

Air & Weather: 2nd Grade Science Unit

Big Idea: There are many ways we experience the air around us. Weather is caused by changes in the air.

Core Book

Ouellet, Marie Claude. *Scholastic Atlas of Weather*. New York: Scholastic Reference, 2004.

Concept I: Air is matter and occupies space.

Core Book

Branley, Franklyn Mansfield. *Air is All Around You*. New York: Harper Collins, 1986 (2006).

Additional Titles

Stille, Darlene R. *Air: Outside, Inside and All Around*. New York: Picture Window Books, 2004.

Related Literature

Calhoun, Mary. *Hot Air Henry*. New York: W. Morrow, 1981.

Gorbachev, Valeri. *Molly Who Flew Away*. New York: Philomel, 2009.

Priceman, Marjorie. *Hot Air: The (Mostly) True Story of the First Hot Air Balloon Ride*. New York: Atheneum Books for Young Readers, 2005.

Concept II: Weather can be observed, measured and described.

Core Book

Berger, Melvin and Claudia. *Can it Rain Cats and Dogs? Questions about Weather*. New York: Scholastic Reference, 1999.

Additional Titles

Locker, Thomas. *Cloud Dance*. San Diego: Harcourt, 2000.

Gibbons, Gail. *Weather Forecasting*. New York: Aladdin, 1993.

Related Literature

Aardema, Verna. *Bringing the Rain to Kapiti Plain: A Nandi Tale*. New York: Dial Books for Young Readers, 1981.

Boswell, Addie. *Rain Stomper*. Tarrytown, NY, Marshall Cavendish Children, 2008.

Hesse, Karen. *Come On, Rain!* New York: Scholastic Press, 1999.

Shannon, David. *The Rain Came Down*. New York: Blue Sky Press, 2000.

Concept III: Wind is moving air and we can measure its speed and direction.

Core Book

Sherman, Josepha. *Gusts and Gales: A Book About Wind*. Minneapolis: Picture Window Books, 2004.

Additional Titles

Cobb, Vivki. *I Face the Wind*. New York: Harper Collins, 2003.

Related Literature

Del Negro, Janice M. *Willa and the Wind*. New York: Marshall Cavendish Children, 2005.

McKissack, Patricia C. *Mirandy and Brother Wind*. New York: Knopf, 1999.

Concept IV: Weather conditions change over time. Each season has a typical weather pattern.

Core Books

Singer, Marilyn. *On the Same Day in March*. New York: Harper Colluns 2000.

Additional Titles

Gibbons, Gail. *The Reasons for the Seasons*. New York: Holiday House, 1995.

Karas, G. Brian. *On Earth*. New York: GP Putnam's Sons, 2005.

Related Literature

Barrett, Judi. *Cloudy With a Chance of Meatballs*. New York: Atheneum, 1978.

Esbensen, Barbara Juster. *Swing Around the Sun: Poems*. Minneapolis, MN: Carolrhoda Books, 2003.

Krishnaswami, Uma. *Monsoon*. New York: Farrar, Straus, Giroux, 2003.

Videos

A First Look: Air. *Rainbow Educational Media*. 1999. Discovery Education.

<http://media2.aea10.k12.ia.us/htbin/wwform/040?TEXT=R3315588-3320251/CA/WWI770.HTM>

Magical Mother Nature: The Four Seasons. *Rainbow Educational Media*. 2004. Discovery Education.

http://media2.aea10.k12.ia.us/htbin/wwform/040?T=US20973#multimedia_resources_US20973

Websites

"Tree House Weather Kids." *University of Illinois Extension*. Urban Programs Resource Network. <http://urbanext.illinois.edu/treehouse/index.cfm>. Provides basic information on weather topics such as winds, moisture, air pressure, seasons, and storms. Very visually appealing.

"Harcourt Science Close Up." *Harcourt School Publishers*.

http://www.harcourtschool.com/activity/science_up_close/610/deploy/interface.html. An interactive site that explores different types of clouds.

"From Windmills to Whirligigs." *Science Museum of Minnesota*.

<http://www.smm.org/sln/vollis/trythese/trythese.html>. More of a teacher resource, this site explores pinwheels and wind power. Also has activities to use with *Mirandy and Brother Wind*