

3.1

QUICK GROWING CRYSTALS

How can crystals grow in natural environments?

MATERIALS

- Epsom salt
- Hot water
- Clear cup/bowl/beaker
- Food coloring

DIRECTIONS

1. Add 120 mL of hot tap water (boiling or close to it) to beaker, stir in 120 mL of Epsom salt until dissolved.
2. Add more Epsom salt if some undissolved crystals do not rest at the bottom of the container after stirring for at least 1 minute (must have a super saturated solution).
3. Add a couple of drops of food coloring if you want colored crystals.
4. Put the beaker in a refrigerator, if possible. Let sit several hours or overnight.
5. Pour off the remaining solution to examine the crystals.

REFLECTION

1. Describe the process that is responsible for the formation of the crystals you grew in the container.
2. Name a mineral that is used every day that formed by this same method in the environment.
3. Identify the crystal form that most closely represents the crystals you just grew from the image below.

Crystal Habit					
Cubic					
Tetragonal					
Hexagonal					
Orthorhombic					
Monoclinic					
Triclinic					

Source: Ohio Oil and Gas Energy Education Program