

Name _____

Date _____

How much air is in snow?

Question: How much air is in snow?

Research: Write several facts that you know about snow.

Hypothesis: I think snow is _____ % air, because...

Materials: Container with straight sides and a flat bottom, ruler, calculator, snow

Procedure:

1. Fill the container evenly with 10 cm of snow. Do not pack down the snow.
2. Bring the container indoors and leave it somewhere warm until all the snow melts.
3. Measure (in centimeters) the amount of water in the container after the snow has melted.
Try to measure to the nearest tenth of a centimeter. Water = _____ cm
4. Find the percentage of air in your snow. Follow these steps:
 1. Subtract. 10 cm of snow – _____ cm of water = _____ cm of air.
 2. Multiply. _____ cm of air * 10. This is the percentage of air in your snow.

Observations:

What did the snow look like at the start of the experiment? How did it feel?

What happened to the snow as it began to melt?

How long did it take the snow to melt?

Analysis/Conclusions:

Why do you think the snow and water levels were different?

What percentage of your snow was air? _____%

How do you think this is possible?

How can scientists use this information to predict snowfall amounts?

How might your results have changed if you packed down the snow?

Name _____

Date _____

What is in snow?

Question: What is in snow?

Research: How does snow form? What is in the air?

Hypothesis: I think snow contains...

Materials: 3 clear glasses, paper towels or coffee filters, rubber bands, snow

Procedure:

1. Fill each glass with snow from a different area.
2. Bring the glasses indoors and leave them somewhere warm until all the snow melts.
3. Observe the melted water in each glass. Write your observations below.
4. Wrap a clean paper towel or coffee filter around the top of each glass, using a rubber band to secure the towel in place. Carefully pour the water through the paper towel into the sink. What is left on the paper towel? Record your observations and repeat for each glass.

Observations:

| Glass 1 Snow Location _____ | | |
|------------------------------|-------------------------------|-------------------------------|
| What did the snow look like? | What did the water look like? | What did the towel look like? |
| | | |

| Glass 2 Snow Location _____ | | |
|------------------------------|-------------------------------|-------------------------------|
| What did the snow look like? | What did the water look like? | What did the towel look like? |
| | | |

| Glass 3 Snow Location _____ | | |
|------------------------------|-------------------------------|-------------------------------|
| What did the snow look like? | What did the water look like? | What did the towel look like? |
| | | |

Analysis/Conclusions:

Based on your experiment, what is in snow?

How do you think something other than water got in the snow?