows a man extinguishing a fire.</i>
	2.3 Present subject objectives.	<i>At this point, participants can answer the fire extinguisher as an extinguishing agent, as answered in the third question.</i>
		<i>Assess the participant's firsthand experience of fire extinguishers by asking the last question.</i>
		<i>Refer to Goals and Subject Objectives</i>
<b>3. LESSON PROPER</b>		
	3.1 Discuss safety measures/precautions for handling fire extinguishers.	<i>Utilize primary tools or alternative tools.</i>

# Cont.

Audio/Visual Aids	Outline	Notes
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3.2 Discuss the proper procedures of fire extinguisher usage following TPASS.

*In this part, team teaching is encouraged. Two facilitators simultaneously discuss and show the proper procedures.*

*The facilitator will place the fire extinguisher on the table or any elevated platform to be visibly seen by the participants.*

*The facilitator should encourage queries from the participants to address if there are clarifications. The facilitator must be ready to answer the prompt questions from the participants to suffice the information.*

3.3 Ask if there are questions or clarification.

## 4. APPLICATION/GAME ACTIVITY



4.1. Introduce the game by its title.  
“The Tell and Act Game”

4.2. Discuss the mechanics of the game.

## 5. GENERALIZATION/EVALUATION



5.1 Demonstration of proper fire extinguisher usage (TPASS) by the participants.

*The facilitator will demonstrate the fire extinguishers with proper guidance and must adhere to safety measures.*

*The facilitator may prepare simple tokens for the active participants.*



5.2 Review the objectives by asking the questions:

- Is it necessary to know the proper handling of fire extinguishers following the TPASS procedures? Why?
- Why must we familiarize ourselves with the proper fire extinguisher operation?

5.3 End of the session.



## *Engagement Activity*

### *"Using a Fire Extinguisher"*

This activity will introduce the participants to fighting simple fires using a firefighting tool-Fire Extinguisher. A series of questions will engage participants and assess their prior knowledge of the lesson in either of the activities below.

#### Facilitator's Note

- ▶ The facilitator may introduce the lesson by watching a video clip or presenting through pictures.
- ▶ Given questions must be delivered one at a time by the facilitator to gather information that would help end up in the subject.



### Examine The Picture Below

Below are sample pictures showing different scenarios of fighting simple fires using a portable fire extinguisher.



**IN THE ILLUSTRATION:** It shows a fireman demonstrating a fire extinguisher.



**IN THE ILLUSTRATION:** It shows a man extinguishing a fire in a burning pit.

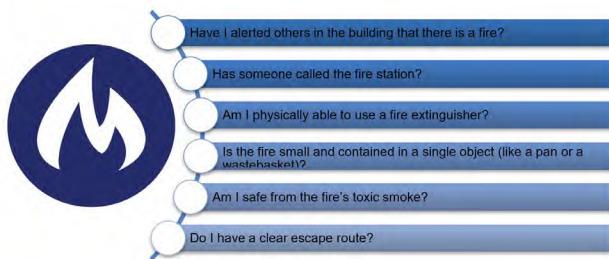
### Guide Questions:

- What did you see in the short video/pictures?
- What did it show?
- What firefighting tool did they use?
- Who among you knows how to use a fire extinguisher?
- Do you want to experience performing an actual fire extinguisher?

### When To Use A Fire Extinguisher?

A portable fire extinguisher can save lives and properties by preventing the development of fire and flame spread; it can put out or have a small fire until the firefighters arrive. However, portable extinguishers have limitations. Fire grows and spreads rapidly, and the main priority for residents is to get out safely.

Checklist to help you prepare to use a fire extinguisher.



**IN THE DIAGRAM:** It shows a series of questions that must be considered before deciding to fight fires using a fire extinguisher.

Use a fire extinguisher when all these questions are answered “Yes.” If you are unsure about whether it is safe or not to use a fire extinguisher, and for all other situations, alert others, leave the building, and call the Hotline Number Of The Nearest Fire Station through a mobile or neighbor’s phone. Children should not use fire extinguishers.

### Safety Precautions Before Using a Fire Extinguisher

Considering safety precautions can save your life in case of a fire hazard.

**Always pull the fire alarm.** It is crucial to prioritize installing fire alarms in buildings to ensure the safety of the people inside. If you see fire or smoke, ensure people are exiting the building and someone has the emergency hotline number of the fire station.

**Evaluate the area** and make sure the fire is small and can be contained.<sup>1</sup> “Do not attempt to use a fire extinguisher if the fire is large or spreading, or if you do not know what is burning.”<sup>2</sup>

<sup>1</sup>Motor home, camper, and recreational vehicle Safety - NFPA

<sup>2</sup>Safety Precautions before Using a Fire Extinguisher

**Make sure you have an unobstructed escape route.** Stay low and try not to breathe in heated smoke or fumes.<sup>2</sup>

**Check the extinguisher for good condition.** Do not try to use a fire extinguisher if the handle pin has been tampered with, the cylinder is damaged, or if the pressure gauge pointer is in the red ‘Recharge’ zone.<sup>3</sup>

Make sure you have the proper size and type of extinguisher for the fire at hand and that you are familiar with how to use it. If you do not know what is burning, leave fire fighting for emergency responders.<sup>2</sup> Considering these safety precautions can save your life in case of a fire hazard.

**Proceed with the ‘TPASS’ method only if you are confident with your abilities.** Start from a safe distance of about eight feet away and move towards the fire only if the extinguisher agent is working to control the flames. “Evacuate immediately to safety if no one can control the fire.”

### **Proper Procedures In Using A Fire Extinguisher**

It can be challenging to think clearly during an emergency!

So, here’s a long-standing fire safety acronym to help you recall the steps involved in using your fire extinguisher.

---

<sup>3</sup>Fire Extinguishers | Environmental Health and Safety | Case Western Reserve University. <https://case.edu/ehs/safety-subject/fire-safety/fire-extinguishers>



**IN THE ILLUSTRATION:** It shows the proper procedures of fire extinguisher usage following the acronym TPASS.



Let us exercise!  
*Game Activity*  
“The Tell and Act Game!”

The “Tell and Act” game comes in two groups or two teams simultaneously discussing and showing the proper procedures of using a fire extinguisher.



Mechanics Of The Game

1. Divide the class into two groups and name it Group Tell and Group Act.
2. Each group will choose five representatives.
3. Group Tell will give or discuss the proper procedures of fire extinguisher operation, while the Group Act will show the correct methods provided by the other group.
4. The first representative from Group Tell will give the first letter “T” and discuss the meaning.

5. The first representative from Group Act will perform the first letter with body language and perform – “Twist the pin” using a fire extinguisher.
6. The game will continue until it reaches the last letter of the TPASS, the letter “S.”

**Facilitator's Note**

► The number of participants who will demonstrate the TPASS operation is based on the availability of fire extinguishers.



Let Us See What You Have  
**Evaluation**  
Demonstration

Call three (3) volunteers to show the proper handling of the actual fire extinguisher. Each of them will go ahead in front to perform the TPASS operation. Wear safety goggles and a facemask before the demonstration.

Or,

To fully experience the firefighting operation using a fire extinguisher, prepare an actual burning pit and fuels to burn. Call for participants to show and use the existing fire extinguisher following the TPASS procedures. They observed safety measures while doing the activity.

### How much have you learned?

Is it necessary to know the proper handling of fire extinguishers following the TPASS procedures? Why?

Why do we need to familiarize the proper fire extinguisher operation?

## POWERPOINT AND VISUAL AIDS

### COVER PAGE

1

### Watch and Learn

2



**IN THE ILLUSTRATION:** It shows a fireman demonstrating a fire extinguisher.

3



**IN THE ILLUSTRATION:** It shows a man extinguishing a fire in a burning pit.

4

What did you see in the short video/pictures?

What does it show?

What firefighting tool did they use?

5

Who among you know how to use fire extinguisher?

Do you want to experience operating an actual fire extinguisher?

6

When to use a fire extinguisher?



Have I alerted others in the building that there is a fire?

Has someone called the fire station?

Am I physically able to use a fire extinguisher?

Is the fire small and contained in a single object (like a pan or a waste basket)?

Am I safe from the fire's toxic smoke?

Do I have a clear escape route?

7

When to use a fire extinguisher?

If all your answer is YES use a fire extinguisher

If you're unsure about whether it's safe or not to use a fire extinguisher, and for all other situations, alert others, leave the building, and call the Hotline Number of the Nearest Fire Station through a mobile or neighbor's phone.

What is the fire station's hotline number in your area?

8

### Safety Precautions Before Using a Fire Extinguisher

- If you see fire or smoke always pull the building fire alarm first to ensure people are exiting the building and someone has the emergency hotline number of the fire station.
- Evaluate the area and make sure the fire is small and can be contained. "Do not attempt to use a fire extinguisher if the fire is large or spreading, or if you do not know what is burning."
- Make sure you have an unobstructed escape route. Stay low and try not to breathe in heated smoke or fumes.

9

### Safety Precautions Before Using a Fire Extinguisher

- Check the extinguisher for good condition. Do not try to use a fire extinguisher if the handle pin has been tampered with, the cylinder is damaged, or if the pressure gauge pointer is in the red "Recharge" zone.
- Make sure you have the proper size and type of extinguisher for the fire at hand that you are familiar with how to use it.
- If you do not know what is burning, leave fire fighting for emergency responders. Considering these safety precautions can save your life in case of a fire hazard.

10

#### **PROPER PROCEDURE IN OPERATING A FIRE EXTINGUISHER-**

**TPASS**



11

#### **PROPER PROCEDURE IN USING FIRE EXTINGUISHER**



**T-**



**TWIST**  
the safety pin  
to break the  
seal

12

**PROPER PROCEDURE  
IN USING FIRE EXTINGUISHER**



**P-**



**PULL**  
out the safety  
pin from the  
extinguisher

13

Is there any questions  
regarding the topic?

17

**PROPER PROCEDURE  
IN USING FIRE EXTINGUISHER**



**A-**



**AIM**  
at the base  
(bottom) of  
the fire

14

**Let's have an exercise!**



*"The Tell and Act Game"*

18

**PROPER PROCEDURE  
IN USING FIRE EXTINGUISHER**



**S-**



**SQUEEZE**  
the lever to discharge  
the extinguishing agent

15

**Let's see what you've got!**



*Perform the fire  
extinguisher's TPASS  
procedure.*

19

**PROPER PROCEDURE  
IN USING A FIRE EXTINGUISHER**



**S-**



**SWEEP**  
the nozzle from  
side to side

16

**How much have you learned?**

Is it necessary to know the proper handling of fire extinguishers following the TPASS procedures? Why?

Why do we need to familiarize the proper fire extinguisher operation?

20

THANK YOU 😊

# **Subject 8**

Fire Safety for Teenagers

## **Common Causes of Fires Inside Home, School, and Community Fire Prevention Tips**



ILLUSTRATION BY: FO1 Ken Dominic M Mordeno

# In this Subject 8...

## Goal

For the participants to recognize the Common Causes of Fires Inside Schools, Homes, and Communities. To demonstrate and appreciate the importance of Fire Prevention Tips.

## Objectives

At the end of the session, the participants will be able to:

1. Recognize the Common Causes of Fires by showing a Simulation Drill Exercise conducted by the City/Municipal Fire Station during OLP;
2. Classify the Common Causes of Fires into Three Main Categories
3. Demonstrate and appreciate awareness of the different Fire Prevention Tips by performing a 30-second Infomercial.

---

### Subject Aids Needed:

#### A. Primary Tools

1. Multimedia Projector
2. Powerpoint Presentation
3. Simulation Exercise Audio Visual Presentation
4. Infomercial Cards

#### B. Alternative Tools

1. Laminated Pictures

---

### Total Time of Delivery:

*30 minutes*

---

## Subject Overview

**Purpose:** To introduce to the participants the common causes of fires in homes, schools, and communities and incorporate fire safety tips. The participants will be made aware through visual examples of how the fire starts and what everyday items may cause it.

**General Guidance:** In this subject, the facilitator must deliver the lesson in the simplest terms that are understandable to the participants. He should ensure that the lecture is delivered in a fun and enthusiastic manner to capture the participants' attention. For an interactive atmosphere, the facilitator may prepare a simple token and cheer to be performed by the participants before discussing the lesson. In addition, the lecturer may clarify that these causes are the topmost common causes of fires in schools, homes, and communities.

**Things to Consider:** The participants are young teenagers, ages 12 to 17. Care and effort must be considered when it comes to delivering the subject. Thus, direct interaction with the participants is advised, such as moving around the lecture venue and making jokes. Sensitivity should be kept in mind in making or citing examples, especially in matters that might involve personal details. Stay on the topic and the schedule as much as possible.

# Cheat Sheet

## Subject Outline

Audio/Visual Aids	Outline	Notes
<b>1. PREPARATORY</b>		
PPT cover	1.1 Greet the participants and start by introducing your name and your teammates. You can also start by asking the participants to exercise to prepare their mind and body.	
<b>2. MOTIVATION</b>		
LG 8-1 PPTS-1	Simulation Exercise Audio-Visual Presentation  2.1 Start by presenting a Simulation Drill Exercise video performed by the station, which shows the Causes of Fires. The video will give excitement to the participants as the lecturer themselves were the one who was portrayed in the Simulation Drill Exercise.	<i>If the Simulation Drill Exercise is unavailable, browse social media platforms such as YouTube and Facebook for references.</i>
LG 8-1 PPTS-2	2.2 After watching, ask these questions to the participants. <ul style="list-style-type: none"><li>• What is the Cause of Fire presented in the video?</li><li>• What did they do to stop the fire?</li><li>• What can be the fire safety tip to remember to avoid that fire incident?</li><li>• Does this happen in real life?</li></ul>	<i>Remind participants while watching the video about dos and don'ts:</i> <ul style="list-style-type: none"><li>a. <i>Keep silent while watching.</i></li><li>b. <i>As you watch, pay attention to the details of the video; and</i></li><li>c. <i>After watching, you will be asked a series of questions</i></li></ul>
LG 8-1 PPTS-3-6	2.3 Discuss the Importance of Identifying the Causes of Fire. Engage the participants by presenting facts about the Statistics at Home, school, and the community.	<i>Note: If a projector or television is unavailable, distribute laminated pictures to five random participants and let them identify which best describes the images. Follow the arrangement of photos as presented in the lecture guide.</i>
	2.4 Present subject objectives.	<i>Give the participants time to interact and give their answers to the questions of laminated pictures.</i>
		<i>Refer to Goals and Subject Objectives</i>

# Cont.

Audio/Visual Aids	Outline	Notes
<b>3. LESSON PROPER</b>		
 <b>LG 8-2</b> <b>PPTS-7-26</b>	<p>3.1 Discuss "What are the Common Causes of Fire in Schools, Homes, and Communities? Discuss the Five Common Causes of Fires and Fire Safety Tips for each Cause.</p> <ul style="list-style-type: none"><li>3.1.a. Cooking</li><li>3.1.b. Heating</li><li>3.1.c. Electrical</li><li>3.1.d. Smoking</li><li>3.1.e. Torch (Candle)</li></ul> <p>3.2 Proceed to development demonstration.</p>	<p><i>Utilize laminated pictures for the presentation.</i></p> <p><i>Allow the participants to express their examples that cause fire in school, home, and community.</i></p> <p><i>The lecturer may accept other examples but explain to the participants that these were the Top Common Causes of Fires.</i></p> <p><i>The audience must be engaged in giving examples.</i></p>
<b>4. ENRICHMENT ACTIVITY</b>		
 <b>LG 8-3</b> <b>PPTS-27-30</b>	<p>4.1 Present the Three Main Categories of the Common Causes of Fires in School, Home, and Community by introducing them through a game entitled "Choose Me," in which nine random students will pick a paper and name which group each Common Cause of Fire belongs to.</p> <p>4.2 Discuss the Three Main Categories of the Common Causes of Fires in Schools, Homes, and Communities.</p> <ul style="list-style-type: none"><li>4.2.a. Carelessness and Accidents</li><li>4.2.b. Electrical Equipment</li><li>4.2.c. Lighting of Fire Material</li></ul>	<p><i>These Three Main Categories should be emphasized to the audience by giving photographic examples.</i></p> <p><i>It is essential to engage each student to avoid boredom and lack of interest.</i></p>
<b>5. PERFORMANCE ACTIVITY</b>		
 <b>LG 8-4</b> <b>PPTS-31-30</b>	<p>5.1 Divide them into three groups (depending on the class size). Introduce the 30-second infomercial activity to the participants and discuss the criteria for judging. The duration of practice is 7-10 minutes, and discuss the performance rubrics before dividing the class into groups, then distribute the cards for themes.</p>	<p><i>The lecturer may give rewards, a token, or a Certificate of Commendation to the chosen group to motivate the participants.</i></p>
<b>6. GENERALIZATION</b>		
<p>6.1 Summarize the lesson and provide a generalization of the things the participants must remember.</p>		

# Cheat Sheet

Audio/Visual Aids	Outline	Notes
<b>7. CLOSING EVALUATION</b>		
 <b>LG8-5</b> <b>PPTS-34</b>	<p>7.1 Review the objectives by asking the questions.</p> <p>7.1.a. Can you share a particular story wherein you encountered the mentioned Causes of Fires, whether in School, Home, or Community?</p> <p>7.1.b. How did you (or the concerned citizen) manage the Fire Incident?</p> <p>7.1.c. As a teenager, how can you promote Fire Prevention Tips in your home, school, and community?</p>	
 <b>LG8-5</b> <b>PPTS-35-36</b>	<p>7.2 Ask if there are questions or clarifications.</p> <p>7.3 End the subject by asking the participants to recite a Pledge to Avoid fire, to be taken at home to be signed by the parents and optional for the signing printed on a Tarpaulin.</p>	<i>Please print out the Fire Safety Pledge and distribute it to participants.</i>
 <b>LG8-5</b> <b>PPTS-37</b>	<p>7.4 End the subject by presenting the hotlines and social media accounts of the Fire Station. Let them write it on their notebooks, save it on their phones, ask them to memorize it, and share it with their family and friends.</p>	<i>It is optional to print the pledge on a tarp (if possible, let the participants and stakeholders sign on it. See the learning guide for reference.</i>
<p>7.5 End of the session.</p>		

**Facilitator's Note**

- At this discussion, the facilitator may ask added questions and expect that the participants' answers may vary.

***Watch and React***

The purpose of the Simulation Drill was to evaluate the responding unit, the local authorities, and even civilians on the Fire Safety Drill. Every Fire Station yearly did this activity nationwide. After watching the Audio-Visual

Presentation, what are your reactions to these questions:

1. What is the Cause of Fire presented in the video?
2. What did they do to stop the fire?
3. What can be the fire safety tip to remember to avoid that fire incident?
4. Does this happen in real life?  
Do you have any fire incidents individual experiences

**Facilitator's Note**

- In this discussion, the facilitator may cite real-life experiences to the participants, how they met fire incidents in school, their homes, or any fire incident that will catch their undivided attention.
- Then, present the statistical data about the current population of young people in the Philippines.

**COMMON CAUSES OF FIRES INSIDE SCHOOL, HOME, AND COMMUNITY****Importance of Identifying the Causes of Fire**

There is this saying, “It’s better to be robbed than to have your house catch fire,” It may sound cliché, but behind this proverbial Filipino adage is a fundamental truth: it can turn everything you ever worked hard for into ashes.

A house and lot in the Philippines are the most expensive purchase and investment among Filipinos, and all your hard work will burn and crumble to the ground in case of fire.<sup>1</sup> Residential

<sup>1</sup>Top Causes of Fire Incidents in the Philippines | Lumina Homes | <https://www.lumina.com.ph/news-and-blogs/blogs/10-common-fire-causes-in-the-philippines>

buildings are not the only structures that can catch fires; public places, schools, business establishments, or any building are susceptible to being burned.<sup>1</sup>

“We can all help make the world a safer place by learning more about how and why fires start.” (“Public education - NFPA”) One of the best ways of dealing with a fire is to prevent its occurrence, fundamentally understanding and learning what causes fire.

The young generation is the future. According to the United Nations Population Fund (UNFPA), the Philippines today has the largest generation of young people. Thirty million young people between the ages of 10–24 account for 28 percent of the Philippine population.<sup>2</sup> As of SY 2022-2023, there were 4,600,822 junior high school enrollees according to the latest data from the Learner Information System for the incoming school year in the period from July 25 to 7 a.m. of August 3, 2022, which shows that young people in any places can be a help in engaging the community about Fire Safety.<sup>3</sup>

### **Importance of Identifying the Causes of Fire: Remember your CHEST (Cooking, Heating, Electrical, Smoking, and Torch)**

There are top causes of fire incidents in the Philippines, as well as some basic but legitimately helpful ways to prevent fires and what to do in case the unfortunate happens, whether within your property or in a public setting.<sup>1</sup> It is scary that something as simple

#### **Facilitator's Note**

- In this discussion, the facilitator may accept other examples but explain to the participants that these were the Top Common Causes of Fire and Safety Precautions.

