

LESSON 2

What causes storms to form?

Adaptations for:

STEP 1: What can we learn about storms by watching clouds in the sky? (pg. 6)

STEP 2: What do you notice about the sunny day compared to the stormy day? (pg. 6)

EXPLANATION:

Students who are blind or have low vision may struggle with connecting the appearance of clouds in the sky with storms.

ADAPTATION FOR STEP 1:

UDL Principle: [Multiple Means of Engagement](#)

- Provide cotton balls, sponges, felt, or other materials so that students can create models of three main cloud types (cumulus, stratus, and cumulonimbus). Have students make connections between the different types of clouds and what clues they give about the weather (e.g., what are the clouds like on a stormy day versus a sunny day?). Students who are blind or have low vision can observe and feel the different types of clouds. Also, ask students to use other senses to describe how it feels outside on a sunny day and on a stormy day - they may describe the wind, temperature, precipitation, etc.

ADAPTATION FOR STEP 2:

UDL Principle: [Multiple Means of Engagement](#)

- When showing the video, provide narration to describe what is on the screen (there isn't any speech or captions for this video). Provide sponges so students can create tactile models of the sky on a sunny day and on a stormy day. Consider using different colored sponges to represent specific parts of the model. Use a spray bottle filled with water to dampen the clouds - spraying more water on the stormy day model than the sunny day model. The stormy day sponge should be saturated with enough water that water runs out of it (representing precipitation). Students can feel that the clouds are heavier with water on a stormy day than on a sunny day.

ADAPTED MATERIALS:

N/A

IMPLEMENTATION NOTES:

Creating tactile models supports students who are blind or have low vision, and hands-on experiences are helpful to all students. For students who are completely blind, it may be difficult to describe personal experiences observing clouds in the sky and connecting that to the weather. UDL promotes the use of multiple modalities to help students understand content.

MY STUDENTS' UNIQUE NEEDS:

I work with students who have various cognitive impairments; however, I have created adaptations for students who are blind or have low vision. Asking students to represent their thinking in different ways and providing tactile models is helpful to all types of learners, including students with cognitive impairments.

