ACTIVITY AT HOME

PINK PALACE MUSEUM

Chemistry

# DISAPPEARING CANDY

Discover how temperature effects how things dissolve.

## Materials

3 clear containers

3 pieces of the same hard candy (M&Ms, peppermint, ect.)

Water

Ice

Paper

Marker

Note: Do not eat or drink anything used in this activity.

## Procedure

- Fill one of your containers with ice water, another with room temperature water, and another with hot water.
- Place each glass on the printer paper and use the marker to write a label next to each glass (room temp, cold, hot).
- Drop one piece of candy into each glass.
- Observe what happens for a few minutes.

## Results

The candy dissolved faster in the warmer water than the cooler water.

## Why?

The candy dissolves faster in the warmer water than in the cooler water because warmer water has more energy. The molecules in the warm water are moving faster than the molecules in the cool water. This means the water molecules in the warmer water will bump up against the molecules in the candy more frequently and break them apart more quickly. The molecules in the cooler water are moving around more slowly, so they bump up against the molecules in the candy less frequently and dissolve it more slowly.

This activity was adapted from the American Chemical Society's "Middle School Chemistry" activities. You can find more activities on their website, acs.org