<sup>2</sup><https://philippines.unfpa.org/en/node/15309>

<sup>3</sup><https://www.deped.gov.ph/2022/08/23/deped-welcomes-over-28m-enrollees-for-sy-2022-2023>

as lighting a cigarette and throwing it out can cause open flames that will turn into a giant ball of fire, destroying everything that is near it. According to the National Fire Protection Association (NFPA), below are the top five culprits of fire incidents anywhere in the world, and below are some facts and tips to take precautions:



**IN THE ILLUSTRATION:** It shows a person using a phone while cooking.

### Cooking

“Cooking brings family and friends together, provides an outlet for creativity and can be relaxing.” (“Cooking brings family and friends together, provides an outlet for ...”) But did you know that cooking fires are the number one cause of home fires and injuries? Cooking was the leading cause of reported home fires and injuries in 2015–2019 and the second leading cause of home fire deaths.<sup>4</sup>



### To Remember

The leading cause of fires in the kitchen is unattended cooking.

Most cooking fires in the home involve the kitchen stove.



### To Remember

- Stay in the kitchen while frying, boiling, grilling, or broiling food. If you leave the kitchen for even a brief period, turn off the

<sup>4</sup><https://www.nfpa.org/Public-Education/Fire-causes-and-risks/Top-fire-causes/Cooking>

stove. (“Cooking Safety - NFPA”)

- Know the basics of extinguishing kitchen fires. - If the fire is small, cover the pan with a lid and turn off the burner.
- Throw lots of baking soda or salt on it. Never use flour, which can explode or make the fire worse. (“How to Put Out Kitchen Fires - dummies”)
- Smother the fire with a wet towel or other large wet cloth. (“How to Put Out Kitchen Fires - dummies”)
- Use a fire extinguisher.
- If you doubt fighting a small fire, call 9-1-1 or the local fire emergency number from outside the home.

## Heating

There is something about ironing your school uniform or favorite shirt and baking gingerbread cookies on Christmas Eve. Did you know that heating equipment like iron and ovens are one of the leading causes of fire incidents? We often decline to remember that this cause can trigger fire incidents anywhere, usually at home.<sup>4</sup>



**IN THE ILLUSTRATION:** This shows an unattended oven in the kitchen.



### To Remember

“Half of home heating fires are reported during December, January, and February.”<sup>5</sup>

“If you cook using an oven while it is on high

<sup>4</sup>Power Outages | Puyallup, WA

temperature, it will cause fat and oil to become highly flammable.”<sup>6</sup>



### To Remember

- Keep anything that can burn at least three feet (one meter) away from heating equipment, a fireplace, a wood stove, or a portable space heater.<sup>7</sup>
- Remember to turn portable heaters off when leaving the room or going to bed.<sup>8</sup>
- Keep anything that can burn at least three feet (one meter) away from heating equipment, a fireplace, a wood stove, or a portable space heater.<sup>7</sup>
- Remember to turn portable heaters off when leaving the room or going to bed.<sup>8</sup>
- If you do see a fire, at once, turn off the oven and all the top burners. Clear the counters around the stove and unplug other appliances.<sup>9</sup>

## Electricity

“Electricity helps make our lives easier, but there are times when we can take its power and its potential for fire-related hazards for granted.”<sup>10</sup> Flipping a light switch, plugging in a coffee maker, and charging a laptop computer. These are second nature for most of us. Electricity makes our lives easier. However, we need to be cautious and keep safety in



#### IN THE ILLUSTRATION:

This shows an overloaded extension.

<sup>6</sup>Be Aware of Potential Oven and Cooker Fire Risks - Repair Aid

<sup>7</sup>State fire marshal cautions on heating as cold weather rolls in

<sup>8</sup>Heating Safety - NFPA

<sup>9</sup>Important Precautions You Should Know to Prevent Oven Fires in Your...

<sup>10</sup>Electricity helps make our lives... - Golden Fire-Rescue - Facebook

mind.<sup>11</sup> Frayed or exposed wirings can release heat on combustible surfaces, and old wirings are more likely to overload due to the number of appliances used in a house or building. Using extension cords for multiple and large appliances can also cause electrical fires since these cords cannot manage the energy needed.<sup>11</sup>



### To Remember

There are more than 45,000 home electrical fires every year. About half of these involve lighting equipment and electrical wiring. Home electrical fire deaths peak between midnight and 6 a.m.



### To Remember

- Never overload an extension lead by plugging in appliances that together will exceed the maximum current rating stated for the extension lead.”<sup>12</sup>
- Major appliances (refrigerators, dryers, washers, stoves, air conditioners, microwave ovens, etc.) should be plugged directly into a wall receptacle outlet. Extension cords and plug strips should not be used.<sup>11</sup>
- Avoid plugging several power-hungry items of equipment into the same line.<sup>13</sup>

<sup>11</sup><https://www.nfpa.org/Public-Education/Fire-causes-and-risks/Top-fire-causes/Electrical>

<sup>12</sup>What can happen if sockets are overloaded? – Wise-Answer

<sup>13</sup>What is an electric overload? – Energuide



**IN THE ILLUSTRATION:**  
This shows an irresponsible smoker throwing cigarettes near an explosive object.

## Smoking

The place where we feel safest — at home — is where most smoking-materials structure fires, deaths, and injuries occur. Smoking materials are the leading cause of fire deaths. It should come as no surprise that smoking has contributed to many fire-related injuries and property damage through the years.<sup>14</sup>

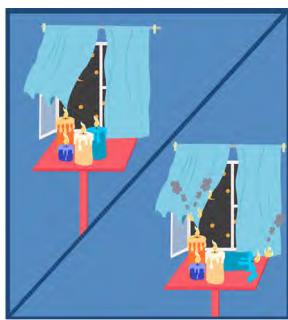


### To Remember

It takes only one cigarette discarded in landscaping or potted plants to start a fire. Electronic cigarettes and vapes also present a potential fire hazard if not cared for properly.

**Put Cigarettes Out, All the way, Every Time!**

- Do not discard cigarettes in vegetation such as potted vegetation and dried grass.
- Refrain from smoking in your house altogether, and do not allow others to smoke in your home.



**IN THE ILLUSTRATION:** This shows an unattended candle placed near a curtain.

## Torch (Candle)

There is a special beauty and tranquility to candles. Behind this beauty are the causes of home fires — and home fire deaths. “Remember, a candle is an open flame, which means that it can easily ignite anything that can burn.”<sup>15</sup> An estimated 8,200 home fires are started by

<sup>14</sup><https://www.nfpa.org/Public-Education/Fire-causes-and-risks/Top-fire-causes/Smoking>

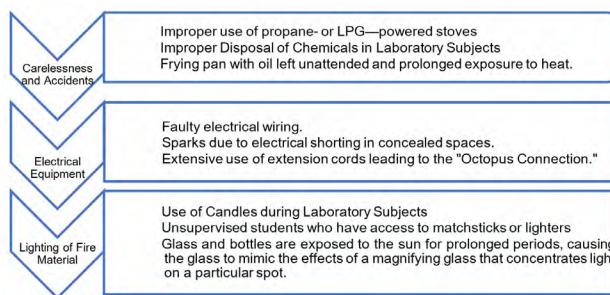
<sup>15</sup> Candle Safety Tips - NFPA | <https://www.nfpa.org/Public-Education/Fire-causes-and-risks/Top-fire-causes/Candles>

candles each year, according to the National Fire Protection Association.<sup>15</sup>

### Let us Categorize these Common Causes of Fires

“My safety, my responsibility.” Fire safety is not just about simple precautionary measures; understanding the cause and root is integral in stopping the continuous damage it produces. Some fires are caused intentionally by people with ill motives, but most of the time, fires are caused by an accident. Why do these fires happen?<sup>16</sup>

Since fires can quickly get bigger and uncontrollable if not responded to at once, the best practice is to prevent them from happening. Prevention starts with naming the common causes and understanding the fire-related factors. By knowing these common causes, people can proactively address fire hazards at home or in the workplace and correct irresponsible practices that can cause fires.<sup>16</sup>



**IN THE DIAGRAM** It shows examples for each category of the causes of fires.

<sup>16</sup>How do fires start? Common causes of fires about which you should know |<https://www.phelpsdodge.com.ph/updates/article/top-cause-of-fires-in-the-philippines>

## Why is Fire Safety Important?

- Fire safety is essential, whether at home, school, or any place, to prevent and protect against the destruction caused by fire.
- Fire safety reduces the risk of injury and building damage that fires can cause.
- Developing and implementing fire safety protocols in any place is not only required by law but is crucial to everyone's safety. ("Why is Fire Safety Important? | Alsco")
- Fire safety is vital to protect and prevent fire hazards in all structures. There are general fire safety precautions you should follow regardless of where you live.

## Fire Safety Starts with YOUlt! Cooperation is a Key Characteristic of the New Generation

Cooperation creates opportunities. The Philippines today has the largest generation of young people in its history. Thirty million young people between the ages of 10-24 account for 28 percent of the Philippine population. Therefore, including youth in fire safety preparedness is an essential part of engaging the entire community.<sup>17</sup> Training and teaching youth to empower, educate, and build their resilience strengthen the community's ability for preparedness in response to various threats and hazards. Doing so helps to increase school safety ability. It helps youth be more confident during an emergency because they have less anxiety, know what to expect, and are prepared for various outcomes.<sup>17</sup>

<sup>17</sup> Building Youth Preparedness and School Safety Capacity by Integrating



**IN THE ILLUSTRATION:** It shows that preparing youth today will create tomorrow's prepared adults. Developing knowledge and skills at an early age often leads to individuals carrying that knowledge into adulthood, creating a more stable, secure, and prepared community.



### *Ready, Set, Action!*

Television commercials are potent tools to convince people to support and remember Fire Safety Tips. It will appeal to viewers emotionally and persuade them to feel obligated to subscribe to a point of view. For this learning experience, the participants will perform a 30-second Infomercial promoting Fire Safety Tips. Below are the cards to be distributed to each team, and the themes are as follows (Fire Safety Tips):

1. Manatili sa kusina kapag may nakasalang na niluluto.
2. Huwag iwanan ang oven habang may niluluto.
3. Huwag i-overload and mga saksakan ng kuryente.
4. Huwag itapon sa mga madadaling masunog ang upos at abo ng sigarilyo.
5. Ilayo ang mga nakasinding kandila sa mga bagay na madaling masunog.

**Facilitator's Note**

- ▶ In this performance task, the facilitator may ask the participants to incorporate actions, creativity, and uniqueness in the act.
- ▶ At the end of the performance, you may give rewards, a token, or a Certificate of Commendation to the selected groups or even choose the best one to motivate the participants.

**Performance Rubrics**

- 25% - The Infomercial uses a lot of persuasive language to help persuade the audience.
- 25% - The Infomercial has a solid and clear link between educational goals and objectives of the subject.
- 25% - The Infomercial has outstanding skill in showing imagination, creativity, and production techniques
- 25% - The Infomercial is presented within the time limit (30 seconds).

**How much have you learned?**

Can you share a story of your encounter with fire?

Why do we need to classify fires?

How did you (or the concerned citizen) manage the Fire Incident?

As a teenager, how can you promote Fire Prevention Tips in your home, school, and community?



# *Fire Safety Pledge*



## Facilitator's Note

- ▶ In this discussion, the facilitator may ask the participants to recite the pledge and then put their right hand (clenched fist) facing toward their chest.
  - ▶ Explain that Fire Safety Precautions must be a commitment they must see throughout their lives.
  - ▶ Also, the facilitator may print out this pledge and distribute it to the participants to be signed by them and their parents.
  - ▶ Another choice is that the facilitator may print out this pledge on a tarp and post it on the wall to be signed by the participants and other stakeholders.

**IN THE ILLUSTRATION:** It shows a sample of the fire safety pledge.

The Fire Safety Pledge is designed to bring greater awareness of the importance of fire safety at home, school, and community. It is imperative that teenagers - especially those living in places with higher numbers of fire incidents- understand the dangers and know how to respond if they find themselves caught up in a fire incident situation. The Fire Safety Pledge is not a requirement but a reminder of this important safety initiative. Fire is every young person's fight, too; all teenagers should partake of the noble advocacy of sharing fire safety awareness geared for a fire-free community.



## Pagtatalaga ng Sarili sa Pag-Iwas sa Sunog

Nangangako ako na magiging kaisa sa pag-iwas sa sunog. Sa pamamagitan ng pangakong ito, ako ay hindi kailanman magluluto nang walang patnubay mula sa matatanda at babantayan ang niluluto. Sisiguraduhing nahugot mula sa saksakan ang mga appliances sa tuwing aalis ng bahay. Hindi mag-ooverload sa mga saksakan o gagamit ng mga extension cord sa halip ng mga saksakan. Papaalalahanan ang mga naninigarilyo na maaaring maging sanhi ng sunog ang mga upos na nalalaglag nila. Ilalayo ang nakasinding kandila sa mga mabilis masunog gaya ng kurtina, papel at kahoy at hihipan ito tuwing lalabas ng silid. Aaralin ang paggamit ng pamatay sunog gaya ng fire extinguisher. Nangangako akong gagawin ito, dahil ang pinakamahusay na paraan sa pagpuksa ng sunog ay ang pagpigil dito sa simula pa lang.

Ang pagtatalagang ito ay ginawa ko ngayong ika-\_\_\_\_\_ ng \_\_\_\_\_ taong \_\_\_\_\_ sa lungsod ng \_\_\_\_\_.

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Pangalan at Lagda ng Nanunumpa

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Pangalan at Lagda ng Magulang

## POWERPOINT AND VISUAL AIDS

### COVER PAGE

1



### Watch and React

Simulation Drill

conducted by the station

2

### PROMPT QUESTIONS

1. What is the Cause of Fire presented in the video?
2. What did they do to stop the fire?
3. What can be the fire safety tip to remember to avoid that fire incident?
4. Does this really happen in real life?  
Do you have any personal?

3

### Importance of Identifying the Causes of Fire

“It’s better to be robbed than to have your house catch fire.”

4

**TEENAGER STATISTICS**

According to the United Nations Population Fund (UNFPA), the Philippines today has the largest generation of young people in its history. Thirty million young people between the ages of 10-24 account for 28 percent of the Philippine population.

5

**FACTS**

1. The leading cause of fires in the kitchen is unattended cooking.
2. Most cooking fires in the home involve the kitchen stove.

9

**TEENAGER STATISTICS**

And as of SY 2022–2023, there were 4,600,822 junior high school enrollees according to the latest data from the Learner Information System for the incoming school year in the period from July 25 to 7am of August 3, 2022, which shows that young people in any places can be a help in engaging the community about Fire Safety.

6

**Cooking Fire Safety Tips**

Stay in the kitchen while you are frying, boiling, grilling, or broiling food. If you leave the kitchen for even a brief period, turn off the stove.

10

**Importance of Identifying the Causes of Fire: Remember your C.H.E.S.T (Cooking, Heating, Electrical, Smoking and Torch)**

7

**Cooking Fire Safety Tips**

Know the basics in extinguishing kitchen fire.

11

**Cooking**

was the leading cause of reported home fires and home fire injuries in 2015–2019 and the second leading cause of home fire deaths.

8

**Cooking Fire Safety Tips**

If you have any doubt about fighting a small fire, call 9-1-1 or the local fire emergency number from outside the home.

12

## Heating Fire Safety Tips

If you do see a fire, at once turn off the oven and all the top burners. Clear the counters around the oven and unplug other appliances.

17

## Electricity Fire Safety Tips

Major appliances (refrigerators, dryers, washers, stoves, air conditioners, microwave ovens, etc.) should be plugged directly into a wall receptacle outlet. Extension cords and plug strips should not be used.

21

## Electricity

Electricity makes our lives easier. However, we need to be cautious and keep safety in mind.

18

## Electricity Fire Safety Tips

Avoid plugging several power-hungry items of equipment into the same line.

22

## FACTS

1. There are more than 45,000 home electrical fires every year. About half of these involve lighting equipment and electrical wiring.
2. Home electrical fire deaths peak between midnight and 6 a.m.

19

## Smoking

Smoking materials are the leading cause of fire deaths. It should come as no surprise that smoking has contributed to many fire-related injuries and property damage through the years.

23

## Electricity Fire Safety Tips

Never overload an extension lead by plugging in appliances that together will exceed the maximum current rating stated for the extension lead.

20

## FACTS

1. It takes only one cigarette discarded in landscaping or potted plants to start a fire.
2. Electronic cigarettes and vapes also present a potential fire hazard if not cared for properly

24

### **Smoking Fire Safety Tips**

Do not discard cigarettes in vegetation such as potted vegetation and dried grass.

25

### **Torch Fire Safety Tips**

Never leave a burning candle unattended.

29

### **Smoking Fire Safety Tips**

Refrain from smoking in your house altogether and do not allow others to smoke in your home.

26

### **Torch Fire Safety Tips**

Never burn a candle on or near anything that might catch fire such as curtain.

30

### **Torch**

Remember, a candle is an open flame, which means that it can easily ignite anything that can burn.

27

### **Torch Fire Safety Tips**

Keep candles out of the reach of children and pets.

31

### **FACTS**

1. It takes only one cigarette discarded in landscaping or potted plants to start a fire.
2. Home electrical fire deaths peak between potential fire hazard if not cared for properly.

28

### **Let Us Categorize These Common Causes of Fires**

32



Improper use of propane- or LPG-powered stoves  
Improper Disposal of Chemicals in Laboratory Subjects  
Frying pan with oil left unattended and prolonged exposure to heat.



Faulty electrical wiring.  
Sparks due to electrical shorting in concealed spaces.  
Extensive use of extension cords leading to the "Octopus Connection."



Use of Candles during Laboratory Subjects  
Unsupervised students who have access to matches/lighters  
Glass and bottles are exposed to the sun for prolonged periods, causing the glass to mimic the effects of a magnifying glass that concentrates light on a particular spot.

**IN THE DIAGRAM** It shows examples for each category of the causes of fires.

33

1. Manatili sa kusina kapag may nakasalang na niluluto.
2. Huwag iwanan ang oven habang may niluluto.
3. Huwag i-overload and mga saksakan ng kuryente.
4. Huwag itapon sa mga madadaling masunog ang upos at abo ng sigarilyo.
5. Ilayo ang mga nakasinding kandila sa mga bagay na madaling masunog.

37

## Why Fire Safety is Important? Fire Safety Starts with YOUTH! COOPERATION IS A KEY CHARACTERISTIC OF NEW GENERATION

34



Youth Preparedness

Family and  
Community  
Engagement

**IN THE ILLUSTRATION:** It shows that preparing youth today will create tomorrow's prepared adults. Developing knowledge and skills at an early age often leads to individuals carrying that knowledge into adulthood, creating a more stable, secure, and prepared community.

35

### Performance Rubrics

- 25% - The Infomercial uses a lot of persuasive language to help persuade the audience.
- 25% - The Infomercial has a solid and clear link between educational goals and objectives of the subject.
- 25% - The Infomercial has outstanding skill in showing imagination, creativity, and production techniques
- 25% - The Infomercial is presented within the time limit (30 seconds). 38

### How much have you learned?

Can you share a story of your encounter with fire?

Why do we need to classify fires?

How did you (or the concerned citizen) manage the Fire Incident?

As a teenager, how can you promote Fire Prevention Tips in your home, school, and community?

39



### Watch and React

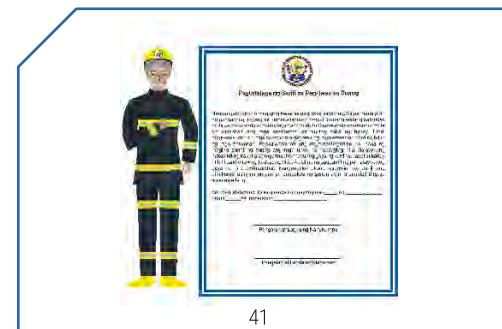
The participants will perform a 30-second Infomercial promoting Fire Safety Tips. Below are the cards to be distributed to each team, and the themes are as follows (Fire Safety Tips):

36



### Fire Safety Pledge

40



41

**Insert Fire Station Hotlines  
and Social media.**

42

**THANK YOU** 😊

43

## MODULE 4

# *The* **Fire Square Challenge**



**MODULE 4 OUTLINE**

# The Fire Square Challenge

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## **Scope/ Overview**

The renowned community response on the frontline program of this institution, The Fire Square Roadshow, is the backbone of this program, formulated with the differentiated activities bound to embody the fire safety awareness campaign of our institution. Summarily, designed to address the effective dissemination of our advocacy through the active participation of the targeted audience, as in this case, the teenagers.

With the purpose of bringing forth the doctrine of “self-help,” participants are now provided with an opportunity to face the challenges of learning self-reliance and accountability in the face of fire and other emergencies through the differentiated activities strategically designed with their respective objectives and core value system, complete with the proposed game plan set-up, flexible and dynamically interchangeable to accommodate the optimized demands of the targeted audience in varying circumstances and conditions.

