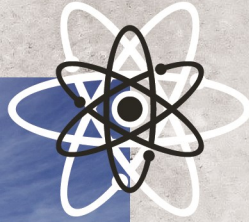


WEATHER

DISCOVERING GOD'S
DESIGN IN THE SKY



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KNOW WHY YOU BELIEVE
WHAT YOU BELIEVE



Colors of the Sky

Why is the sky blue?

The sky is very colorful because of the sun. The white light has all the colors of the rainbow in it: red, orange, yellow, green blue, indigo, and violet. When things are just right—either with a rainbow or a sunset—the colors are visible.



The sky is blue because the sunlight is separate. Of course, God has specially designed this because the color blue is absorbed by air molecules, and given off again in all

directions. He specially designed this in a way in which the other colors are usually not seen. Have you ever noticed the sun at noon? The blue color is missing from it and it looks yellow.

Genesis 1:1

In the beginning God created the heavens and the earth.

Why are sunsets red?

Did you know the colors of sunlight have something to do with all the beautiful colors we see here on earth? The surface of each object finds colors that will reflect from it. God also created the night to look amazing with various shades of gray since colors are not available from the sun at night.

With all our science and technology, we can figure out the answers to some pretty tough questions, like “Why is the sky blue?” But there are still many things we cannot figure out! Sometimes we just have to look at the sunset and say, “Good job, God!”



What are Clouds?

Everyone has seen the big puffy white things in the sky that look like pillows. Those are clouds. They have moisture in them like rain or ice crystals. God's design is written all over their design. For example, clouds form when warm, moist air moves upward from the earth's surface. You cannot see the drops of water because they are too small to see and then they turn into a gas called water vapor. When the water vapor goes higher in the sky, the air becomes colder. This makes the water droplets stick together like salt does in a salt shaker without rice!

If you look up at the sky, you can see that God made clouds to come in all different shapes, colors, and sizes. Some are white, some are dark, some are big and some are small. The different shapes, colors, and sizes allow us to see what the weather will be like. If the clouds are dark it may mean rain is on the way, but if they are white it usually means the weather will be good. In the Bible, the Israelites also looked to the sky. Instead of looking at the weather they were looking for directions. God gave them a pillar of clouds to lead the way by day and a pillar of fire by night to help them see where He was leading them.

Exodus 13:21

The LORD went ahead of them. He guided them during the day with a pillar of cloud, and he provided light at night with a pillar of fire. This allowed them to travel by day or by night.



Make Your Own Clouds

AN ACTIVITY FOR
LESSONS TWO & THREE

ITEMS NEEDED

- Shaving cream
- Small bowl and spoon
- White liquid glue
- Colored paper (or old newspaper)

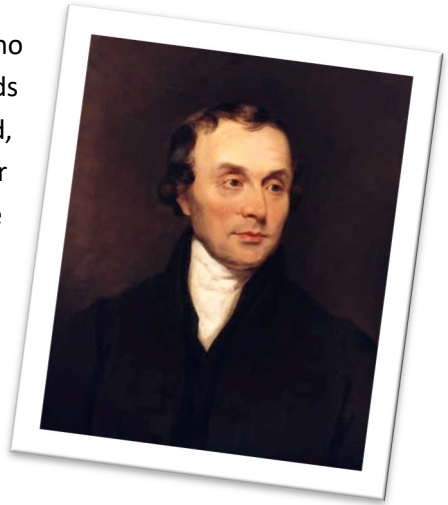
DIRECTIONS

1. In a bowl, mix 3 parts shaving cream to 1 part white liquid glue. Place the bowl next to the newspaper.
2. Use your finger to draw the different kinds of clouds that are listed in Lesson Three (page 6).

How are Clouds Named?

Have you ever wondered who named the different kinds of clouds in the sky? In 1803, Luke Howard, a British chemist and amateur meteorologist named three general groups of clouds: cumulus, stratus, and cirrus.

Right: Portrait of Luke Howard, by John Opie (Royal Meteorological Society)



What is fog?

