

CLIMATE CHANGE EDUCATION RESOURCES

Activities & Lessons

Coloring activity on weather and climate:

<https://www.teacherspayteachers.com/Product/Weather-vs-Climate-Interactive-Notebook-Freebie-1594272>

Cornell Cooperative Extension:

<http://4hstaff.cce.cornell.edu/system/files/climate.pdf>.

https://ohio4h.org/sites/ohio4h/files/d6/files/publications/documents/SelfDetermined/365_14_Climate_Change_2015.pdf

<https://www.extension.iastate.edu/4h/projects/environment>

<http://agroclimate.org/wp-content/uploads/2017/04/weatherAndClimateVariabilityToolkit.pdf>

Erosion versus weathering hands-on activity:

<https://www.thenaturalhomeschool.com/erosion-vs-weathering-awesome-science-stem-activities.html>

Extreme weather event role playing game:

<https://toolkit.climate.gov/tool/extreme-event-game>

Facing the Future: Two-week curriculum on climate change.

<https://www.facingthefuture.org/collections/middle-school-curriculum/products/climate-change-connections-and-solutions-grades-6-8?variant=13631796547>

Game of Floods: Freely available downloadable game that does include agriculture in the assets.

<https://www.marincounty.org/~media/files/departments/cd/planning/slr/game-of-floods/game-of-floods-materials.pdf?la=en>

NOAA Science on a Sphere: Agriculture.

<https://sos.noaa.gov/Datasets/search.php?q=agriculture>

Ordering information: <https://sos.noaa.gov/getting-sos/equipment-list/>

NOAA Science on a Sphere Explorer: Flat screen version of the datasets we viewed on Science on a Sphere.

https://sos.noaa.gov/SOS_Explorer/

Scavenger Hunt:

<http://www.edgalaxy.com/journal/2014/7/6/climate-change-savenger-hunt-task-for-students>

Southeastern Forests and Climate Change: Project Learning Tree's climate change module, easily adapted to the Northeast.

<http://sfrc.ufl.edu/extension/ee/climate/>

STEM: Science, technology, engineering, and mathematics.

<https://www.teacherspayteachers.com/Product/Climate-Change-7-Engaging-Lab-Station-Activities-2301691>

Visualizing climate change:

<https://blog.education.nationalgeographic.org/2016/05/15/weekly-warm-up-visualizing-climate-change/?sf26418119=1>

Weather and Climate Science Level 1, 2 and 3:

<https://shop4-h.org/products/weather-and-climate-science-level-1>

<https://shop4-h.org/products/weather-and-climate-science-level-2>

https://mdc.itap.purdue.edu/item.asp?Item_Number=4-H-1025-W

Weird weather:

<https://www.priweb.org/index.php/education/education-projects-programs/climate-change/weird-weather-exhibit>

Curriculum & Lesson Collections

Alliance for Climate Education (ACE): Created by the Alliance for Climate Education (ACE), Our Climate Our Future is an award-winning climate education resource for teachers and students with climate change videos, interactive trivia questions, climate change lesson plans and more.

<https://acespace.org/our-climate-our-future>

Climate Generation: Free, comprehensive, cross-disciplinary climate change curriculum for 3rd-12th grades.

<https://www.climategen.org/what-we-do/education/climate-change-and-energy-curricula/curriculum-guides/>

Climate Generation: Suite of lesson plans, resources and activities.

<https://www.climategen.org/take-action/teach-climate-change/curriculum/>

Climate Literacy and Energy Awareness Network (CLEAN): Clearinghouse for climate lessons and visualizations – a collection of about 700 free, ready-to-use resources rigorously reviewed by educators and scientists.

<https://cleanet.org/index.html>

EPA Climate Change for Kids:

<https://www3.epa.gov/climatechange//kids/index.html>

<https://www3.epa.gov/climatechange//kids/resources/lesson-plans.html>

NASA Climate Education resources:

<https://climate.nasa.gov/resources/education/>

NOAA Climate Education Collections:

<http://www.noaa.gov/resource-collections/climate-education-resources>

Climate Change Education Books

Communicating Climate Change: A Guide for Educators (available for free in November 2018)

<http://www.cornellpress.cornell.edu/book/?GCOI=80140103609930>

National Climate Assessment Teaching Resources: Educator resources designed to support the National Climate Assessment.

<https://www.climate.gov/teaching/national-climate-assessment-resources-educators/northeast-region>

Teacher-Friendly Guide to Climate Change:

<https://www.priweb.org/index.php/pubs-special/pubs-spec-5813-detail>

Tips and Tricks for Presenting Climate Change Information: Climate Interpreter, great site for learning how to fine tune the language we use when we teach.

<https://climateinterpreter.org/>

Climate Change Communication & Public Opinion Resources

Climate Chat: A research roundup of recently published literature on climate change communication and public opinion.

<http://www.theclimatechat.org/>

Find out what your community thinks about climate change here:

<http://climatecommunication.yale.edu/visualizations-data/ycom-us-2016/>

NYS Climate Science Clearinghouse: Excellent resource for relevant, up-to-date science of climate change impacts in NYS, with an interactive map viewer and data tool to customize information on a local level.

<https://www.nyclimatescience.org/>

Climate Change in NGSS & NYS Standards

Climate Change Literacy Principles:

<https://www.climate.gov/teaching/essential-principles-climate-literacy/essential-principles-climate-literacy>

New York State Science Standards: For example, see MS-ESS2-5, MS-ESS2-6, MS-ESS3-5, HS-ESS2-2 - 7).

<http://www.p12.nysed.gov/ciai/mst/sci/documents/p-12-science-learning-standards.pdf>

Next Generation Science Standards, ESS3D: Global Climate Change.

<https://www.nextgenscience.org/disciplinary-core-ideas/ess3d-global-climate-change>

Toolkit

NOAA's Toolbox for Teaching Climate Education: The Climate Action Learning Process (CALP) provides a path teachers can follow to educate students about climate and energy science, develop the skills to take action, and then reevaluate teaching methods.

<https://www.climate.gov/teaching/toolbox-teaching-climate-energy>

U.S. Climate Resilience Toolkit: A powerful tool for exploring climate impacts and design solutions on a national scale.

<https://toolkit.climate.gov/>

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