

The Clouds Outside My Window

Include a picture of your
home or school here

Your School Name

The Clouds Outside My Window

Include picture of
your window

**Written and illustrated by
Your Name**

The Clouds Outside My/Our Window

**Write a little bit about your area
Where are you?
What's the weather like?**

**Your Name
Your Grade
Your Class**

**Perhaps
include a
picture of you**

A Look Out My Window

Include picture of
looking out your
window

**Here's a look out my window. Talk about what we see
out your window.**

What are clouds made of ?

Include picture of clouds

High in the atmosphere where temperatures are very, very cold, most clouds are made of tiny ice crystals. Closer to the ground, the clouds we see are made of tiny water droplets.

How do clouds form?

In general, there are two ways clouds form. In both cases though, the clouds form because the air is cooling.

In the atmosphere, rising air cools and sinking air warms. In most cases, the clouds that you see are caused by rising air.

Include picture of clouds

How do clouds form?

Clouds can also form when the air gets colder for other reasons. This can happen overnight when the air is cooling, or when warm air moves over a cold lake or a snow-covered surface.

Include picture of
fog

How are clouds named?

Clouds are classified based on how high they are in the sky, whether they are made up of tiny water droplets or ice crystals, their general appearance, and whether they are producing precipitation.

On the next page, I'll explain some of the basic terminology used to classify clouds.

How are clouds named?

Puffy clouds are called **cumulus** or have the prefix “**cumulo.**”

Clouds that form a layer are called **stratus** or have the prefix “**strato.**”

Clouds that are made up of ice crystals are called **cirrus** or have the prefix “**cirro.**”

Clouds that produce precipitation are called **nimbus** or have the prefix “**nimbo.**”

How are clouds named?

We often need to combine the various cloud terms to accurately describe the clouds we see.

For example, puffy clouds are called **cumulus**; however, if the cumulus clouds form a layer, they are called **stratocumulus**.

If those puffy **cumulus** clouds grow upward high into the sky and produce rain, they are called **cumulonimbus** clouds.

Types of Low Clouds

LOW	Stratocumulus Cumulus Stratus

Types of Low Clouds

[cloud type]

Include picture of
low clouds

Repeat this slide for every low cloud picture

Write something about the clouds.

Types of Middle Clouds

MIDDLE

**Alto cumulus
Altostratus**

Types of Middle Clouds

[cloud type]

Include picture of
middle clouds

**Repeat this slide for every middle cloud
picture**

Write something about the clouds.

Types of High Clouds

HIGH

Cirrus

Cirrostratus

Cirrocumulus

Types of High Clouds

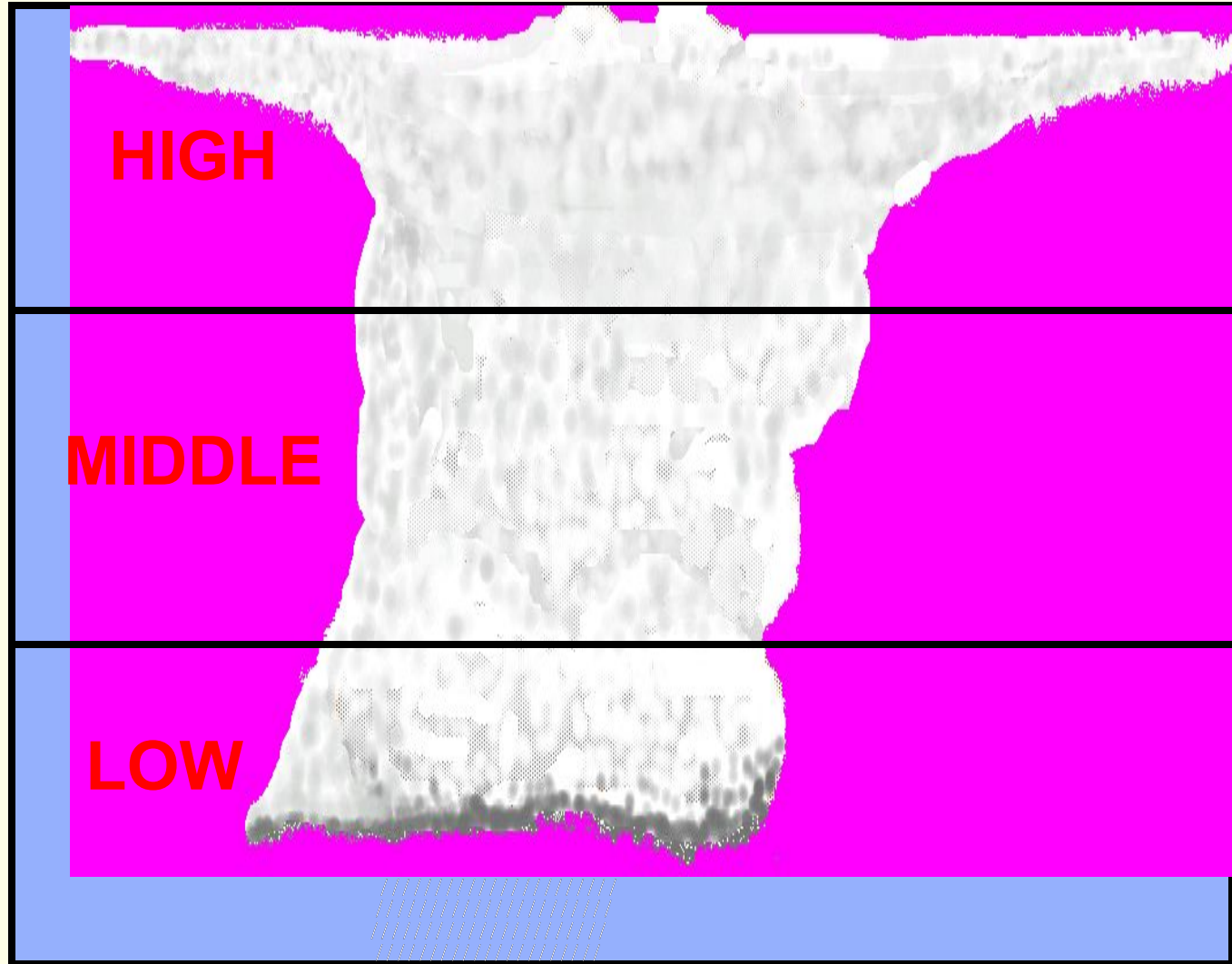
[cloud type]

