Rock Weathering

Procedure

Safety: Wear goggles during this activity.

1. **Experiment** Using a nail, scratch the calcite over a plastic bowl to make a small pile of dust. Tilt the bowl to spread the dust as evenly as possible across the bottom and up the sides.

2. **Observe** Use the eyedropper to drip several drops of water along one side of the bowl. Observe what happens to the dust that the water meets. Use a hand lens to observe more closely. Record your observations.

3. **Predict** What do you think will happen to calcite when it comes in contact with vinegar? Write your predictions.

4. **Observe** Using another bowl, repeat Step 1. Then repeat Step 2, but use vinegar instead of water. Observe and record what happens.
Conclusion

1. **Compare** Describe how the calcite dust changed when it came in contact with water and with vinegar. Compare the two changes.

2. **Hypothesize** In nature, how could pieces of rock change when exposed to rushing water? How could rock change when exposed to acids? Use your result to support your hypothesis.

3. **Infer** Why are most caves and caverns formed in limestone, a kind of rock made from calcite?

**Experiment**

Can water break apart rocks when it freezes into ice? Design an experiment using chalk, water, a plastic bag, and a freezer. Write a report to communicate the steps you followed, your results, and your conclusions.