Thus, this program is viewed as an ideal activity that will open an avenue for this institution to partake of the opportunity to disseminate our advocacy in the various youth organizations, such as but not limited to the scouting unions, student organizations/unions, and youth religious unions included explicitly in the age range of 12 to 17 years old. This platform shall form part of their program of activities that will lead to a broader scope of introducing fire safety awareness to our teenagers of today. Moreover, the completion of this program will be incorporated as a milestone following the existing guidelines of the programs set forth for this age range.

With much emphasis on its proportionate incorporation with the Boy Scouts and Girl Scouts of the Philippines, the backbone herewith is basically patterned in the doctrine embodied in their vision and mission with the corresponding badge for the differentiated activities that will be completed to represent a recognition of their commitment in support of this noble cause.

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## Delivery Methodology

The BFP Fire Square Challenge is designed with the reasonable and practical use of the available logistical equipment of all units, with the minimal need to obtain burdensome materials, complete with the needed instructions and documentary attachments to provide all pertinent information to the designated facilitator/instructor.

## Learning Objectives

At the end of the session, the participants will be able to:

1. Be trained on fire safety and preparedness measures;
2. Develop self-reliance and vigilance during times of emergency; and
3. Familiarize and re-enforce safety practices.

## Learning Materials Needed

The following are the differentiated activities of their BFP Fire Square Challenge with their respective material requirements sufficiently listed for the proper set-up of the selected game plan by the designated facilitator/instructor, to wit;

1. The Obstacle Course
2. Fire evacuation relay
3. Flammable fire extinguishment (firefighting technique)
4. Hose laying and hose folding
5. Donning and Doffing of PPE
6. Bucket relay

# In this Module 4... Ch

## Goal

For the participants to understand the basic concepts of fire, how it occur, its causes and risks.

## Objectives

At the end of the session, the participants must be able to:

1. Gain competence in fire safety preparedness measures.
2. Develop self-reliance and vigilance during times of emergency and
3. Familiarize and re-enforce safety practices.

## Performance Objectives

**Action-** the team with the fastest time and most proficient performance of the tasks will be the winner. Thus, all teams will have one Team Leader to be supervised by the designated game officials.

**Standard-** each group will have at least 7-10 members; all teams shall have an equal number of members who will actively participate in all the games and must complete all the tasks.

**Condition-** The available facilities shall utilized, including all the available equipment in the firetruck/station and the material requirements of the differentiated games.

## Rationale

To optimize dissemination, our well-entrenched advocacy for fire safety awareness, ergonomically associated with interactive games as another information campaign tool, is now presented. The Fire Square Roadshow was the basis of the differentiated activities of this challenge, developed to complement the traditional teaching methods and enhance the learning experience of the targeted participants, as in this case, the teenagers, with the necessary innovative techniques of incorporating the primary goal of increasing their self-sufficiency thru the principle of self-help<sup>1)</sup> allowing the latter to gain the willpower and confidence to provide the needed "first-hand fire suppression" to address the challenges of the most vulnerable incipient phase of fire incidents, thereby creating an avenue to prevent or mitigate damages to lives and properties.

# Great Sheet

**Concept:** The BFP Fire Square Challenge is composed of the following activities:

1. The Obstacle Course
2. Fire Evacuation Relay
3. Flammable Fire Extinguishment (Firefighting Technique)
4. Hose Laying and Hose Folding
5. Donning and Doffing Of Ppe
6. Bucket Relay

The differentiated activities of the BFP Fire Square Challenge were selected according to the reasonably available logistical equipment in all units. The challenge is designed to emphasize the importance of fire safety awareness and the principle of self-help <sup>2)</sup> in any fire and other related emergencies. Thus, the incorporation of fun-filled games in the campaign on fire safety will set up an avenue for the better assimilation of the objectives of this program.

The core of competencies aims to develop the characteristics teenagers must be apparent with to capacitate them with the proficient enforcement of an enhanced knowledge and skill on "first-hand fire suppression," a plausible means in the realization of prevention or mitigation of damage to lives and properties in the eventuality of a fire.

It empowers the lecturers or facilitators to teach technical knowledge and skills even at a limited time using the activities set forth to ensure that students are given confidence and self-reliance in any case of the tragic consequences of uncontrolled fires.

Thus, this program is an ideal activity that will open a path for this institution to partake of the opportunity to disseminate our advocacy in the various youth organizations, such as but not limited to the scouting unions, student organizations/unions, and youth religious unions included in the age range of 12 to 17 years old. This platform shall form part of their program of activities that will lead to a broader scope of introducing fire safety awareness to today's teenagers. Moreover, the completion of this program will be incorporated as a milestone following the existing guidelines of the programs set forth for this age range.

With much emphasis on its proportionate incorporation with the Boy Scouts and Girl Scouts of the Philippines, the backbone is fundamentally patterned in the doctrine embodied in the vision and mission of the scout movement, with the corresponding BADGE for the differentiated activities that will be completed to represent a recognition of their commitment in support of this noble cause.

The lecturer/Facilitator may choose among the differentiated activities in the following Game options with their corresponding **BADGES:**



## The Obstacle Course



**Fire Evacuation Relay  
Flammable Fire Extinguishment  
(Firefighting Technique)  
Hose Laying And Hose Folding  
Donning Ang Doffing Of Ppe  
Bucket Relay**



## INSTRUCTOR'S NOTE:

## *General Guidelines:*

### *Do's and Don'ts*

1. Strictly implement the safety measures in the performance of the differentiated activities. It is imperative to coordinate with the Local Rescue Unit, if available, or choose a rescue/first aid team/individual to be assigned with a first aid kit and other rescue equipment to keep all participants safe and to prevent aggravating the injuries if not avoided.
2. It is also necessary that the parent consent and waiver forms be given to the person in charge of the participants at least 3-5 days before the event for its accomplishment and accommodation, see Annex for reference.
3. It is also required that all designated facilitators/lecturers for this event make sure that the institution has the required evacuation plan and provide the needed help for the prompt preparation of the same before the event.
4. It is also imperative to acquire the following:
  - ▶ A whistle will serve as a secondary means of signaling the start/end of all the activities, notifying offenses/defaults, and calling the attention of the participants.
  - ▶ A meter stick, to be used for the measurement of the height of the water collected in the bucket relay event and in setting up the game plan, and
  - ▶ A voice amplifier that a Megaphone, Lapel wireless microphone, Portable speaker with microphone, or any form of sound system that will enable all participants to understand instructions and other details about the event clearly.

5. The lecturer/facilitator must prepare the following documents (See Annex for reference):
  - ▶ Attendance Sheets
  - ▶ Parent Consent and Waiver Forms
  - ▶ Score Sheets
  - ▶ Assessment/Evaluation Forms
  - ▶ Zeal of a Firefighter's Ally
6. The facilitator/lecturer must also remind the person in charge of the event of the game requirements enumerated, including the proper coordination of the needed time for its set-up and installation and the determination of the lacking material requirements or other issues/concerns for at least 24 hours before the event to amply accommodate the needed adjustments or procurement of whatever is lacking or insufficient.
7. The facilitators must ensure that the person in charge will only allow physically fit participants to take part in the events to prevent any untoward incident from occurring for the most significant realization of this program.
8. The instructor must carefully choose among the given sample game plans and figure out the ideal plan to accommodate the needs of the targeted participants or in consideration of the logistical equipment available.
9. The Facilitator and all designated BFP personnel must wear the proper uniform and enthusiastically engage the participants with the highest energy and regard for the realization of the objectives and
10. Plan, Prepare, Practice, and be lively to ensure proper execution of the BFP Fire Square Challenge



# Game 1

The Fire Square Challenge

# Fire Evacuation Relay

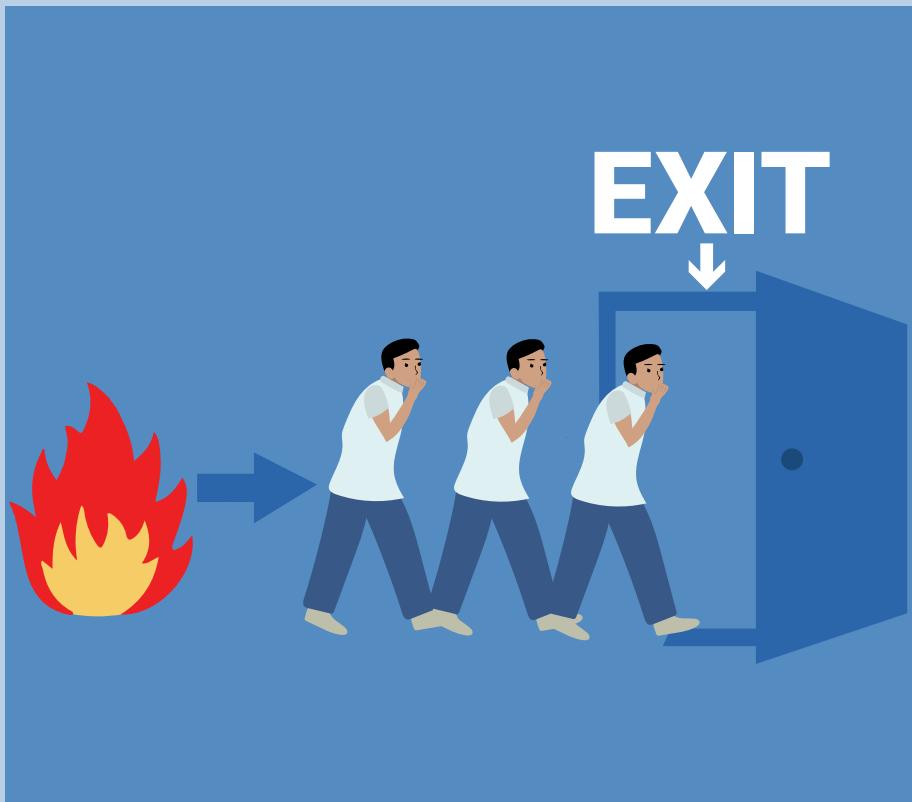


ILLUSTRATION BY: F01 Nolan D Yadao

Activity Title:

*Save the day by what you say!*  
"Getting ahead when rightfully started."

## Activity Description:

This activity emphasizes the role of effective communication in the actual conduct of the evacuation plan, accordingly planned and designed corresponding to the specific characteristic of any given structure/facility, considering the determined factors that may affect the safety of its occupants. Thus, this activity shall establish a course of action for a deeper understanding of the role of communication and awareness of the evacuation plan often disregarded, if not ignored, by most students nowadays.

Hence, an effective evacuation can only be in so much as the occupants are aware of the specific instructions. With frequent practice and reminders, the occupants will surely be well acquainted and trained to be safely situated in the designated evacuation area for proper accounting and determination of whether to alert those in charge to conduct search and rescue operations.

### Instructor's Note

#### Safety Reminders

Carefully supervise the overall execution of the drill and strictly observe the discipline of the participants. The participants must be reminded not to run, push, yell, or scream, which may affect the surge of movement of the team and avoid untoward incidents.

All participants must be physically able to perform the differentiated events in this game. Thus, make sure that all participants have submitted their respective **PARENT CONSENT** and **WAIVER** forms, and make sure to keep in close coordination with the **RESCUE/FIRST AID TEAM** assigned to be on standby at the venue of this event.

## Objectives:

At the end of the session, the participants will be able to:

- ✓ Identify effective communication during emergencies.
- ✓ Understand the importance of an evacuation plan; and
- ✓ Demonstrate an effective communication process to prevent harm or injury in an emergency.

## Core Values:

Hence, an effective evacuation can only be in so much as the occupants are aware of the specific instructions. With frequent practice and reminders, the occupants will surely be well acquainted and trained to be safely situated in the designated evacuation area for proper accounting and determination of whether to alert those in charge to conduct search and rescue operations.

## Detailed Procedure:

This game is a perennial concept of relaying a message from one player to the next, but what makes this game different is the incorporation of the needed clarity of instructions and relay of information in case of a fire incident as a reinforcement to the fire drill practices of

teenagers. Thus, all teams will have a maximum of four (4) minutes to complete the task.

## *Game Officials:*

**The Head Referee-** is a BFP personnel positioned on the field and moves with the run of play who will act as the final authority for decisions regarding the scores and ensure the smooth flow of the game, vigilantly facilitating a positive and fair environment for all the competing teams and maintain the pace of the event. In any case, he may also serve as the scorekeeper in addition to this task.

**Umpire-** any individual, preferably a BFP personnel/ Class Adviser/Faculty Member/Barangay Official/ Youth Leader, whose task is to make sure that the games set forth will be completed by all participants fairly, with the observance of the safety measures, and according to the rules. In any case, may also serve as the Timekeeper in addition to this task.

**Timekeeper-** any individual assigned to keep track of the time records from the start, stop, or temporary stoppages whenever instructed by the referee, who shall inform the Score Keeper of the time covered by the team on-play.

**Score Keeper-** any individual, preferably BFP personnel, who will accurately keep records on score sheets for proper tabulation and determination of the performance scores of all teams.

## *Game Participants:*

**Team Leader-** who will function as the contact point person for the team and be the first to relay the message, conduct headcount upon reaching the evacuation area, and report the same to the Umpire.

**Number of Participants-** Ten (10) participants in every team.

## *The Starting Area*

**Classroom Zero-** any classroom/room situated within the building compound, preferably the upper floors, where all the participants will gather, forming a circle and staying put until the instruction is given to the team leader to emphasize the manner and procedure of a proper

fire drill.

## *Material Requirements:*

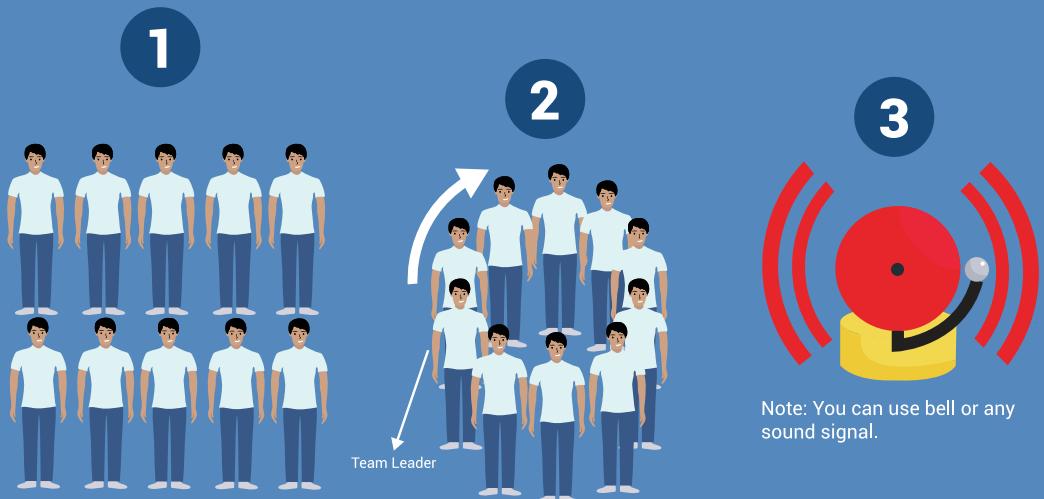
- ✓ The school evacuation plan with complete details on the routes leading to the designated evacuation area and
- ✓ The school alarm system will be used to signal the alert and commencement of the game.

## *The Instruction:*

The head referee will inform the team leader that a fire broke out at the ceiling part of the comfort room inside classroom zero; upon the sound of the alarm, the participants must perform the following instructions:

1. Cover their noses with a handkerchief/any piece of cloth, including their shirt/whatever they have on, to avoid inhalation of the smoke or fumes.
2. Leave the building in a single file and in a calm and orderly manner (No one must run or break the file formation).
3. The team leader must inform the Umpire to call the BFP Station Hotline Number and notify the latter of

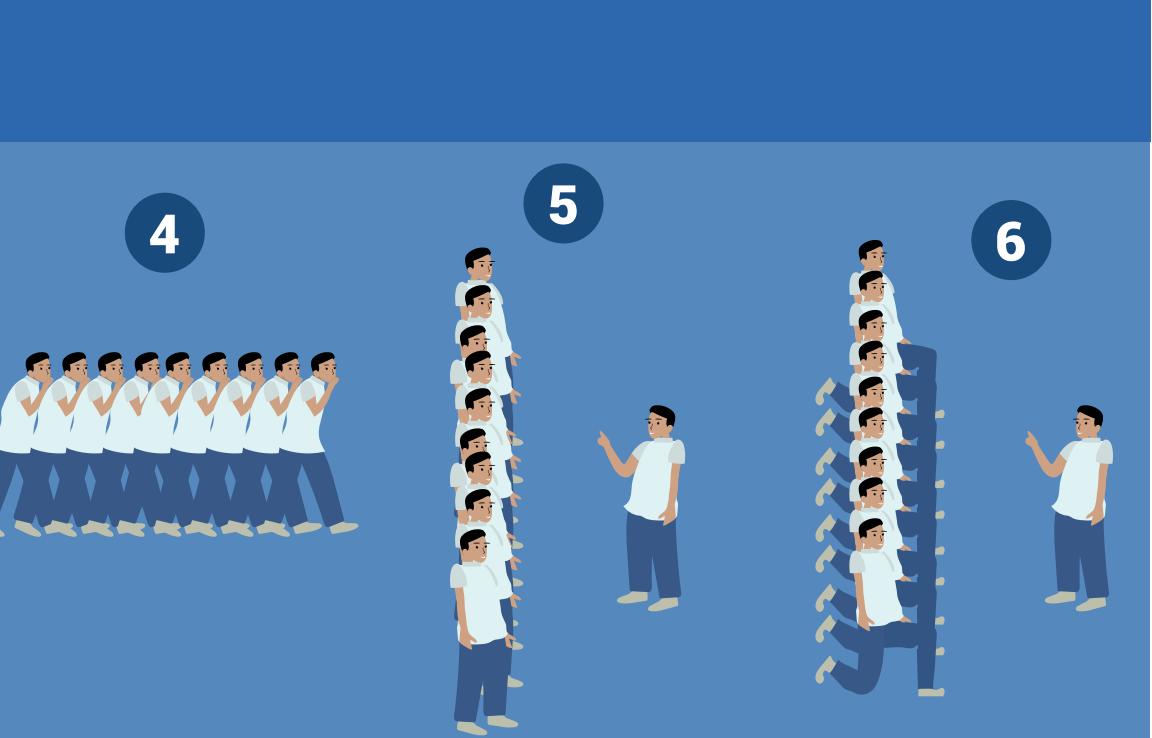
# Fire Evacuation Relay



the fire in progress.

4. Maintain a single file formation at the evacuation area and wait for the team leader to perform the body count and report the same to the Umpire.
5. All participants must then take a knee and wait for further instructions.

The “*message*” (instructions) will now be passed on to the next participant by whispering; no one will be allowed to talk or to make any other forms of communication other than that of the whispered “*message*” (instructions), which must be executed within 3 minutes at the most. Then, the alarm will be sounded as soon as the last participant is informed, and the team time shall start running as soon as the alarm has been sounded. The participants must execute the detailed “*message*” (instruction) from classroom zero until the evacuation area within four (4) minutes as the allotted time; any minute more than which shall be equivalent to ten (10) points deduction.



## Scoring Matrix

Instructor's Note	TIME	POINTS	DEDUCTION
<b>Reflection:</b> To comprehend the value of this activity, the overall performance of the group will determine whether effective communication has been demonstrated. This activity will enhance the performance of the group during the challenging times of fire and other emergency-related situations. Nevertheless, the incorporation of the need to be aware of the evacuation plan shall also reinforce the knowledge of the participants on the importance of knowing the safest routes and the significance of headcount (body count) upon reaching the evacuation area.  The instructor may ask the participants of the following questions:  <ol style="list-style-type: none"> <li>Are you all aware of the evacuation plan and evacuation area now?</li> <li>Do you understand the importance of relaying the right message and instructions?</li> <li>Do you know the importance of headcount during the evacuation process?</li> <li>Do you feel prepared to do the same in any case of fire and other emergencies?</li> </ol>	4 minutes and less	20	5 points per 1 minute
Fire Drill Steps	Points	Deductions	
Covering of Nose	20	10 points deduction for every step that was not observed.	
Orderly and Calm Manner	20		
Single file formation	20		
Report to the BFP station hotline	20		
Body count, Take a knee, and Status report	20		
<b>GRAND TOTAL</b>	<b>100</b>		

### EXAMPLE:

- If the participants started running due to the pressure time and forgot to cover their noses, then 2 steps were not followed, equivalent to 20-point deduction; their grade shall then be only 80 points in total.
- If the participants have performed all the steps but have done the task in 5 mins and 30 seconds, exceeding the allotted time of 1.5 minutes, then the deduction shall be 7.5 points ( $1.5 \text{ min} \times 5 \text{ points/min}$ ). Hence, their total score is 92.5 points.

