

# Science Packet 1



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

Date: \_\_\_\_\_

Teacher: \_\_\_\_\_

## Challenge:

Can you "fish" the ice out of the cup using the string? How will salt change the ice in the cup? Write down your prediction.

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## Materials:

1. Cup
2. Water
3. Ice
4. Salt
5. String

## Directions:

1. Check and make sure you have all your materials.
2. Fill a cup with water and three ice cubes.
3. Place the string in the water across the top of the ice cubes. Leave the string sitting on top of the ice cubes.
4. Sprinkle some salt into the cup across the ice cubes and string.
5. Wait one minute by counting to 60.
6. Slowly pull the string out. Some people are able to "fish" the ice cubes out with the string. If this didn't work for you, make a change and try again. Try using more salt in Step 4 or counting to a higher number in Step 5.

## Reflection:

Explain what happened during this experiment and why.

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## Science Information:

The temperature of 32 degree Fahrenheit ( $^{\circ}\text{F}$ ) is the freezing point of water. When the temperature is  $32^{\circ}\text{F}$  or colder, water freezes and becomes ice. When the temperature is  $32^{\circ}\text{F}$  or warmer, ice melts and becomes water. An ice cube is about  $32^{\circ}\text{F}$ . When salt is sprinkled on ice, it changes its freezing point to temperature colder than  $32^{\circ}\text{F}$ . This causes the ice to melt.

# Science Packet 2



## A Day of Snow!

**\*Fill in the lines with descriptive words. Use the words in parenthesis to help you write a sensory word. A metaphor is when you compare one thing to another. \***

Today the weatherman said chance of snow, but how do I know?

I wake to find it cold as \_\_\_\_\_ (touch-metaphor)

Patently waiting until I feel the first \_\_\_\_\_ (touch)

While walking home I stop to hear \_\_\_\_\_ (sound)

Then I saw the \_\_\_\_\_ (sight)

As it floated to my outstretched tongue I thought, "This tastes like \_\_\_\_\_!" (taste)

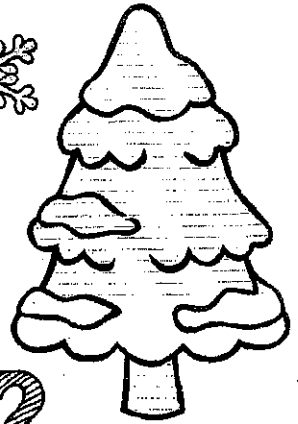
How odd it seems to be. It took condensation to make a cloud that brought this wet, tasty precipitation to me.

Oh please, oh please, sun in the sky, hide for a while so this treat will collect while I wait inside.

I cannot build a wonderful snowman with melting heat.  
But with evaporation, soon after there will be condensation.  
Then, once again, wonderful snow we may meet.



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



# Nature in Winter

## Sink or Float?

Winter Object	Prediction CIRCLE YOUR ANSWER	Result CIRCLE YOUR ANSWER
	<b>sink / float</b>	<b>sink / float</b>
	<b>sink / float</b>	<b>sink / float</b>
	<b>sink / float</b>	<b>sink / float</b>
	<b>sink / float</b>	<b>sink / float</b>

Put objects in water to see if they float.

# Science Packet 4

Name \_\_\_\_\_

**Directions:** Write a word from the word bank on each line below.  
Choose the word that best completes each sentence.

**WORD BANK:** \_\_cold, \_\_crystals, \_\_freezes, \_\_evaporates,  
\_\_clouds, \_\_gas, \_\_melt, \_\_snowflake, \_\_cycle, \_\_water

## How Do Snowflakes Form?

Have you ever wondered how snowflakes form? It all starts when water from the earth's surface 1) \_\_\_\_\_, or turns from a liquid to a gas. This 2) \_\_\_\_\_, or vapor, condenses into tiny droplets of water. Cold air 3) \_\_\_\_\_ these water droplets and turns them into ice crystals. Water vapor continues to collect on the ice crystals making them larger and heavier.

Eventually, the ice crystals fall from the sky leaving the

4) \_\_\_\_\_ they once helped form. As the ice crystals fall, they pick up more 5) \_\_\_\_\_ vapor and continue to get larger. Sometimes ice crystals come into contact with warmer air as they fall closer to the earth. The warm air causes the crystals to

6) \_\_\_\_\_ a little. This melting acts like glue, making it easier for ice 7) \_\_\_\_\_ to stick together and form a

8) \_\_\_\_\_. Once on the ground, snowflakes will stay frozen only if the temperature is 9) \_\_\_\_\_ enough.

When the snow melts and becomes water, the

10) \_\_\_\_\_ begins all over again.

## How Do Snowflakes Form?

Have you ever wondered how snowflakes form? It all starts when water from the earth's surface evaporates, or turns from a liquid to a gas. This gas, or vapor, condenses into tiny droplets of water. Cold air freezes these water droplets and turns them into ice crystals. Water vapor continues to collect on the ice crystals making them larger and heavier. Eventually, the ice crystals fall from the sky leaving the clouds they once helped form. As the ice crystals fall, they pick up more water vapor and continue to get larger. Sometimes ice crystals come into contact with warmer air as they fall closer to the earth. The warm air causes the crystals to melt a little. This melting acts like glue, making it easier for ice crystals to stick together and form a snowflake. Once on the ground, snowflakes will stay frozen only if the temperature is cold enough. When the snow melts and becomes water, the cycle begins all over again.

Name \_\_\_\_\_

**Directions:** Reread the selection. Cut out each circle below. Lay the circles out in the correct sequence. Paste the circles onto the "Snowflake Timeline" in the correct order. The first and last steps are already in the correct place on the timeline.

ice crystals come into contact with warmer air	ice crystals pick up more water vapor
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ice crystals stick together and form a snowflake	cold air turns the water droplets into ice crystals	ice crystals fall from the sky
vapor condenses into tiny droplets of water	the crystals melt a little	water vapor collects on the ice crystals

Name \_\_\_\_\_

# Snowflake Timeline

