

Name: _____

Class: _____

What Are Clouds?

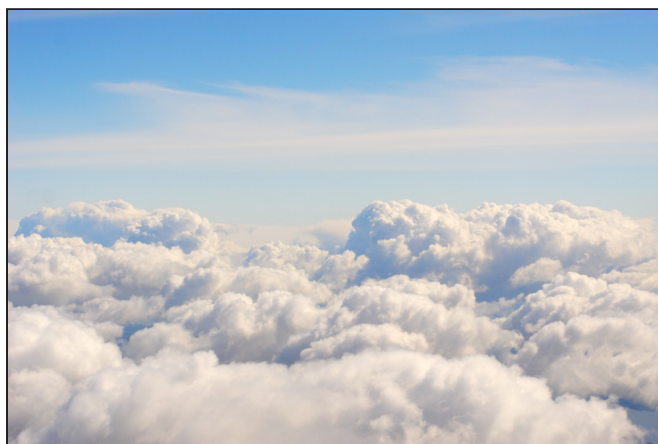
By NASA
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Spotting a cloud floating overhead is a common sight on our planet, but what are clouds made of? Why do they look like they do? This informational text explains the formation of different clouds and how they contribute to different types of weather on Earth. As you read, take notes on how clouds can affect weather on Earth.

- [1] A cloud is made of water drops or ice crystals floating in the sky. There are many kinds of clouds. Clouds are an important part of Earth's weather.

How Do Clouds Form?

The sky can be full of water. But most of the time you can't see the water. The drops of water are too small to see. They have turned into a gas called water vapor. As the water vapor goes higher in the sky, the air gets cooler. The cooler air causes the water droplets to start to stick to things like bits of dust, ice, or sea salt.



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STOP AND GET THE GIST OF SECTION 1

What Are Some Types of Clouds?

Clouds get their names in two ways. One way is by where they are found in the sky. Some clouds are high up in the sky. Low clouds form closer to Earth's surface. In fact, low clouds can even touch the ground. These clouds are called fog. Middle clouds are found between low and high clouds.

Another way clouds are named is by their shape. Cirrus clouds are high clouds. They look like feathers. Cumulus clouds are middle clouds. These clouds look like giant cotton balls in the sky. Stratus clouds are low clouds. They cover the sky like bed sheets.

STOP AND GET THE GIST OF SECTION 2

What Causes Rain?

- [5] Most of the water in clouds is in very small droplets. The droplets are so light they float in the air. Sometimes those droplets join with other droplets. Then they turn into larger drops. When that happens, gravity causes them to fall to Earth. We call the falling water drops “rain.” When the air is colder, the water may form snowflakes instead. Freezing rain, sleet, or even hail can fall from clouds.

STOP AND GET THE GIST OF SECTION 3

Why Does NASA Study Clouds?

Clouds are important for many reasons. Rain and snow are two of those reasons. At night, clouds reflect heat and keep the ground warmer. During the day, clouds make shade that can keep us cooler. Studying clouds helps NASA better understand Earth’s weather. NASA uses satellites¹ in space to study clouds.

NASA also studies clouds on other planets. Mars has clouds that are like the clouds on Earth. But other planets have clouds that aren’t made of water. For example, Jupiter has clouds made of a gas called ammonia.

STOP AND GET THE GIST OF SECTION 4

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1. A satellite is a man-made or natural object that orbits around another object. In this context, it refers to a man-made object that sends information from space back to Earth.