

BUILD AN ICE CUBE IGLOO

WHAT YOU NEED:

- ☐ Slushy mix (made with a few ice cubes and tablespoons of water in the blender)
- ☐ 2-3 ice cube trays
- ☐ Salt
- ☐ Water
- ☐ Teaspoon
- ☐ Baking sheet
- ☐ Freezer space

WHAT YOU DO:

- 1 You'll need around 50 ice cubes in various sizes. Make half the ice cubes full sized. The other half should be an assorted sizes made from filling the ice cube trays half and three-quarters full.
- 2 Sprinkle salt on the cookie sheet. Make a circle with 12 ice cubes and place in the freezer until completely frozen.
- 3 For the second row, dip one side of each ice cube the salt. Center each cube, salty side down, on the seam between two cubes from the bottom row (like brick walls). Use the slushy mix to carefully fill the gaps. Refreeze.
- 4 Repeat step 2 making each successive layer with smaller and smaller cubes. Each new row should be smaller than the one before, creating a dome. Refreeze as necessary. Continue until only a small hole in the top center remains.
- 5 Make a door two with parallel rows of ice cubes and smaller ice cubes placed on top. Use slushy mix to fill the gaps.
- 6 Carefully pat a thin layer of slushy mix over the entire igloo and then refreeze for 2-3 hours.



WHAT HAPPENED:

The salt works as an adhesive by melting the ice cube where you dipped it. The melted part then “sticks” to the frozen cubes below. The salt works by lowering the freezing point of the ice cube. Freshwater freezes at 32° F, but saltwater freezes at 28.8° F. In order for the salty ice cube to stay frozen, the side with the salt on it would need to be below 28.8° F. Since room temperature is often around 70° F, the ice melts.