

QUEST:

- ★ **Content Standard:**
 - ✓ The learner demonstrates understanding of the importance of quantitative research across field.
 - ✓ The learner demonstrates understanding of the nature of variables.
- ★ **Learning Competencies:**
 - ✓ The learner illustrates the importance of quantitative research across fields. (CS_RS12-Ia-c-2)
 - ✓ The learner differentiates the kinds of variables and their uses. (CS_RS12-Ia-c-3)

MISSION1

Instruction:Provide what is being asked in each item.

1. Give at least two (2) recent contributions of research in the following fields and provide a brief description.

Medicine	Technology	Engineering	Education
1.	1.	1.	1.
2.	2.	2.	2.



QUANTITATIVE RESEARCH ACROSS FIELDS

- Quantitative research deemed importance across different fields. It allows academics and practitioners to produce new knowledge and come up with solutions to existing societal problems.

GOVERNANCE

- Through quantitative research, the government can gather statistics released by the Philippine Statistical Authority through regular censuses and surveys. By this it will provide us better understanding on the following aspects:
 - poverty
 - increasing number of unemployment
 - improvement of education
 - and other aspects of national situation

The data provided will be the concrete basis for the planning of programs and policies by the government.

📁 **BUSINESS**

- In the field of business, quantitative research is utilized to collect and analyze information on customer preference and product performance as well as overall business performance.

Using quantitative research, a business can come up with better marketing strategies and better products that can satisfy their customers.

📁 **ENVIRONMENT**

- For environmental studies, quantitative research is very useful solving the following environmental problems.
 - depletion rate of forest covers
 - impact of increasing greenhouse gases
 - effects of dynamite fishing in environment and communities
 - status of different animal species

Through this, environmental researchers can have better understanding of the various environmental issues and provide alternative solutions to the issues.

MISSION 2

Instruction: Give one (1) example of quantitative research from the different fields of studies.

Governance	Business	Environment

VARIABLES

- **VARIABLE**
 - Is an object, event, idea, feeling, time period, or any other type of category which can be measured. *(Kalof, Dan, & Dieyz, 2008)*

MAJOR KINDS OF VARIABLES

Independent Variable	<ul style="list-style-type: none">● This <u>causes changes</u> in a phenomenon or situation.● Probable <u>cause</u> of an event.
Dependent Variable	<ul style="list-style-type: none">● It changes when the independent variable varies.● These are <u>effects brought by the independent variables</u>.● the <u>outcome</u> of the study.

