



Read about it!



Use context to determine the meanings of the words. You use context when you use the words around the unknown word to figure out its meaning.

Scientists use a process called the scientific method to help answer questions.

The scientific method is made up of six steps:

1. Observe & ask questions
2. Form a hypothesis
3. Plan the experiment
4. Conduct the experiment
5. Analyze & draw conclusions
6. Share findings

The first thing a scientist will do is come up with a question based off of an observation. An observation is using your senses and tools to gather information. You may notice a difference in how hot or cool you are changes based on the color of your shirt on a sunny day. You decide you will conduct an investigation into the question “Does a lighter colored shirt stay cooler than a darker colored shirt on a sunny day?” Your investigation will help answer the question. Your hypothesis, or educated guess, is that a light colored shirt stays cooler than a dark colored shirt on a sunny day.

How will you test your hypothesis? You will plan an experiment, which is a test to try and confirm the answers you seek. You’ll need to choose the materials, tools, and procedures to follow. The materials, or items you will need to conduct the experiment, will vary based on your needs. You may need some tools to help measure the data for example, a scale, ruler, graduated cylinder, etc. For the tee-shirt experiment you will need tee-shirts or varying colors, a thermometer, a watch to keep track of the time, and a sunny day.

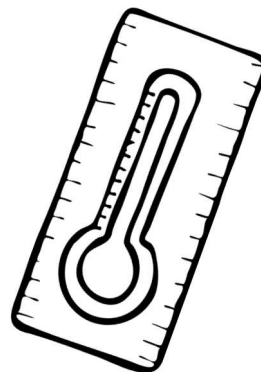
Next, you’ll need to create a list of steps to follow for the experiment. This will be your procedures.

For your tee-shirt experiment your procedures may look like this:

1. Gather materials
2. Lay tee-shirts outside on a sunny day
3. Check the temperature of the tee-shirts every thirty minutes for three hours
4. Record results

You'll follow the steps you have laid out to conduct the experiment. Once your experiment is complete you'll analyze your evidence and draw conclusions. The evidence are the observations and facts from the experiment. Analysis of evidence comes from careful study of the results. You may note that the lighter shirts were cooler than the darker shirts, with white being coolest and black being the warmest. Your conclusion, or end result, is that your hypothesis was correct. Lighter colored shirts keep cooler than darker colored shirts.

You've made an inference! It's a conclusion drawn from data and observations. The final step of the scientific method is to share your findings. It's important for scientists to share their work so others may try to reproduce their results.



What's it mean?

Based off what you just read what do you think the words below mean? Write your own definition.

Scientific Method _____

Investigation _____

Tool _____

Hypothesis _____

Evidence _____

Procedure _____

Inference _____

Observation _____

Materials _____

Experiment _____

Analysis _____

Conclusion _____