

WEATHER SYMBOLS AND RECORDS

Overview

3.20.2019

Subject

Basic science

This lesson plan covers teaching content for;

2. Weather records(temperature, rainfall)

Prepared By

[Instructor Name]

Grade Level

5

1. Weather symbols (rain, sun, cloud)

Objectives

Students should be able to;

- Understand that weather can change daily and that weather patterns change over the seasons
- Understand that weather has characteristics that can be measured and predicted
- Recognize how weather affects humans

Activity Starter/Instruction

- 1. First, get students to just talk about weather generally. Ask questions such as: What's the weather like today? What was it like yesterday? How can you find out what the weather will be like ahead of time? Do you know what it will be like tomorrow? Does the weather ever affect what you can do (e.g., can't play outside if raining)?
- 2. Then ask: Can you find clues around the classroom that indicate what the weather is like? (Examples could include umbrellas, raincoats, shorts, tshirts, snow boots, etc.) Would you have found the same types of items in the room yesterday? (If yesterday's weather was much like todays, then they will answer yes. If yesterday's weather was very different, then they will answer no.) If not, why not? (The weather changed.)

Teacher Guide

Day 1/ Lesson 1: 15 Mins

- Take your students outside for a view of how the weather is today
- 2. Before going outside, demonstrate how students should safely use and read a thermometer. These are tools, not toys.
- Once outside, pass out the thermometers in small groups and ask students to measure and record the temperature in their science journals.
- 4. Gather the class to share temperature results, and discuss why it is this temperature. What month is it? What season is it? Does it look like this everywhere in the world, and why? Have students record all ideas in journals. (Depending on current weather conditions, conduct discussion outside or back inside classroom).

Materials Required

- -thermometers
- -science journals
- rain gauge
- -pegboard
- -barometer
- -wind stock
- -nails
- -compass

Additional Resources

- https://www.cpalms.org/Public/PreviewResc
- http://www.climatechoices.org.uk/pages/act
- http://www.ucar.edu/learn/1 2 2.htm
- http://familyfun.go.com/crafts/crafts-by-typ activities/science-projects/weather-wizards-

Additional Notes

Weather and climate are integral factors in the masses, oceans and atmosphere interact.

A basic knowledge of weather and climate will help young students form the foundation from which to build deeper thinking about the earth as a system.

Guided Practice

Day 2/ Lesson 2: 15 Mins

- Make a line graph of the daily high temperatures for a month, using information from a newspaper or online source.
- Discuss what the daily average, or "normal" temperature, means, then graph it on the same graph, using a different colored line. Talking about the difference between the two lines will help illustrate the difference between climate and weather.
- 3. Ask students how the graphs help them to predict tomorrow's weather or if this seems to be a warmer or cooler than average month. Or, pair with a school in another climate and complete the project together, making weekly comparisons via the Internet.
- 4. Assign groups of students different climates to study, such as arid or polar. Each group can prepare a poster for their assigned climate that meets a minimum of requirements. First, it must define the significant attributes of that climate. It must also display a world map that marks places on earth that have that climate.
- Finally, it should include two to three
 pictures (either drawn by the students
 or cut from magazines) that
 demonstrate how the climate in one or
 more of these places has affected
 human activity.

- 5. Ask the class, "What do you think it looks like in Canada (or a distance country) right now?"
- 6. Allow students to make observations based on real-time footage and ask: What season does it look like? Why does it look different or similar to what we see outside our window? Why is the temperature different?

Guided Practice

Day 3/ Lesson 3: 15 Mins

- Make a classroom weather station by nailing a 1-foot square piece of pegboard to a 3-foot-long stake.
- 2. Fasten a thermometer, rain gauge and barometer to the pegboard with wire.
- 3. Draw a compass on a 3-inch square board and nail it to the top of the stake, leaving a ½-inch gap between the nail head and the board. Fasten a windsock to the nail with fish line. Sink the stake in an 18-inch hole in an open area with the thermometer facing north and adjust the compass accordingly.
- **4.** Gather weather data at the same time daily. This will help students understand more through this tools, change in weather with the study of wind, sun and the next time it's going to rain

Assessment Activity 1. To assess student's knowledge of the differences between weather and climate 2. To assess student's study of weather and climate around the world using their analysis of the graph, the science journal, weather station and	Assessment Activity
Summary	