

Weather Faux-Yoga and Other Moves

Become the sun, wind and clouds to learn about weather in motion!

Gardening Connection:

Gardening can inspire students to pay more attention to weather. Movement can make lessons about weather more memorable.

Time Required:

2 class periods

Grade Level:

Elementary

EDUCATOR NOTE:

This activity can be used in conjunction with the activity *What's with This Weather?* from the Kansas School Gardens Curriculum.

OBJECTIVES

Students will be able to:

1. Define weather and list at least three elements of weather
2. Use movement to demonstrate an understanding of weather patterns
3. Collect and interpret data from the weather station

BACKGROUND

If you ask students, or anyone, for their definition of weather, they will often be at a loss of words. Weather is a hard word to define because for many *weather is the weather*. Students often understand what it is, but have a more difficult time putting that understanding into words.

Weather is the conditions and state of the atmosphere, or all the air around us and the earth, at a specific time. It is a snapshot of many things including temperature, cloud cover, the sun's brightness, wind, and precipitation (rain, snow).

Gardening can inspire students to pay more attention to weather. Temperature, wind, light and precipitation affect the health of garden plants every day. If it does not rain, the garden will need to be watered. When it gets hot, lettuce often turns bitter. If a frost is in the forecast, some plants may need to be covered.

Movement can be an exciting method to reinforce concepts learned elsewhere. "Faux yoga" or pretend yoga is a fun and easy way to get kids moving and thinking about weather.

For additional information, please refer to the activity **What's With the Weather**.

MATERIALS

- Garden journal
- Weather station
- Rain Gauge
- Thermometers

Subjects

Science
Physical Education

Vocabulary

Weather
Precipitation

Project Connections

WET: Thunderstorm
The Incredible Journey
The Rainstick

PROCEDURES

Engage

Discuss with the students that they have learned about weather before (see *What's With This Weather?* activity from the Kansas School Gardens Curriculum) and that weather affects their choices everyday.

If you have conducted the activity What's With this Weather, then some of this discussion will be a review with your students.

Ask students for their definition of weather. Weather is a hard word to define because for many *weather is the weather*. Kids often understand what it is, but have a more difficult time putting that understanding into words. Weather is the conditions / state of the atmosphere, or all the air around us and the earth, at a specific time. It affects life and our activities. It is a snapshot of many things include temperature, cloudiness, brightness, wind, and precipitation (rain, snow).

Take students outside to explore. Instruct them to look for signs of recent weather – if it has been really dry the ground will be dry and maybe cracked. If there has been a lot precipitation, the ground will be wet. What do you see? Are there puddles? Are there worms? What is happening?

Explore

Tell students that instead of measuring the weather, they are going to be the weather!

Instruct all students to find a space in the classroom or outdoors where they can move freely without touching anything or anyone. Speak the following as you also do the movements:

Weather “Faux Yoga”

“You are my sunshine! Spread your arms out wide and send your warmth out all around you. You control the weather – you warm the air; you make the winds – you are very important.”

“Now, I want you to sway (move) your head and body back and forth. Make little blowing sounds and quiet whistles. You are the wind. Light wind makes a light sound, strong winds can be loud. You blow the clouds around; you blow the leaves in the garden’s trees.”

“Puff yourself out as big as you can. Slowly shuffle around the room, slowly moving your arms. You might bump into your neighbors, but not too hard. You are my clouds. I can tell what kind of weather we might have based on the type of clouds I see. Big puffy, cumulus, clouds mean nice weather is here...

Crouch low to the ground and spread out your arms – you are now low stratus clouds – you are fog....

Stand up tall, arms up in a circle over your head. Give me a dark, grumpy face. Tall, dark clouds mean rain is coming. You are big rain clouds – cumulonimbus!”

“Slowly bring one arm down, then the other. With your fingers, make them move like rain falling down: lightly, heavier, heavier, softer (or the other way around).

Stomp your feet softly, now loudly, and now softly. You are thunder!

Great job! Now, let’s look at how some of those parts of weather affect the garden.”

Review the weather from weather yoga.

Sunshine – warmth, food for plants, very important! We can't control the sun, but some plants grow better in sun and others prefer areas of little or no sun. What do we call that? Shade.

