

Compare Matter

Procedure

1. **Collaborate** Work with a partner. Record your observations in the chart below.

Method of Observation	Sugar Cube	Granulated Sugar	Powdered Sugar
Touch			
Sight Without Hand Lens			
Sight With Hand Lens			

2. Place a sugar cube, a spoonful of granulated sugar, and a spoonful of powdered sugar on a sheet of black paper. Label each sugar sample. **Safety:** Do not taste the sugar samples.
3. **Observe** Look at the color and texture of each sugar sample. Break off a small piece of the sugar cube and rub it between your fingers. Now rub a small amount of each of the other two samples between your fingers. Note how hard or soft each sample feels. Record your observations in your chart.
4. **Observe** Use a hand lens to observe each sugar sample. Record your observations.

Conclusion

Write the answers to the questions below.

- 1. Compare** What differences did you observe when you looked at the sugar samples without a hand lens? With a hand lens? How were the samples alike?

- 2. Infer** Which do you think contains more small pieces, or particles, of sugar—the spoonful of granulated sugar or the spoonful of powdered sugar? Explain.

Investigate More!

Design an Experiment Tiny solid particles float in the air outdoors. Using clear sticky tape, plan an experiment to collect these particles. Then use a microscope or hand lens to look at them. Record the results of your experiment here.

