

The Scientific Method

Cross-Curricular Focus: Science Investigation



Scientists study the world and learn about how it works. As they study the world, the scientists use a process called the scientific method. They ask important questions and search for the answers. Sometimes they make amazing discoveries! There are times when a scientist is unable to answer his own question. If he has taken good notes, another scientist may come along later and use his notes to find the answer. Every year there is new knowledge.

The scientific method is a step-by-step process. You can use it to **conduct an experiment**. You start by making **observations** about something that interests you. Based on your observations, you make a hypothesis. A hypothesis is a smart guess you make by using what you know. You guess what you think could happen. Now you are ready to begin your experiment.

During your experiment you should take notes. These notes are your experiment data. You constantly make observations during this time. You may discover things that make you to revise your experiment. Eventually, you conclude your experiment. Next, you begin to look over your notes. You decide what you found out in your experiment. You make a final statement about whether or not your hypothesis was correct. You use reasons and evidence to support your statement.

Using the scientific method can be challenging. However, it can also be rewarding. All the steps are organized in a process. When you provide observations and data as evidence to support your conclusion, your ideas are more likely to be accepted.

Name _____

Answer the following questions based on the reading passage. Don't forget to go back to the passage whenever necessary to find or confirm your answers.

1) What is the scientific method?

2) When you find something that interests you, how do you make a hypothesis?

3) Why is it important to take good notes when you are conducting an experiment?

4) What is the last step in the scientific method?

5) Name one thing you might like to investigate this year for a science project.
