

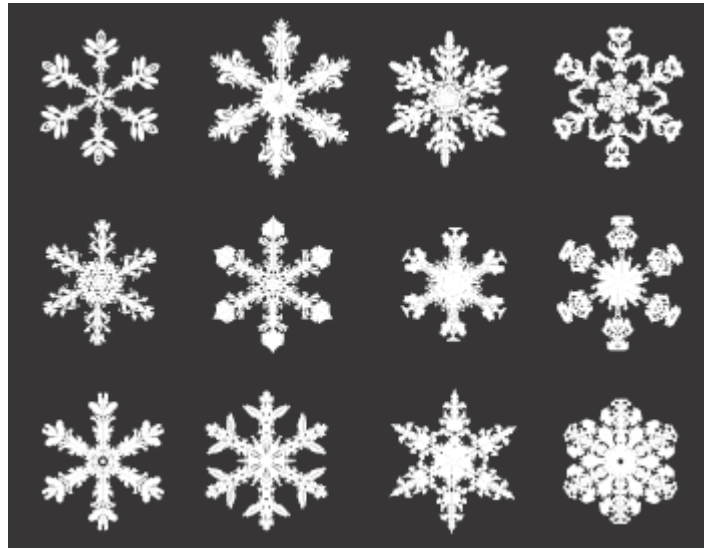
Enrich

Precipitation

Read the passage and study the figure. Then use a separate sheet of paper to answer the questions that follow the passage.

Snow Crystals

Thanks to a Vermont farmer who was fascinated with snow, we know a great deal about the shape and formation of snowflakes. In the late 1800s and early 1900s, Wilson Bentley studied thousands of snow crystals under a microscope. He took photographs of more than 5,000 of them and published about half of the photographs in a book. Some of the crystals look like feathery stars. Others look more like plates. Some of the different types of snow crystals Bentley observed are shown in the figure below.



Since Bentley's time, scientists have learned that the shape of snow crystals depends on the temperature and the amount of moisture in the cloud where they form. For example, the feathery star shapes on the left in the figure form when the amount of moisture in the cloud is moderate. When it is drier, platelike shapes like those on the right are more likely to form.

1. Although Wilson Bentley never found two snow crystals that were exactly alike, he did learn that snow crystals always have the same basic shape. From the snow crystals in the figure, what basic shape do you think snow crystals always have?
2. Most people rarely see snow crystals that look like the ones in the figure. This is because the snowflakes that reach the ground actually are composed of bits and pieces of many different snow crystals that are clumped together. The biggest snowflakes, which may be as much as several centimeters in diameter, are made up of pieces of hundreds of individual snow crystals. How do you think snowflakes form from individual snow crystals?