Fog is a kind of cloud that is low to the ground. This cloud is known as the *stratus cloud*. The stratus cloud is made up of tiny water droplets or ice crystals.

Psalm 139:23

Search me, O God, and know my heart; test me and know my anxious thoughts.



Cumulus Clouds

These clouds are like cotton. A cumulus cloud may contain as little as 25 gallons or 94 liters of water.

Stratus Clouds



These clouds are layered clouds that lay across the sky like a blanket. Stratus clouds are very flat and are not disturbed by wind. They usually cause snow.



Cirrus Clouds

These clouds can be found at a high altitude and often happen before a warm front that causes rain or snow. Did you God designed high cirrus clouds to make a ring around the sun or moon? This means there is a chance of rain or snow!

What Causes Fog?



Fog is a cloud that forms on the ground. It forms when the air becomes full of moisture and you can begin to see droplets. Fog droplets are very small compared to those of rain. Cold air is heavier than warm air and can

be found close to the ground in the evening. It can be foggy in the morning when there is cool air as the sun comes up.

Usually, fog only lasts for a little while. When the sun starts to rise, the heat from the rays it gives off will burn away the fog. God has specially designed that! If it all just happened, would there be a way for it to continue happening over and over?

Psalm 139:23

**Search me, O God,
and know my
heart; test me and
know my anxious
thoughts.**





Make Your Own Fog

AN ACTIVITY FOR
LESSON FOUR

PLEASE BE GUIDED: ADULT SUPERVISION IS REQUIRED FOR THIS ACTIVITY!

ITEMS NEEDED

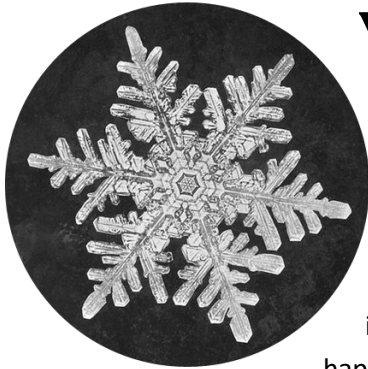
- Ice cubes
- Hot water
- Strainer
- A container for use with hot water

DIRECTIONS

1. Fill up the container with hot water. Leave it filled for about 1 minute.
2. Have an adult help you pour out most of the water (but not all of it).
3. Place the strainer over the container (depending on your container, you may need to hold it).
4. Place 3-4 ice cubes in the strainer.
5. Wait for a while... be patient and watch the fog form!

The cold air from the ice cubes will mix with the warm, moist air from the water causing condensation and then forming fog.

Snowflake Shapes



What gives a snowflake its shape?

The outward form of a snowflake depends on its temperature while it is being made. Snowflakes with 6 points happen when it is very cold outside.

Snowflakes have many different patterns or designs. The special detail needed for each part of a snowflake is decided by weather conditions. Think back to the lessons about clouds—as water freezes and gets closer to the ground—this is what will cause changes in the snowflake shape. This truly shows that not only is God a God of order but that He has specially designed everything around us to work together.

A snowflake is formed when water droplets freeze into an ice crystal. Water vapors attach to the frozen crystal and the snowflake is stretched into a special shape.

Genesis 16:13

Thereafter, Hagar used another name to refer to the LORD, who had spoken to her. She said, “You are the God who sees me.” She also said, “Have I truly seen the One who sees me?”



Make a Snowflake

AN ACTIVITY FOR
LESSON FIVE

PLEASE BE GUIDED:
ADULT SUPERVISION IS
REQUIRED FOR THIS
ACTIVITY!

