Snow Science!

Have you ever caught a snowflake on your tongue? Just where does snow come from?

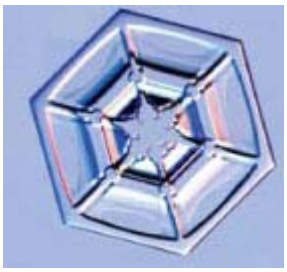
How Does Snow Form?

Snow forms when the air is cold and water freezes into ice crystals or snowflakes. These steps show how a snowflake forms:

1. A snowflake begins as bits of water inside a cloud.
2. When the temperature drops to 32 degrees, the bits of water freeze.
3. As the bits of water freeze, they start to stick together in an organized way.
4. That arrangement of frozen bits of water creates a beautiful ice crystal or snowflake.
5. As the snowflakes get heavy they fall from the clouds. It's snowing!
6. Snow is FUN! Now go outside and play!

Snowflakes Shape Up!

Snowflakes take different shapes depending on the temperature at which they form. Look at these close-up pictures of real snowflakes to see how.

Thin Plates form at 25 to 32 degrees.	
Needles form at 21 to 25 degrees.	

Hollow Columns form at 14 to 21 degrees.	
Sector Plates form at 10 to 14 degrees.	
Dendrites form at 3 to 10 degrees.	
snowflakecrystals.com	

Picture Perfect

Have you ever looked closely at snowflakes? Scientist Kenneth Libbrecht has. The snowflake pictures in this issue are real. Libbrecht took these pictures with a special camera called a **photo-microscope.** His camera has a microscope in it that makes the snowflakes look bigger so he can take pictures of them. When a snowflake falls on a dark, cold surface, Libbrecht gently picks it up using a small paintbrush. Then he places the snowflake under the photo-microscope and takes a picture.

Libbrecht says it's not hard for kids to begin a hobby in snowflake watching. "The best way to start is to get a magnifying glass and take a close look at the crystals next time it snows," he says. "This is very easy to do, and you never know what you might find!"