

Melting Ice with Salt

Section: Properties of Matter; Topic: States of Matter

Name: _____

Date: _____

Inquiry Question

Write down what you'll be learning today! What do you want to understand?

Procedure

1. Fill 2 clear cups halfway with equal amounts of ice
2. Add 1 tablespoon of salt to one cup, but do not add any salt to the other.
3. Observe the two cups every five minutes for 30 minutes. Observe how much water is collecting at the bottom of the cups.
4. Measure the depth of the water in each cup using a metric ruler.

Observations, Data Collection & Analysis

Write down your observations below.

1. Research and record the temperatures at which pure water changes states from liquid to solid (freezing point).

2. Record your observations after 5 minutes of when salt is added to the cup. Does the ice in each cup look different? What changes are happening? What does the salt do to the ice?

3. Use the table below to measure and record the amount of collected in each cup.

Time	Amount of Water (cm) in the Cup of Ice	Amount of Water (cm) in the Cup of Ice and Salt
5 minutes		
10 minutes		
15 minutes		
20 minutes		
25 minutes		
30 minutes		

4. Does the ice melt faster in the regular cup or in the cup with salt? Why?

5. What is your control in this experiment? Explain.

6. What are some examples of how salt can be used in freezing temperatures?

7. Salt is also placed in water when water is boiled at high altitudes. Why?
