

Crystals In Space

Activity Objectives

- To investigate why researchers grow protein crystals on an International Space Station
- To grow crystals
- To think about how the microgravity environment may change how students conduct the experiment

Materials

- ✓ 250 ml of warm water
- ✓ Spoon
- ✓ Salt
- ✓ Pencil
- ✓ Two drinking glasses
- ✓ 15 cm piece of string

Instructions

1. Pour the warm water into a glass.
2. Pour the salt into the water, stirring until the salt dissolves. Continue adding salt until no more will dissolve. Some undissolved salt will remain at the bottom of the glass.
3. Pour the clear salt water into another glass. Leave the undissolved salt in the first glass.
4. Tie the string around the pencil.
5. Lay the pencil across the top of the glass, allowing the string to hang down into the water.
6. Place the glass in a protected place.
7. Check the glass weekly.
8. Once crystals form, check the glass daily.

Questions

How long did it take for the first crystals to form?

What did you notice on your daily observations?