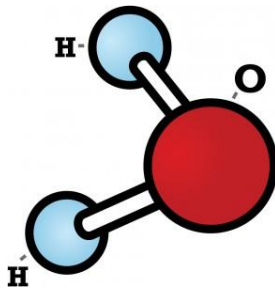


Teaching about Snowflakes: A Flurry of Ideas for Science and Math Integration (Teach before students create salt snowflakes)

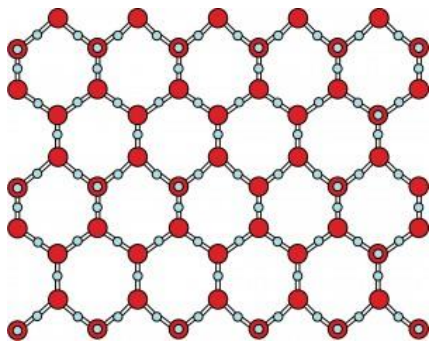
Did you know that while no two snowflakes are exactly the same, they are all six-sided? Snowflakes' hexagonal shapes are due to the molecular structure of ice.



As you might know, each water molecule is made of two hydrogen atoms bonded to one oxygen atom and looks something like this:



As water freezes, the molecules are forced to align themselves into a very particular structure – a hexagonal lattice that is the basis for the six-sided snowflakes.



This shape also helps explain why water expands as it freezes, while all other solids contract. Ice takes up more space as a solid and is therefore less dense, meaning that ice floats in liquid water. No other compound behaves this way!

Rainbow Snowflakes and Color "Crawling"!



Supplies: food coloring, coarse salt, liquid glue, pencil, construction paper

1. Draw a simple snowflake design on construction paper and trace it with liquid glue.



2. Sprinkle coarse salt over the glue and shake off the excess into the trash or a cardboard box.



3. If you want to add color to the snowflake, use food coloring to add color on top of the coarse salt. Discuss what will happen to the colors if they decide to use different colors (color mixing)

