# Environmental education curriculum

The following curriculum resources are available to educators looking to incorporate lessons and activities on environmental topics.

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| Name, link, and description | Topic area(s) | Resources offered | Cost | Age Group |
| [Adopt-a-Drain](https://adopt-a-drain.org/)Adopt-a-Drain K-12 supports the Adopt-a-Drain program which asks residents to adopt a storm drain in their neighborhood and keep it clear of leaves, trash, and debris to reduce water pollution.   | * Water quality
* Understanding stormwater
 | * Online K12 learning sources
* Teacher kits
* Online training
* Access to program experts for content, planning and classroom management advice
 | Free (funded) for most classrooms in Hennepin County. [If not, inquire about purchasing](https://ms4.adopt-a-drain.org/educators#sign-up) | KindergartenElementaryMiddleHigh school |
| [City of Minneapolis Clean City Classroom](https://www.minneapolismn.gov/government/programs-initiatives/clean-city/clean-city-classroom/)Curriculum for grades K-8 on waste reduction, recycling and composting. Available to schools and organizations located in the City of Minneapolis.  | * Litter prevention
* Waste reduction and recycling
* Composting
* Understanding plastics
 | * Curriculum
* Games
* Coloring pages
 | Free (registration required) | KindergartenElementaryMiddle |
| [Climate Generation curriculum](https://climategen.org/resources/)Interdisciplinary climate change curriculum resources for grades K to 12. Toolkits are also available to train student groups, including YEA! Toolkit for Trainers (working with high school green teams).   | * Climate change
* STEM
* Art
* Social studies
* Math
* History
* Geography
* Renewable energy
* Green careers
* Humanities
* Storytelling
 | * Curriculum guides
* Online modules
* Educator training and workshops
 | Free downloadsPrint copies available for purchase | KindergartenElementaryMiddleHigh school |
| [Climate Interactive Climate Action Simulation](https://www.climateinteractive.org/climate-action-simulation/)Online or in person game ideal for 20-50 people. Runs 2 to 4 hours. | * Climate solutions; energy supply subsidies, energy efficiency, land use changes
 | * Game materials, training, and simulation.
* Resources offered in 19 languages
 | Free | High schoolYoung adult |
| [Climate Kids from NASA](https://climatekids.nasa.gov/)Site for students that tells the story of our changing planet through the eyes of the NASA missions studying Earth. | * Weather
* Climate
* Water
* Energy
* Plants and animals
 | * Games
* Activities
* Crafts
* Videos
* Articles
 | Free | ElementaryMiddle |
| [Commission for Environmental Cooperation](https://www.cec.org/tools/)Find data on various topics including land change, pollutants, food waste, and more. | * Water
* Climate
* Food waste
* Pollution
* Habitat
 | * Tool kits and guides
* Data collections
 | Free | MiddleHigh school |
| [Do the Rot Thing](https://www.cvswmd.org/uploads/6/1/2/6/6126179/do_the_rot_thing_cvswmd1.pdf)Composting activities.  | * Composting
* Understanding ecosystems
 | * Curriculum guide and activity ideas
 | Free | KindergartenElementaryMiddleHigh school |
| [Earth Partnership curriculum](http://www.earthpartnership.wisc.edu/curriculum)Tools from the University of Wisconsin for teachers to guide students through schoolyard restoration and exploration.  | * Understanding ecosystems
* Protecting land and water
 | * Curriculum guides and activity ideas
* Webinars and training
 | Free | ElementaryMiddleHigh school |
| [Environmental Protection Agency (EPA) resources](https://www.epa.gov/students/lesson-plans-teacher-guides-and-online-environmental-resources-educators)An array of environmental and science-based lesson plans, activities and games. | * Air quality
* Climate change
* Ecosystems
* Energy
* Health
* Waste
* Water
 | * Curriculum guides and activities
* Books and posters
* Games
* Resources in Spanish
 | Free | KindergartenElementaryMiddleHigh school |
| [Food Matters Action Kit](https://www.cec.org/flwy/)Activities from the Commission for Environmental Cooperation (CEC) to encourage youth (5-25 years old) to reduce food waste  | * Preventing food waste
 | * Curriculum in English, French, and Spanish
 | Free | Young adult |
| [Green Ninja](https://web.greenninja.org/)Climate education materials | * Energy
* Weather and Climate
* Pollution
* Scientific Storytelling
* Ecosystems
 | * Games
* Videos
* Lesson plans
 | Free  | Middle  |
| [Hennepin County environmental education activity guides](https://www.hennepin.us/environmentaleducation)Activities on a variety of topics to engage audiences of all ages in learning about and taking action to protect the environment.  | * Air, energy, climate change
* Recycling
* Reducing waste
* Reducing food waste
* Organics recycling
* Protecting land and water
* Toxicity and hazardous waste
 | * Background information
* Curriculum and activity guides
* Additional activity ideas
 | Free | ElementaryMiddleHigh school |
| [Jeffers Foundation](https://jeffersfoundation.org/resources-and-programs/)Lessons for K-5th grade about the natural world that reinforce art, English, math and science academic standards and journal activities.  | * Astronomy
* Gardening
* Phenology
* Water
* Weather
 | * Lessons
* Activities
* Journals
 | Curriculum is free Journals are free for workshop participants or available for a fee.  | KindergartenElementary |