Sunshine also controls the water cycle, which is something we will learn more about later.

Temperature - Most of our plants don't grow when it is cold. We need the weather to be warm before we can start growing many of our vegetables and flowers.

Rain – What is rain? Water that falls from the sky. It is called precipitation. Ask students to list other types of precipitation (or things that fall from the sky) – snow, hail, sleet.

Ask students to remind you of why this is important for the gardens. Plants need water to grow.

Can we have too much water? YES. What happens when there is too much water? Flood. Can you have too little water? Yes. A drought is when you don't have enough water for a really long time.

Clouds –

Have students look out the window (or if you are outside) and ask if they what the sky look like today? Is it cloudy? Clouds can tell us a lot about the kind of weather we are having or may soon have. Big puffy, cottonball clouds are called cumulus clouds. They indicate nice weather.

Tall, dark rainclouds are cumulonimbus.

Nimbostratus are the clouds that cover the whole sky on a rainy day. Fog is even a type of cloud. They are very low stratus clouds.

Wind – Ask students if they can see wind? Not really. But can they see the work of wind? YES. Have students list some of the signs of wind. Have them look out the window (or if you are outside) and ask if they can see signs of wind now?

Because you can't see wind, like you can see rain, we use different ways to measure it. One way is to look and see what the wind is doing. Is it making leaves rustle? It is making flags flap? Very strong wind can even uproot trees or destroy buildings. That is when weather can actually be dangerous.

Show students a picture of images demonstrating the Beaufort Scale for wind measurement (see resources section). Ask them to think of some reasons why it would be important to have a common scale for visually measuring wind. Not everyone has a wind gauge. A visual scale allows everyone to understand the intensity of the wind.

Explain

Use your school's weather station or other tools to collect some data on the day's weather. Record the day's measurements in the garden journal. If measurements have been taken before or as part of an earlier activity, compare the data between today's measurements and prior recordings.

Students may also use symbols to record their measurements. Have students determine if it is sunny, partly sunny, cloudy, or partly cloudy. Also determine if there is cloud cover.

Use the thermometer to take the temperature. Take it in several places (sunlight and shade) to see if it changes.

Check the rain gauge to see how much rain has fallen.

Ask students how they should check for the work of the wind, other than using a wind gauge if you have one. Show them the images demonstrating the Beaufort Scale again and determine a designation.

The Explore and Explain portions of this activity may be repeated frequently to measure and record weather.

Elaborate

Use Project WET's activity, Thunderstorm, to demonstrate the sounds of a thunderstorm. This is an activity similar to Weather Faux Yoga.

Ask students if they would go swimming in a thunderstorm? (No.) Why?

Discuss other choices they have made because of the weather... (How do you dress when it is snowing outside or cold?) How did the weather today affect their choices?

Introduce (or re-introduce) another word: climate. Have you heard of that word? Do you know what it means?

Climate is when we look at all the weather together. So, the north pole – what does the weather like there? Very cold...almost all the time. The North Pole has a cold climate. How about the desert? Very hot...almost all the time. Hot and dry. The desert has a hot and dry climate.

What's the climate like in Kansas? First think about the weather at different times of year. There are four seasons with different weather in each. That makes Kansas pretty special. Kansas is called temperate – a word that sounds like temperature. Not too hot and not too cold with rainfall or precipitation all year round. Even though the summers can get hot for us, it is still considered temperate.

Evaluate

Review with each student how to read the thermometer and the other tools to record data. Continue to repeat the activity and review until all students are confident in the abilities to use the tools.

Ask students if they have a favorite type of weather. Using the descriptions of several students' favorite types of weather, have all students "record the data" and symbols for that weather. For example, one student may say they love winter and cold, cloudy days with snowstorms. Students would record a cloud, a sign of wind, and a picture of a snowflake or snowman.

Have students design their own "Faux Yoga" routine to act out weather for their favorite season.

Extension Ideas

Do the activity *Thunderstorm*, *The Rain Stick*, or *The Incredible Journey* from Project WET

Related Readings:

Thundercake by Patricia Polacco

Resources:

Beaufort scale for wind measurement

<http://www.unc.edu/~rowlett/units/scales/beaufort.html>