

Canon Paleo Curriculum
Unit: The Nature of Science
Lesson Plan: 4

Activity Name: Can You Spot The Scientific Method

Supplies:

Worksheet - Can You Spot The Scientific Method

Preparation:

Copy worksheet for students

Concept:

Students learn to recognize a problem, a hypothesis, a conclusion, and the testing stage of a hypothesis.

Activity:

Students complete worksheets on their own.
The class discusses answers

Conclusions:

This activity clearly defines the different stages of forming and testing a hypothesis.
Students will gain a better knowledge of how to set up their own scientific experiment.

Time: 25-30 minutes

CAN YOU SPOT THE SCIENTIFIC METHOD CRITICAL THINKING/PROBLEM SOLVING

Name _____

Date _____

Class _____

Each sentence below describes a step of the scientific method. Match each sentence with a step of the scientific method listed below.

- A. Recognize a problem
- B. Form a hypothesis
- C. Test the hypothesis with an experiment
- D. Draw conclusions

- _____ 1. Stephen predicted that seeds would start to grow faster if an electric current traveled through the soil in which they were planted.
- _____ 2. Susan said, "If I fertilize my geranium plants, they will blossom."
- _____ 3. Jonathan's data showed that household cockroaches moved away from raw cucumber slices.
- _____ 4. Rene grew bacteria from the mouth on special plates in the laboratory. She placed drops of different mouthwashes on bacteria on each plate.
- _____ 5. Kathy used a survey to determine how many of her classmates were left-handed and how many were right-handed.
- _____ 6. Jose saw bats catching insects after dark. He asked, "How do bats find the insects in the dark?"
- _____ 7. Justin wondered if dyes could be taken out of plant leaves, flowers, and stems.
- _____ 8. Alice soaked six different kinds of seeds in water for 24 hours. Then she planted the seeds in soil at a depth of 1 cm. She used the same amount of water, light, and heat for each kind of seed.
- _____ 9. Bob read about growing plants in water. He wanted to know how plants could grow without soil.

- _____ 10. Kevin said, "If I grow five seedlings in red light, I think the plants will grow faster than the five plants grown in white light."
- _____ 11. Angela's experiment proved that earthworms move away from light.
- _____ 12. Scott said, "If acid rain affects plants in a particular lake, it might affect small animals, such as crayfish, that live in the same water."
- _____ 13. Michael fed different diets to three groups of guinea pigs. His experiment showed that guinea pigs need vitamin C and protein in their diets.
- _____ 14. Kim's experiment showed that chicken eggshells were stronger when she gave the hen feed, to which extra calcium had been added.

KEY FOR TEACHERS
CAN YOU SPOT THE SCIENTIFIC METHOD
CRITICAL THINKING/PROBLEM SOLVING

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Date _____

Class _____

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