

# CREATEKIT™

## *Cooler Lesson Directions Overview*

### **Equipment List**

- 25 Foam Sheets (8½" x 11")
- 100 Cardboard Sheets (8" x 10")
- 1 Box Bubble Wrap (12" x 175')
- 24 Felt Sheets
- 2 Glue Guns
- 24 Glue Sticks
- 2 Rolls Duct Tape
- 6 Thermometers

### **Learning Objectives**

1. Students will use the Engineering Design Process to create an insulated cooler intended to slow conduction and convection and keep a cup of ice water cold as long as possible.
2. Students will test the effectiveness of their cooler design by measuring the temperature of a cup of ice water at designated time intervals and graphing the results.

**Grade Levels:** 6-12

### **Vocabulary Covered**

- Insulation
- Convection
- Conduction

### **NGSS Topics Addressed**

- Energy
- Engineering Design