

The H.O.T. Spot

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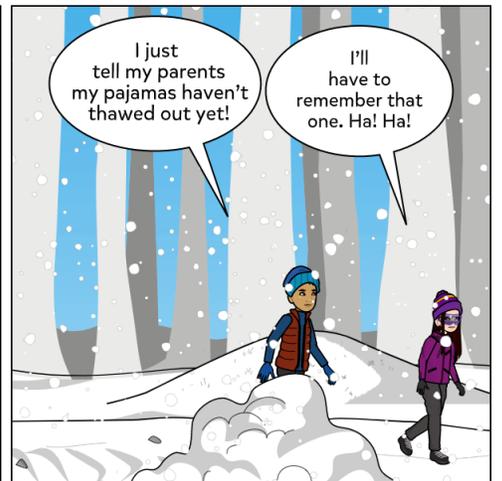
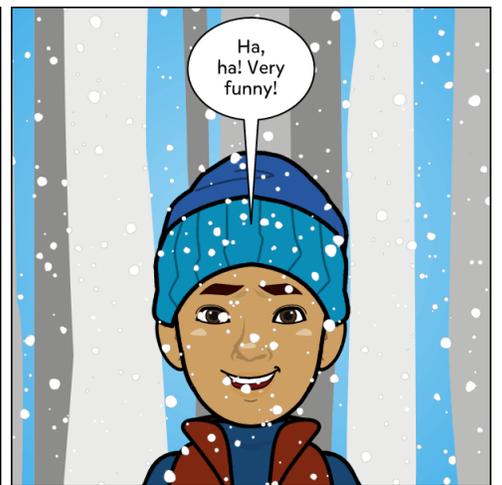
A WEEKLY PUBLICATION FOR CURIOUS KIDS

Issue #19 (December 2, 2020)

CAUTION: Participation may lead to a lack of boredom and a tired brain!

FEATURED TOPIC THIS WEEK:

A Salute to Snowflakes





A Salute to Snowflakes

Did You Know?

There are four classifications of snow crystals: snowflakes, hoarfrost, graupel, and polycrystals. Click the word 'link' here to read about each one → [LINK](#). Snowflakes are, of course, the most well-known and form when water molecules line up in a precise hexagonal pattern. No two snowflakes are the same because each one undergoes different temperatures and humidities as it drifts to the ground. Scientists have been able to create nearly identical snowflakes in the lab due to the fact they can carefully control the conditions. The largest snowflake ever photographed was 10mm (0.4") across.

Help Wanted

Do you like being outside in the cold? If so, here is a list of some of the coldest jobs in the world. Which would you be most interested in?

- Polar oceanographer in Antarctica
- Cold storage manager England
- Avalanche forecaster in Utah
- Horse breeder in Russia
- Subsistence gatherer in the Arctic
- Gold miner in Canada
- Fuel specialist in Alaska
- Ski instructor in Montana
- Package deliverer in Colorado
- Airport ground crew in Oregon
- Snow removal team in Japan
- Power-line technician in New York

To read more, click the word 'link' here → [LINK](#)

Virtual Field Trip

Take a ride on a Snowcoach in Yellowstone National Park:

<http://www.viewpure.com/A7nKb-HSjR8?start=0&end=0>

Would You Rather

Be warm in cold weather or cool in hot weather?

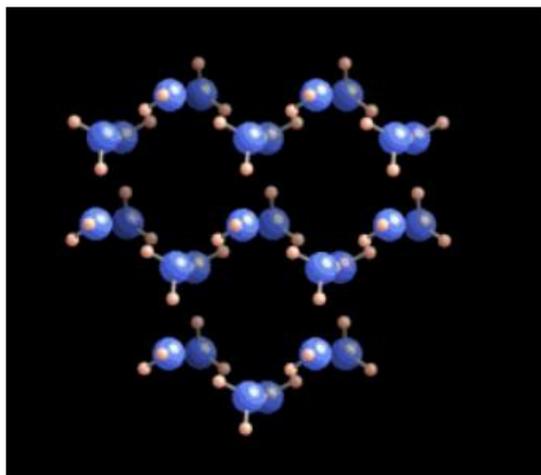
Bio-Profile



Wilson A. Bentley (1865-1931) was the first person to ever take a photograph of a snow crystal. In his lifetime, he took pictures of over 5,000 different snowflakes. Bentley published a book of his photographs a short time before he died. To watch an 8 minute documentary about his life, click the word 'link' here → [LINK](#)

Mystery Picture of the Week

The picture below is a diagram of what? Turn your paper upside down to check your answer. Click ON the picture to find out more!



This is a diagram of the hexagonal arrangement of water molecules in the snow crystal lattice. To learn more about how snowflakes form, click the picture above.



What do you think the featured topic should be next week? Email your teacher with your thoughts.

Project-Based Bonanza

Choose one or more of the projects below to complete this week.

CHOICE A

Find a few pieces of clean white paper, a pencil, and a pair of scissors. Watch the video linked here and create your own unique paper snowflakes:

[LINK](#)



CHOICE B

Which of these are snowflakes and which are snow FAKES?

(Hint: snowflakes are hexagonal)



CHOICE C

Have you ever wondered how animals stay warm in the cold and snow? This can be answered using just three words:

- Hibernation,
- Migration, or
- Adaptation

Research and define each one. Then, find 5 or more example animals for each of the three survival strategies.

Story Starters

Choose one of the story starters below!

- A. Imagine you just finished playing in the snow for the first time. Describe what you saw, heard, tasted, touched, and felt during this experience.
- B. (Finish this story!)



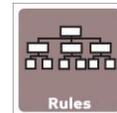
The day began like any other December morning in Ohio. The twins woke up, ate breakfast, and prepared for school. Just as they were putting on their snow boots, however, a loud noise began coming from the roof above their heads. Knowing this could not be the predicted snow they were expecting, they ran to the window and peered outside. What they saw instead was ____ falling from the sky. Not knowing quite what to do or think, they

Digging Into Depth and Complexity

Based on what you have learned from this H.O.T. Spot about snowflakes, answer the following questions using the depth and complexity icons.



List three or four DETAILS of Wilson Bentley's life.



What are the RULES that determine if a snow crystal is a snowflake or a snow FAKE?



What do scientists call the four classifications of snow crystals?



What UNANSWERED QUESTIONS do you still have about the snow making process?

Brain Teaser of the Week

Solve this riddle!

What do you have in December that you can't have in any other month?