

Snowflakes

Goal: To understand the science behind snowflakes, and then make our own!

How are snowflakes formed?

Snowflakes are formed when water vapor freezes around a tiny particle of dust in the clouds. Then, as this particle moves through the clouds, more water vapor freezes to it. Eventually, the snowflake becomes heavy enough to fall from the clouds down to the ground.

Why do snowflakes always have six sides?

When water freezes, the molecules connect together and always form hexagons. As more molecules are added, they form branches on each of the six sides.

Why are all snowflakes different?

You have probably heard that no two snowflakes are the same, but why is this true? It can take up to 100,000 water vapor droplets to make one snowflake. It is very unlikely that all 100,000 droplets of one snowflake could arrange themselves in exactly the same way as another snowflake.

