

Experiment Instruction Sheet

I. Question: Does water wear away rock?

Explore and See:

1. Get 2 sticks of chalk. Break them into pieces about ½" long.
2. Fill a jar ½ full with water.
3. Carefully drop all but one piece of the chalk into the water in the jar.
4. Screw the lid on the jar.
5. Predict what will happen to the chalk in the jar if you shake it for a long time. Write your prediction in your Earth Explorer Journal.
6. Hold the jar firmly in both hands and shake it as long as you can.
7. When finished shaking, compare the chalk in the jar with the piece of chalk you did not put in the jar.
8. What happened to the chalk in the jar? What caused this to happen? Was your prediction correct? Can water wear away rock? Write about what you have learned in your Earth Explorer Journal below the prediction you wrote earlier.

II. Question: Can wind move weathered rock?

Explore and See:

1. Get a shallow box.
2. Pour a bucket of sand into the box.
3. Put on your goggles.
4. Write what you think will happen in your Earth Explorer Journal when you blow on the sand with the straw .
5. Be the wind! Take a drinking straw and blow on the sand.
6. What happens?
7. Do you think the wind can reshape the Earth?
8. Write about what you have learned in your Earth Explorer Journal.

III. Question: Can water move weathered rock?

1. Get a shallow box or baking pan.
2. Put a bucket of soil in the box or pan.
3. Shape the soil into a mountain shape.
4. What do you think will happen to the mountain if you pour water on it?
Make a prediction. Write it in your Earth Explorer Journal.
5. Using a watering can, **gently** pour water on the top of your mountain.
6. Watch what happens as you pour the water on your mountain.
7. Did the water move the soil?
8. Was your prediction correct? Write about what you have learned in your Earth Explorer Journal.
9. Reshape the soil into a mountain.
10. Put leaves and sticks on one side of the mountain.
11. Predict what you think will happen to the side that has leaves and sticks on it. Write your prediction in your Earth Explorer Journal.
12. Using the watering can, gently pour water on top of your mountain.
13. Do you notice any difference in the action of the water on the side that was covered with leaves and sticks and the side that was only soil?
14. Was your prediction correct? Write about what you have learned in your Earth Explorer Journal.
15. Reshape the mountain again.
16. Predict what you think will happen if you **quickly** pour the water on the mountain. Write your prediction in your Earth Explorer Journal.
17. Use the watering can and quickly pour the water on the mountain.
18. What happens to the soil?
19. Does the speed of the water make a difference in how much soil is moved?
20. Was your prediction correct? Write about what you have learned in your Earth Explorer Journal.

Earth Explorer Activity 2

Name _____ Date _____

1. Draw a sketch to show what happened when you **gently** poured water on the mountain made of soil. (SC.H.1.2.5.3.1)

2. Draw a sketch to show what happened when you **quickly** poured water on the mountain made of soil. (SC.H.1.2.5.3.1)

3. What did you learn about the movement of water on soil? Circle the letter of the correct answer. (SC.H.1.2.5.3.1)

- a. Water mixes with the soil.
- b. Water poured quickly moves more soil.
- c. Water poured slowly doesn't move soil.

4. Fill in the blanks using one of the bolded words:
(SC.D.1.2.4.3.1)

Weathering and **erosion** change the surface of the Earth.

The process of _____ causes rocks on the Earth's surface to crumble, crack, and break. The process of _____ occurs when these materials are carried away by wind and water to other places.

5. On the chart below, list 2 examples of slow changes in the Earth's surface and 2 examples of fast changes in the Earth's surface.
(SC.D.1.2.5.3.1)

Slow Changes	Fast Changes

6. Complete this sentence:
(SC.D.1.2.1.3.1)

Smaller rocks come from _____
_____.

7. Use a reference material in your room. Find the meaning of the word **precipitation**. Write the meaning. Then write the name of the reference you used to find it. (SC.H.3.2.1.3.2)

Precipitation - _____

Reference used - _____

Earth Explorer Activity 2
Answer Key

1. Accept all reasonable attempts. The sketch should indicate that the water moved some of the soil.
2. Accept all reasonable attempts. The sketch should indicate that more soil is moved when the water is poured quickly.
3. b. Water poured quickly moves more soil.
4. weathering, erosion
5. Possible answers might include:

Slow changes – weathering, erosion
Fast changes – volcanic eruptions, hurricanes, tsunais, earthquakes
6. larger rocks
7. Accept all reasonable responses. Possible response might be: The depositing of moisture or ice from the atmosphere to the surface of the earth (rain, snow, sleet, etc.).
Reference Used – Webster's Pocket Dictionary