## Cloudy with a Chance of Science!
### Week 3: Grades K-2

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<td>Analyze patterns in weather conditions of various regions of the world and design, test and refine solutions to protect humans from severe weather conditions.</td>
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<td>Observe, describe, ask questions and predict seasonal weather patterns and how those patterns impact plants and animals (including humans).</td>
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**Cloudy with a Chance of Science!**
### Week 3
**Day 1: Stormy Weather**
Teacher/Parent Background

Weather is the combination of sunlight, wind, snow or rain and temperature in a particular region and time. People use simple tools to collect and record data on elements of daily weather including sun or clouds, wind, snow or rain, and higher or lower temperature. Talking about weather is a daily opportunity to increase children’s awareness of the natural world. Over time, these conversations will allow children to see patterns in their observations and explore how weather has an impact on living things.

Overview

In this activity, young learners will explore and identify evidence of different types of weather.

Related Standards

- Observe, record and ask questions about temperature, precipitation and other weather data to identify patterns or changes in local weather.

Key Terms

- weather - a mix of sunlight and clouds, wind, precipitation and temperature happening in a certain place at a certain time
- precipitation - any form of water that falls to Earth's surface such as rain, snow, hail and sleet
- shelter - a place that protects you from bad weather or danger

Materials List

- Internet access to PEEP and the Big Wide World: Stormy Weather
- drawing paper
- crayons/markers/colored pencils
- newspapers and magazines (optional)
- dress up clothes (optional)
- various books about weather (optional)

Activity Description

1. Play Stormy Weather (timestamp 00:00-01:09) video and prompt the student to discuss the current weather in the story:
   - What is weather?
     - Possible responses: sun, rain, how hot or cold it is, etc.
   - What is the weather like in our story?
1. Sunny, some clouds, warm
   - How do you know?
   - Clouds in the sky; perfect morning; blue sky; sun in sky; sunned themselves
2. Continue Stormy Weather (timestamp 01:09-01:30) video and prompt the student to discuss how the weather is changing:
   - How is the weather changing in the story?
     - Possible responses: it looks like it might rain; the wind is blowing; the sun disappeared; it’s getting colder
   - How do you know?
     - Gray clouds filled the sky; leaves blew by; the sun was covered by clouds; the water in the river is rippling
3. Continue Stormy Weather (timestamp 01:30-03:37) video and discuss changes in the weather:
   - Peep, Chirp and Quack couldn’t find any of their friends. Why?
     - A storm was coming.
   - What happens when it storms?
     - Clouds fill the sky. The wind starts to blow. Rain begins to fall. Lightning flashes. Thunder claps.
4. Continue Stormy Weather (timestamp 03:37-04:45) video and discuss:
   - Why do Peep, Chirp and Quack leave the can?
     - The can is too small for them all to fit.
5. Continue Stormy Weather (timestamp 04:45-08:53) video and discuss:
   - Why isn’t Nellie (dog) afraid of the storm?
     - She has a dog house to keep her safe and dry.
   - Where does Nellie find shelter during the storm?
     - Her dog house.
   - What is something good about the storm?
     - The rain waters the plants and causes them to grow.
   - What do Peep, Chirp, Quack and Nellie see in the sky after the storm?
     - A rainbow.
   - What evidence do we see that it rained earlier in the day?
     - Puddles on the ground.

Closure

Provide the student with a piece of drawing paper. Prompt him/her to fold the paper in half creating two sections. On one half of the paper, prompt the student to record the weather conditions at the beginning of the student. On the other half of the paper, prompt the student to record the weather conditions in the middle of the story. Once the student has completed both drawings, ask him/her to answer the following questions using evidence from his/her paper:

- In the story, how does the weather change throughout the day?
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- In the beginning of the story the sky is blue, the clouds are puffy and white and the sun is shining. Later, the sky fills with gray clouds, the wind begins to blow and rain falls. The characters observe thunder and lightning.
  - How are the two types of weather different? How are they the same?
    - It is sunny and there is no wind compared to cloudy, windy and rainy.
    - There are clouds when it is sunny and when it is rainy.

Extension

Weather Role Play - dress up for different kinds of weather. Discuss why different types of clothing are needed depending on the weather.

Weather Collage - look for different pictures in newspapers and magazines that depict different types of weather. Create a collage using the pictures.

Read All About It

- May I Come In? by Marsha Diane Arnold (PreK-1)
- Pignic by Matt Phelan (PreK-1)
- A Year with the Wind by Hanna Konola (PreK-1)
- The Weather Girls by Aki (PreK-1)
- Tap, Tap, Boom, Boom by Elizabeth Bluemle (PreK-2)
- Sun by Sam Usher (PreK-2)
- The Rain Came Down by David Shannon (PreK-2)
- Thunder Cake by Patricia Polacco (1-4)