



STUDENT ACTIVITY SHEETS

TEACHER ANSWER KEY

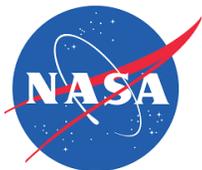


THE GLOBE PROGRAM





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▶ **TEACHER ANSWER KEY**
▶ **LESSON 1**

LESSON
1

What do we know about storms?

 LESSON 1

What do we know about storms?

**STEP 1: What happens in the atmosphere to cause a storm?**

Your class will watch a video about a storm that happened in Colorado and how the precipitation affected the city of Boulder, Colorado. After watching the video, think about what you know about the water cycle and how storms form. What do you think happens in the atmosphere to cause rain, snow, and other types of precipitation? Write your ideas below.

Responses will vary. Look for clues about student's understanding of water cycling, cloud formation, and how storms form. This question helps assess students' prior knowledge about weather.

STEP 2: What are my experiences with storms and precipitation?

Think about a time when you experienced a storm. Answer the questions below.

Was it a rainstorm, a snowstorm, or some other type of storm?

Responses will vary.

What time of year did it happen?

Responses will vary.

Did the storm last for a few hours or a day or more?

Responses will vary.

1. How did the precipitation from this storm affect your community?

Responses will vary.

What do we know about storms?

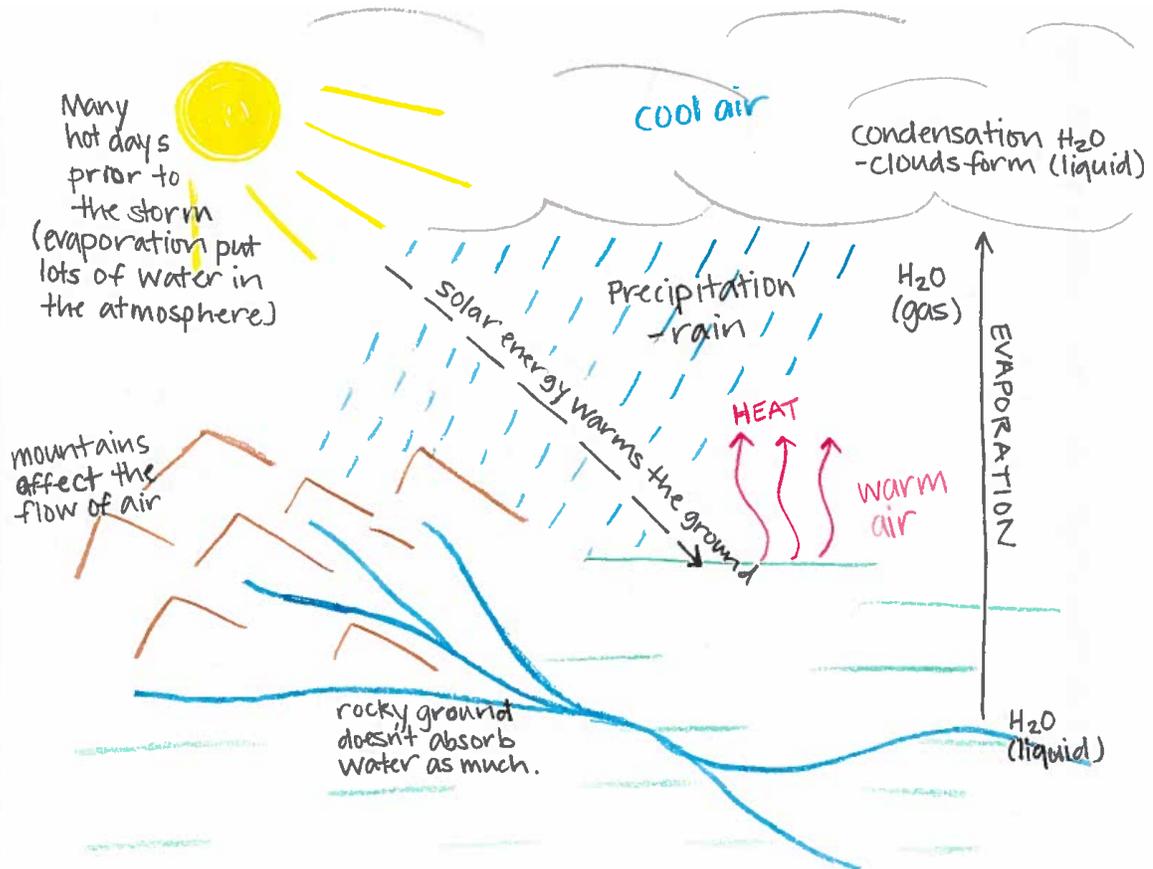


STEP 3: Represent what you know about storms.

What caused the rain in the Colorado storm you saw in the video? Draw and label a picture in the box below to answer this question. Your picture is a model of how this storm happened.

- Your picture should show all the factors that led to rain.
- Include labels in your drawing that explain how each factor led to rain.
- Be prepared to share your thinking with the class.

Student drawings will not necessarily look like this one, and likely will not include all aspects represented below. Use drawings to assess students' prior knowledge of vocabulary, phase changes, and water cycling.



What do we know about storms?



STEP 4: How were my ideas similar or different from my peers' ideas?

Describe your model to the other students in your group.

SIMILAR IDEAS	DIFFERENT IDEAS
<p><i>Student responses should focus on aspects that were represented in some fashion both in their own model and in their peers. ("We both drew the Sun and clouds, even though our clouds didn't look the same.").</i></p>	<p><i>Student responses should focus on aspects that were represented differently or not at all when comparing their own model to a classmate. ("I drew water coming down to the ground from the clouds, but my friend drew water coming up from the ground to the clouds.").</i></p>

STEP 5: What questions do I have about storms and precipitation?

What do you wonder about how storms form? List questions that you have about storms and precipitation.

Responses will vary.

CONGRATULATIONS,
you are now part of the GLOBE community!

Now that you have completed Lesson 1 of GLOBE Weather, you are ready to be an active GLOBE student scientist.



GLOBE stands for Global Learning and Observations to Benefit the Environment. GLOBE is an international science and education program that includes students and scientists from all over the world. You now have the opportunity to participate in GLOBE along with other students interested in learning more about the environment through conducting research on topics that are interesting to you. GLOBE has many resources and opportunities for scientists of all ages. Check out how to get involved by viewing a short video (4:26 minutes) on the GLOBE website: <https://www.globe.gov/do-globe/for-students/be-a-scientist>.