

“Snow Science” BONUS BADGE

Instant Snow

1. Find the container of white powder in your Snow Science kit and place it on a plate or tray. Open the lid and slowly fill the little cup with water. Watch what happens.
2. Dump the “snow” out and play with it for a bit. *What does it feel like? Is it cold? Wet? Does it stick together like a snowball? I wonder why it puffs up so much.*
3. Use the eye dropper to add some more water. *Is it still growing?*
4. When you are done playing with it, spread it out and put it somewhere it won’t get knocked over. Check back on it after a couple of hours. Keep checking on it over the next day or so. *What do you think will happen? Will it melt?*
5. If you would like to learn the scientific explanation for what this mysterious powder is, use this link to watch a video that explains what is going on: <https://youtu.be/gTO-30j1N9o>

Ice Fishing

1. For this experiment, you will need a glass or bowl, a couple of ice cubes and some plain old salt. You will also need the piece of string from your Snow Science kit.
2. Place the ice cubes in the glass and fill it with water.
3. Wet the yarn and lay it across the top of one of the ice cubes.
4. Sprinkle salt on the string and wait a few seconds.
5. Slowly pick up the string and see what happens?
6. Were you able to pick up the piece of ice with the string? Why do you think it worked? If it didn’t work, try again. Try more salt, or less salt or maybe wait a little longer. See if you can pick up more than one ice cube at a time.
7. If you would like to learn the scientific explanation for what this mysterious powder is and what it is used for, use this link to watch a video that explains what is going on: <https://youtu.be/Y2b8CJtwQkg>

Flat Face Snowman/FAT Face Snowman

1. Use markers to draw a snowman face on the zip lock bag. (You don’t have to draw on your bag. This step is optional and is just for fun.)
2. Fill the bag with snow. It should have enough snow to cover it from top to bottom when it is lying flat, but not so full that it is puffed up.
3. Using your finger, poke the 2 white tablets into the middle of the snow.
4. Seal the bag tightly. Now you have to be a little patient and see what happens. What does it look like after 5 minutes? 10 minutes? 15 minutes? 30 minutes? 60 minutes? What is happening in this bag? Why?



Tie-Dyed Snowflake

1. Use markers to color one of the coffee filters. You don't have to be neat, just scribble with different colors. Be sure that there are spaces in between your colors.
2. Place the colored filter on top of the other two filters. Place the three filters on of a plate or a pile of newspapers. This will prevent the markers and water from making a mess.
3. Use the eye dropper to drip water on the filter. Watch as the colors run together. Let it dry completely.
4. Once the coffee filter is dry, fold it in half, then in thirds, then in half again. This method will give you that is divided into 6 sections, or a symmetrical hexagon, which is the shape real snowflakes have. For help, watch this video: <https://youtu.be/Q9BSDDM5jqc> (This folding method is a little complicated. You can fold it in half and half and half again to make 8 sections.)
5. Take your folded filter and cut shapes into it. Unfold and behold your beautiful snowflake!

