

SNOWFLAKES

A Symphony of Nature's Design

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EVERY winter as the chill sets in, hordes of tourists from across the country flock to the Himalayas in the north to witness and experience the magnificence of snow and the fun and sports associated with it.

The beauty of snow is like magic, especially for those who have never experienced it. The quiet, slow dance of snowflakes falling through the cold winter air adds to the charm, making it seem like nature is sharing secrets in the soft snow. Each snowflake, with its special design, is like a tiny masterpiece of art, transforming the world into a living snow globe. The romance of a snowy scene makes ordinary things look amazing — trees sparkle, rooftops frost, and even simple objects become extraordinary.

Amazingly, adding to the beauty is the fact that every single snowflake is different from the other in terms of its structural formation — so, no two snowflakes are ever alike, even though to the naked eye they all seem to be the same! Why and how this is possible, is what we will explore here.

Why Study Snowflakes?

But to start with — have you ever wondered why the study of snowflakes is more than just a whimsical pursuit? Well, snow isn't just about building snowmen; it's a captivating substance with unique properties, waiting for scientists to explore its mysteries.

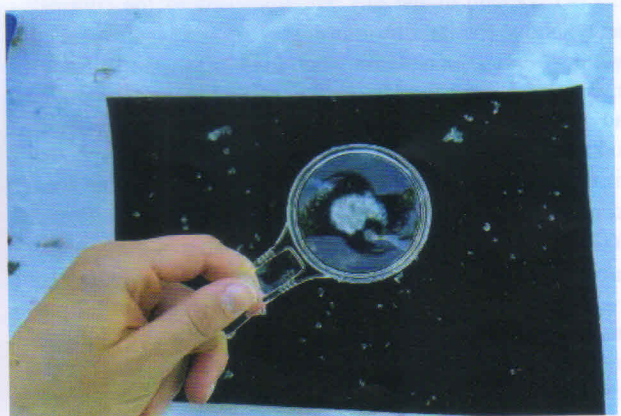
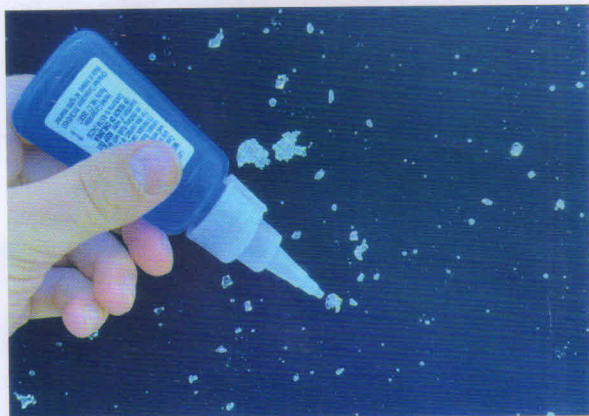
Snowflakes and ice aren't just frozen water; they are bona fide minerals. Studying them offers a sneak peek into the behaviour of water in its solid form. It's like unveiling the secret life of water!

Snowflakes, with their mesmerising patterns, narrate the tale of the clouds they originated from. Each snow crystal becomes a tiny storyteller, aiding us in unravelling the science of our environment. So, the next time you catch a snowflake on your glove, remember, it's not just winter's artwork — it's a microscopic marvel contributing to our scientific odyssey!

History of Snowflake Exploration

The journey of understanding the intricate world of the symmetry and complexity of snowflakes is a tale stretching back through centuries, marked by the insights of eminent scholars and the tenacity of pioneers in scientific observation. Around 135 BC, the Chinese scholar Han Yin articulated a fascinating revelation. In comparing snowflakes to the myriad flowers of plants and trees, he noted an intriguing six-pointed symmetry. This insight, well-known in ancient China, awaited recognition in Europe for many centuries.

Fast forward to 1591, Thomas Harriot, an English astronomer and mathematician, delved further. Offering a refined description, Harriot emphasised the distinct six-fold symmetry that defines snowflakes, showcasing their peculiar



Preserving snowflake with glue and observing it