<sup>3</sup> Challenge Course, Outdoor Obstacle Course for Every Generation, Game Time, 2023, <https://www.gametime.com/outdoor-fitness-equipment/challenge-course>

## Game 2

The Fire Square Challenge

# The Obstacle Course



ILLUSTRATION BY: FO1 Ken Dominic M Mordeno

Activity Title:

*Venture for adventure*  
“Live, Play and Lead!”

## Activity Description:

One of the fastest-growing trends in outdoor activities is the obstacle course, which offers a new experience and helps develop strength, agility, and critical thinking skills. Obstacle courses can take on many forms, as in this case, the emphasis is on coordination, discipline, and speed of reaction, which are the bases for the creation of this course <sup>3)</sup>. It consists of a series of challenges arranged in a sequence navigated by running, balancing, crawling, and movement with stealth and speed, primarily linked to improving the cognitive functions of the learners founded on the advocacy of fire safety awareness.

The course is strategically arranged in an order that will genuinely make the fire safety activity a learning experience coupled with fun and adventure, the principle of competition that adds up to the thrill of finishing the course on top.

Drafted with the safety surface of using improvised mattings, incorporated with the core of competencies needed for vigilant, responsible, and capable teenagers also anchored in the mission of the existing Scout Oath Law of the Philippines, as agents of change in communities, as well as all other youth organizations and unions, the participant learners, as well as viewers, will certainly be indulged in an educational interactive activity.

### Instructor's Note

#### Safety Reminders

All participants must be physically able to perform the differentiated events in this game. Remind all participants of the safety measures that must be observed during the events.

Thus, make sure that all participants have submitted their respective **PARENT CONSENT** and **WAIVER** forms, and make sure to keep in close coordination with the **FIRST AID TEAM** assigned to be on standby at the venue of this event.

► All participants shall be given an instruction to form in line, and the first participant shall perform the obstacle courses and shall head back to the line to tap the next performer until all the team members have completed the task accordingly, timed by the designated score and Timekeeper for this game.

## Objectives:

At the end of the session, the participants will be able to:

- ✓ Enhance their motor skills, endurance, and agility in the sequence of action needed in times of fire and other emergencies.
- ✓ Perform coordinated and quick response to fire and other related emergencies; and
- ✓ Adhere to the fire safety practices with due diligence

<sup>3)</sup> Challenge Course, Outdoor Obstacle Course for Every Generation, Game Time, 2023, <https://www.gametime.com/outdoor-fitness-equipment/challenge-course>

## *Core Values:*

This game will empower the participants on the value of persistence, commitment, and unity geared for a common cause. As such, this game shall embody the opportunity to gain experience into a responsible individual sufficiently dependable and confident to extend a helping hand during fire and emergencies.

## *Material Requirements:*

Rimless-used tires: one may use a car tire of about 17 to 19 inches in diameter for the flipping challenge and motorcycle/bike tires of about 17 inches in diameter for the “tire-run” challenge. Thus, you may choose to paint the tires with light colors to enhance visibility and add to its representation

4"x4" size wood of about 2 meters in length placed in between two (2) parallel 1/4 inch size water pipes (PVC) attached to a 1/4 size of Plywood and a rubber mallet hammer to pound on the wood from one end to the other.<sup>4</sup>

## *The Tunnel:*

- ✓ 4-5 plastic 55-gallon barrels
- ✓ 6-foot long 2x4
- ✓ Drill
- ✓ Screwdriver
- ✓ Screws
- ✓ Washers
- ✓ Bolts and Nuts
- ✓ Jigsaw or Circular Saw

### **✓ Steps In Making The Tunnel<sup>5</sup>:**

1. Measure the distance between the bottom rungs to form the tunnel. Add two inches to allow for an overhang for the drums that will be attached. Divide by two. Turn the barrel up with the bottom facing up and measure from the ground up to that location. Mark the distance all around both barrels and cut and do the same for the remaining drums.

<sup>4</sup> (Fire Square Roadshow Manual, BFP Region VIII, 2018)

<sup>5</sup> How to make a 6-foot Wide Tunnel for Playscape, eHow Team, [https://www.ehow.com/how\\_4492426\\_foot-wide-tunnel-playscape.html](https://www.ehow.com/how_4492426_foot-wide-tunnel-playscape.html)

2. Drill matching holes periodically around both barrels on the cut end. They must align. Use scrap plastic or metal connectors and put in bolts and nuts to connect the two barrels. Run bolts from the inside out and make sure that the same will be placed without any ends hanging out that may scratch the participants.
3. Cut a piece of weather-stripping sealer long enough to go around the entire inside of barrels. Trim off both edges so you are left with a flat piece.
4. Lay out flat and cover with rubber cement. Cover the inside of the tunnel, where it connects, with rubber cement. Cover a spot at least as wide as your weather-stripping sealer.
5. Wait 15–30 minutes and press the weather-stripping sealer into place. Start and end at the bottom of the tunnel to prevent rain or water from seeping in. You can keep repressing the stripping sealer into place, or you can find items to push into the tunnel to compress and hold the weather-stripping sealer in place while it dries. You can also use small screws to secure it in place if necessary.
6. Cut a 2x4 long enough to fit across the top of the supporting base parallel to the proposed tunnel location. Place the tunnel up against a side of the



tunnel and push 2x4 against the other side to help stabilize it. Screw 2x4 into tunnel base.

7. Cut a 2x4 long enough to fit inside the supporting base. Screw in place directly under the tunnel to add support. Using screws and washers, secure the tunnel anywhere it touches wood.

4-5 Drum Barrels that must be attached in a tunnel-like formation with an opening on both ends. In any case, you can also use cardboard boxes or Plywood as an alternative. If Plywood is selected as the alternative, then change the shape for as long as it will be a tunnel-like figure that will represent the "zero-visibility" phase of a fire incident. Make sure that all the sharp edges of the wood and all nails are fully embedded to prevent injury to the participants. Also, if cardboard boxes are preferred, must attach pieces of boxes that will be a replacement for Plywood to be formed into a tunnel-like arrangement, connecting about 8-10 pcs of large cardboard boxes to make about a 10-meter long tunnel, using packing tapes and straw rope as its main line of foundation anchored on two (2) points to keep it from crashing to the ground when participants crawl into the tunnel for this particular segment of the course. In addition, pop-up crawling tents are also available from some online sellers that can be available but of unwarranted diameter, which may be better for teenagers.

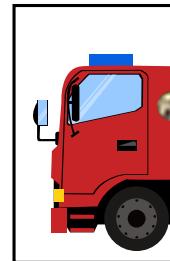


## Salvaging And Overhaul (Scavenger Hunt)

Large pieces of the puzzle will be placed strategically within the square during the games. It shall only be completed when the participants are observable enough to find all the missing pieces, incorporated as the SCAVENGER HUNT (SALVAGING and OVERHAUL) game.

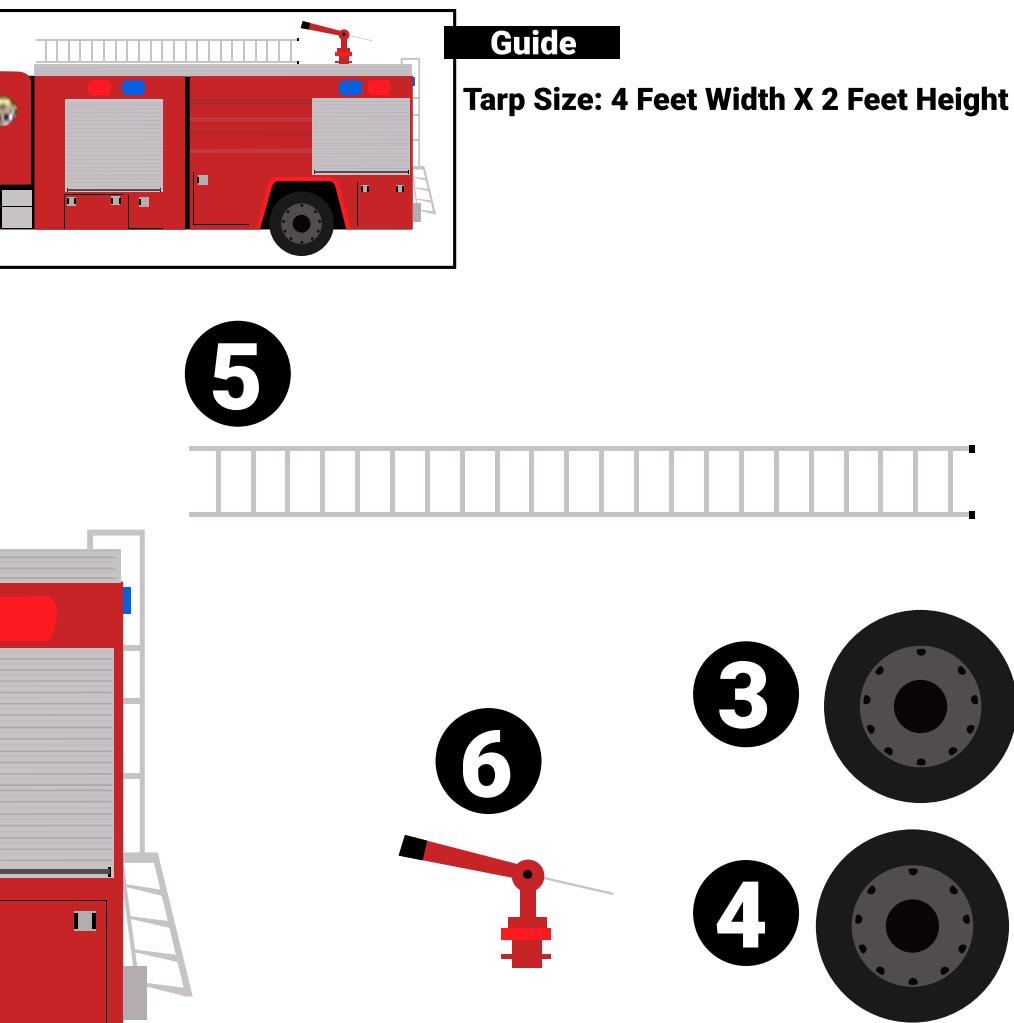
The Firetruck Puzzle must be printed in a tarpaulin/canvas, illustration below. The printed puzzle will be placed on the

### ✓ The Puzzle Pieces



floor as the main frame of the puzzle where the pieces are to be placed on top; another will be attached to Plywood and carefully cut to make the puzzle pieces. Attach the canvas/tarpaulin to the Plywood using a competent adhesive like CYNO adhesive or Vinyl Adhesive HH-66. Then, clamp your plywood piece flat to a work surface or sawhorse with your sketched puzzle facing up. Starting at one corner, slowly cut along your penciled guidelines with your Jigsaw and a fine wood-cutting blade. Avoid cutting too quickly, which can increase splintering<sup>6</sup>). (See Annex for more details and reference).

<sup>6</sup> )Puzzle Me This-With a Homemade Jigsaw, BLACK + DECKER, 2023, <https://www.blackanddecker.com.au/ideas-inspiration/puzzle-me-this-with-a-homemade-jigsaw>



## General Procedure:

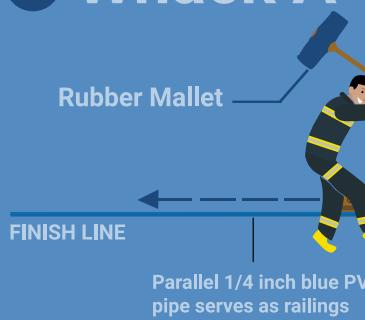
1. All participants shall form a line and wait for their turn as the first shall perform the first segment of the game.
2. Upon completion of the first segment, the first participant shall go ahead to the next, while the next in line shall go ahead with the first segment until the last participant.
3. The entire game shall be accordingly timed by the Timekeeper, who shall declare "FIRE OUT!" when all the team members have already completed the entire course.

# THE OBSTACLE COURSE

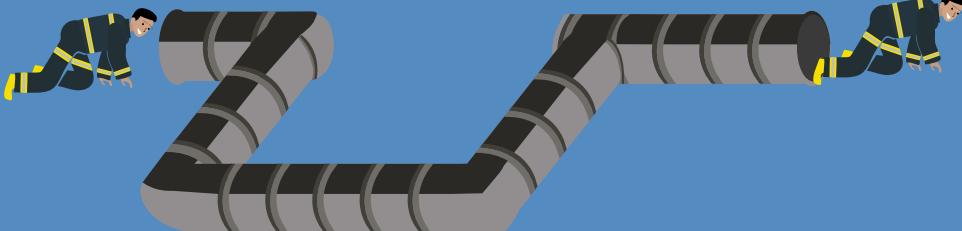
## 1 Flip N' Flex



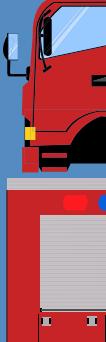
## 2 Whack A'



## 4 Tunnel Trek



## 5 S

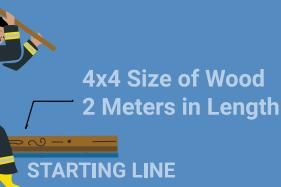


## Detailed Procedure:

All players will form in line at station zero; at the sound of the signal/whistle of the head referee, the first player shall go ahead to the first event of the obstacle course.

**Station zero** – pertains to the designated area for the team that shall perform the course; the team can set their strategic plan and be given **five (5) minutes** to brief on the matter before the head referee proceeds with the game.

### Wood



### Tire Dash



### Salvaging and Overhaul



### 6 FIRE OUT!!!



## Game Procedures:

### I. The Flip n' Flex<sup>7</sup>

1. Start strong, with your feet and hips shoulder-width apart, and push your hips back to get in the starting position with your back flat and core engaged. You may do a squat position.
2. Watch your hands, and make sure that as you underhand grip the tire, place your hands into the treads.
3. Power is the key; drive up through your hips; once the tire is almost vertical, catch it overhand and push it so it topples over onto the ground.
4. Repeat the same process four (4) times to reach the endpoint for this event, and
5. The next participant shall then start this event right at the endpoint, where the first participant took off and did four (4) flips to return to the starting point. In short, the following participants will start at wherever the participant before them has taken off; indeed, all participants will be flipping back and forth between the start and end point until the last participant performs.

### II. Whackawood!

The idea of this game is to whack/hammer the wood placed on top of parallel poles and maneuver the same from the starting point in a straight direction of about 10 meters in distance until it reaches the other endpoint using the rubber mallet. The participants shall then start from wherever the participant that played before them took off until the last participant performs.

### III. Tire Dash!

With the lined-up tires in two rows, the participants must dash to the endpoint of the tires in rows, making sure to hit every tire, landing in each tire along the way with either their right or left foot.

**Note:** One missed tire will be equivalent to a 3-point deduction each time.

<sup>7</sup> The Right Way to Flip a Tire, Naomi Nazario, 2/4/2017, <https://www.menshealth.com/fitness/a19538861/how-to-flip-a-tire/>

## *IV. Tunnel Trek<sup>8</sup>*

This game represents the zero-visibility situation in fire incidents to give the participants an outlook of what the scenario is going to be like when the problem occurs. Thus, in this game, all participants will have to drop to the ground and quickly crawl through the dark tunnel and must reach the end of the tunnel at their fastest capacity as the typical moving pattern because smoke naturally rises. This game encompasses the zero-visibility rule:

**STOP** what you are doing safely.

**DROP** to the floor where the air is clearest.

**MOVE** quickly towards the nearest exit.

## *V. Salvaging and Overhauling*

This game represents the salvage and overhaul activity in a fire incident to protect the property and belongings from damage and to ensure that the fire is entirely extinguished without the threat of re-ignition. Thus, associated with this is the placement of scattered pieces of puzzles that require the keen observation of the participants during the gameplay.

The Head Referee will inform the team that a grand puzzle must be completed to get a bonus award of 20 points at station zero. The pieces of the puzzle will be scattered in strategic places within the entire course area, and all participants must be able to gather all the pieces or parts of the puzzle. Then, they must attach the same to the grand puzzle box situated within the area and win the bonus. An incomplete puzzle will bear no extra points in the final tabulation of scores.

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<sup>8</sup> Fire Dangers Explained: Reduced Visibility, Tariq El-Hoss, 10/19/2012, <https://www.discountfiresupplies.co.uk/blog/fire-dangers-explained-reduced-visibility/>

## Scoring Matrix

### Instructor's Note

#### Reflection:

The value of this game shall remind the participants that while most may perform with excellence, the undeniable fact that some may be lagging behind is a factor that we must all accept and accordingly accommodate through frequent practices, which will bring about confidence, agility, endurance, and focus that any individual must possess in any emergency. We must acknowledge the weaknesses of others and work as a team to save lives and properties.

The instructor may ask the following questions:

1. Did you all feel energized and happy about the activity?
2. Do you understand the importance of being physically and mentally fit during emergencies?
3. Were you all able to understand the importance of safety while being quick and vigilant in this case?

TIME	POINTS	DEDUCTIONS
15 mins and LESS	20	10 points -more than 15 mins and to be at most 20 mins. 15 points-more than 20 mins
EVENTS	POINTS	DEDUCTIONS
Flip n' Flex	20	3 points- for an unflipped tire
Whackawood!	20	3 points-failure to maneuver the wood
Tire Dash	20	3 points-for every missed tire
Tunnel Trek	20	3 points-failed to cross the tunnel
Salvaging and Overhaul	Bonus points of 20	No bonus for an incomplete puzzle
<b>GRAND TOTAL</b>	<b>120</b>	

#### ✓ EXAMPLE:

If the team started running through all the events in 13 mins and 17 secs, but one participant refused to cross the tunnel trek, then 3 points will be deducted from the team, and if they will not complete the puzzle due to this, then they will fail to get the bonus points and will have a total score of points of 97.

# Game 3

The Fire Square Challenge

# Flammable Fire Extinguishment



ILLUSTRATION BY: FO1 Nolan D Yadao

Activity Title:

## *Smother the Fire!*

"Let's blaze the way to keep the flames away!"

## Activity Description:

Fire Fighting<sup>9</sup> is an activity directed at limiting the spread of fire and extinguishing it, mainly as performed by members of organizations trained for the purpose. This operation requires rapid assessment for the determination of the technique employed with consideration of the accounts of the building structure and all other fire protection systems present in the building. Indeed, it is one of the world's most honored but hazardous occupations. Thus, a firefighter must commit to practicing life safety, incident stabilization, and property conservation. (The Editors of Encyclopedia Britannica, 10/11/ 2023)

This activity shall provide the participants with the knowledge and skills on how to use a fire extinguisher to prevent or mitigate the consequences of flame spread. Thus, a fire extinguisher<sup>10</sup> is an active fire protection device used to extinguish or control small fires, often in emergencies. It is not intended for use on an out-of-control fire, such as one that has reached the ceiling, endangers the user (i.e., no escape route, smoke, explosion hazard, etc.), or otherwise requires the ability of a fire firefighter.

In the event of a fire, the Fire Department must be alerted at once; this activity shall ensure that fire will be prevented from spreading through the active participation of the occupants to apply their knowledge and skills on **first-hand fire suppression** that will ensure the preservation of lives and properties.

### Instructor's Note

#### Safety Reminders

All participants must be physically able to perform this game, remind the audience and the participants that the fumes from the flammable liquid and the chemical component of the fire extinguisher to be used may cause shortness of breath, coughing, skin/eyes/nose/throat/lungs irritation, and other respiratory problems when excessively inhaled. Thus, must advise everyone with a history of upper respiratory tract infection and those who can easily be affected by exposure to irritants to keep their distance and take precautionary measures to avoid the same.

Thus, make sure that all participants have submitted their respective **PARENT CONSENT** and **WAIVER FORM**, and make sure to keep in close coordination with the **RESCUE/FIRST AID TEAM** assigned to be on standby at the venue of this event.

## Objectives:

At the end of the session, the participants will be able to:

- ✓ Acquire knowledge and skills in firefighting,
- ✓ Develop the capacity to apply acquired knowledge and skills in fighting the fire, and
- ✓ Enforce “first-hand fire suppression” during the incipient phase of fire.

## Core Values:

This activity will empower the participants with the courage to face the challenges of any given fire/emergency. It will also reinforce the value of initiative-taking

<sup>9</sup> The Editors of Encyclopedia Britannica, 10/11/ 2023

<sup>10</sup> The Editors of Encyclopedia Britannica, 10/11/ 2023

initiatives and the prudent assumption of accountability that will be manifested through this event, as the participants are to partake in the first-hand suppression of a simulated fire. Thus, the value of demonstrating the importance of unwavering courage will help one endure the dangers of any fire or emergency.

## *Material Requirements:*

Fire extinguisher<sup>11</sup>, is a portable or movable apparatus used to put out a small fire by directing onto it a substance that cools the burning material, deprives the flame of oxygen, or interferes with the chemical reactions occurring with the flame. It is one of the common fire protection appliances in use today; it is found in fixed facilities and on fire apparatus.