| [MinnAqua](https://dnr.state.mn.us/minnaqua/leadersguide/index.html)Lessons and activities from the Minnesota DNR for grades 3 to 5 focused on learning about aquatic habitats and introducing kids to fishing.  | * Understanding ecosystems
 | * Curriculum guides and activity ideas
* Field trip opportunities
 | Free  | Elementary |
| [Minnesota Valley National Wildlife Refuge curriculum](https://fws.gov/refuge/Minnesota_Valley/visit/for_educators/curriculum.html)Field-tested curriculum developed by refuge staff. | * Understanding ecosystems
 | * Curriculum guides and activity ideas
 | Free  | KindergartenElementary |
| [Pollinator LIVE](https://pollinatorlive.pwnet.org/teacher/index.php)A collection of pollinator lessons plans and resources. | * Understanding ecosystems
* Protecting pollinators
 | * Curriculum guides and activity ideas
* Webinars
* Citizen science projects
 | Free  | KindergartenElementaryMiddleHigh school |
| [Project Flying WILD](https://dnr.state.mn.us/projectwild)Lessons involve language arts, social science, and math experiences coupled with community outreach and service learning to offer a whole-school approach to environmental education using birds as the focus.  | * Understanding ecosystems
 | * Training and workshops
* Curriculum guides and activity ideas
 | $20 to $50 for training, curriculum resources provided with training  | Middle |
| [Project Learning Tree](https://mndnr.gov/plt/activityguide.html)Uses forests as a “window on the world” to help students in grades Pre-K to 12 excel in reading, writing, math, science, and social studies.  | * Trees and forests
* Understanding ecosystems
 | * Activity guides
* Online and in-person workshops
* Online modules
* Correlation to MN academic standards
* Dakota and Ojibwe lessons
* Outdoor, hands-on activities
 | $40 to $60 for curriculum and/or in-person or online training with CEUs.  | KindergartenElementaryMiddleHigh school |
| [Project WET](https://dnr.state.mn.us/projectwet)International, interdisciplinary water science and education program for educators. | * Water quality
 | * Training and workshops
* Curriculum guides and activity ideas
* Background on environmental topics
* Supplemental resources
 | $65 for training, curriculum resources provided with training. Free resources also available without training.  | KindergartenElementaryMiddleHigh school |
| [Project WILD](https://dnr.state.mn.us/projectwild)Interdisciplinary conservation and environmental education that capitalizes on the natural interest students and adults have for wildlife.  | * Understanding ecosystems.
 | * Training and workshops
* Curriculum guides and activity ideas
 | $20 to $50 for training, curriculum resources provided with training  | KindergartenElementaryMiddleHigh school |
| [The Soil Story](https://kisstheground.com/wp-content/uploads/2020/04/Soil-Story-Curriculum_200212.pdf)Lessons on the carbon cycle, soil health and the role of compost in building soil. | * Earth systems
* Photosynthesis
* Healthy soil
* Food and Farming
 | * Curriculum
 | Free  | Middle |
| [Think Earth curriculum](https://thinkearth.org/curriculum)Behavior-based curriculum that focuses on conserving natural resources, reducing waste, and minimizing pollution. | * Understanding ecosystems
* Recycling
* Reducing waste
* Protecting land and water
 | * Curriculum guides and activity ideas
 | Free  | KindergartenElementary |
| [UMN 4-H Sustainable polymers curriculum](https://www.4hpolymers.org/)Aims to address environment challenges associated with traditional plastics and engage youth to develop solutions to create a sustainable future. Offers curriculum for grades K-12.  | * Plastic waste
* Climate
* Engineering
 | [Additional resources](https://www.4hpolymers.org/resources) * 4-H Green Superheroes
* LitteratiED Lesson plans
* Polymer science exploration activities
* Videos
 | Free | KindergartenElementaryMiddleHigh school |
| [UMN Bee Lab / Monarch Joint Venture Pollinator Education toolkits](https://docs.google.com/forms/d/e/1FAIpQLSenVfT4LXLrbLuUTlYck7eJ-ruhmMAPyBJ1hPiFPnukgIWl9Q/viewform)Kits provide science-based pollinator education through games and interactive features and include instructions for education and outreach leaders.  | * Pollinators
* Food
* Understanding ecosystems
 | * Activity guides
* Games
* Physical materials available for checkout or purchase
 | Physical kits available for checkout from libraries and Extension Research and Outreach Centers and for sale at the UMN bookstore.Free online materials | KindergartenElementaryMiddleHigh school |
| [Water Action Volunteers](https://wateractionvolunteers.org/resources/coordinator-resources/)Hands-on activities for grades 6 to 12 to learn about stream health and stream monitoring both within and outside the classroom.  | * Understanding ecosystems
* Protecting land and water
 | * Curriculum guides and activity ideas
* Monitoring videos
 | Free  | MiddleHigh school |
| [World Wildlife Fund Food Waste toolkits](https://www.worldwildlife.org/teaching-resources/toolkits/be-a-food-waste-warrior)Curriculum for grades K to 12 to teach the planetary impact of what we eat and what we throw away. | * Food waste prevention
 | * Curriculum guides and activity ideas
* Posters
 | Free | KindergartenElementaryMiddleHigh school |
| [Young Naturalists stories and teachers guides](https://dnr.state.mn.us/mcvmagazine/young-naturalists.html)A collection of Young Naturalists stories, discussion questions, and activities guides for grades K to 6 from the Minnesota Conservation Volunteer magazine. | * Understanding ecosystems
* Climate change and weather
 | * Readings
* Curriculum guides and activity ideas
 | Free  | KindergartenElementary |