

Environmental Education Resources for Remote Teaching



Curated by the <u>Superintendent's Advisory Committee on Sustainability</u>. Last updated October 2020.

Want to add resources to this list? Contact Cathy Lin at cathy.lin@apsva.us

PROJECT SUGGESTIONS

Home Sustainability Assessment

Grades: Elementary & Middle For: Teachers & Parents

Using resources listed here, have students complete a sustainability assessment and come up with action plans to implement sustainability strategies at home or school.

- Project Learning Tree Free Activities Around Your Home
- Eco Schools USA Pathways At Home
- Earth Day at Home
- Energy Efficiency Checklist
- K-2 Circular Economy Trick or Treat Lesson
- 3-5 Circular Economy Trick or Treat Lesson

Digital Poster Project

Grades: Elementary, Middle, & High School

For: Teachers

Teacher curated and crowdsourced, the <u>5000th Poster Assignment</u> offers alternatives to creating a paper poster and instead, encourages students to create digital posters they can keep! Challenge students to develop a brochure or poster raising awareness for a sustainability topic or theme you are teaching in class.

Upcycle At Home

Grades: Elementary & Middle

For: Parents

<u>Upcycle at home with these guiding activities</u> such as using an old t-shirt and turning it into a grocery bag or coasters!

CARBON & CLIMATE RESOURCES

Use these resources to create remote lessons related to carbon and climate.

Climate Civics Toolkit

Grades: Middle, & High School

For: Teachers & Parents

Earth Day Network's Climate Civics Toolkit provides resources for educators and parents to engage youth in learning about climate change and civic action, including plastic pollution, equity and environmental justice, and food sustainability. Includes suggestions for service learning projects and investigations.

Tracking Carbon to Understand Its Flow

Grades: Middle For: Teachers

Three lessons developed by National Geographic, about tracking carbon, climate change, and fossil fuels. Includes video and discussion to be easily adapted virtually. Nat Geo resources easily integrate into Google Classroom

CoolClimate Calculator

Grades: Middle, & High School

For: Teachers & Parents

Pair the CoolClimate Calculator for activities and lessons related to carbon and climate. Have youth calculate carbon footprint based on where they live. For a virtual classroom setting, provide students with an estimated gross annual household income based on average for your county using annual income data from the **US Census**.

Climate Leaders In Action: Energy Module

Grades: High School For: Teachers & Parents

Sign-up for a free account at Learning Lab to access this lesson on Climate Leaders. Students investigate renewable and nonrenewable energy uses. For other free lessons from Learning Lab, check out their Free Preview Resources. Please note, for other lessons on Learning Lab, a \$40 annual subscription is required.

WATER CONSERVATION & MARINE ECOSYSTEMS

Chesapeake Bay Conservation

Grades: Middle & High School

For: Teachers and Parents

The Chesapeake Bay Foundation's Learn Outside, Learn at Home content includes new video resources, field investigations, and printable watershed curriculum to help students and teachers stay connected to the Bay and watershed.

CBF is also offering the <u>Chesapeake Bay Foundation Online Watershed Learning (OWL)</u> <u>program</u>, a live and local learning program designed to provide students the opportunity to discover our unique watershed through real time lessons with CBF educators. (The fee is \$50 except for Title I schools.)

Water Works Lesson

Grades: Middle For: Teachers

Three lessons by National Geographic, <u>Water Works lessons</u> guides students to compare their own tap water use in light of global freshwater access to develop an understanding of water security.

Wading into Water Quality

Grades: Middle

For: Teachers & Parents

Part of EarthEcho International, <u>Wading into Water Quality</u> is a recorded lesson part of their Snack-Sized Science resources. Check out other Snack-Sized Science videos on the EarthEcho International Youtube Channel.

National Marine Sanctuaries

Grades: K-12

For: Teachers & Parents

Check out a <u>variety of digital tools and resources</u> from NOAA including <u>virtual dives</u>, <u>data in the classroom</u> activities, activities on <u>ocean acidification</u> and <u>lessons on reef monitoring</u>.

Watershed Sleuth Challenge

Grades: Middle & High School For: Teachers & Parents

Developed by the National Environmental Education Foundation (NEEF), the <u>Watershed Sleuth</u> <u>Challenge</u> is a self-paced lesson for students to learn about watersheds.

Find More Resources Related to Water

Check out In Water to find curated resources about water conservation and oceans.

WILDLIFE

National Wildlife Federation

Grades: K-12

For: Teachers & Parents

Check out the <u>National Wildlife Federation virtual resources</u> which includes virtual field trips, activities, and more. For example, share the <u>Bird Watching Activity</u> as a homework assignment or a family activity to explore birds near your home. For accessibility, the activity can be done by looking out a window or completely online with the resources provided by NWF.

National Zoo's School Programs

Grades: K-5 For: Teachers

With your choice of various topics all corresponding to Next Generation Science Standards, National Zoo staff will meet one-on-one with your virtual classroom. All programs are completely free, you just need to register on a first-come basis.

https://nationalzoo.si.edu/education/school-programs

National Zoo's STEAM Webinars

Grades: 5-8

For: Teachers and Parents

National Zoo staff lead this monthly live webinar series (on Zoom) that explores the various careers in STEAM at the Zoo. https://nationalzoo.si.edu/education/wild-side-steam

Remote Wild

Grades: K-12

For: Teachers & Parents

<u>Project Wild developed remote adaptations</u> to their activities. Even if you don't have access to Project Wild curriculum resources, you can use these adaptations by expanding on the guidance provided.

The Great Backyard Bird Count

Grades: K-12

For: Teachers & Parents

Participate in the <u>Cornell University Great Backyard Bird Count</u> citizen science project. Pair this with other lessons about wildlife and birds.

VIRTUAL FIELD TRIPS & VIDEOS

Use these virtual field trips with related lessons and activities, or as a fun break from face-to-face Team Meetings lessons.

- Nature Time 10-15 Minute Videos (Youtube)
- 25 Virtual Field Trip Suggestions
- National Wildlife Federation Virtual Trips
- Nature Conservancy Field Trips

FIND OTHER RESOURCES

Can't find something that meets your needs? Find more with these tools below:

- Green School Yards Resources
- Nature For All Searchable Index
- Project Learning Tree Resources
- GreenSchools National Network Resources

TEACHER EDUCATION AND DEVELOPMENT

Resources to support teachers to teach remotely:

- GreenSchools National Network Archive Newsletter
- Practical Guide to Place-Based Learning Webinar
- Webinars from the North American Association for Environmental Education