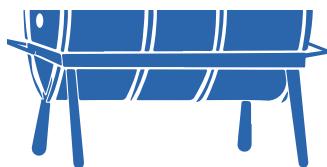
A Portable Fire Extinguisher <sup>12</sup> There are several types of portable fire extinguishers, and some of the most commonly available at schools are the ABC type of portable fire extinguisher and Stored-pressure Water Extinguishers or Air-pressured Water (APW) Extinguishers.

This activity is the ultimate firefighting challenge that will truly be a meaningful experience for the participants. Thus, materials must be provided, such as the stored-pressure Fire extinguisher, set of personal Protective Equipment (PPE), fire pit, and torch.

## *Fire Pit with a Stand*

The fire pit shall have four stable stands to prevent unnecessary spills of its contents to the ground, and it must not have any leaks. The materials used shall be fire-resistant which cannot be melted easily. The fire pit shall be half-cut from the 45–55-gallon size of the metal drum.

The fire pit stand must be two feet (2 feet) in height, with a handle on both ends of the drum to be utilized for water spills. The mixture of gasoline and diesel must be 1:1 in ratio equivalent to at least 200 ml or 1 glass to be mixed with the half-full water of the fire pit.



<sup>11</sup> Shaping the Future of Fire Protection, Kanex, 01/27/2021, <https://kanexfire.com/blog/what-is-fire-extinguisher/>

<sup>12</sup>is excellent to use on incipient fires. In many cases, a portable fire extinguisher can extinguish a small fire in much less time than it would take to deploy a hose line. (Portable Fire Extinguisher, Scribd, RMAF Fire School based on the new curriculum for Basic Aero firefighter Course, <https://www.scribd.com/document/153293745/Portable-Fire-Extinguishers>



### Instructor's Note

The designated Facilitator/ Lecturer must take note of the following:

### *Before the Flammable Fire Extinguishment Drill*

The designated Facilitator/ Lecturer must take note of the following:

- ✓ Select a location for the fire drill and ensure that the area is in an open space specifically far from fire hazards, and
- ✓ Prepare and check the serviceability of the fire extinguishers to be used during the fire extinguishment drill.

### *Pre-Drill Preparation*

- ✓ Prepare a standby fire extinguisher to be used in case of emergency,
- ✓ The distance from the fire pit up to the starting line must be at least 10 meters,
- ✓ Ensure fire hazard clearance within the perimeter of the fire pit,
- ✓ Participants shall be advised to wear complete PPE prior to the start of the drill, and
- ✓ A fire extinguisher must

## Torch

Wrap the Fire Torch with a cloth on its tip; must not less than 1 meter in length, not too long in order not to compromise the igniting of fire pit.

## Detailed Procedure:

Two (2) of the members from each team shall be designated to perform this task to perform the proper use of the fire extinguisher to drop the flames of the target, accordingly, timed by the Umpire and graded by the head referee.

1. At station zero, the team leader shall choose a participant two (2) who will represent the team.

Station zero – pertains to the designated area for the team that shall perform the course; the team can set their strategic plan and be given five (5) minutes to brief on the matter before the head referee goes ahead with the game.

2. At the sound of the signal/whistle by the referee, designated players for this game will have to put on the PPEs (Fire Boots, Fire Trousers, and Fire Coat) laid down at the starting point.
3. Then must pick up the Fire extinguisher placed on their lanes and perform T-P-A-S-S,

Where:

T-Twist the pin to break the safety seal to unlock the extinguisher.

P – Pull the pin

A - Aim the Nozzle (holding the nozzle part) at the base of the fire about 6-8 feet away

S – Squeeze the lever to discharge the extinguishing agent

S – Sweep side to side (to cover the burning object or fuel)

### ✓ STEPS:

- a. Select the proper fire extinguisher based on the classes of fire.

Classes of fire according to the nature of burning materials:

- |                |   |
|----------------|---|
| <b>Class A</b> | wood, paper, and the like                                 |
| <b>Class B</b> | Flammable liquids such as cooking oils and paint thinners |
| <b>Class C</b> | Electrical equipment                                      |

- Class D** Highly reactive metals such as sodium and magnesium
- b. Break the seal and pull the safety pin at the top.
  - c. Approach the fire, about 6–8 feet away, in the windward direction.
  - d. Aim the nozzle at the base of the fire.
  - e. Squeeze the lever slowly to discharge the chemical agent.
  - f. Sweep the nozzle from side to side to ensure the full coverage of the fire and watch for smoldering hot spots or re-ignition and
  - g. Make sure that the fire is out.
4. The head referee shall only declare FIRE OUT when both players have completely extinguished their flame targets, and the Umpire shall take note of the time for the proper tabulation of scores.

### Instructor's Note

be placed on the ground while waiting for the go signal from the Head Referee.

### During the Drill

- ✓ Carefully ignite the fire pit using the torch before the start of the signal or whistle from the Head Referee,

### During the Drill

- ✓ Carefully ignite the fire pit using the torch before the start of the signal or whistle from the Head Referee,
- ✓ At the signal or blow of the whistle, the participants will start with the drill from the starting line to the fire pit and observe standard practices in handling fire extinguishers,
- ✓ The participant must perform T.P.A.S.S. sequentially,
- ✓ Participants must be at least 3 feet away and at most 6 feet away from the fire pit, and
- ✓ The fire extinguishment ends as soon as the fire has been declared as FIRE OUT.

### POST DRILL

- ✓ Conduct debriefings with the participants on what went well, what went wrong, and what should be done, sample questions are herewith provided for your reference.

## Game Officials:

**The Head Referee**– is a BFP personnel positioned on the field and moves with the run of play who will act as the final authority for decisions regarding the scores and ensure the smooth flow of the game, vigilantly facilitating a positive and fair environment for all the competing teams and maintain the pace of the event. In any case, he may also serve as the scorekeeper in addition to this task.

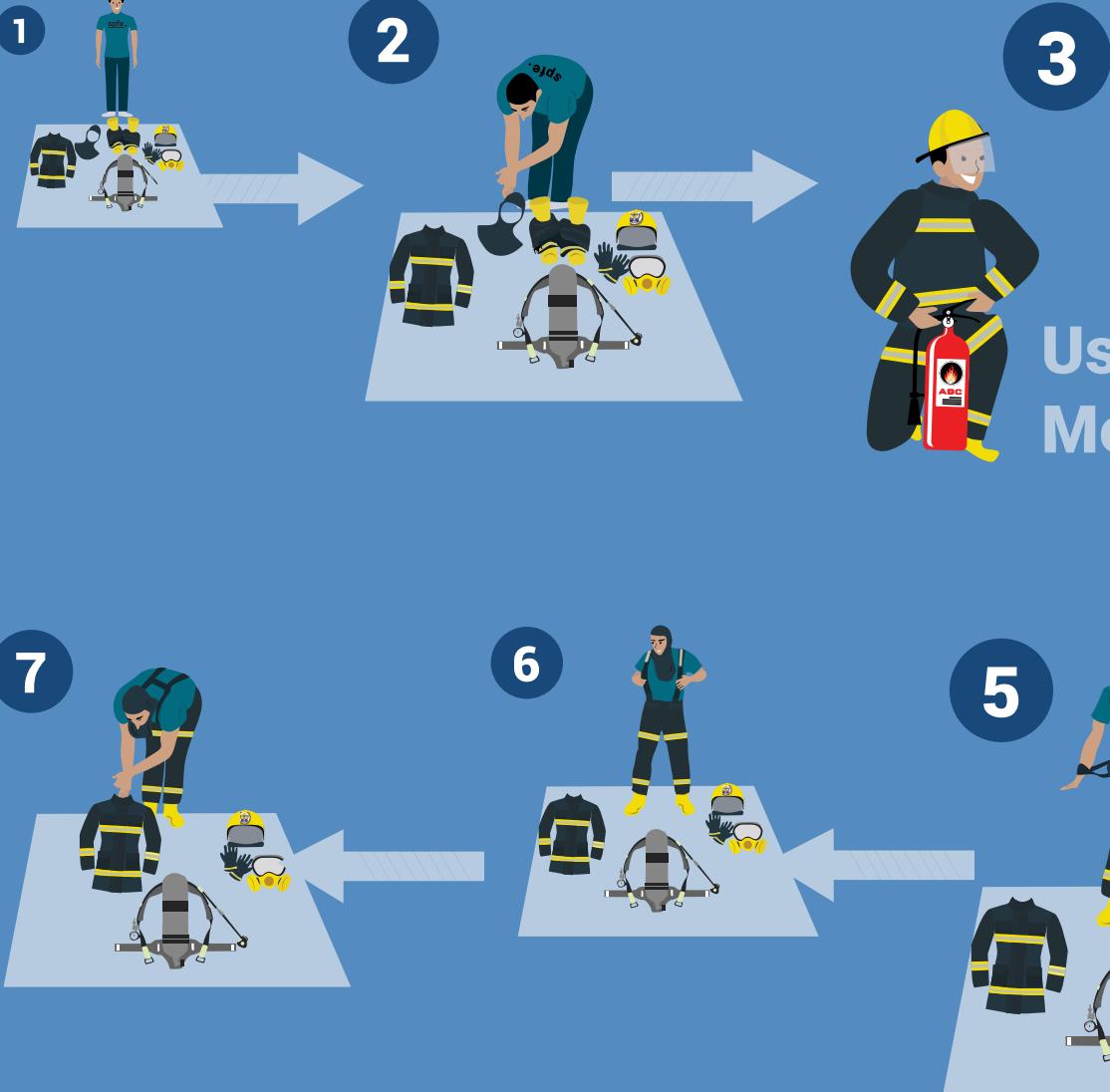
**Umpire**– any individual, preferably a BFP personnel/Class Adviser/Faculty Member/Barangay Official/ Youth Leader, whose task is to make sure that the games set forth will be completed by all participants fairly, with the observance of the safety measures, and according to the rules. In any case, may also serve as the Timekeeper in addition to this task.

**Timekeeper**– any individual assigned to keep track of the time records from the start, stop, or temporary stoppages whenever instructed by the referee, who shall inform the Score Keeper of the time covered by the team on-play.

**Score Keeper**– any individual, preferably BFP personnel, who will accurately keep records on score sheets for proper tabulation and determination of the performance scores of all teams.

**Team Participants:** Two (2) selected participants from the team shall perform this event.

# Flammable Fire Extinguisher

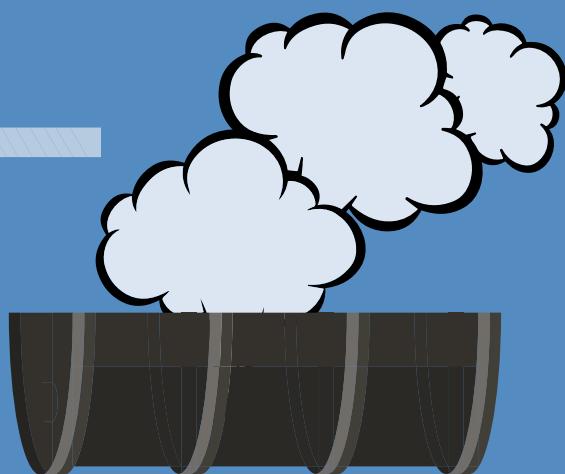


# ent (Firefighting Technique)

4



using T-PASS  
method



**Instructor's Note*****Reflection:***

This challenge shall bring about the conditioning of immediate REACTION to apply knowledge and skills in the **first-hand fire suppression** of incipient fires.

To acquire complete knowledge and skills on how to use portable Fire Extinguishers.

The instructor may ask the following questions:

1. Do you know how to use the fire extinguisher now?
2. Are you confident to help put out the fire now?
3. Are you all happy about the activity?

**Scoring Matrix**

TIME OF EXECUTION	POINTS
Less than a minute	100
00:01:00 - 00:01:59	95
00:02:00 - 00:02:59	90
00:03:00 - 00:03:59	70
00:04:00 – 00:04:59	30
5 minutes and above	ZERO OR FAILED

Note: The final score will be the average rating of the point equivalent of the two (2) participants of each team.

# Game 4

The Fire Square Challenge

# Hose Laying and Hose Folding



ILLUSTRATION BY: FO1 Nolan D Yadao

Activity Title:

*Target Legacy*  
“Focus tight, aim right!”

## Activity Description:

This activity shows the significance of forward and reverse hose laying for the effective firefighting operation response, which must take into consideration the terrain and distance of the fire engine to the fire. Thus, this challenge shall teach the participants the importance of focus and endurance during fire incident response, leaning towards the purpose of setting a standard procedure that requires the unequivocal commitment of all firefighters to maintain their capacity to respond to fire and other emergency-related situations laden with challenges and dangers which calls for a discipline that relies heavily on the right tools and equipment. In this case, a fire hose is one of the most critical pieces of equipment that must be used effectively in any case of fire.

### Instructor's Note

#### Safety Reminders

All participants must be physically able to perform the differentiated events in this game. Remind all participants never to lay the hose in the direction of other people and to safely grip the fire hose before laying the same to avoid causing injury and to follow instructions carefully.

Also, make sure that all participants have submitted their respective **PARENT CONSENT** and **WAIVER** forms, and make sure to keep in close coordination with the **RESCUE/FIRST AID TEAM** assigned to be on stand-by at the venue of this event.

## Objectives:

At the end of the session, the participants will be able to:

- ✓ Identify the importance of agility, endurance, and focus on firefighting response; and
- ✓ Empower the participants with knowledge of firefighting response.

## Core Values:

This activity will give the participants the opportunity to practice focus under the pressure of a competitive set-up, encompassed in the value of discipline and determination. Hence, this event shall provide an avenue for the participants to commit themselves to the common goal that they have set as a team.

## Material Requirements:

Fire Hose<sup>13</sup> is a specialized high-pressure tube that transports water or other fire suppressants like foam to put out fires. It is a critical part of the firefighting operation equipment essential to deliver the water at the necessary pressure to extinguish the fire. Thus, in this game, it is recommended that at least 2-3 busted hoses be used and avoid using those devoted to the fire emergency response operations to maintain the serviceability of equipment

<sup>13</sup> What is a Fire Hose? A Fire Hose Waqar Ali, 5/18/2023, hseblog.com, <https://www.hseblog.com/method-of-rolling-up-a-fire-hose/>

## Kinds of Fire Hose<sup>14</sup>

**Attack Hose** is also known as a frontline or supply hose.

Supply Hoses are larger hoses, often ranging from 3.5 to 5 inches in diameter, used to move large volumes of water from hydrants or other water sources to the foreground or a fire engine's pump.

**Forestry Hose** is designed for fighting wildfires, lightweight and flexible hoses intended to be carried over long distances over rough and uneven terrain.

**Booster Hose** is a rubber-covered, thick-walled, flexible hose to fight small fires.

**A Suction Hose** connects a fire engine to a water source such as a fire hydrant; made to withstand vacuum pressures and will not easily collapse when the pump draws water.

**Relay and Supply Hoses** are large-diameter hoses, usually 3.5 inches or 5 inches, used to convey water along distances, often from one hydrant to another or a pumper located near the fire.

**Occupant Use Hoses** are found in cabinets in building hallways intended to be used by building occupants in the first stages of a fire.

### Instructor's Note

You may also count the following information about fire hoses during the demonstration.

#### DIAMETER SIZES OF FIRE HOSE

25 mm	1 inch
38 mm	1.5 inches
50 mm	2 inches
65 mm	2.5 inches
80 mm	3 inches
100 mm	4 inches

Length: Ranges between 30-50 meters

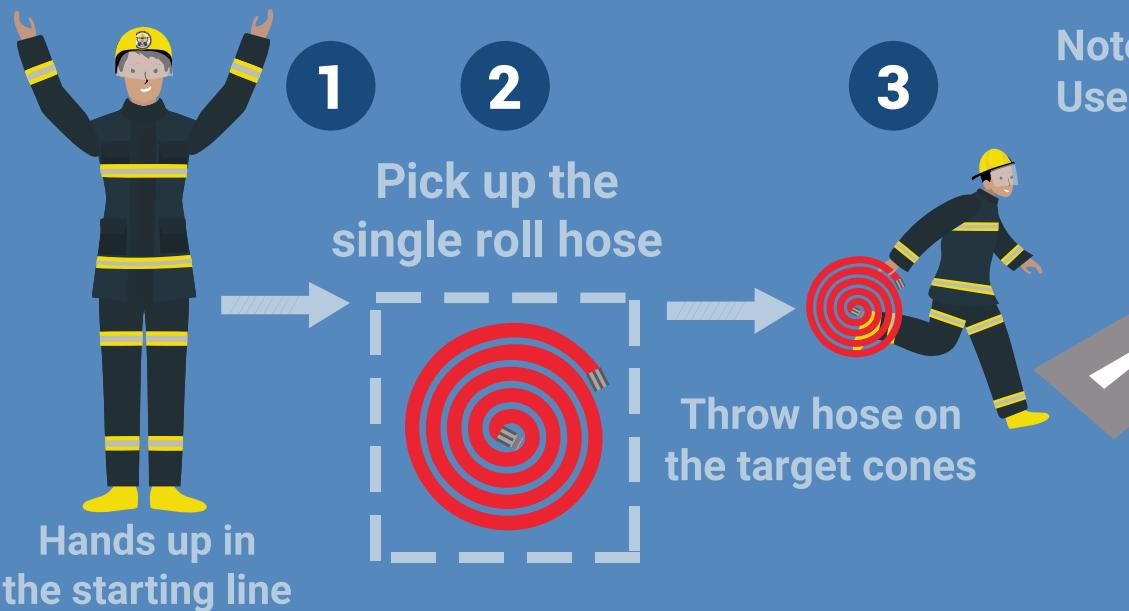
<sup>14</sup> Different Types of Fire Hose, Waqar Ali, 5/18/2023, hseblog.com, <https://www.hseblog.com/method-of-rolling-up-a-fire-hose/>

## Detailed Procedure:

Thus, in this activity, it is advised that a busted fire hose with a diameter of 30 mm or 1.5 inches be used. The method of rolling is the straight roll<sup>15</sup>, the simplest method for storing or loading hoses onto the firetruck, as in this case, to give way to the next participant who will be performing the same task.

1. All participants will perform the straight roll, passing through the Line of Target and focusing on the target zone.
2. Proceed to the other side of the hose while the head referee and Umpire are keeping score.
3. Wait for the signal/whistle of the head referee before continuing to the performance of the single donut roll and
4. Place back the single roll hose to the starting point for the next participant to pick up.

# Hose Laying and Hose F



<sup>15</sup> Different Methods of Rolling Fire Hose, Waqar Ali, 5/18/2023, hseblog.com, <https://www.hseblog.com/method-of-rolling-up-a-fire-hose/>

## Scoring Matrix:

LINE OF TARGET- the line parallel to the target situated about 30 feet from the starting line.

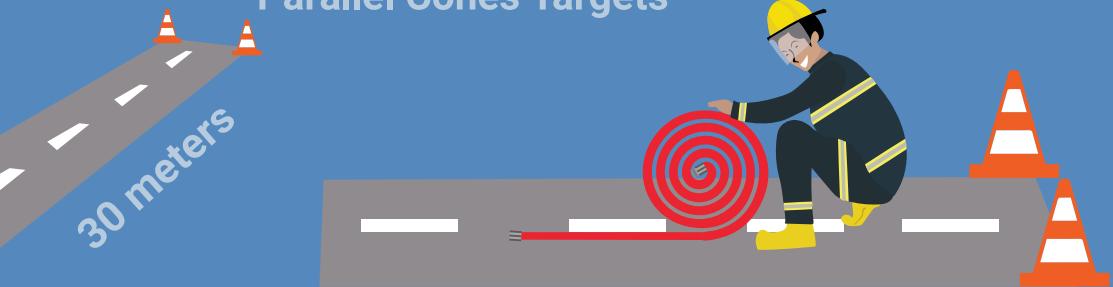
TARGET	POINTS
Within the Target Zone	100
Outside the Target Zone <i>(Slightly bent to the left/right area of the target zone)</i>	80
Failure to reach the Line of Target	50
Total Team Points	$\frac{\text{Total of Team Points}}{\text{No. of participants}}$

# Folding

e: Roll the hose after throwing (Single Donut Roll)  
monoblock chairs if cones is not available

4

### Parallel Cones Targets



**Instructor's Note*****Reflection:***

An understanding of the fire hose is vital for everyone involved in the realm of fire safety; such is more than just a conduit of water and other extinguishing agents, for the manner of how it is laid and rolled can drastically affect the outcome of **firefighting operations**<sup>16</sup>. The knowledge shared in this activity is crucial for effective and rapid emergency response, which undeniably contributes to the longevity and maintenance of this equipment. Finally, this will provide the participants with valuable insight to appreciate the role of the fire hose in protecting lives and properties.

