# YOUNG EXPL@RERS

## LET IT SNOW, LET IT SNOW

Don't let Elsa fool you! Snowflakes won't appear at the flick of a wrist, but the way they're formed is just as magical.

Way up high in the sky when it is very cold (think below freezing—brrrr!), the invisible moisture in the air, called water vapor, will freeze onto a speck of dust, pollen, or ash. This forms a teeny, tiny ice crystal.

As the ice crystal travels through the sky, more water vapor can freeze onto it to form new crystals. As it gets larger and heavier, it tumbles down toward Earth, changing its shape along the way.

A snowflake will always have six sides because it's originally formed from a cluster of frozen water molecules with a hexagon (six-sided) shape. But each snowflake will also be unique because its shape changes depending on how cold it is and how much moisture is in the air.

## Become a Snowflake Explorer

Snowflakes don't always last, so check them out while you can! Try to catch falling snowflakes on a dark surface, like your jacket sleeve or a dark piece of paper. Make a "snowflake notebook" where you can write down the date, temperature, humidity (amount of moisture in the air), and the different kinds of snowflakes you observe. You can find temperature and humidity in a local weather report, or use an outdoor thermometer and hygrometer (a device that measures moisture in the air).

Bring a magnifying glass to help you see the different shapes. What patterns do you find? How many different kinds of snowflakes do you discover? Can you draw some of them? Do snowflakes look the same at the beginning, middle, and end of a snowfall?

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### Did You Know...

It can be too cold and dry for snow to form? That's because colder air holds less moisture, and if the temperature gets too cold, there may not be enough water in the air to form ice or snow.

#### More Snowflake Fun

Snowflakes come in lots of different shapes! Can you figure out the shape of yours? Visit **massaudubon.org/** youngexplorers for a helpful guide to snowflake shapes and instructions for making your very own paper snowflake.

