Name

Date



What's the Matter with My Jell-O? Family Page



## **Question:** How does salt, sugar, Styrofoam packaging, or room temperature affect the phase change of Jell-O?

## What's Happening in Class?

We are studying the the matter concepts of phase change and physical change using Jell-O. Each team of students is conducting four controlled investigations to determine the effect of salt, sugar, Styrofoam packaging, or room temperature (instead of refrigeration) on the phase change of Jell-O. For more specific information on this lesson, visit the *Science for Ohio* website at **www.environmentaleducationohio.org** and click on *What's The Matter With My Jell-O?* 

## What Can We Do at Home?

- 1) Discuss the following terms and come up with your own examples.
  - --phase change: when matter changes from one state (solid, liquid, gas) to another *Example:* When Jell-O cools, it phase changes from liquid to solid.
  - --*freezing point*: the temperature at which liquid matter becomes solid as it cools *Example*: When cooling, Jell-O has a freezing point of 80-85 degrees Fahrenheit.
  - --*melting point*: the temperature at which solid matter becomes liquid when it is heated

*Example:* If heated, Jell-O will reach its melting point around 80-85 degrees. --physical change: when the physical properties of a substance change without

becoming a different substance *Examples*: Jell-O hardens from liquid to solid snow melts to water wood

*Examples:* Jell-O hardens from liquid to solid, snow melts to water, wood is cut into pieces.

2) Investigate the relationship between salting roads in winter and phase change. Find out what is being done in your area to reduce the impacts of salt on local ecosystems.

3) Consult the following resources.

Books

*Eyewitness: Matter* by Christopher Cooper Explores the amazing world of matter from the earliest ideas of the four elements to the latest discoveries about the atom. ISBN 0-789-448866 World Wide Web

Beakman and Jax

tell where Jell-O comes from. (You might not want to know!) www.beakman.com/jello/jello.html