The instructor may ask the following questions:

1. Can you now help lay the fire hose in any case of fire?
2. Do you now understand the importance of staying fit and focused so you can help in any case of fire?

**Scoring Matrix**

TIME OF EXECUTION	POINTS
Less than a minute	100
00:01:00 - 00:01:59	95
00:02:00 - 00:02:59	90
00:03:00 - 00:03:59	70
00:04:00 – 00:04:59	30
5 minutes and above	ZERO OR FAILED

Note: The final score will be the average rating of the point equivalent of the two (2) participants of each team.

<sup>16</sup> What Is Fire Hose? Types & Methods of Rolling Fire Hose, Waqar Ali, 5/18/2023, hseblog.com, <https://www.hseblog.com/method-of-rolling-up-a-fire-hose/>

## Game 5

The Fire Square Challenge

# Donning and Doffing of PPE



ILLUSTRATION BY: FO1 Nolan D Yadao

Activity Title:

*An Encounter with the Bunker*  
“GEAR-UP and SPEED-UP!”

**Instructor's Note****Safety Reminders**

All participants must be physically able to perform this game; safety matting must be used to avoid damage to the PPE to be used and will help protect the ankles, legs, and joints of participants; in any case, they lose balance due to the heavy equipment.

Also, make sure that all participants have submitted their respective **PARENT CONSENT** and **WAIVER FORMS**, and make sure to keep in close coordination with the **RESCUE/FIRST AID TEAM** assigned to be on stand-by at the venue of this event.

## Activity Description:

Firefighters<sup>17</sup> are exposed to hot temperatures, harmful smoke, and airborne hazards such as toxic gases, dust, etc, which can prove detrimental to their health if not protected by proper clothing and equipment. Thus, this special clothing must be able to withstand various conditions, which include extremely hot temperatures. Accordingly, the national standard requires a firefighter to don the PPE for two (2) minutes to quickly turn out for a response to save time on the fire ground.

Thus, **Personal Protective Equipment (PPE)**<sup>18</sup> is the best personal protective equipment available because of the hostile environment in which they perform their duties. Providing or using quality protective equipment will not necessarily guarantee the absolute safety of a firefighter. However, injuries can be reduced and prevented if protective clothing is correctly used. Complete protective equipment for structural firefighting consists of the following:

1. **Helmet** – Protects the head from impact and puncture injuries as well as from scalding water.
2. **Protective Hood** – Protects portions of the firefighter's face, ears, and neck not covered by the helmet or coat.
3. **Protective Coat & Trousers** – Protect trunk and limbs against cuts, abrasions, and burn injuries and provide protection from corrosive liquids.
4. **Gloves** – Protects the hands from cuts, wounds, and burn injuries.
5. **Safety Shoes Or Boots** – Protects the feet from burn injuries and punctured wounds.
6. **Eye Protection** – Protects the wearer's eyes from flying solid particles or liquids.
7. **Self-Contained Breathing Apparatus (SCBA)** – Protects the face and lungs from toxic smoke and the products of combustion.

Donning and doffing of PPE as Fire Fighters, PPE must be prepared upon assuming the tour of duty. Personal Protective Equipment must be arranged (from head to toe) so that upon a call for a response, firefighters can wear PPE properly, fast, and accessible.

<sup>17</sup> Fire Square Roadshow Manual, BFP VIII, 2018

<sup>18</sup> Fire Square Roadshow Manual, BFP VIII, 2018

## Personal Protective Equipment



## *Objectives:*

At the end of the session, the participants will be able to:

- ✓ Understand the importance of observing safety measures and
- ✓ Name the parts of the firefighter's Personal Protective Equipment (PPE)

## *Core Values:*

This activity will teach the value of safety awareness that must begin with oneself; the extent of our aid to others can only be ensured if we, ourselves, are always equipped with the knowledge of the significance of safety. Thus, this activity shall reinforce the safety practices that our teenagers often disregard, that the slightest negligence can create consequential damages to themselves and others, thereby imparting the value of integrity and consideration of others as contributory factors to a better community relation, especially in troubled times.

## *Material Requirements:*

1. Helmet
2. Protective Hood
3. Protective Coat & Trousers
4. Gloves
5. Safety Shoes or Boots
6. Eye Protection

SELF-CONTAINED BREATHING APPARATUS (SCBA) is optional; the Facilitator must discern, with due diligence, whether the participants can manage the heavy weight of the equipment, as well as the safety precautions for its proper handling/usage.

## *Game Officials:*

The Head Referee- is a BFP personnel positioned on the field and moves with the run of play who will act as the

final authority for decisions regarding the scores and ensure the smooth flow of the game, vigilantly facilitating a positive and fair environment for all the competing teams and maintain the pace of the event. In any case, he may also serve as the scorekeeper in addition to this task.

**Umpire-** any individual, preferably a BFP personnel/Class Adviser/Faculty Member/Barangay Official/ Youth Leader, whose task is to make sure that the games set forth will be completed by all participants fairly, with the observance of the safety measures, and according to the rules. In any case, may also serve as the Timekeeper in addition to this task.

**Timekeeper-** any individual assigned to keep track of the time records from the start, stop, or temporary stoppages whenever instructed by the referee, who shall inform the Score Keeper of the time covered by the team on-play.

**Score Keeper-** any individual, preferably BFP personnel, who will accurately keep records on score sheets for proper tabulation and determination of the performance scores of all teams.

## *Detailed Procedure:*

All participants shall properly put on and remove the Personal Protective Equipment laid down in the area placed on a matting/floor covering to prevent any injury during the performance of this activity. Thus, they shall follow the following steps<sup>19</sup> during this activity:

1. Gather all the required PPE.
2. Put on the Fire-resistant Protective Footwear (Fire Boots)
3. Don the Hood
4. Wear the Fire-resistant Protective Clothing (Fire Coat and Trousers with suspenders)
5. Wear the Firefighter Helmet
6. Don the Fire-resistant Gloves

---

<sup>19</sup> PPE in Firefighting & Food Industries: How to wear PPE Correctly! Yogi Kramer, 9/24/2021, <https://www.trueppeusa.com/blogs/all-about-ppe/ppe-in-firefighting-manufacturing-and-food-industries-how-to-wear-ppe-correctly>

# Donning and Doffing of P

1



2



3



7



8



9



13



14



15



19

# PPE

4



5



6



10



11



12



16



17



18



**Instructor's Note*****Reflection:***

This activity enhances the awareness of the participants on the importance of safety protocols in the face of emergencies. Saving lives and properties entails due diligence and discernment of every individual to always employ safety measures before facing the uncontrolled consequences of an emergency. As we always say, **SAFETY FIRST**. To effectively provide the needed help in the prevention of damage to lives and properties, a firefighter must put on the **PERSONAL PROTECTIVE EQUIPMENT**.

The instructor may ask the following questions:

1. Do you now understand the importance of "SAFETY FIRST"?
2. Do you now know the parts of the Firefighter's PPE?
3. Are you happy with the activity?

## ► Scoring Matrix

TIME FOR THE TEAM	POINTS
Less than 15 minutes	100
15 minutes but less than 20 minutes	70
20 minutes and above	40

# Game 6

The Fire Square Challenge

# Bucket Relay

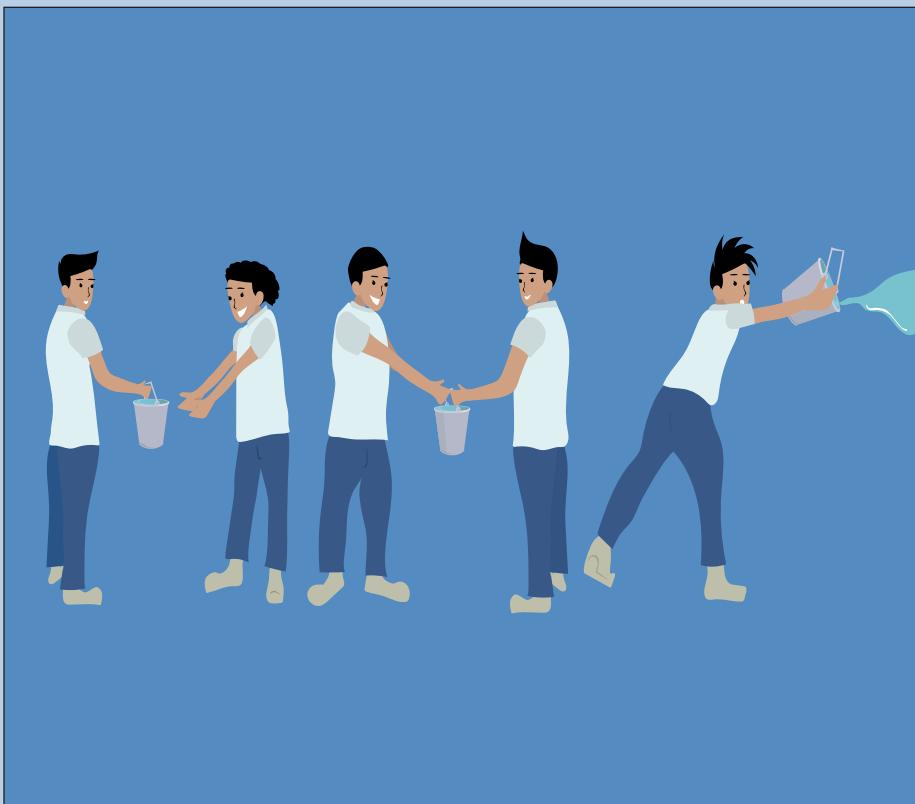


ILLUSTRATION BY: F01 Nolan D Yadao

**Activity Title:**

*Slay the relay!*  
“Reach your Dream, Work as a Team!”

## Activity Description:

The Bucket Relay<sup>20</sup> traces its roots in the history of the realm of fire safety. In the absence of available firefighting devices and equipment, some people usually use this type of means to suppress fire. Fire buckets or pails are usually a mundane type of method of suppressing minor fires. It is the simplest and easiest way to put out a fire quickly.

In the Philippines, no specific bucket type is used; instead, any kind of bucket available can come in handy. Community people usually fill buckets with water, which are then passed from one person to another to fill a bigger container. The collected water is usually thrown at the source of fire to extinguish it, associated with the spirit of Bayanihan, which is well entrenched in our tradition.

### Instructor's Note

#### Safety Reminders

All participants must be physically able to perform this game; safety matting must be used to avoid damage to the PPE to be used and will help protect the ankles, legs, and joints of participants; in any case, they lose balance due to the heavy equipment.

Also, make sure that all participants have submitted their respective **PARENT CONSENT** and **WAIVER FORMS**, and make sure to keep in close coordination with the **RESCUE/FIRST AID TEAM** assigned to be on stand-by at the venue of this event.

## Objectives:

At the end of the session, the participants will be able to:

- ✓ Be empowered with the importance of unity and teamwork in times of emergencies.
- ✓ Be trained in the application of “first-hand fire suppression” using the bucket relay and
- ✓ Enhance awareness of other ways to extinguish fire.

## Core Values:

This activity will stand for a manifestation of the value of unity, cooperation, and selflessness of the participants. While victory may seem to be the primordial goal, the essence of this game is the oneness of the team to extinguish the fire under the duress of time yet determinedly accomplished with optimum enthusiasm and committed perseverance to deliver the component that shall extinguish the fire to save lives and properties.

## Material Requirements:

1. Three (3) Drum Barrels- two (2) as the source of water and one (1) as the empty target. (Note: 1 Drum = 15 regular-size pails only)

<sup>20</sup> Fire Square Roadshow Manual, BFP VIII, 2018

2. Ten (10) Buckets/Pails
3. Water Level measurement in metric units must be marked inside the Drum Barrel Target for ease of volume measurement during the game.
4. Stopwatch and Whistle for a well-coordinated flow of the game

## *Game Officials:*

**The Head Referee-** is a BFP personnel positioned on the field and moves with run of play who will act as the final authority for decisions regarding the scores and ensure the smooth flow of the game, vigilantly facilitating a positive and fair environment for all the competing teams and maintain the pace of the event. In any case, he may also serve as the scorekeeper in addition to this task.

**Umpire-** any individual, preferably a BFP personnel/Class Adviser/Faculty Member/Barangay Official/ Youth Leader, whose task is to make sure that the games set forth will be completed by all participants fairly, with the observance of the safety measures, and according to the rules. In any case, may also serve as the Timekeeper in addition to this task.

**Timekeeper-** any individual assigned to keep track of the time records from the start, stop, or temporary stoppages whenever instructed by the referee, who shall inform the Score Keeper of the time covered by the team on-play.

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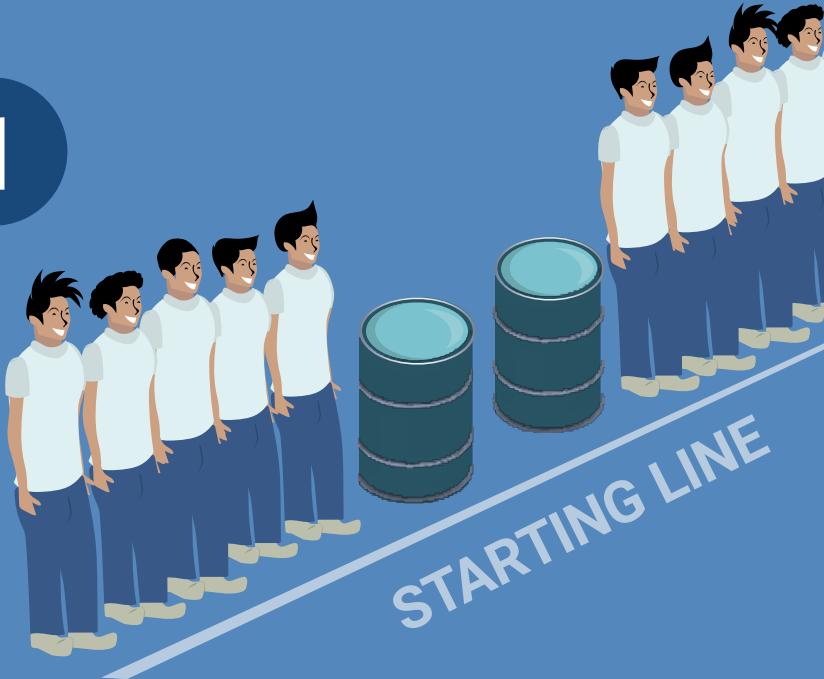
## *Game Participants:*

**Team Leader-** who will function as the **contact point person** for the team and be the first to relay the message, conduct headcount upon reaching the evacuation area, and report the same to the Umpire.

**Number of Participants-** Ten (10) participants in every team

# Bucket Relay

1

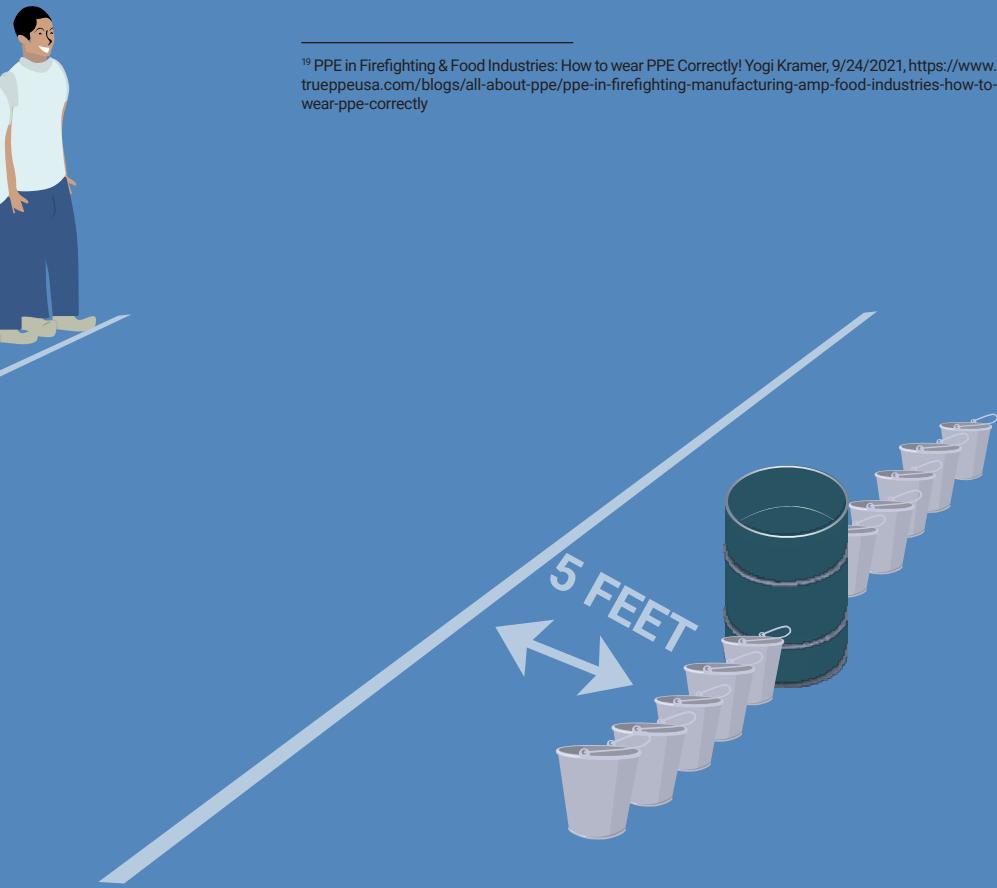


2



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<sup>19</sup> PPE in Firefighting & Food Industries: How to wear PPE Correctly! Yogi Kramer, 9/24/2021, <https://www.trueppeusa.com/blogs/all-about-ppe/ppe-in-firefighting-manufacturing-amp-food-industries-how-to-wear-ppe-correctly>



## Detailed Procedure:

All participants shall choose one person to fetch the water to be relayed to the others until reaching the person chosen to fill the bigger container simulated as the target. The team shall be accordingly scored based on the level of water accumulated after two (2) minutes of performing the relay<sup>21</sup>.

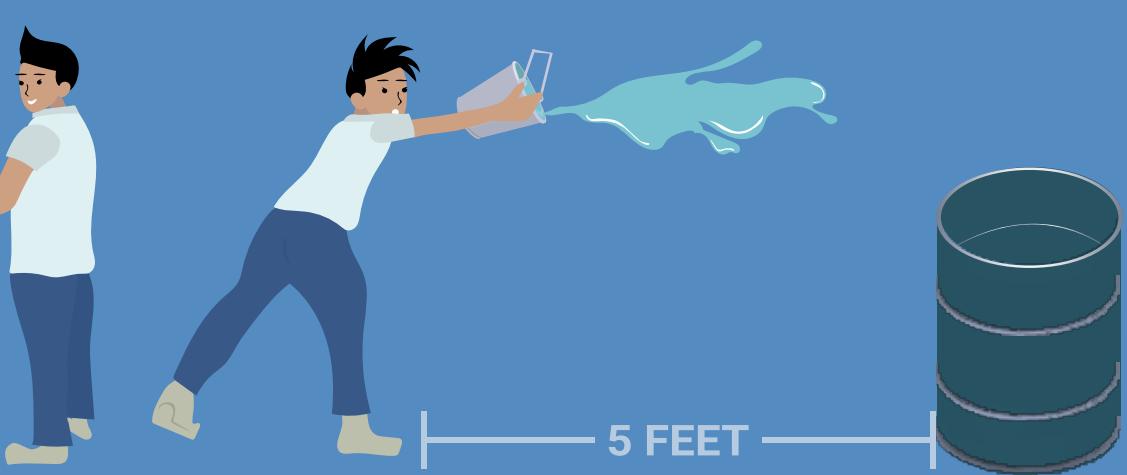
1. When the designated BFP personnel signals GO, the participants should run to get the empty buckets, then.
2. Fill the bucket with water from the drum barrel,
3. Each participant will throw away the water from the bucket to the empty drum with about five feet and place it down the bucket.
4. The participants should position themselves to perform the relay operation with one (1) or two (2) assigned as bucket runners,
5. Transfer the buckets filled with water in a sequential order until the time limit,
6. Once the signals STOP, only one bucket from the last man shall be allowed to be poured, and
7. The level of water transferred on the empty target drum barrel shall be measured by the Umpire.



<sup>21</sup> BFP First National Fire Olympics-Barangay Fire Brigade Category Mechanics, BFP National Headquarters, 2015

## Scoring Matrix

WATER LEVEL	POINTS	DEDUCTIONS
First	100	
Second	90	
Third	85	
Fourth	75	
TIME	TWO (2) MINUTES	Stepping on the line or crossing the line of the target is equivalent to a 5-point deduction each time.





# **SET GAMES**

The Fire Square Challenge

## **Game Set-Up Plan**



ILLUSTRATION BY: FO1 Nolan D Yadao

## *Activity Description:*

The Facilitator must choose four (4) of the six differentiated activities illustrated to be set up in the accessible area, gymnasium, or Amphitheatre available around the activity. Moreover, the obstacle course (Venture for Adventure) is already considered as one package, for it is already apparent with five (5) events.

