

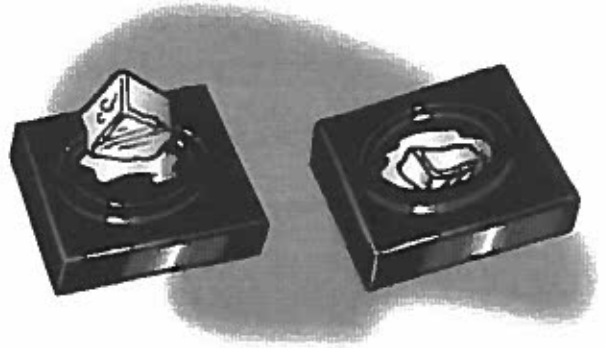
Changing State - Melting Activity Sheet

Objectives:

1. To explain the process of _____ and molecular motion that causes a solid to _____.
2. To explain how the _____ is different from most other substances when it changes state from a _____ to a _____.

DEMONSTRATION

1. You watched a piece of ice melt. Where do you think the energy came from to melt the ice?



2. What do you think happened to the speed of the molecules in the ice when it was heated?

ACTIVITY

Work with your group to design a way to make ice melt faster. You will need to show that your method really does make ice melt faster, so be sure to use a control. Check with your teacher before conducting your experiment.

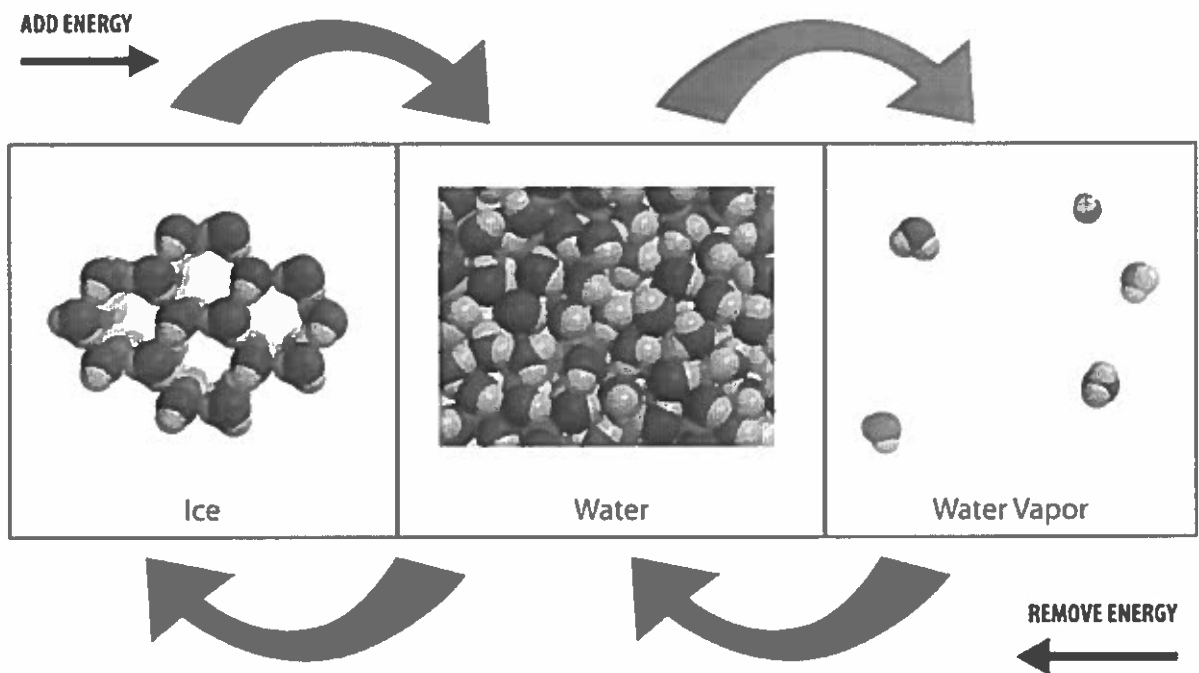
Question to investigate

Will _____ make ice melt faster?

3. Does your method make ice melt faster?

How do you know?

4. The following diagram uses the space-filling model of water to represent the arrangement of water molecules when it is a solid, liquid and a gas.



How are the state changes of water similar to the state changes in most other substances?

How are the state changes of water different from the state changes in most other substances?

5. Do regular ice and dry ice melt in the same way?

How do you know?

6. You saw that dry ice sublimates very quickly in water. Why does it sublimate even faster in hot water?