

Ames Public Library @HOME Activities

Climate and Weather Part 2

Weather is all around you. It influences what you eat, wear, and even the activities you can do. Weather and climate are also changing due to a number of factors. To learn more see a related video on the Library's YouTube Channel at <http://bit.ly/APLvideos>.

Books and Media:

| Title | Author / Performer | Call Number: |
|--|---------------------|---------------------|
| <i>Climate Emergency Atlas</i> | Hook, Dan | J 363.73 HOO |
| <i>Fever in the Oceans</i> | Aitken, Stephen | J 363.7337 AIT |
| <i>Fever at the Poles</i> | Aitken, Stephen | J 363.7387 AIT |
| <i>Climate Change</i> | Woodward, John | J 363.7387 WOO |
| <i>Climate Change</i> | (DK Let's find out) | J 367.73 CLI |
| <i>Climate Change</i> | Green, Dan | J 551.6 GRE |
| <i>The Hottest and the Coldest</i> | Marisco, Katie | J 551.6 MAR |
| <i>Polar Climates</i> | Senker, Cath | J 551.6911 SEN |
| <i>Climate Change: Discover How It Impacts Spaceship Earth</i> | Sneidman, Joshua | J 577.22 SNE |
| <i>The Magic School Bus – Climate Challenge</i> | Degen, Bruce | e-audio (Overdrive) |
| <i>Weather and Climate</i> | Greek, Joe | e-book (Overdrive) |
| <i>Climate Scientist</i> | Gregory, Josh | e-book (Overdrive) |

Websites:

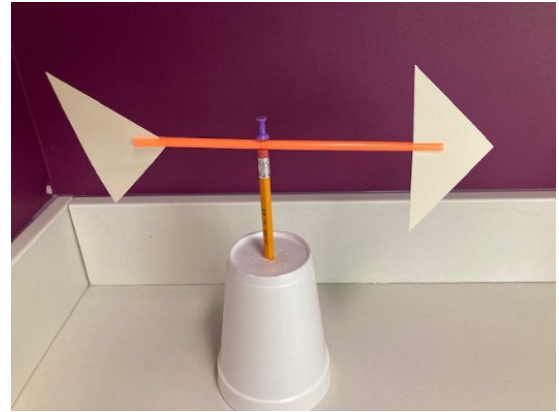
| URL | Notes |
|---|--|
| https://www.timeoutdoors.com/expert-advice/walking/kit/map-reading-skills | Great website for learning map skills |
| https://climatekids.nasa.gov/menu/weather-and-climate/ | This is a great website with lots of information |

Take Away Kit: Weather Vane

Bag Contents:

- 1 Styrofoam cup
- 1 straw
- 2 triangles
- 1 pencil with an eraser
- 1 push pin

To learn how to make a weather vane watch the @Home Activity video on the Library's YouTube Channel at <http://bit.ly/APLvideos>.



To put your weather vane together follow these instructions:

Take all the items out of the bag; the push pin is secured to the top of the pencil eraser.

You can decorate the cup by marking the sides with the four cardinal directions.

To make the arrow, locate the straw and the two triangles. The straw has two slits; insert the triangles provided one in each slit. You can refer to the image above.

For the next step please ask a grown-up for help. Carefully make a hole at the bottom of the cup, the hole should be just wide enough so that the pencil is snug. Next insert the pencil into this hole, eraser side up, and out the top.

Place the straw with the triangles on top of the eraser, and secure in place with the push pin. Adjust the pin as needed so that the straw arrow is able to move freely.

Adjust the cup and the pencil, so the cup is balanced. Your weather vane is now ready!

Weather vanes are used to show the direction of the wind. To try it out, take your weather vane outside and see if the straw arrow moves to adjust to the direction of the wind.

Vocabulary

Anemometer - An instrument used in weather forecasting to measure the speed and force of the wind.

Atmosphere – The layer of gases that surrounds a planet and is held to it by the planet's gravity (force of attraction).

Barometer – An instrument used in weather forecasting to measure the pressure of the atmosphere.

Climate – The general pattern of the weather of a place, year by year.

Derecho – A huge windstorm associated with a thunderstorm.

Greenhouse effect – The way certain gases in the Earth's atmosphere trap the Sun's heat like the panes of glass in a greenhouse. The effect increases the temperature of the Earth's surface and lower atmosphere.

Meteorology – A science that studies the atmosphere climate and weather conditions in regions throughout the world.

Precipitation – Any form of water (dew, rain, snow).

Season – A period of time each year with particular weather conditions.

Weather – The conditions of the atmosphere at any particular time and place.

Weather satellite – A spacecraft that orbits around a planet and can carry tools to track the weather.

Wind – Air moving in relation to the Earth's surface.

Source: Weather: An amazing fact and hands-on project book by Robin Kerrod. J 551.5 KER

First big book of weather by Karen De Seve. J 551.5 DES