1. Message Relay Drill
2. The Obstacle Course
3. Flammable Fire Extinguishment (Firefighting Technique)
4. Hose Laying And Hose Folding
5. Donning Ang Doffing Of Ppe
6. Bucket Relay

### *Set A*

1. Message Relay Drill
2. Hose Laying And Hose Folding
3. Donning Ang Doffing Of Ppe
4. Bucket Relay

### *Set B*

1. Message Relay
2. Hose Laying And Hose Folding
3. Donning Ang Doffing Of Ppe
4. Flammable Fire Extinguishment (Firefighting Technique)

### *Set C*

1. Hose Laying And Hose Folding
2. Flammable Fire Extinguishment
3. Donning Ang Doffing Of Ppe
4. Bucket Relay

## *Set D*

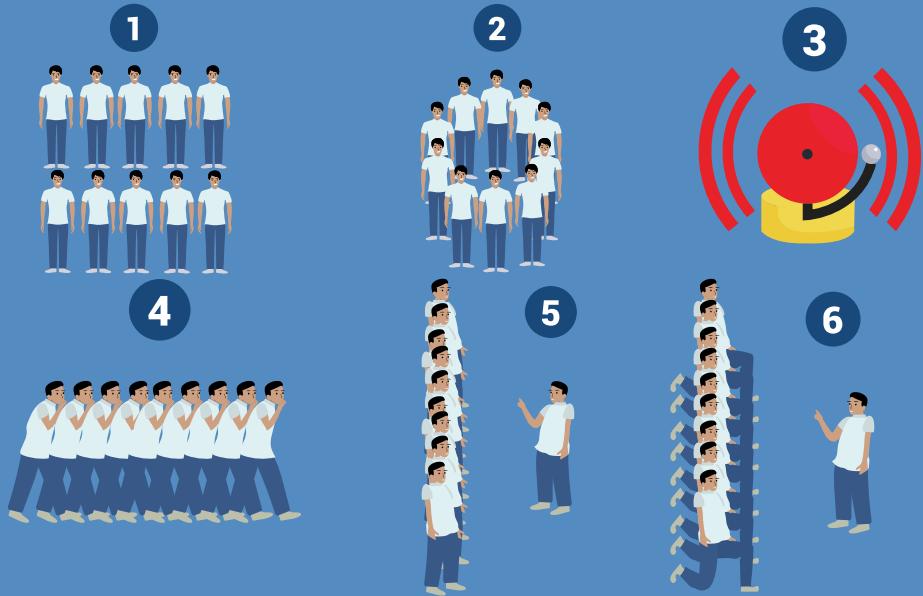
1. Message Relay Drill
2. Donning Ang Doffing Of Ppe
3. Flammable Fire Extinguishment (Firefighting Technique)
4. Hose Laying And Hose Folding

## *Set E*

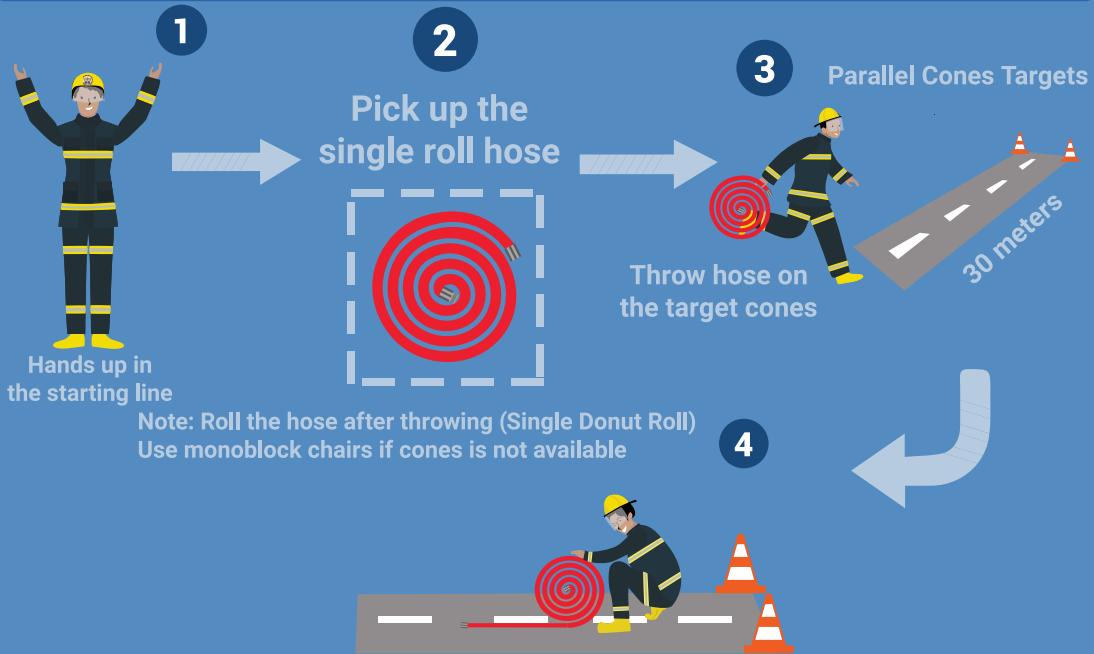
1. Flammable Fire Extinguishment (Firefighting Technique)
2. Donning Ang Doffing Of Ppe
3. Hose Laying And Hose Folding
4. Bucket Relay

## SET A

### 1. Fire Evacuation Relay



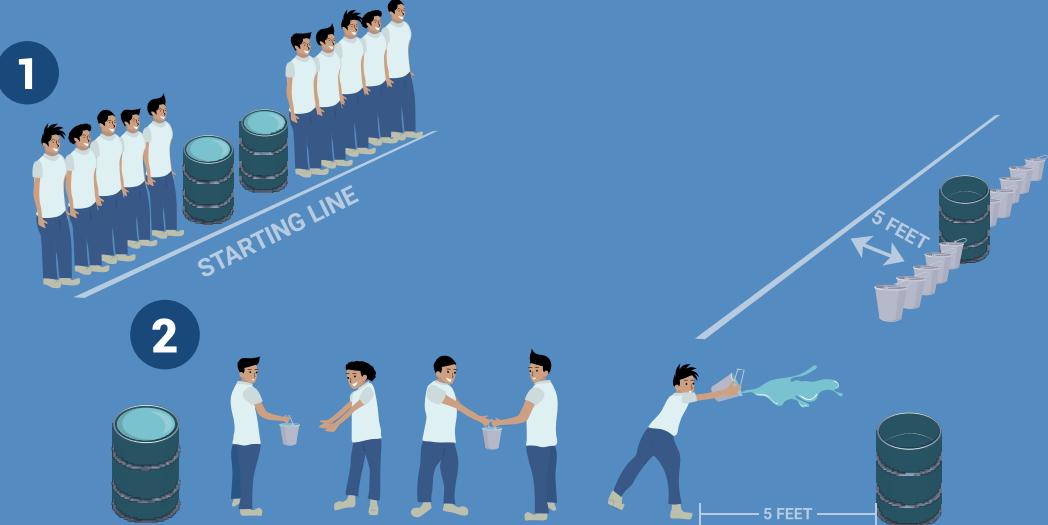
### 2. Hose Laying and Hose Folding



### 3. Donning and Doffing of PPE

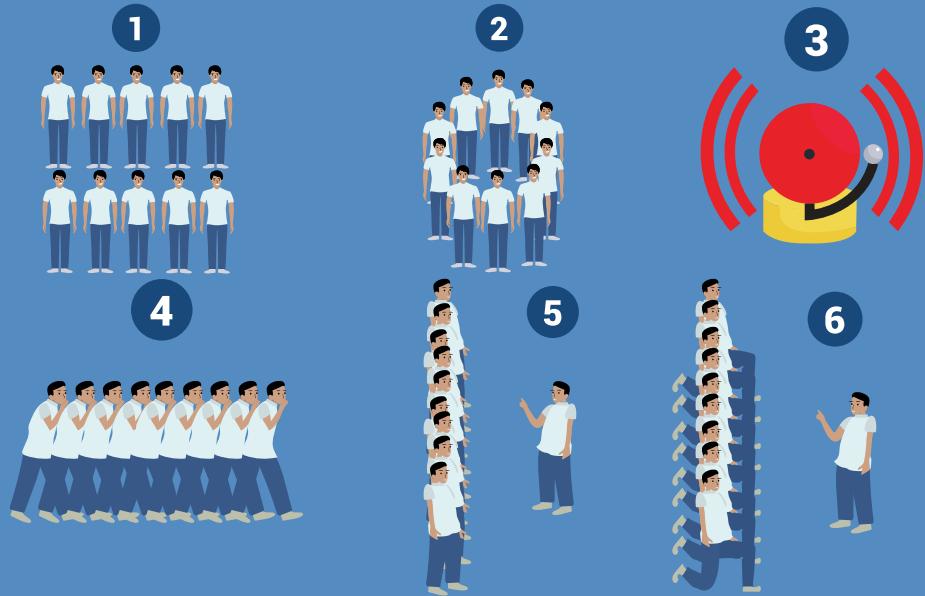


### 4. Flammable Fire Extinguishment (Firefighting Technique)

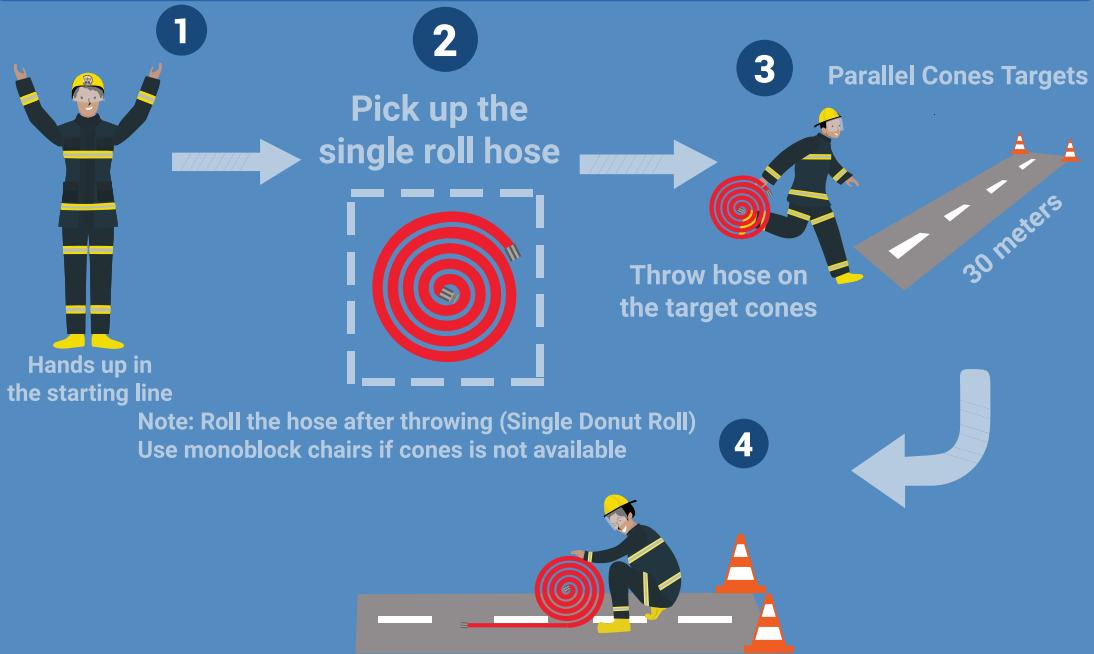


## SET B

### 1. Fire Evacuation Relay



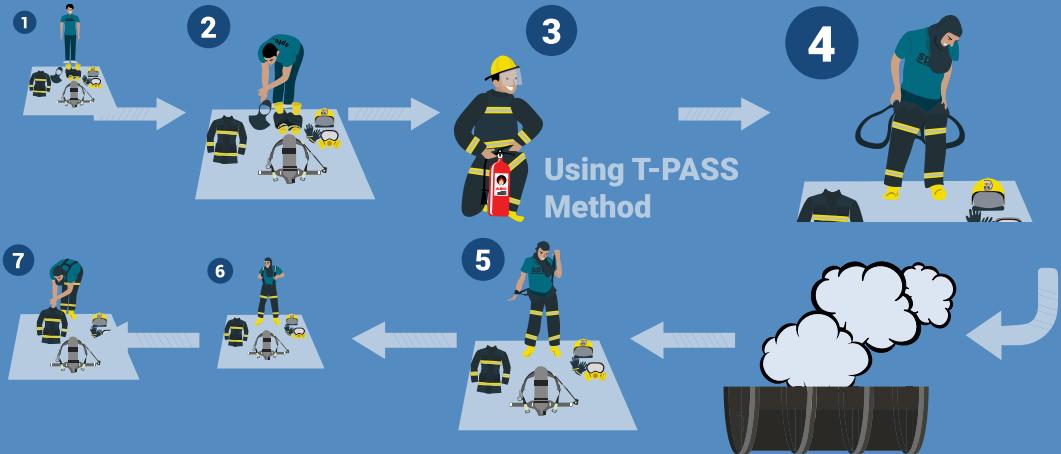
### 2. Hose Laying and Hose Folding



### 3. Donning and Doffing of PPE

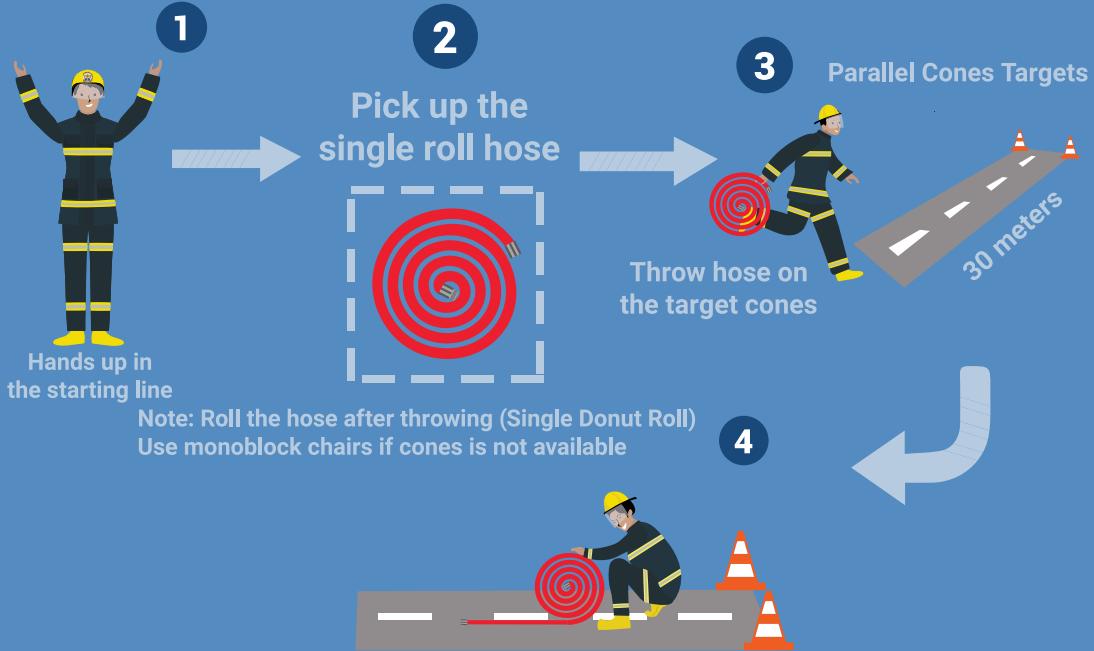


### 4. Flammable Fire Extinguishment (Firefighting Technique)

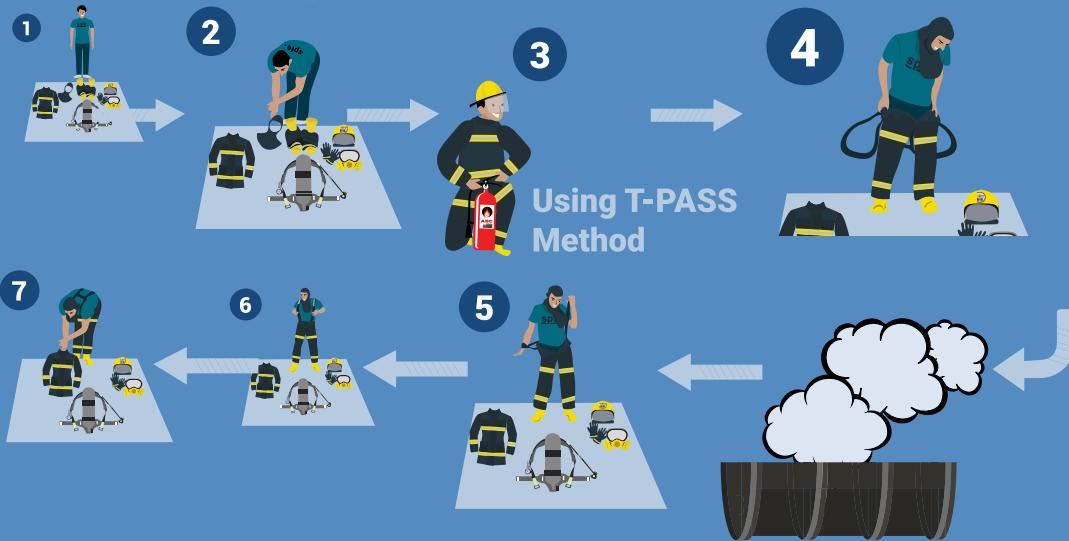


## SET C

### 1. Hose Laying and Hose Folding



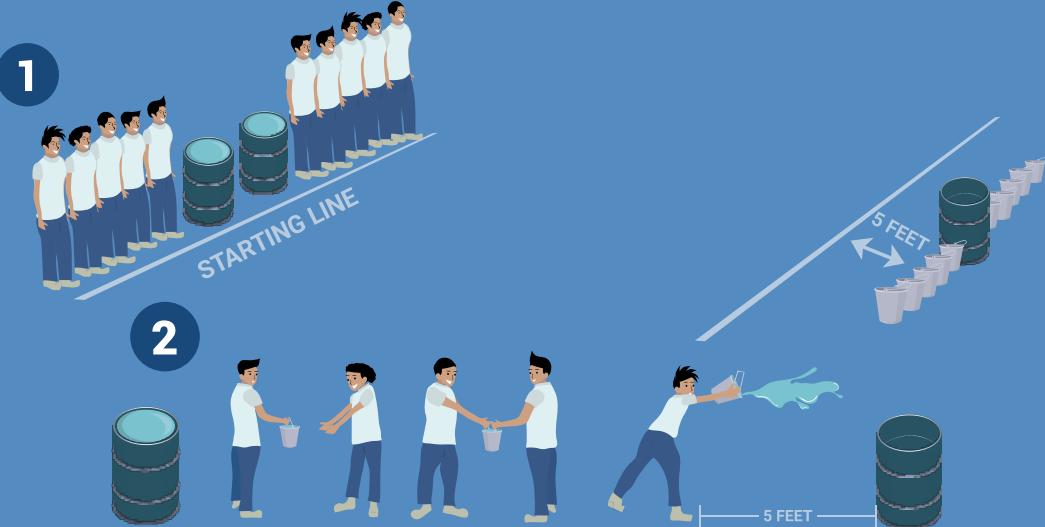
### 2. Flammable Fire Extinguishment (Firefighting Technique)