Include picture of
high clouds

**Repeat this slide for every high cloud
picture**

Write something about the clouds.

Vertically-Developed Clouds



Vertically-Developed Clouds **[cloud type]**

Include picture of
thunderstorm
clouds

Repeat this slide for every picture

Write something about the clouds.

A rectangular box with a vertical color gradient from blue at the top to pink at the bottom. The text 'Colors In The Sky' is centered within the box in a white, bold, sans-serif font with a slight drop shadow.

Colors In The Sky

Colors In The Sky

Sunlight is made up of all different colors of light.

Some particles in the atmosphere such as raindrops and ice crystals act as prisms and separate the sun's light into the various colors.

Other particles cause certain colored light to be scattered in many different directions.

Why is the sky blue?

Include picture of
blue sky

The blue light that we see in the sky actually comes from sun. When sunlight strikes tiny particles high in the sky, the blue portion of the sun's light is scattered in all directions. We see the blue light that is scattered toward us from all over the sky.

Sunrise Colors

Include picture of
colorful sunrise

Sunrises and sunsets are red, orange, and yellow for the same reason that the sky is blue. Because the sun's light must travel through more atmosphere at sunrise and sunset, the violet, blue, and green light gets scattered by particles in the atmosphere, leaving only the red, orange and yellow light.

Sunrise Colors

Include picture of
colored clouds at
sunrise

Sometimes, high and mid level clouds reflect the yellow orange, and red light from the sun at sunrise or sunset. This can cause the clouds at sunrise to look red, orange, or yellow.

Sunset Colors

Include picture of
colored clouds at
sunset

Clouds at sunset are colored for the same reason as they are at sunrise. Beautiful sunsets often occur when the sky to the west is clearing.

Rainbows

Include picture of
rainbow if you
have one

The raindrops act like little prisms and separate the sun's light into various colors. We see these colors as a rainbow. For the main rainbow, the red is on the outside, followed by orange, yellow, green, and blue (if visible).

Rainbows

Include picture of
double rainbow if
you have one

In some cases, the raindrops can cause a secondary rainbow. In this case, the secondary rainbow is barely visible. The colors are in reversed for secondary rainbows and the sky between rainbows darker than either side.

Sundogs

Include picture of
sundog if you
have one

Ice crystals can also act as prisms to separate the sun's light. In this case, ice crystals have created a sundog in the sky. Sundogs can occur on one or both sides of the sun near sunrise or sunset.

Sundogs

Include picture of
sundog if you
have one

**If we take a closer look, we see that the red light is
closest to the sun followed by orange, yellow,
green, blue, and violet.**

Iridescence

Include picture of iridescence if you have one

Thin clouds composed of tiny water droplets or ice crystals can also cause iridescence. This typically occurs near the sun and is often difficult to see.

Other

Include picture of
other colorful
objects in the sky.

Write about the picture.

The Clouds Outside My Window

Include picture of clouds.

The End