

Developing a Hypothesis

Goal • Become familiar with the development of hypotheses in science inquiry.

Think About It

In their inquiries, scientists make observations. From these, they develop ideas that they test. They state these ideas in the form of a hypothesis.

What to Do

- Learn more about the hypothesis in science by reading the discussion on page 309 in *BC Science 7*, then do the activities below.

Questions

- Define “hypothesis,” giving an example you have learned from science.

- Following the example provided, complete the following hypothesis statements:

(a) Brushing my teeth twice a day will protect my teeth from decay.

(b) Applying heat to a liquid will cause its particles to _____.

(c) Living things down the food chain will be affected negatively by _____.

- (a) Identify the independent variable (cause) and the dependent variable (effect) in 2 (a).

(b) Explain how the relationship between cause and effect can be a hypothesis.

- Develop a hypothesis for the following questions:

(a) What effect does a nutritious diet have on my health?

Hypothesis: _____

Reasoning: _____

(b) What is the relationship between the amount of exercise I take, and my body’s energy level?

Hypothesis: _____

Reasoning: _____

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(continued)

(c) What effect does watering a plant regularly have on its growth rate?

Hypothesis: _____

Reasoning: _____

5. Complete the chart provided with your responses to question 4.

Independent Variable	Dependent Variable	Hypothesis