

Newton's Law of Cooling Lab

Name _____

Definitions:

- **Temperature** is how hot or cold something is.
- Energy transferred from one body to another because of a temperature difference is called **heat**.

Background:

The transfer of heat from a body with high temperature to a body with lower temperature runs your car's engine and keeps your food cold in your refrigerator. Let's investigate how heat moves in time.

Equipment:

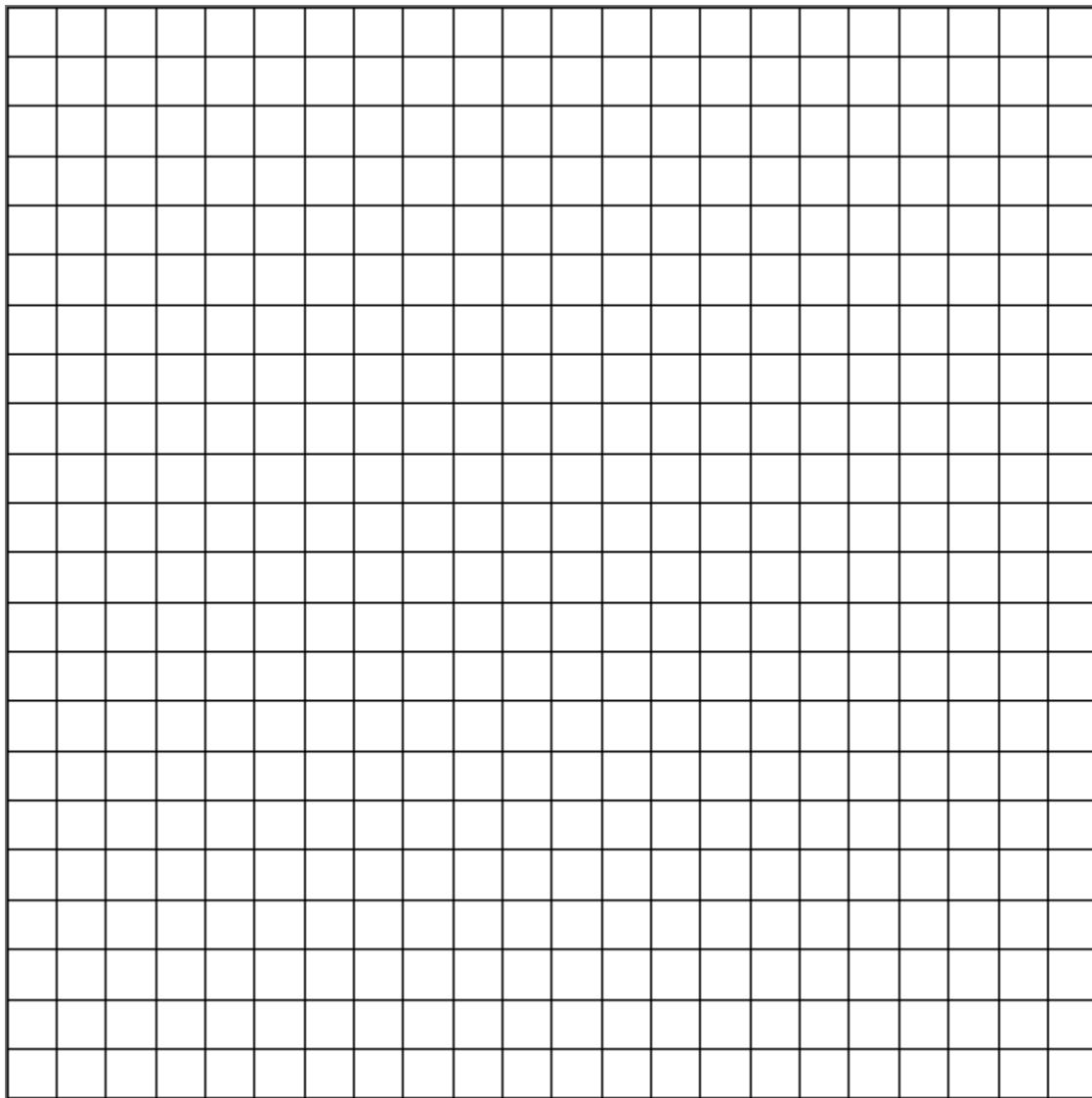
- Basic Stamp 2 with temperature probe
- 100 mL beaker of room temperature water
- Ice bath

Procedure:

Place temperature probe in beaker with room temperature water. Begin recording its temperature with the temperature probe. Record its temperature every 15 seconds for 5 minutes.

Analysis:

Plot your results on the graph below.



Questions:

1. What do you expect the temperature to be at 360 seconds? 900 seconds?
2. Will the water in the beaker ever be 0° Celsius? Why?