



Name: \_\_\_\_\_

Class: \_\_\_\_\_

## What Is Freezing Point? Science Experiment

### You will need:

- Three identical clear plastic cups
- One or two trays of ice cubes
- Jug of water
- Salt
- Teaspoon
- Cooking thermometer
- Marker pen

### What to do:

1. Write 'Ice' on cup 1, 'Ice + Water' on cup 2, 'Ice + Water + Salt' on cup 3.
2. Fill cup 1 to the top with ice cubes only.
3. Fill cup 2 with  $\frac{2}{3}$  ice cubes and  $\frac{1}{3}$  water.
4. Fill cup 3 with  $\frac{2}{3}$  ice cubes,  $\frac{1}{3}$  water and 3 tea spoons of salt.
5. Using the cooking thermometer, record the temperature of each cup in the table below:

Record results:					
Cup	After 1 min	5 min	10 min	15 min	30 min
1					
2					
3					

### Other observations:

1. Which cup stayed coldest the longest? Why? \_\_\_\_\_  
\_\_\_\_\_
2. Which cup recorded the greatest rise in temperature after 30 minutes? Why? \_\_\_\_\_  
\_\_\_\_\_
3. Which cup melted quickest? Why? \_\_\_\_\_  
\_\_\_\_\_
4. What is the temperature at freezing point? \_\_\_\_\_  
\_\_\_\_\_
5. How does salt affect ice? \_\_\_\_\_  
\_\_\_\_\_
6. How would the air temperature affect the melting of the ice cubes? \_\_\_\_\_  
\_\_\_\_\_

**FACT:** The oceans don't freeze even when the temperature is below  $0^{\circ}\text{C}$  because salt water freezes at a lower temperature than normal water.