

Understanding Science

Directions: Use your textbook to complete the graphic organizer and respond to the statement.

1. Fill in the graphic organizer to describe a typical series of steps in scientific inquiry. Use the terms from the word bank. Each term is used only once.

Ask Questions Communicate Results Draw Conclusions Test Hypothesis

STEP #1



#2

Hypothesize and Predict



#3



#4

Analyze Results



#5



#6

Explain why critical thinking and skepticism are important to scientific inquiry.

Language Arts Support

LESSON 3

Text-Analysis Activity: Revising Hypotheses

A hypothesis is a statement of explanation for an observation that can be tested by scientific investigations. If a hypothesis is supported by an investigation, it will be retested to ensure consistency. If a hypothesis is not supported by the investigation, the results can be used to revise the hypothesis before it is tested again.

the steps of the scientific method in the paragraphs.
Directions: Read each scenario and answer the questions that follow.

Jennie and LaMonte wondered when the most students missed school during the school year because of illness. Their hypothesis was that the most students miss school because of illness in September, because students have recently returned to school and bring illnesses that spread from person to person. They looked up the school records for the past ten years and found that the greatest number of students missed school due to illness in the month of February.

- 1. In your own words, describe Jennie and LaMonte's original hypothesis.

- 2. Using the information they learned from the school records, write a revised hypothesis.

Last year, Vidal and Mia observed that birds ate the berries at the bottom of the bushes in the schoolyard first. After all the lower berries were gone, the birds worked their way up the bushes, finally eating the berries at the top. Vidal and Mia hypothesized that the birds ate the lower berries first because they ripened first, so the birds were attracted to their red color. To test their hypothesis, they used a nontoxic, odorless, flavorless, edible red dye to color all of the berries on three bushes. They left three other bushes untouched. They observed that the birds ate the lower berries on all the bushes, even on the untouched bushes.

- 3. In your own words, describe Vidal and Mia's original hypothesis.

- 4. Using the information from Vidal and Mia's investigation, write a revised hypothesis.

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