

Marshmallow Demo

Summary

Students will discover that solid particles when heated will expand.

Main Core Tie

SEEd - Grade 6

[Strand 6.2: ENERGY AFFECTS MATTER Standard 6.2.3](#)

Time Frame

1 class periods of 45 minutes each

Group Size

Large Groups

Materials

marshmallows
microwave
graham crackers and chocolate bars (optional)

Instructional Procedures

This can be done the same day as the [Big Stinky Demo](#).

The teacher will show a large Marshmallow to the class. Then put it onto a cracker and heat it up for 5 seconds.

Take it out quickly and show to the students.

Try heating it up for 10 and 15 seconds.

Explain that as the particles are heated up they move faster, thus expand.

You can have students bring graham crackers and chocolate to make S'mores.

This is a great one to have the students take home and show to their parents. You may want to give them extra credit for bringing back a signed paper that they explained it to their parents.

Scoring guide: These are questions that you can ask the students. If they answer it correctly they get to eat the accelerated particles.

What happens to particles when you heat them up?

What happens to the volume when you heat up the particles?

What happens to the particles when you cool them off?

What happens to the Volume when you cool off the particles?

Describe the particles in a gas?

Describe the particles in a solid?

Describe the particles in a liquid?

Why did the marshmallow get big?

Why does the marshmallow get little if you let it sit a little bit?

Why does the chocolate melt?

What is happening to the particles in the chocolate?

How and why did the principal find out that we were making s'mores?

Bibliography

Lesson Design by Jordan School District Teachers and Staff.

Authors

[Utah LessonPlans](#)