

Lab Question

How are weathering and erosion related?

Before You Begin

Look at the materials that will be used during this lab. How do you think these materials could be used to learn about weathering and erosion? *Do not look ahead in the lab.* (You can discuss with your group before writing your answer.)

Purpose:

During this experiment, you will construct a model of weathering and erosion. This model will help you to visualize more clearly the processes of weathering and erosion and how they occur together in nature.

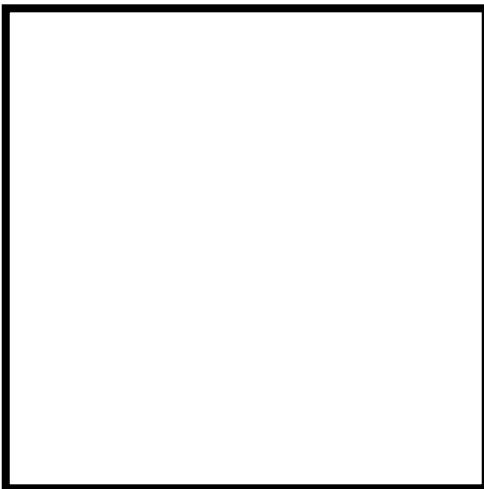
Remember to answer all questions listed in the Procedure section *during* class while working on the lab. Conclusion Questions should be answered after the lab is complete.

Materials

- colored pencils or crayons
- graduated cylinder or any container with 50-100 mL of water
- pipette (water dropper)
- skittles (1 per student)
- tin pan (or shallow container of any kind)

Procedure:

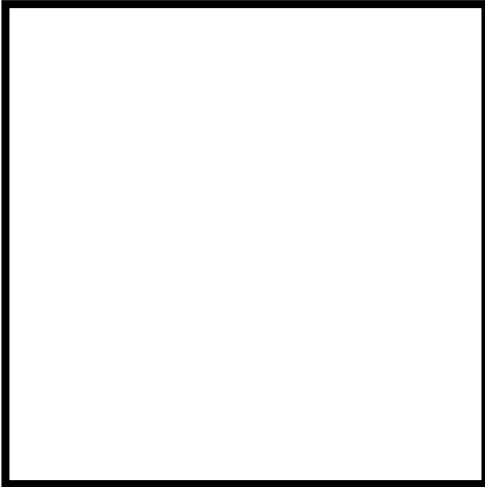
1. Place your skittle in the dry container or tin pan.
2. Use the pipette to squeeze 10 drops of water onto your skittle from a distance of about 6 inches. Observe the skittle closely.
3. Record what you see. Use crayons or colored pencils to draw it in the box below and answer the question.



10 drops

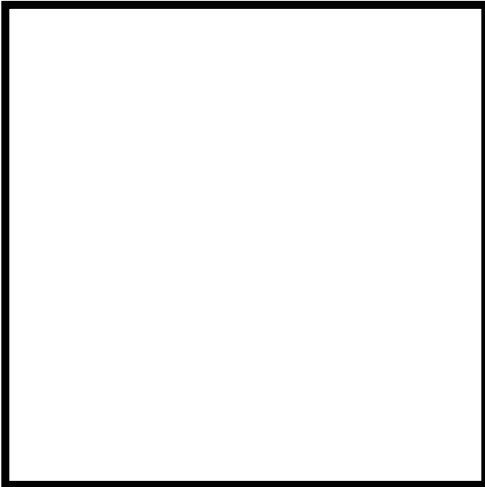
What is happening?

4. Repeat steps 2 and 3 after 20, 30, 40, and 50 drops.



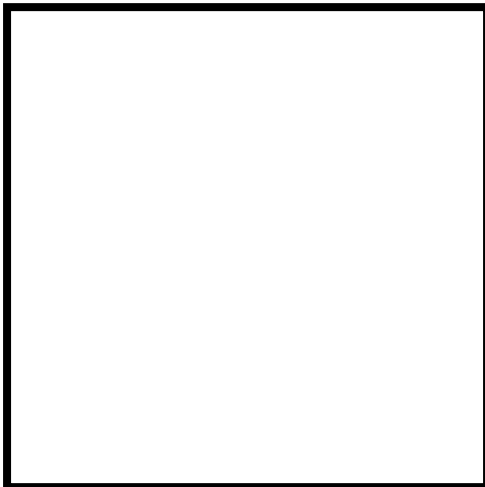
20 drops

What is happening?



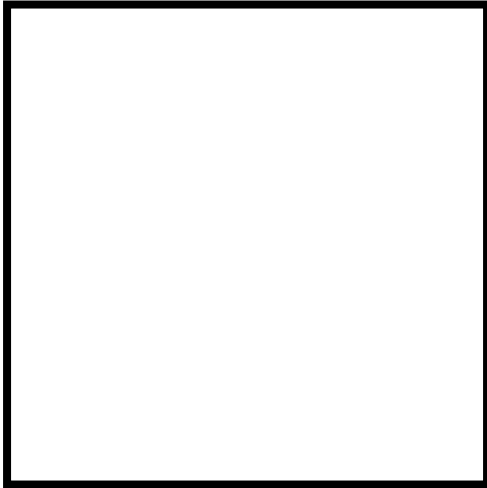
30 drops

What is happening?



40 drops

What is happening?



50 drops

What is happening?

Conclusion Questions

1. When did mechanical weathering occur during this lab?

2. When did chemical weathering occur during this lab?

3. When did erosion take place during this lab?

4. What did the water represent in this lab?

5. What did the Skittle represent in this lab?

6. What did the color on the Skittle represent in this lab?

7. What did the tin pan represent in this lab?

Weather and Erosion Lab Answer Key

Conclusion Questions

1. When did mechanical weathering occur during this lab?
When the water dropped on the skittle and it made some of its color come off.
2. When did chemical weathering occur during this lab?
When the color changed into a liquid.
3. When did erosion take place during this lab?
When the color from the skittle floated away in the water.
4. What did the water represent in this lab?
Water in nature, rain.
5. What did the Skittle represent in this lab?
A rock
6. What did the color on the Skittle represent in this lab?
Part of a rock that can be chemically changed by forces in nature.
7. What did the tin pan represent in this lab?
The Earth's surface