### 3. Donning and Doffing of PPE

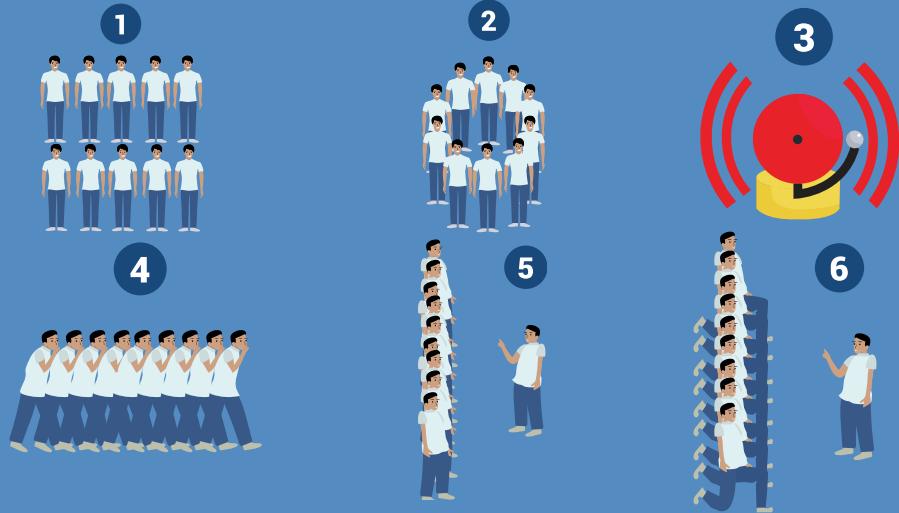


### 4. Flammable Fire Extinguishment (Firefighting Technique)



# **SET D**

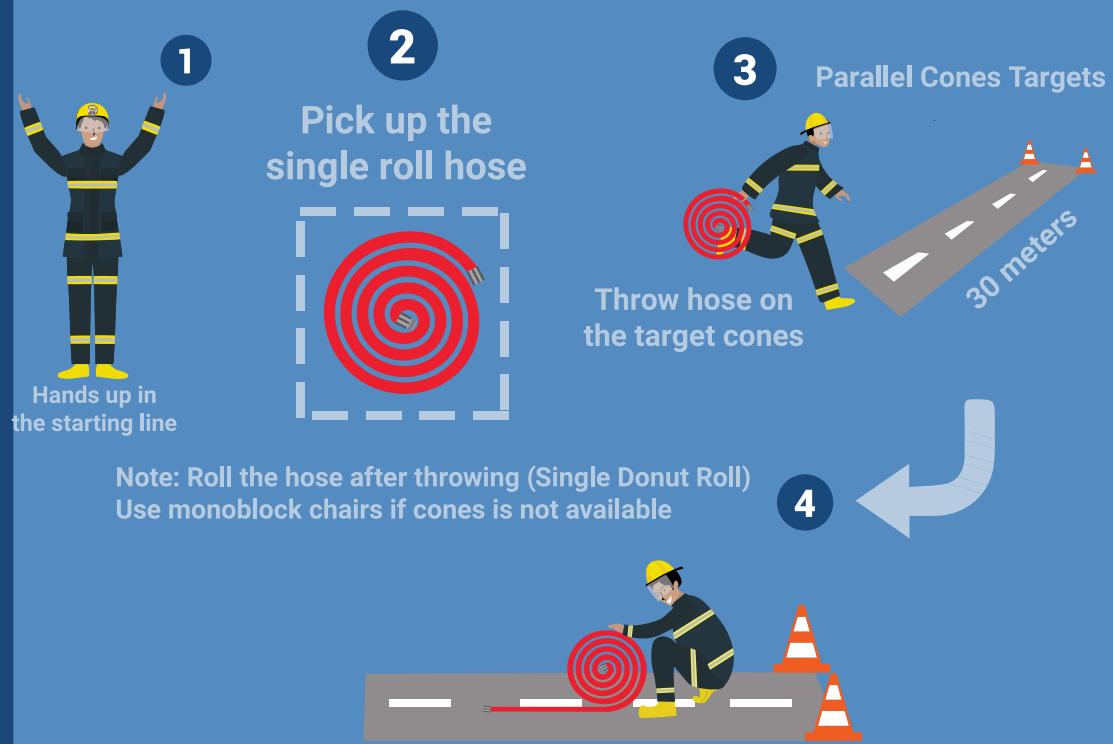
## 1. Fire Evacuation Relay



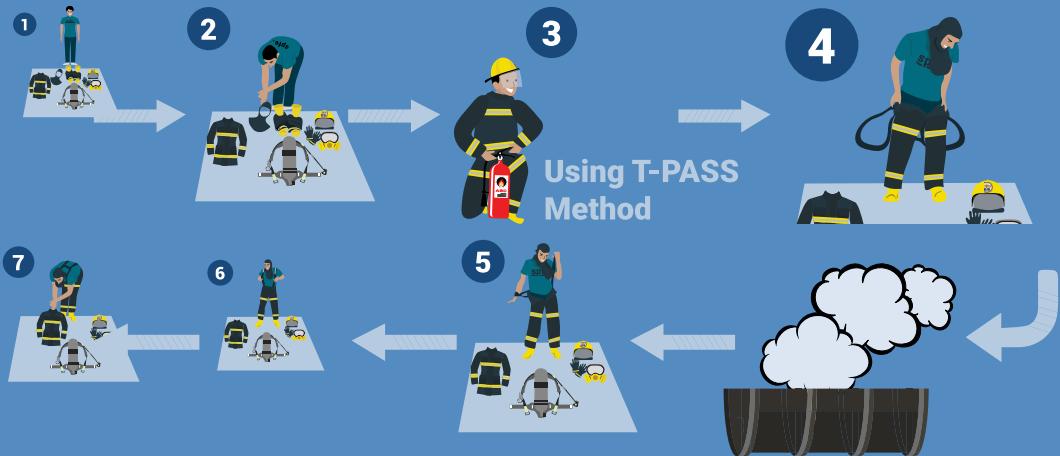
## **2. Donning and Doffing of PPE**



### 3. Hose Laying and Hose Folding

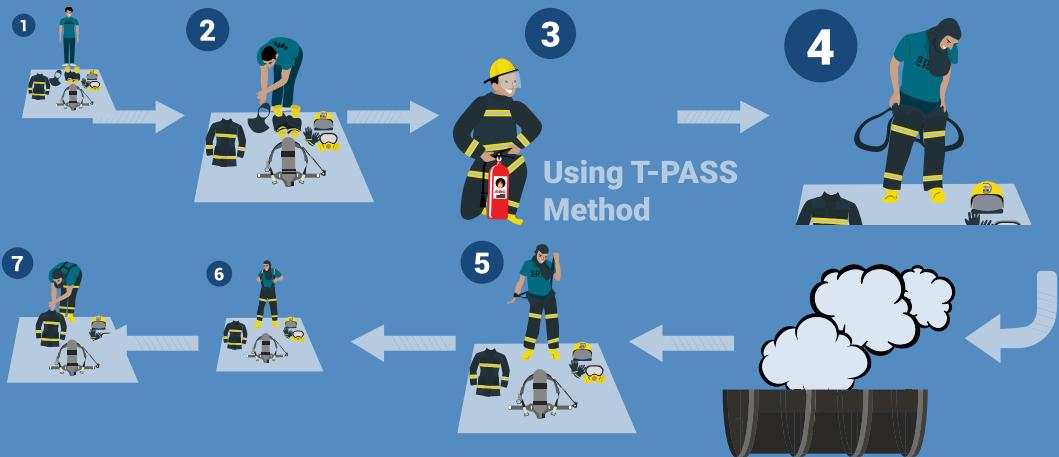


### 4. Flammable Fire Extinguishment (Firefighting Technique)



## SET E

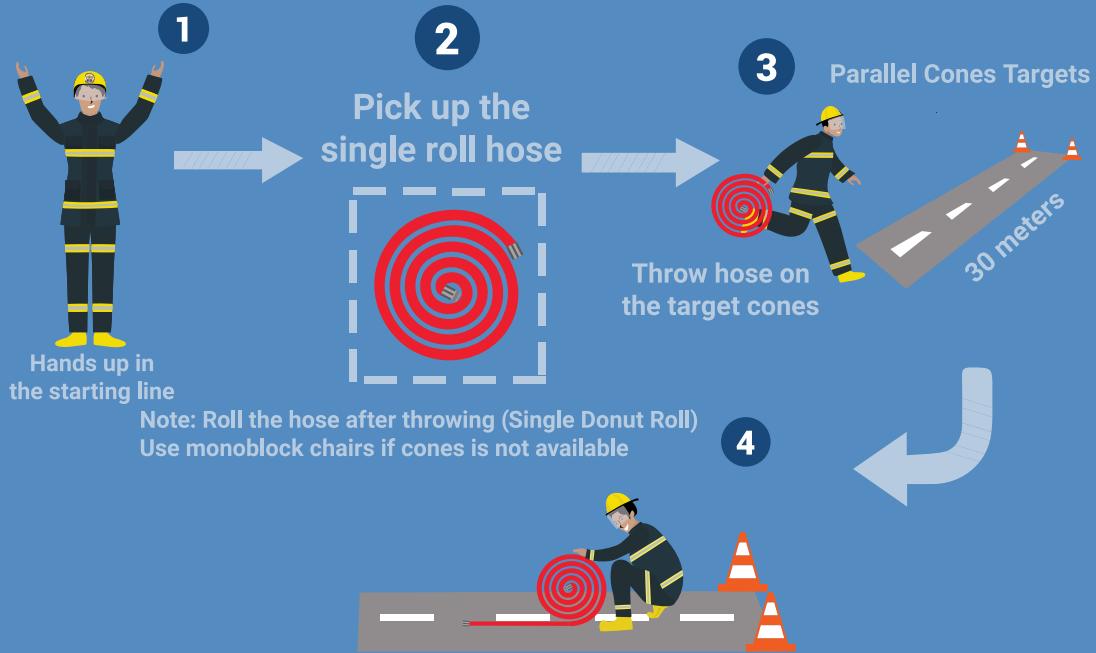
### 1. Flammable Fire Extinguishment (Firefighting Technique)



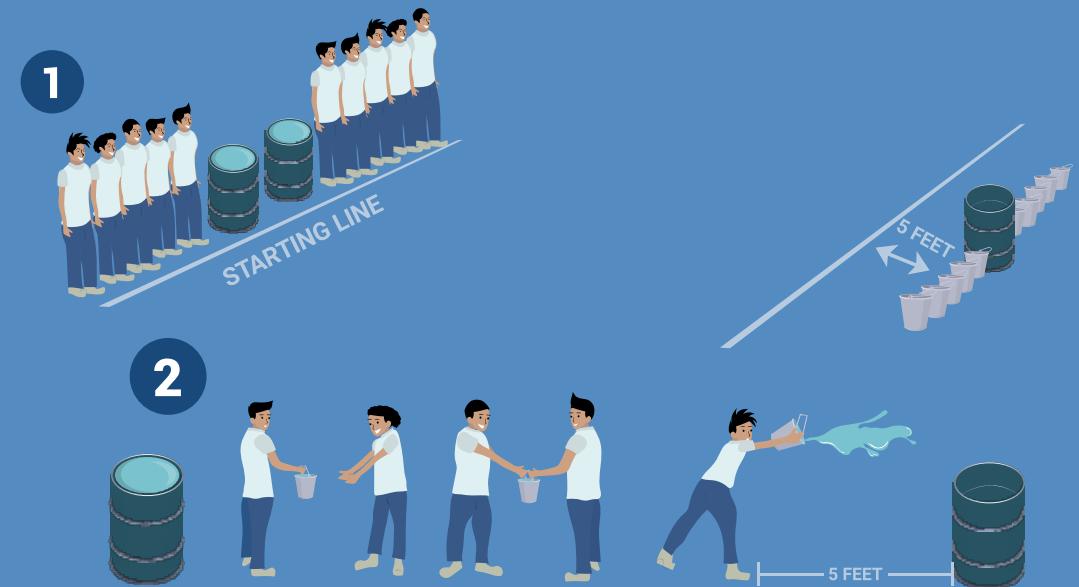
### 2. Donning and Doffing of PPE



## 2. Hose Laying and Hose Folding



## 4. Flammable Fire Extinguishment (Firefighting Technique)



**INSTRUCTOR'S NOTE:**

## Sequence of Game Proper

### *Part I*

1. (Opening Program and Orientation)
2. Invocation AVP (Fireman's Prayer)/ Designated BFP Personnel
3. Philippine National Anthem Audio/AVP Name BFP Personnel as Conductor
4. Opening Remarks Person-In-Charge (OIC) School Head/Principal
5. Presentation of the Fire Square Roadshows conducted in the Philippines (downloadable on the internet)- Optional.

#### *6. Zeal of A Firefighter's Ally*

-To be led by the Officer-In-Charge of the Participants

#### *7. Introduction of the Bfp Fire Square Challenge*

- ✓ (Orientation Proper)
- ✓ The Facilitator may present the game plan or an improvised sketch that can be visible to all the participants.
- ✓ One team made up of all the designated BFP personnel (Head Referee) in every differentiated activity will demonstrate the mechanics illustrated in the Game Plan and
- ✓ The participants shall be accordingly grouped into four (4) and must choose their team leaders and will be supervised by designated Umpires.

### *Part II*

8. Game Proper
- ✓ Draw Lots/Draw Straws of the team leaders to figure out the sequence for the performance of all teams; all designated corners of the accessible area shall be given to each team as their warm-up area while waiting for their turns.
- ✓ Head Referee shall inform the participants what the parent consent and waiver form, signed by them and their respective parents/guardians, upholds at this point.

- ✓ Head Referee shall call on the first team to perform while the rest shall be on stand-by at their designated warm-up areas while always keeping themselves in formation.
- ✓ Head Referee shall sound the whistle to signal the start/end and to notify participants of a penalty/offense committed.
- ✓ The decision of the Head Referee shall be final and executory
- ✓ Head Referee must remind the scorekeepers to be mindful of the accuracy of inputs in the score sheets for proper tabulation and determination of winners and
- ✓ The Tie Breaker event shall be the best of 3 Participants. Each Team in the game of the Obstacle Course, the fastest shall win. However, if the tie is not settled, the team who can recite the current **Fire Prevention Month Theme** shall be declared as the winner.

**9. Awarding Ceremony**

CERTIFICATE/PLAQUE/  
BADGE for B/GSP

**10. Closing Remarks**

Facilitator/City or  
Municipal Fire Marshal  
OIC/MFPO/Team Leader

**11. BFP Hymn**

## Part III

**12. Demobilization/Retrieval of Equipment**

### Evaluation (Post Activity)

The feedback mechanism for the Fire Square is in the form of survey questionnaires, which are distributed to the participants after the completion of the activities. The questionnaire shall figure out whether the activity has carried out the goal set forth. The facilitators shall collect the survey forms from the participants of the activity to further enhance and name rooms for improvement for the subsequent activities calendared in their area of responsibility.

Another form of feedback mechanism is through asking **Prompt Questions** after the performance of the differentiated activities to figure out whether it has done the objectives laid out for every activity.

This evaluation and post-activity analysis will help us figure out how effective the lecturers and facilitators are on the topics they are tasked to discuss with their target clientele, as in this case, the **Teenagers** with the age range of 12-17 years old. Through this, their mode of approach is aimed to improve or sustain depending on how the latter rates them. (See Annex for more details.)



## **Volume 2**

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Fire Safety for Teenagers

# **Annexes & References**

## 256 MODULE 4 The Fire Square Challenge



REPUBLIC OF THE PHILIPPINES  
 DEPARTMENT OF THE INTERIOR AND LOCAL GOVERNMENT  
 BUREAU OF FIRE PROTECTION  
 UNIT STATION  
 ADDRESS  
 HOTLINE NUMBER  
 EMAIL ADDRESS

REGIONAL  
 LOGO/STATION  
 LOGO

### BFP FIRE SQUARE CHALLENGE

#### SCORE SHEET

DATE: \_\_\_\_\_

VENUE: \_\_\_\_\_

NAME OF TEAM	FIRE EVACUATION RELAY	THE OBSTACLE COURSE	FLAMMABLE FIRE EXTINGUISHMENT	DONNING AND DOFFING OF PPE	HOSE LAYING AND HOSE FOLDING	BUCKET RELAY
ALPHA						
BRAVO						
CHARLIE						
DELTA						
TOTAL POINTS						
FINAL RATING						

### SCORE SHEET

#### GAME 1:FIRE EVACUATION RELAY

NAME OF TEAM	TIME WITH EQUIVALENT POINTS AFTER DEDUCTION	COVERED NOSE	ORDERLY AND CALM MANNER	SINGLE FILE FORMATION	REPORTED TO THE BFP HOTLINE	BODY-COUNT, TOOK A KNEE, & STATUS REPORT	TOTAL POINTS
	20= 4mins and less Deduction of 5 points/min excess of 4mins	20 NO=deduction of 10 points					
ALPHA							
BRAVO							
CHARLIE							
DELTA							



REPUBLIC OF THE PHILIPPINES  
 DEPARTMENT OF THE INTERIOR AND LOCAL GOVERNMENT  
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 EMAIL ADDRESS

REGIONAL  
 LOGO/STATION  
 LOGO

**BFP FIRE SQUARE CHALLENGE  
 ATTENDANCE SHEET**

DATE: \_\_\_\_\_  
 VENUE: \_\_\_\_\_

NO.	NAME OF PARTICIPANTS	SCHOOL/ AGENCY/ ORGNIZATIONS	CONTACT NUMBER	SIGNATURE
1				
2				
3				
4				
5				

CERTIFIED CORRECT:

\_\_\_\_\_

NOTED BY:

\_\_\_\_\_

**Parent Consent And Waiver Form**

As a parent/guardian of the student-participant, I hereby give my consent and acknowledge by my signature that my son/daughter of (School/Youth Organization/Union) \_\_\_\_\_ will join THE BFP FIRE SQUARE CHALLENGE to be held \_\_\_\_\_ on \_\_\_\_\_

I am aware of the usual risks and dangers inherent in this event, where accidents can occur with or without any fault on either the part of the school/institution administration/organizers or the Bureau Of Fire Protection during the events.

Thus, by allowing my child to participate in this activity, I accept the risk of any untoward incident and conform to the general guidelines set forth for this activity that aims to impart the importance of fire safety awareness and empower the participants with the knowledge and skills needed to ensure for their self-reliability in fire/emergency cases.

Hence, i have read and understood the terms of this consent and waiver and understood well that it is binding upon me, my heirs, executors, and administrators.

Date: \_\_\_\_\_

\_\_\_\_\_  
 Signature of Student-Participant

\_\_\_\_\_  
 Signature of Parents-Guardians

**258 MODULE 4 The Fire Square Challenge**

**SCORE SHEET**

**GAME 4: HOSE LAYING AND HOSE FOLDING**

NAME OF TEAM	TARGET SCORE	EQUIVALENT POINTS	TOTAL POINTS
	✓ Within the Target Zone ✓ Outside the Target Zone ✓ Failure to reach the Line of Target	✓ 100 ✓ 80 ✓ 50	
ALPHA			
BRAVO			
CHARLIE			
DELTA			

**SCORE SHEET**

**GAME 4: DONNING AND DOFFING OF PPE**

NAME OF TEAM	TARGET SCORE	EQUIVALENT POINTS	TOTAL POINTS
	✓ 15 mins ≤ ✓ 15 mins ≥ 20 mins ✓ 20 mins ≤	✓ 100 ✓ 70 ✓ 40	
ALPHA			
BRAVO			
CHARLIE			
DELTA			

**SCORE SHEET****GAME 2: THE OBSTACLE COURSE**

NAME OF TEAM	FLIP N'FLEX	WHACKAWOOD	TIRE DASH	TUNNEL TREK	SALVAGING AND OVERHAUL	TOTAL DEDUCTIONS	TOTAL POINTS
	3 Points Un-flipped tire/s	3 Points failure to maneuver the wood	3 Points for every missed tire	3 points did not cross the tunnel	No bonus for an incomplete puzzle		
ALPHA							
BRAVO							
CHARLIE							
DELTA							

**SCORE SHEET****GAME 3: FLAMMABLE FIRE EXTINGUISHMENT**

NAME OF TEAM	TIME OF EXECUTION	EQUIVALENT POINTS	TOTAL POINTS
	5 Minutes and above	FAILED	
ALPHA			
BRAVO			
CHARLIE			
DELTA			

## 260 MODULE 4 The Fire Square Challenge

### SCORE SHEET

#### GAME 4: DONNING AND DOFFING OF PPE

NAME OF TEAM	TARGET SCORE	EQUIVALENT POINTS	TOTAL POINTS
	✓ Highest Level= 100 Points ✓ 5 Points Deduction for Every Stepping on the Line	✓ FIRST-100 ✓ SECOND- 90 ✓ THIRD- 85 ✓ FOURTH- 75	
ALPHA			
BRAVO			
CHARLIE			
DELTA			

#### THE EVALUATION SURVEY QUESTIONNAIRE:

Name:

Age:

School/Organization:

Answer the following questions briefly.

1. Did you like the games of the BFP Fire Square Challenge?

YES       NO

2. In the future, would you like to join the challenge again?

YES       NO

3. Did the activity help you understand the importance of safety and preparedness during fire and emergencies?

YES       NO

4. Did it help you understand the importance of self-reliance during fire and emergencies?

YES       NO

5. Which of the games did you:

most like? \_\_\_\_\_

least like? \_\_\_\_\_

### ZEAL OF A FIREFIGHTER'S ALLY

I, \_\_\_\_\_, of \_\_\_\_\_

do hereby solemnly swear that I will abide by all the rules of the games,

I will respect all calls and decisions of the game officials. (["Oath of Sportsmanship | PDF - Scribd"](#))

and I will act, always, as a true sportsman,

Whose desire to win is only second to our yearning to learn fire safety.

I further solemnly swear to perform in the spirit of camaraderie and responsibility,

Where our victory is determined by our will to observe what we have learned today.

To all these ideals, I pledge my whole-hearted cooperation and full commitment to be a firefighter's ally in the face of challenges.

So, help me, God.









# SPFE

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Education  
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FIRE SAFETY INFORMATION DIVISION  
DIRECTORATE FOR FIRE SAFETY AND ENFORCEMENT

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