

Evidence is crystal clear: No two snowflakes are alike

By Washington Post, adapted by Newsela staff on 02.21.20

Word Count **367**

Level **410L**



Image 1. All snowflakes have their own unique structure. Photo: Damian McCoig/Unsplash

Most people have heard that no two snowflakes are the same. So many snowflakes fall from the sky every winter. Could it really be true?

Jason Benedict is a scientist. He is also a crystal expert. He works at the University of Buffalo. It is in New York. Mr. Benedict said the answer is yes.

A snowflake begins with a small piece of dust or dirt. Then water in the air starts sticking to it.

Mr. Benedict said that small piece of dust or dirt is important. It allows snowflakes to stick together. It gives the water something to hold onto.

Ice Crystals Take Many Shapes

These ice crystals take many shapes as they stick together. Temperature has a big effect. So does the air. The winds blow. This has an effect, too. This is why snowflakes are all different. The effects of the wind and temperature on a snowflake will never be the same twice.

"It just won't happen," Mr. Benedict said.

Can a snowflake's shape tell you if it will be good for making snowballs? Well, kind of. Temperature is what decides.

Light and fluffy snow is great for skiing and sled-riding. Mr. Benedict said it comes from very cold temperatures. This is because all the water has frozen. Warmer temperatures make snow that has more water in it. It is best for making snowballs.

You can see how this works. Try it in your own home. You can use another kind of crystal.

Ask your parents before you do this. Get some sugar. Stand over a sink. See if you can turn a handful of sugar into a "snowball." It does not work. Right? Now add just a few drops of water. Try making a ball now.

Water Acts Like A Glue

"Liquid sugar starts to stick together," Mr. Benedict said. "The liquid water is acting almost like a glue."

Crystals are a big part of our lives. Snow and sugar are made from crystals. They are not the only things, though. Crystals are important parts of computers and medicine.

The next time little crystals fall from the sky, think about their story. Maybe you'll want to make crystals of your own.