[an error occurred while processing this directive]

Activities

Zapping with Microwaves

Name: _____ Date: _____

You fly through the door, grab a frozen snack, toss it in the microwave, and zap it. Soon, you're devouring a steaming snack. You'll learn how microwaves work in this Planet Diary activity.

Directions

- Plug in this Virtual Microwave. Hold the shift key and click *Top View* of the tray (below the oven) to add marshmallows to the tray. Click *Start*, cook the marshmallows for 30 seconds, then *Stop*. Look at the marshmallows inside the oven and in the Top View. See the pattern? Answer Workspace question 1.
- Why is there a pattern in how the marshmallows cook? Go to Why Does a Microwave Oven Have Hot Spots? Read the explanation, then answer question 2.
- Return to the Virtual Microwave. Scroll to the conversation between Dr. Lee and Alex to find out more about how microwaves work. Answer question 3.
- Read What Microwaves Do to Water, Part 1. Experiment with the interactive magnet, then answer question 4.
- Read Water and Friction, then answer the last question.

Workspace

1. Describe the pattern of hot spots and cold spots you observe.

2. Why do you see a checkerboard pattern of hot spots and cold spots inside the oven?

3. Summarize how microwaves heat water molecules in food.

4. Explain how the water molecules in food cooked in a microwave are like a compass and magnet.

5. Where does the friction that creates heat in a microwave oven come from?

Copyright © Savvas Learning Company LLC. All Rights Reserved
Privacy Policy Terms of Use Rights and Permissions

Find us on Facebook Follow