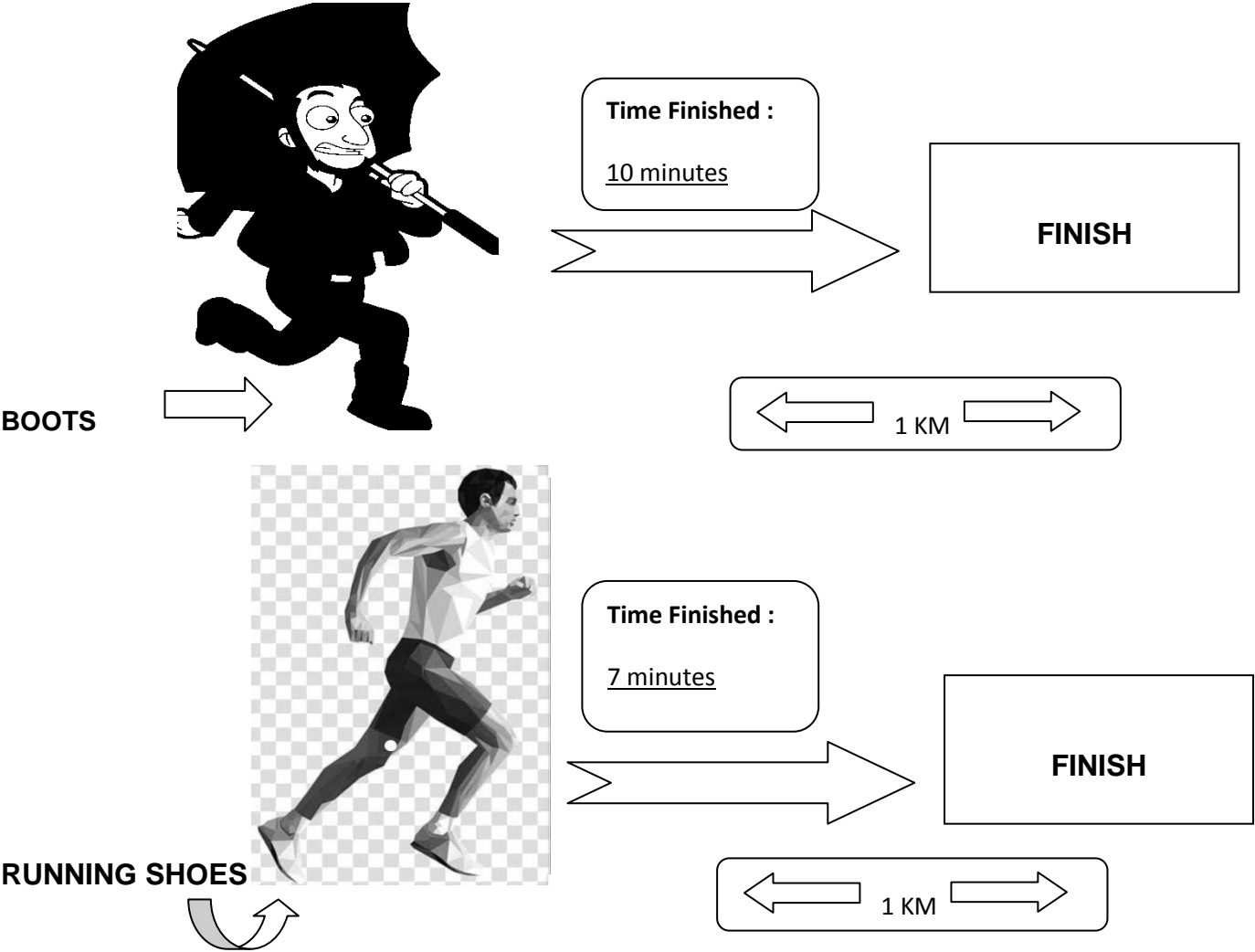
❖ **EXAMPLE**

- The effects of diet and regular soda on the blood sugar levels

Independent Variable	Dependent Variable
The type of soda you drink	Your blood sugar levels

- The blood sugar levels (dependent) are depending on the type of soda (independent) that people drink.

SIMPLIFICATION



- ❖ In this illustration, there are two men running, one with **boots** and another man with **runningshoes**.
- ❖ **The shoes are the independent variable** and **the time is the dependent variable**.
- ❖ The time finished is affected by the shoes used by the running man. Since, the second person uses running shoes, he arrived earlier than the first man wearing boots.

MISSION 3

Instruction. Based on the research titles presented, identify the independent and dependent variables. Write your answers on each column.

Research title	Independent Variable	Dependent Variable
<i>A study on whether the choice of type of foot wear differs between genders.</i>		
<i>How well do different plant species tolerate salt water?</i>		

MISSION 4

PERFORMANCE TASK
“RESEARCH TITLE WRITING”

Instructions:

- 1. In the same group, create your own research title based on the research topics you listed.
- 2. Submit this portion to your research teacher.

Research Topic	Proposed Research Title
1.	1.
2.	2.
3.	3.

GUIDELINES IN WRITING A RESEARCH TITLE

- 1. **Provide the necessary information** - Be sure to indicate the subject of the study.
- 2. **Choose the appropriate wording** - Learn how to play with words when crafting researchtitle.
- 3. **Be mindful of the length** - Limit your research title to 10-15 substantive words.
- 4. **Observe proper grammar** - Capitalize the first words in your title.
- 5. **Cite properly** - When including a quote as part of the title, the source of the quote is cited.

References:

- *An introduction to Quantitative Research - Practical Research 2, Torneo, A &Torneo H, 2017*
- <https://www.scribbr.com/methodology/independent-and-dependent-variables/>
- <https://youtu.be/iaewZmc4TYQ> (What are Independent, Dependent and Controlled Variables? By HighSchoolScience10



CHECKPOINT:

Name: _____

Quarter: 1

Section: _____

Week: 3

PRACTICAL RESEARCH 2

I. Identification: Write “**IV**” if the word describes Independent Variable and “**DV**” if it describes Dependent Variable.

- _____

1. Effects
- _____

2. Results
- _____

3. Affect Outcomes
- _____

4. Cause
- _____

5. Output
- _____

6. Response
- _____

7. Outcomes
- _____

8. Influence

Instruction:Create a poster illustrating how our society would look like in the future with the advancements of technology through research.