

LESSON
2

What causes storms to form?

WATCHING CLOUD SHAPES AND HOW THEY CHANGE OVER TIME CAN GIVE YOU CLUES ABOUT WHAT'S HAPPENING IN THE SKY.



STEP 1: What can we learn about storms by watching clouds in the sky?

Working in pairs or small groups, write your ideas below. (Use complete sentences.)



STEP 2: What do you notice about the sunny day compared to the stormy day?

Observe the clouds in the time-lapse videos and record your observations below.



SUNNY DAY



STORMY DAY

Why do you think that the storm formed on one day and not the other?

Write your ideas below, using complete sentences.

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STEP 3: Draw how a storm forms throughout the day.

Think about the time-lapse video of a stormy day. Draw what the weather is like at different times throughout the day, using each of the boxes below. Include what you know about how clouds, water, air, and sunshine move and change throughout the day.

MORNING 9:00AM

MID-DAY 12:00PM

AFTERNOON 3:00PM

NIGHTTIME 9:00PM

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STOP AND THINK

Answer the questions below.

Clouds and storms are typically high above the ground. If you could investigate the air up high compared to the air near the ground, what do you think you would notice?

What measurements about the air would you want to take from different altitudes?

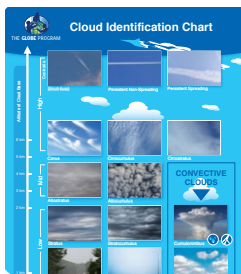
How might those measurements help us figure out how clouds form?

STEP 4: Make observations of clouds in the sky!

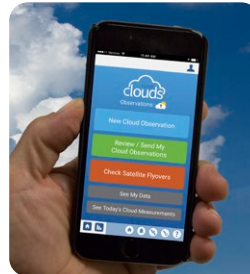
Watch the sky for clues about what's happening with weather in your community. Follow your teacher's instructions for making observations and remember **to never look directly at the Sun**.

Remember to look for:

- How much of the sky is covered with clouds?
- What types of clouds are in the sky?
- Are the clouds opaque or can you see through them?



Identify clouds using the [GLOBE Cloud Chart](http://globe.gov/globecloudchart) (globe.gov/globecloudchart)



Download the [GLOBE Observer Clouds App](http://observer.globe.gov) (observer.globe.gov) to make cloud observations and take pictures that can be compared with NASA satellite images. This helps scientists understand the sky from above and below.