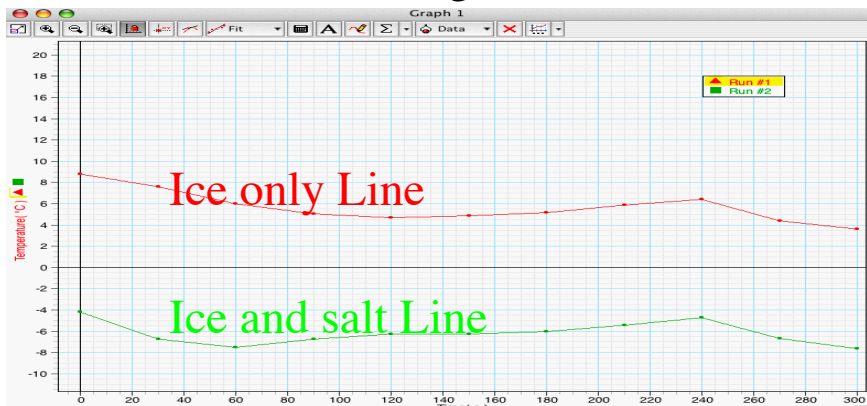


It's Freezing Discussion



Why does adding salt to ice make it colder?

The melting/ freezing point of water is _____ °C.

By adding salt to ice it _____ the melting/ freezing point to _____ °C.

Heat energy is needed to change _____ ice to _____ water because.....

Discussion Questions:

- 1
- 2
- 3
- 4
- 5

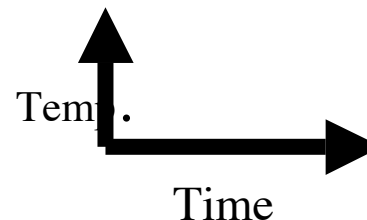
See next page for questions

It's Freezing!!!

1. Problem: What is the freezing/ melting point of water?
How will adding salt change the temperature of ice?
2. Find definitions for Melting/freezing point:
3. What does temperature tell us about the motion of molecules?
4. Information: We use salt in making ice cream
We use salt on roads to melt ice.

Hypothesis: I think that adding salt to ice will make the temperature..... BECAUSE.....

Predict how the temperature will change as your ice melts. Add a line to predict what the temperature will do when you add salt.



Data Analysis

	Ice Only	Ice + Salt
Final Temp.		Final Temp.
Start Temp.		Start Temp.
Temp. Change		Temp. Change

It's Freezing Discussion

Questions from handout

1. What happened after you added the salt to the ice? Was the temperature above or below the ice only?
2. What is the only factor that could have caused the changes shown in question 1? What does this tell you about the freezing point temperature of salt water compared to fresh water?

Use page 260 to give explanation.

3. Heat energy is needed to change phase from a solid to a liquid. List the possible sources of the heat needed for this phase change in your beaker.

Use page 260 to give explanation.

4. Explain how we could use the information we found out about temperature changes in salt water in this experiment to make ice cream.

5. In the radiator of your car you put a combination of antifreeze and water to keep your car engine cool in the summer and prevent the radiator from freezing in the winter. Explain how you think this works in terms of what you saw in the experiment you just did.

Use page 261 to give explanation.

It's Freezing!!!

Problem: What is the freezing/ melting point of water?
How will adding salt change the temperature of ice?

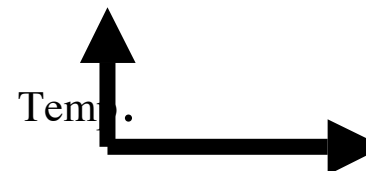
Find definitions for Melting/freezing point:

What does temperature tell us about the motion of molecules?

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Predict how the temperature will change as your ice melts. Add a line to predict what the temperature will do when you add salt.



Data Analysis

Ice Only		Ice + Salt	
Final Temp.		Final Temp.	
Start Temp.		Start Temp.	
Temp. Change		Temp. Change	