



Nudeles Skidoodles



Weather is just the state of the atmosphere at any time, including things such as temperature, precipitation, air pressure, and cloud cover. Daily changes in the weather are due to winds and storms. Seasonal changes are due to the Earth rotating around the sun.

Weather

What are clouds?

A cloud is a large collection of very tiny droplets of water or ice crystals. The droplets are so small and light that they can float in the air.

How are clouds formed?

All air contains water, but near the ground it is usually in the form of an invisible gas called water vapor. When warm air rises, it expands and cools. Cool air can't hold as much water vapor as warm air, so some of the vapor condenses onto tiny pieces of dust that are floating in the air and forms a tiny droplet around each dust particle. When billions of these droplets come together they become a visible cloud.

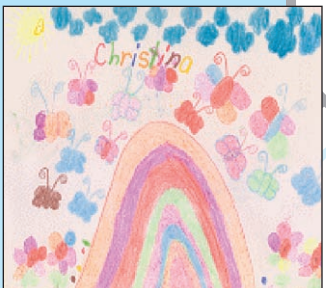
Why do clouds float?

A cloud forms when air is heated by the sun. As it rises, it slowly cools until it reaches the saturation point and water condenses, forming a cloud. As long as the cloud and the air that it's made of is warmer than the outside air around it, it floats!

OPTICAL ILLUSIONS

How do we get rainbows?

Rainbows are spectacular rays of color. Sunlight looks white, but it's really made up of different colors...red, orange, yellow, green, blue, indigo, and violet. The sun makes rainbows when white sunlight passes through rain drops. The raindrops act like tiny prisms. They bend the different colors in white light, so the light spreads out into a band of colors that can be reflected back to you as a rainbow.



Why are clouds white?

Clouds are white because they reflect the light of the sun. Light is made up of colors of the rainbow, and when you add them all together you get white. The sun appears a yellow color because it sends out more yellow light than any other color. Clouds reflect all the colors in the exact same amount so they look white.

Why is the sky blue?

The sun shines white and black light to our planet. The white light has all the colors in it. In our upper atmosphere, we have dust particles and oxygen molecules. The white light, meaning all of the colors in a rainbow, shines through the upper levels of the atmosphere, and the blue light scatters across the entire planet. That is why our sky is blue. Now, during sunrise and sunset, the light traveling through the atmosphere is longer at the horizon than if you were to look up high in the sky. There are more dust particles and oxygen molecules at the horizon, so that is why you see such pretty colors like red, oranges, and yellows.

What are the Northern Lights?

The Northern Lights, commonly referred to as the Aurora Borealis, are the result of interactions between the Sun and Earth's outer atmosphere. They are one of the most spectacular light shows to watch as vivid colors glow in the sky. In the Southern Hemisphere, it is called the Aurora Australis.



What are sun dogs?

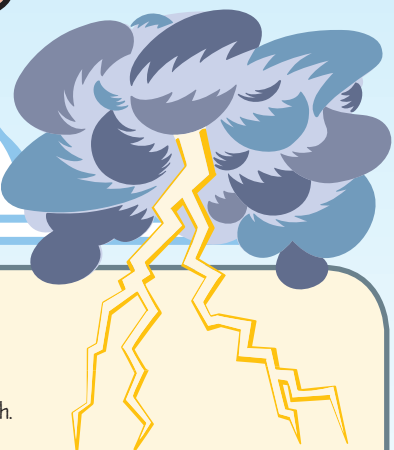
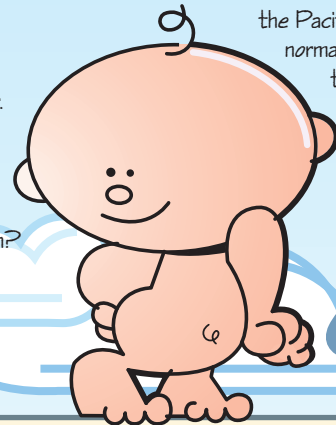
Sun dogs are bright spots that appear on either side of the sun when there are thin layers of high ice crystal clouds otherwise known as Cirrus clouds. This can also happen at night. These are called moon dogs.

What is a blue moon?

The term is used when a full moon occurs twice in the same calendar month. It happens every 2.7 years and never in the month of February because there are not enough days. Is the moon really blue, though? It depends! Most moons are not blue, but if there is a volcanic eruption or even a forest fire, the smoke in the sky can turn the moon a blue color.

Weather Jokes

- Q. What did one tornado say to the others?
A. Let's twist again like we did last summer.
- Q. What's the difference between a horse and the weather?
A. One is reined up and the other rains down.
- Q. What did one raindrop say to the other raindrop?
A. My plop is bigger than your plop.
- Q. How do you find out the weather when you're on vacation?
A. Go outside and look up.



Storms (matching)

1. It can be up to 600 miles across and have strong winds spiraling inward and upward at speeds of 75 to 200 mph. The center of the storm or "eye" is the calmest part. _____
2. A violent rotating column of air extending from a thunderstorm to the ground. It can destroy large buildings, uproot trees, and hurl vehicles hundreds of yards. _____
3. A shaking, rolling or sudden shock of the earth's surface. _____
4. A large ocean wave usually caused by an underwater earthquake or a volcanic explosion. Water flows straight. _____
5. Caused by the forces of the moon, sun, and planets upon the tides, as well as the wind as it moves over the water. The water flows in circles. _____

- a. Tidal Wave
- b. Tsunami
- c. Earthquake
- d. Tornado
- e. Hurricane

