**CLASS 4 SCIENCE QUESTIONS & ANSWERS**

Plastic is an example of \_\_\_\_\_\_\_\_ materials

1. Natural (b) **Synthetic** (c) Original

**Reason:** Plastic is made through application of heat or chemical reactions on natural materials.

Rocks are examples of \_\_\_\_\_\_\_ materials

1. **Natural**  (b) Synthetic (c) Original

Oxygen is a non-metal

1. **True** (b) False (c) None

**Reason:** Oxygen is a gas

Aluminium is a non-metal

1. True (b) **False** (c) None

Non-metals are good conductors of heat

1. True (b) **False** (c) None

**Reason:** Non-metals are poor conductors of heat.

Non-metals are stronger than metals

1. True (b) False (c) None

**Reason:** Non-metals are brittle and easy to break

Metals have \_\_\_\_\_\_\_\_\_

1. Low melting point (b) Medium melting point (c) **High melting point**

**Reason:** Metals need to be exposed to a very high temperature before they can melt.

Which of the following can be used to make electric cables?

1. **Metals**  (b) Non-metals (c) None

**Reason:** This is because metals are good electrical conductors and can be stretched into wires.

Why are metals used for making cooking pots and pans instead of wood?

1. Metals are easier to handle than wood
2. Wood is a good conductor of heat
3. **Metals are good conductors of heat**

Why are handles of pans made with non-metals?

1. Non-metals are easy to handle
2. **Non-metals are bad conductors of heat**
3. Non-metals are less expensive

**Reason:** Since they are bad conductors of heat they remain at a cool temperature when the metals are being heated during cooking. This makes handling whilst cooking easy.

Aluminium and gold rust easily.

1. True (b) **False**  (c) None

**Reason:** These are types of metals along with platinum that do not rust easily like iron and steel.

Rusting occurs due to iron being exposed to \_\_\_\_\_\_\_

1. Carbon dioxide and water (b) **Oxygen and water** (c) Carbon dioxide and oxygen

**Reason:** Rust occurs when metals are exposed to oxygen and water for a long period of time.

Rusting makes metals \_\_\_\_\_\_?

1. Durable (b) Red (c) **Weak**

**Reason:** Rusting wears off the surface of the metal making it weak.

Rusting cannot be removed but can be prevented

1. True (b) **False** (c) None

**Reason:** Rusting can be removed by placing rusted tools in diesel and by using sandpaper on them.

Apply \_\_\_\_\_\_\_\_ onto rusted portions of the metal

1. Water (b) Salt solution (c) Lime

**Reason:** Lime is used to remove rusted portion of metals. It is mostly used for brightening metal surfaces.

Painting the surface of a metal prevents exposure to \_\_\_\_\_\_

1. Oxygen and Lime (b) **Water and oxygen** (c) Lime and water

**Reason:** Metals exposure to water and oxygen causes rusting, painting the surface prevents rusting.

\_\_\_\_\_\_\_\_\_\_\_ is the only liquid metal at room temperature

1. Water (b) **Mercury** (c) Aluminium

\_\_\_\_\_\_\_\_\_\_ is the degree of hotness or coldness of a particular area or object at a given time.

1. Thermometer (b) Rusting (c) **Temperature**

Warm substances have their atoms moving \_\_\_\_\_\_\_\_\_ within them.

1. Slowly (b) Gently (c) **Rapidly**

**Reason:** Warm substances have their atoms moving rapidly within them transferring the heat.

\_\_\_\_\_\_\_\_\_\_ is used to measure temperature

1. Degree (b) Celsius (c) **Thermometer**

**Reason:** Degree and Celsius are units of temperature but a thermometer is used to measure it.

The process whereby warm air with rapidly moving atoms rise and are replaced by cold air with slowly moving particles is called \_\_\_\_\_\_\_?

1. **Convection** (b) Conduction (c) Radiation

Why does heated air rise higher than cold air?

1. Cold air is less dense than heated liquid
2. **Heated air is less dense than cold air**
3. They both show the same density

**Reason:** Heated air is much lighter than cold air and easily rises up. Cold air may contain a little liquid.

The movements which occur in boiling water are what we term as \_\_\_\_\_\_?

1. Radiation currents (b) Conduction currents (c) **Convection currents**

**Reason:** Convection currents have to occur in order for cool water to heat up. Hot water molecules rise to the top whilst cold water molecules replace them.

Convection currents help in producing rainfall

1. **True** (b) False (c) None

**Reason:** When warm air and cold air meet the warmer air rises into the atmosphere because it is less dense.

When the air above the sea is warmer and rises whilst the air above the land sinks to replace it is known as \_\_\_\_\_\_\_\_?

