



Science Virtual Learning

6th Grade Science:

Hypothesis

May 5, 2020



6th Grade Science Lesson: May 5, 2020

Objectives/Learning Targets:

Students will be able to explain the purpose and write a testable hypothesis.

Warm Up:

What do you think will happen when Coca Cola & Milk are mixed together?

Watch this [video](#) to find out!

You can also try this out at home if you have the materials!





Background Information:

In the warm up, you created a very basic hypothesis - What did you think would happen based on a scenario?

A **hypothesis** is a testable answer to a scientific question. Once a scientist has a scientific question they are interested in, the scientist researches what is already known on the topic. Then, they use that information to form a tentative answer to their scientific question. Sometimes people refer to the tentative answer as "*an educated guess*". Keep in mind the hypothesis also has to be **testable** since the next step is to do an experiment to determine whether or not the hypothesis is supported!

"If [I do this] _____, then [this]_____ will happen, because _____."



Example Hypotheses:

- **If** 7th graders and 8th graders complete the same math problems, **then** the 8th graders will get more answers correct, **because** they have studied math for one year longer than the 7th graders.
- **If** dry bread and moist bread are left in bags for two weeks, **then** the moist bread will grow mold more quickly than the dry bread, **because** mold is a living organism, and organisms need water to survive.
- **If** some students eat breakfast before school and others do not, **then** the ones who do eat breakfast will have better grades in their morning classes, **because** their brains have more energy to think.

Practice:

Read the [Readworks article](#) & answer the questions about the scientific method & creating a hypothesis. The answer key is included.





Practice:

Write a hypothesis about the following situations:

1. Mr. Montanari has noticed that there is a wide range of grades that students get on tests, even though they are all in the same class. He wonders whether students, who study for 20 minutes per night, every night, get higher scores on tests or not. Mr. Montanari wants as many kids to be successful as possible.
2. The cooler the temperature in a lake, the more oxygen the water holds. Daniel notices that he catches more fish in a lake that is cooler than 55 degrees. He wants to conduct a study so he can catch the most fish possible this year.



Practice - Answer Key

1. If students study 25 minutes per night, then they will receive higher scores on their tests.
2. If the temperature in the lake is 45 degrees, then Daniel will catch the most fish this year.



Additional Practice

1. IXL [developing a hypothesis](#). Please complete the five free practice questions, you do not need to log in.
2. Test your knowledge with this [quizizz](#).
3. Check out this [song](#) about Hypotheses!