

Elementary General Science





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Note to the Student

Record your ideas, questions, observations, and answers in the student book. Begin with "Think about This." After you read "Think about This," try to recall and note any experiences you have had related to the topic, or make notes of what you would like to learn.

Record all observations and data obtained from each activity.

You should do at least one "Dig Deeper" project each week. Your teacher will tell you how many projects you are required to do, but feel free to do more if you find an area that is especially interesting to you. The reason for the large number of projects is to give you choices. This allows you to dig deeper into those areas you are most interested in pursuing. Most of these projects will need to be turned in separately from the Student Journal, but use the Student Journal to record the projects you choose to do along with a brief summary of each project and the date each is completed.

Record the answers to "What Did You Learn."

The Stumper's Corner is your time to ask the questions. Write two short-answer questions related to each lesson that are hard enough to stump someone. Write your questions along with the correct answer or write two questions that you don't know and would like to know more about.

Some of these experiments should be done with the help of adult supervision. They have been specifically designed for educational purposes, with materials that are readily available.

ACTIVITY

1

Investigation #1 In the Beginning... God Created Dinosaurs!

Thinking About



Date:

The Activity: Procedure and Observations



Part A

Select a large dinosaur or an Ice Age animal and find the length of this animal from a reference book or the Internet. Make a beginning mark on the floor with a piece of masking tape. Measure the length of the animal with a measuring tape and mark its total length with another piece of masking tape.

1. Name the animal and tell how long it was._____

Cut several 3-foot strips of paper. Place the paper strips between the two pieces of masking tape.

- 1. How many strips of paper did it take to equal the length of this animal?
- 2. Describe the length in another way by estimating the number of cars that it would take to equal the length of this animal.

Drawing Board:

Repeat this activity with a small dinosaur or Ice Age animal.

- 3. Name the animal and tell how long it was._____
- 4. Tell how many strips of paper (or fractions of the paper) it took to equal the length of this animal.
- 5. Describe the length by estimating the number of cars (or fractions of a car) that it would take to equal the length of this animal.

Part B

Place several smooth rocks inside a baggie. Add a small amount of vinegar to the baggie to simulate stomach acid, along with a piece of lettuce. Now rub the baggie to simulate a plant-eating dinosaur walking around with the rocks rubbing against the vegetation to help digest it.

- 6. Describe what happens to the lettuce leaf in the bag.
- 7. What do you think rocks do in a dinosaur's stomach?
- 8. Why do you think vinegar was added to the baggie? _____

Part C. Optional

Use reference sources and find the length of the strides of your dinosaur or Ice Age animal (from Part A). Compare the strides of the large and the small dinosaur/Ice Age animal.



2.

1. Are dinosaurs classified as reptiles, amphibians, or mammals? 2. Did dinosaurs lay eggs?_____ 3. Are woolly mammoths classified as reptiles, amphibians, or mammals? _____ 4. Did woolly mammoths lay eggs? _____ 5. Compare the sizes of the smallest and the largest known dinosaurs. 6. Give examples of dinosaurs that walked on two legs. 7. Give examples of dinosaurs that walked on four legs. 8. What are gastroliths and what seemed to have been their purpose? 9. Give examples of some Ice Age animals. **Stumper's Corner** 10. Where have the remains of huge numbers of woolly mammoth been discovered?

Activity #1 S5