6th Grade Science Lesson: April 6th, 2020

#### Learning Target: I can identify variables in an experiment.

#### Let's Get Started:

Watch Video: <u>Study Jams Scientific Method</u> What is an independent variable, dependent variable, and constant?

# Independent Variable (IV)

The ONE factor changed experiment.



"I Change IT!!"

## Dependent Variable (DV) What is measured or observed.



"Data Collected"

Helpful reminder: The <u>dependent variable</u> DEPENDS on the <u>independent variable</u>.

# **Constants:**

The factors that must remain the same throughout the experiment so you have a fair test.

Time each trial for 3 minutes

Use 100 mL of water for each trial



con<u>S</u>tant= <u>S</u>ame



#### Practice:

#### Identify the independent & dependent variables.

REMEMBER: The <u>dependent variable</u> DEPENDS on the <u>independent variable</u>. Read your answers back to yourself filling in the underlined words!

- 1. The higher the temperature of the water, the faster the egg will boil.
- 2. The score on the final test depends on the number of skills attained.
- 3. Students of different age groups were asked to put the same jigsaw puzzle together, they were timed to see how long it took.

Check your answers on the following slide.

#### Answers:

Identify the independent & dependent variables.

Independent= Temperature of water,
Dependent= Time egg boils

(The time it takes the egg to boil DEPENDS on the temperature of the water.)

2. Independent = Skills attained, Dependent = Score

(The test score DEPENDS on the skills attained.)

3. Independent= Age group, Dependent= The time it took to put the puzzle together

(The time it takes to finish the puzzle DEPENDS on the age group.)

#### **Practice:**

Identify the independent & dependent variables.

Use the link below to practice identifying variables. Record your answers on a sheet of notebook paper. When finished, check the answer key to see how you did.

> Links: Identifying Variables Answer Key

#### **Practice:**

Identify the independent & dependent variables.

## Test yourself! See if you can select the correct independent and dependent variables.

Link: Assessment for Variables

#### **Additional Practice:**

Click on the links below to get additional practice and to check your understanding!

Identifying Variables & Constants

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