

4-H EARTH & CLIMATE PROJECT



Step It Up!

Pass it on! Now that you know how, share it with others. Here are ideas to get you started.

Communication

- Create a blog about how kids can be environmentally friendly.
- Do a presentation on where recycled items from your community go and how they are reused.
- Prepare a working exhibit on what green technology is and what it isn't.

Citizenship

- Write a letter to the editor about an earth or climate issue that concerns you.
- Participate in an Earth Day celebration.

Leadership

- Develop a workshop on how adults can easily use green technology at home.
- Create a recycling center at home and teach your family to use it.
- Organize a field trip to meet a meteorologist and learn what it takes to do their job.

4-H
GROWING TOGETHER

Are You Into It?

If the changing planet is on your charts, exploring Earth & Climate should be on your radar. Focus on issues ranging from geology to climate change and find out what everyone is talking about.

- Develop an interest in and understanding of sciences related to our planet, its weather and climate.
- Develop problem solving and logical reasoning skills.
- Improve communication and teamwork skills by working the way scientists and engineers do -- in teams.
- Develop responsible attitudes about science and how science relates to the real world and people's lives.
- Gain experience in problem solving and decision-making using science process skills.
- Develop knowledge and skills related to our planet, its weather and climate.

Here's what you can do all year!

Starting Out Basic / Level 1

- Use science to learn about our natural world, the earth and the atmosphere, and how they're changing.
- Explore what it means to be sustainable, from personal, agricultural, and wilderness sustainable practices to renewable energy and conservation technologies.
- Learn about energy cycles.
- Find out about Iowa's renewable and non-renewable energy sources.

Learning More Intermediate / Level 2

- Use your investigation skills to learn about the earth, weather, and climate.
- Find ways to make sustainable choices and help others discover sustainable practices.
- Make your home environmentally friendly with your family ~ set up a recycling station, use green products, be creative in reusing items you already have.
- Study an environmental issue (soil erosion, climate change)

Expanding Horizons Advanced / Level 3

- Monitor water quality in your community with the IOWATER program. <http://www.iowadnr.gov/Environment/WaterQuality/WaterMonitoring/IOWATER.aspx>
- Participate in the the National Weather Service Cooperative Observer Program. <http://www.nws.noaa.gov/om/coop/>
- Make your own renewable energy system
- Help your community implement sustainable practices



Take Earth & Climate further!

Here are other opportunities to explore the earth and climate sciences:

- Attend a weather spotter training.
- Investigate what your carbon footprint is.
- Check out different types of light bulbs and create a campaign to use the most efficient bulb possible.
- Attend Iowa 4-H Youth Conference and participate in workshops, motivational speakers and a community service project, bringing ideas back to your community.
<http://www.extension.iastate.edu/4h/iowa4hyouthconference>
- Is it county fair time? Consider taking an exhibit, a piece of your project learning to the fair for judging and to show off what you've learned throughout the year. It might get selected to go to the Iowa State Fair.
<http://www.extension.iastate.edu/4h/statefair>
- Enter your science experiment or engineering design in a local science fair or the State Science + Technology Fair of Iowa. <http://www.sciencefairiowa.org/>
- Contact your local ISU Extension Office for other local workshops, activities, and events related to earth, weather, and climate sciences. <http://www.extension.iastate.edu/content/county-offices>
- Meet others interested in our planet, its weather, and climate. Check out camps at the Iowa 4-H Center.
<http://www.extension.iastate.edu/4h/camping/center>
- Interested in a career in geology, paleontology, whether, climate, or other planet related sciences? Schedule a visit with Iowa State University to explore those majors. <http://www.iastate.edu>

Resources

4-H Resources	More Resources	Record Keeping
<ul style="list-style-type: none"> • Exploring Your Environment www.4-h.org/resource-library/curriculum/4-h-exploring-your-environment/ • There's No New Water www.4-h.org/resource-library/curriculum/4-h-theres-no-new-water/ • The Power of Wind www.4-h.org/resource-library/curriculum/4-h-the-power-of-the-wind/ • 4-H2Online http://www.4-h.org/youth-development-programs/4-h-science-programs/environmental-science-alternative-energy/4h2online/ • National Youth Science Day Activities http://www.4-h.org/4-h-national-youth-science-day/past-experiments-archives/ 	<ul style="list-style-type: none"> • Conservation Station http://www.extension.iastate.edu/ilif/page/conservation-station • lowater http://www.iowadnr.gov/Environment/WaterQuality/WaterMonitoring/IOWATER.aspx • Wonderwise: Space Geologist http://wonderwise.unl.edu/18space/spacesite.htm • NASA Global Climate Change http://climate.nasa.gov/ • National Renewable Energy Laboratory http://www.nrel.gov/ • U.S. Geological Survey http://www.usgs.gov/ • Eyes on the Earth http://eyes.nasa.gov/earth/download.html 	<p>Find all your record keeping tools at: http://www.extension.iastate.edu/4h/page/record-keeping</p> <ul style="list-style-type: none"> • 4-H Yearly Summary (4H 0096) • Basic 4-H Project Record (4H 0096A) • Experienced 4-H Project Record (4H 0096B) • Advanced 4-H Project Record (4H 0096C) • Recordkeeping Self-Evaluation (4H 98, PDF)

Exhibit Ideas

- Create a temperature and precipitation log as a National Weather Service Observer
- Create a survey on what other youth think and feel about today's climate issues. Text your friends and keep a tally. Report out through a poster, video, blog, etc.
- Make a poster about weather safety (tornado safety, flash floods, blizzards, etc.)
- Make a poster on green technology that can easily be used at home
- Make a poster comparing the fuel efficiency of different types of vehicles
- Make a poster explaining the Energy Star rating used on household appliances