1. Onshore breeze (b) **Offshore breeze** (c) Breeze

**Reason:** Offshore breeze occurs in at night when the air above the sea is warmer than the air above the land. On shore breeze is the complete opposite of this and occurs during the day.

Ventilation is \_\_\_\_\_\_\_?

1. The replacement of fresh air with stuffy unclear air
2. The replacement of good air with bad air
3. **The replacement of stuffy unclean air with fresh air**

**Reason:** Ventilation talks about introduction of fresh air

Lack of sufficient windows and vents in a room causes \_\_\_\_\_\_\_?

1. Good ventilation (b) **Poor ventilation** (c) Moderate ventilation

**Reason:** Lack of sufficient windows and vents do not allow proper air circulation. Stuffy unclear air cannot be replaced with fresh air.

The solar system is in a galaxy called \_\_\_\_\_\_\_\_\_?

1. **Milky way** (b) Path way (c) Systems

The solar system consists of \_\_\_\_\_\_\_\_\_ planets.

1. 8 (b) **9**  (c) 7

**Reason:** There are 9 planets in our solar system. They are Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune and Pluto

The following are all planets; Mercury, Earth, Sun, Venus

1. True (b) **False** (c) None

The largest star in the solar system is \_\_\_\_\_\_\_

1. Galaxy (b) Jupiter (c) **Sun**

**Reason:** The sun is the largest star in the solar system and at its center providing sunlight to the planets. It is a combination of burning gases. All planets and objects in the solar system orbit the sun.

What keeps the sun at its place and helps pull other objects towards it

1. Magnetic Force (b) Energy (c) **Gravity**

**Reason:** Gravity holds the sun in its position

Luminous bodies are \_\_\_\_\_\_\_?

1. **Objects that can produce their own light**
2. Objects that can reflect light
3. Objects that can refract light

**Reason:** Luminous bodies produce their own light. Examples are sun, stars etc.

A moon is an example of a \_\_\_\_\_\_\_?

1. Luminous body (b) **Non luminous body** (c) Lighted object

**Reason:** Non-luminous bodies cannot produce their own light. They can however reflect light that is shone at them.

Any object that orbits another planet or a star like the sun is known as \_\_\_\_\_\_\_\_\_\_?

1. Solar system (b) **Satellite** (c) Luminous

**Reason:** The earth is an example of a satellite as it orbits the sun.

Satellites made by human beings that help to communicate with engineers are called \_\_\_\_\_\_?

1. Natural Satellites (b) **Artificial satellites** (c) Weather satellites

All the nine planets are satellites

1. **True** (b) False (c) None

**Reason:** This is true because they all orbit the sun.

Satellites used for television, radio, phone and internet transmissions are \_\_\_\_\_\_\_\_?

1. Space observation (b) Weather satellite (c) **Communication satellite**

**Reason:** This satellites help in transmitting information

Power is the ability to do work

1. True (b) **False** (c) None

Energy can be created but cannot be destroyed.

1. True (b) **False** (c) None

**Reason:** Energy cannot be created or destroyed.

Solar energy is a type of energy derived from the \_\_\_\_\_\_?

1. Stars (b) Moon (c) **Sun**

The sun’s energy can be used to generate power in our homes, schools and offices.

1. **True** (b) False (c) None

**Reason:** Solar panels collect the sun’s energy during the day and store it. This energy can be used right away or used later. The stored energy can be converted into electrical energy to generate power.

Wind cannot produce energy

1. True (b) **False** (c) None

**Reason:** Large windmills are place in very windy areas, the wind blows and the turbines turn which creates power through a generator to produce energy.

The push or pull on an object is \_\_\_\_\_\_\_?

1. Energy (b) **Force** (c) System

**Reason:** Force is when there is an interaction between two objects.

Force can also occur when there is no interaction \_\_\_\_\_\_?

1. True (b) **False**  (c) None

**Reason:** Force is a push or pull on an object. When there is an interaction between two objects.

A force applied to one object by another object without direct contact is \_\_\_\_\_\_?

1. Contact force (b) **Non-contact force** (c) Frictional force

**Reason:** Gravitational force is an example of this type of force. When a ball is thrown up there’s a force that brings it back down.

If there is friction on the ground you will slip and fall.

1. True (b) **False** (c) None

**Reason:** You can only slip and fall when there is no friction on the ground. An example of a surface with no friction is a wet surface.

The force that pulls objects to the ground and keeps them there is \_\_\_\_\_\_?

1. **Gravitational** (b) Frictional (c) Magnetic

**Reason:** Every object that has mass applies a gravitational pull on other objects

Force causes objects to move and stop

1. **True**  (b) False (c) None

**Reason:** Objects moving and stopping implies there has been a force applied on it.

A force can change the direction of a moving object

1. **True** (b) False (c) None

**Reason:** When a force is applied on a moving object that may be moving in a straight line it can cause its direction to change.