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## **SNOW AND MORE – Designs of Nature – SLIDE SHOW SCRIPT (Grades 3-6)**

### 1. WINTER SCENE

Snow is as much a part of New England as are the mountains, the fields and the cows. A snowy winter scene can be a breathtaking display of sparkling crystal or a hushed and peaceful panorama when the soft fluffy snow blankets the landscape.

### 2. STELLAR CRYSTALS

But we often overlook the beauty of each *individual* snowflake. A snowflake's intricate and fragile design can tell us the fascinating story of its formation in the sky and its fall to earth.

### 3. CLOUDS

Like other forms of precipitation, snowflakes begin their formation inside clouds as water vapor. If the air becomes cool enough, the water vapor condenses into millions of tiny water droplets that may become heavy enough to fall as rain. But, if the cloud moves through a layer of very cold air, . . .

### 4. FALLING SNOW

...the water vapor may freeze onto a tiny particle of dust or salt in the air, forming a snow crystal. Some crystals grow quickly and some crystals grow slowly. Then, when they get big and heavy enough, they fall.

### 5. SNOWFLAKE MEDLEY

Snowflakes come in lots of shapes, depending on both the air temperature and on the amount of water vapor available.

### 6. W.A. BENTLEY

W.A. "Snowflake" Bentley once wrote "A snowflake is...an idea dropped from the sky, a bit of beauty incomparable, that if lost at that moment is lost forever to the world." Bentley caught and photographed thousands of snowflakes in his workshop in Jericho, Vermont. He then sorted all the different shapes into different categories.

### 7. PLATE

One group is made up of snowflakes that look like 6-sided plates.

### 8. ANOTHER PLATE

Though all these plates have the same 6-sided shape, the designs inside the plates...

### 9. YET ANOTHER PLATE

...are all very different, as you can see.

### 10. SIMPLE STELLAR CRYSTAL

Another group is made up of star-shaped, or stellar, crystals. These snowflakes tend to form in warmer, moister air. The six arms spreading from the center of these flakes can end in just a simple point...

11. ELABORATE STELLAR CRYSTAL

...or they may form an elaborate design.

12. COLUMN CRYSTALS

Yet another group is crystals that resemble six-sided macaronis. These are called column crystals.

13. CAPPED COLUMNS

And sometimes these column crystals have six-sided plates on either end. Most snowfalls have a mix of many different forms of snow crystals.

14. IMPERFECT FLAKE

Perfect snow crystals are unusual. In their journey from sky to ground, most get bumped and broken, and sometimes stick together at warmer temperatures. When they reach the ground, snow crystals continue to break as they settle and pack down.

15. SNOWY TREE BRANCHES

Looking closely at snow may tell us what the weather was like when it fell. What might we guess about the weather when this snow fell? (*probably it was near freezing and moist, making a sticky snow that clung to the branches when it fell.*)

16. SNOWY ROOF

This snow is oozing off the side of the roof. Why doesn't it break off and fall to the ground? (*snow crystals tend to stick together. Because of this, snow often bends and flows like water in slow motion.*)

17. GLAZED LANDSCAPE

What might have caused this snow to glisten? (*the snow melted a bit, then re-froze into a thin glaze of ice.*)

18. GLAZED APPLE

Cold temperatures don't always produce snow. Sometimes we get hail, sleet or freezing rain. This scene tells a complicated weather story. What do you think happened to form the snowy top hat on this ice-glazed apple? (*probably an ice storm first coated the apple, then snow fell on top of that.*)

19. SNOW ROLLERS

Here's another neat natural phenomenon. How do you suppose these "snow rollers" were formed? (*On a warm, windy day, snow on a steep bank may start to roll and gather snow, similar to how we build snowmen.*)

20. STUCK TRUCK

It's fun to go outside in the winter and look for snow puzzles. But there ARE times when enjoying the beauty and mystery of snow may not be the first thing on our minds. Snow can damage tree limbs, pull down power lines, or - make driving a car quite difficult!

21. ICE-GLAZED TREES

No matter what form water takes in winter - snow, sleet or freezing rain - it can transform a naked gray landscape into a sparkling fairyland. A close-up look at these different forms of frozen water reveals the magic and beauty of one of our most precious resources.