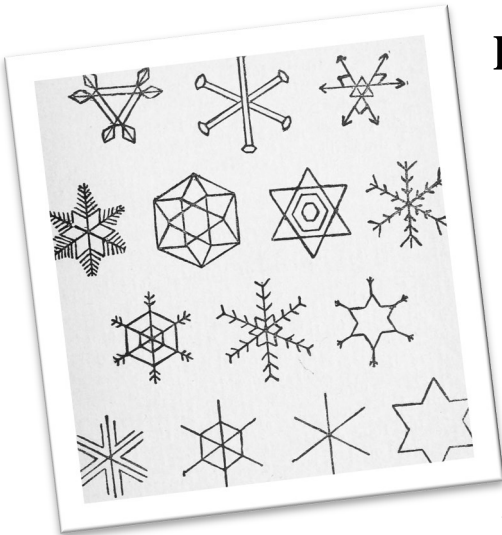
ITEMS NEEDED

- 1 pipe cleaner
- Thread
- Boiling water
- Spoon
- Jar or deep container for hot liquid
- Pencil
- Baking soda

DIRECTIONS

1. Use the pipe cleaner to create your snowflake design. Remember: they always have 6 sides. Attach one end of the string to your snowflake and the other end to your pencil.
2. Have an adult help you fill your jar with boiling water. Add baking soda until you cannot add anymore without it settling to the bottom of the jar. Mix well.
3. Tie your snowflake to the pencil. Place it in the jar. The pencil will rest across the jar so you can pull your snowflake out. Leave it in the jar for at least 24 hours but not longer than 5 days. Look at your snowflake each day to see the small crystals forming!

Unique Snowflakes



Is every snowflake different?

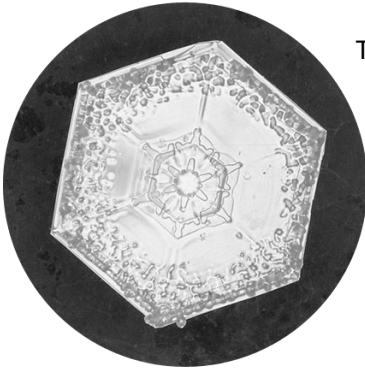
Every snowflake that has fallen to the ground is different! Since the beginning of Earth's history, there have been a lot of snowflakes that have formed. Like we discovered in

Lesson Five, each snowflake has a unique path to the ground. God designed snowflakes in a way in which they float through different clouds of different temperatures. When it is 23° Fahrenheit, ice crystals look longer in a unique way. Each snowflake is designed special because no two snowflakes are exactly the same. God made them each different.

Genesis 16:13

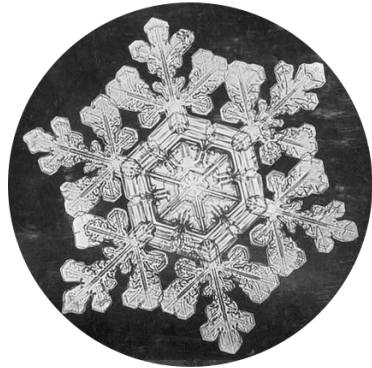
Thereafter, Hagar used another name to refer to the LORD, who had spoken to her. She said, “You are the God who sees me.” She also said, “Have I truly seen the One who sees me?”

Interesting Snowflake Facts



The types of snowflakes include the needle crystal, columnar crystal, plate crystal, combination of columnar and plate crystals, columnar crystal with extended side planes, rimed crystal, irregular snow crystal, and germ of snow crystal.

Every snowflake has approximately 200 snow crystals.



When the temperature is near to freezing point (0° Celsius), snowflakes become much larger and a lot more complex in design.

Bible Verses

Write these verses out and try to memorize them!

Genesis 1:1

Exodus 13:21

READ THE BIBLE WITH FAITH

Psalms 119:18

Open my eyes to see the wonderful truths in your instructions.

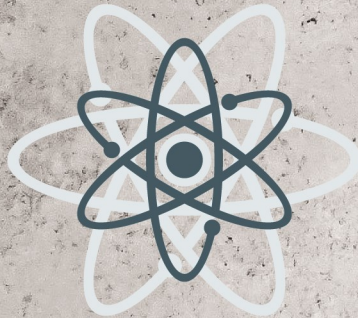
Psalm 139:23

Genesis 16:13

Romans 10:17

So faith comes from hearing, that is, hearing the Good News about Christ.

READ THE BIBLE TO INCREASE FAITH



EXPLORING
CREATION
SCIENCE

FACEBOOK.COM/SHOFARCREATIONSCIENCE
SHOFARMISSIONS.COM/CREATIONSCIENCE