

Solution Formation at Different Temperatures

Chemicals and Equipment Needed

- d-H₂O
- Ice
- KMnO₄—F5
- 2-600 mL tall beakers — P3
- 2-1 L beakers — Q1
- Microspatula — U1
- Hot Plate — A4
- 2 white backgrounds — A1
- Document camera — office

Preparation

- Heat water in beaker before class. Mix ice and water in the second beaker
- On delivery, place the 600 mL beakers on the backgrounds and provide the beakers of cold and hot water and the hot plate.
- Adjust the document camera to display both 600 mL beakers

Presentation

- Pour hot water into one 600 mL beaker and cold water into the other, making sure to avoid pouring ice into the vessel.
- Use the microspatula to add a small amount of KMnO₄ to each of the beakers and observe the different rates of dissolution depending on temperature.

Clean-Up

- Pour solutions down the drain. (they are very dilute)