

## Resources

Visit libraries, science museums, and college and university science departments. If you have access to the World Wide Web on the Internet, use search engines to look for the information you need.

### National Science Teachers Association

1840 Wilson Blvd.

Arlington, VA 22201-3000

Phone: 703-243-7100; Fax: 703-243-7177

Web site: <http://www.nsta.org>

The NSTA Web site includes a Science Store with more than 300 science education materials.

### Delta Education Hands-On Science Catalog

80 Northwest Blvd.

P.O. Box 3000

Nashua, NH 03061-3000

Phone: 1-800-442-5444; Fax: 1-800-282-9560

Web site: <http://www.delta-ed.com>

### Nasco

Nasco distributes various educational catalogs focusing on science and industry. The company has headquarters in Fort Atkinson, Wisconsin, and Modesto, California. Web site: <http://www.nascofa.com>; customer service: 1-800-558-9595.

### Carolina Biological Supply Company

2700 York Road

Burlington, NC 27215

Phone: 1-800-334-5551

Web site: <http://www.carolina.com>

Products and publications for classroom educators of biology, chemistry, physics, and earth and space sciences.

## The Scientific Method

Scientists are always trying to create an accurate picture or description of the world around us. They want to do this without their own opinions or biases getting in the way of how they see things, so they use an objective method of discovery as they develop their theories about the world.

### 1. PURPOSE

You start off wanting to find out the answer to a question—usually one that you arrive at by observing the world around you. For instance, if you see plants wilting when they don't get enough water, you might ask, "How much water do plants need to grow?"

### 2. HYPOTHESIS

What do you think will happen? For instance, "I hypothesize that if I water the plants once a week, they will grow."

### 3. MATERIALS AND PROCEDURES

What do you need and what will you do to find out the answer to your question, or "test" your hypothesis? This part of the scientific method is important so that other people can repeat your experiments and see whether they get the same results.

### 4. DATA COLLECTION

Write down everything you observe during your experiments and organize your data so that it is clear (perhaps using tables or graphs).

### 5. CONCLUSIONS

From your data, you can draw conclusions about your hypothesis—whether it is true or false. For instance, if you found out that plants were healthy and grew when you watered them once a week, you could conclude that your hypothesis was true. But if they turned brown because they got too much water, you could conclude that your hypothesis was not true, and that watering once a week is too much.

## Judging Science Projects

When judging science projects, consider the following areas:

### 1. Scientific Method and Thought

Does the project follow the scientific method?

### 2. Originality

Is the project mainly the work of the child?

### 3. Thoroughness

Are all parts of the project done well?

### 4. Technical Skill

Does the project show effort and craftsmanship?

### 5. Clarity

Is the project easily understood?