Crazy, Amazing Salt

Purpose:

The purpose of this geology activity is to introduce you to the most versatile of all minerals: Salt! That's right! Salt is a mineral—it's something that just exists on our planet and that is not organic. But did you know this:

1. Every cell in your body contains salt
2. Salt crystals are always cube shaped
3. You eat crystals whenever you eat salt
4. Salt is the only edible rock

Skills

By completing this activity, you will build the following amazing skills:

1. Learning to ask questions like a professional scientist
2. Learning to make informed guesses like a professional scientist
3. Naturally being able to fascinate people with amazing knowledge—like a professional scientist.

Get the picture? You're doing actual science here!

Tasks

1. Sit in a very serious pose, look out into the distance, and ponder the mysteries of salt. Ask yourself these very intriguing questions:
    a. Why do icebergs float in saltwater, but are not *made* of saltwater?
    b. What will happen if I try to make a salt-water glacier?
2. Based on all the things you just happen to know about salt, water, and cold temperatures, try to guess the answers to those two questions!
3. Now, EXPERIMENT!
    a. Collect about 15 ice cubes and ¼ to ½ Cup of ice
    b. Crush ice in a blender
    c. Put crushed ice in a shallow bowl and shape into a glacier
    d. Drop a dramatic amount of food coloring on your glacier. (Not really necessary if you don't have food coloring, but it does make it look cooler.)
    e. Sprinkle the salt on your glacier. At this point, your glacier might look something like this:

f. Return your glacier to the freezer.
g. Every few hours, come back and observe your glacier. What is happening? Is it staying the same? Is it changing? How?
h. At the end of the day go to bed. Science is hard work and you need your rest. In the morning, check on your experiment again. What does it look like now? Was your initial guess correct? It's okay if you were wrong! Scientists learn just as much from wrong answers as they do from correct ones. Why do you think you were right or wrong?
i. Go to the video at this link (https://www.youtube.com/watch?v=JkhWV2uaHaA) to learn more about why your experiment turned out the way it did.

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For more geology crafts and activities visit her website, MargaretFinnegan.com