

Earth Day Challenge

Paper Version

Assignment for 7th & 8th Grade Science – Due May 11, 2020

Directions: Complete enough tasks (or boxes) that will earn you at least 50 points.

	A	B	C
10 point	Create a set of flashcards for 5 vocabulary terms from the list provided by your teacher. Each flashcard needs the term listed on the front and a picture clue. Write a definition on the back.	Create a crossword puzzle using at least 10 terms from the vocabulary provided by the teacher. You must provide the clues and an answer key. You may use online puzzle programs to help you!	Create 5 “GimKit” questions using the Earth Day vocabulary that your teacher provided. Each question must have 4 answer choices with the correct one identified.
15 points	Make a list of renewable and nonrenewable resources we use every day and include drawings or pictures of each one. Write a paragraph to explain how the overconsumption of our natural resources impacts our planet’s natural resources and what we can do to conserve them.	Create “Wanted” poster about an invasive species (plant or animal) found in Illinois. Tell where the invasive species came from, where it can be found in Illinois, and explain how it harms other organisms and its habitat.	What options does your community provide to help make every day an Earth Day? Make a list of programs or services available in your town, county, or state. Explain how each one benefits our planet Earth.
20 points	Plant something! Share (or draw) pictures of you and your family planting flowers, trees, or other plants that will benefit the planet. Include a paragraph explaining how this will help your family, local wildlife, and the planet.	Repurpose at least 3 different items from your home that would normally be thrown away, such as toilet paper rolls or plastic bottles. You can use them in any way – organization, decorations, games, etc. Upload pictures of your repurposed items and explain how they will be used.	Create a comic strip, poster, or video to share at least 3 things everyone can do to make every day an Earth Day. Be sure to review the environmental concerns we discussed in class during the Lorax unit to give you ideas for your project.

Directions: Shade in the boxes to show the tasks you complete. Use the pages in this paper packet to earn points for this project. You may use hand-drawn diagrams or cut pictures out of magazines. If you are able to create them on your computer, save the files to share with the teacher when you have access to the Internet or print them out if you have access to a printer.

What can you use to help you?

- Use the vocabulary on the next page.
- Look through the lessons in your science notebook from our Ecology unit – especially the notes from the Lorax lessons and EcoFootprint.
- You can also find ideas in magazines and other printed resources.

Environmental Concerns Summary

Overconsumption =
Using too many resources
Renewable (sun, wind, water, plants) vs. nonrenewable (fossil fuels – oil, coal, ores, etc.)
Amounts of trash/garbage, water usage,
3 Rs – reduce, reuse, recycle

Overpopulation
US vs. World,
More people = more stuff
= More resources used up



Pollution
Air, soil, water, noise, & light
Effects on animals, humans, plants

Climate Change
Greenhouse effects → global warming, rising ocean levels, effects on animals, weather patterns, etc.

Biodiversity
Deforestation & habitat loss, extinction, & invasive species

What causes each issue? What can be done to help?

Example: Fill in the table at the top of the page with the column letter, a brief description, and the points earned for the task. Use the space on the page to complete the task or share evidence you completed it.

Column	Description	Points Earned
A	Plant something & share what you did	20 points
  EXAMPLE	<p>My family and I planted an apple tree in our yard.</p> <p>The tree will provide apples for us to eat or use to make apple butter, applesauce, or cider.</p> <p>The tree will also provide food for birds and other animals. It can also be used as shelter by animals and releases oxygen into the air.</p>	
<p><small>20 points</small></p> <p><small>Plant something! Share pictures of you and your family planting flowers, trees, or other plants that will benefit the planet. Include a paragraph explaining how this will help your family, local wildlife, and the planet.</small></p>		

Earth Day Vocabulary – Also available at [Quizlet](#)

- Atmosphere - A mixture of gases that surrounds our planet; can be polluted from exhaust from vehicles or factories.
- Biodiversity - The variety of life in the world or in a particular habitat or ecosystem.
- Biomagnification - The increase in chemical concentration in animal tissues as the chemical moves up the food chain to the top-level consumers
- Biosphere - Consists of all life on Earth and all parts of the Earth in which life exists, including land, water, and the atmosphere.
- Compost - A process that allows the organic material in solid waste to be decomposed and reintroduced into the soil, often as fertilizer.
- Deforestation - Cutting down of forests leading to increased erosion and slower soil regeneration.
- Earth Day - A day created in 1970 about celebrating and caring for the Earth
- Endangered species - Species with a small population that are in danger of becoming extinct
- Environment - The total surroundings (living and nonliving) of an organism or a group of organisms.
- Environmental Protection Agency - An independent federal agency established to coordinate programs aimed at reducing pollution and protecting the environment
- Extinct - The disappearance of all members of a species from Earth
- Fossil fuels - Coal, oil, natural gas, and other fuels that are ancient remains of plants and animals.
- Geosphere - The solid part of the earth consisting of the crust and outer mantle where many natural resources can be found
- Global warming - The warming of the earth's temperature caused by depletion of the ozone layer and the greenhouse effect causing drastic changes in weather patterns around the world; also referred to as Climate Change
- Habitat - An area that provides an organism with its basic needs for survival.
- Habitat destruction - Damage done to a habitat that results in the loss of resources that organisms need to survive, like food, water, and shelter
- Hydrosphere - All the water on earth that can be polluted by toxic chemicals and trash making them unlivable for animals
- Invasive species - Plants and animals that have migrated to places where they are not native and do not have limiting factors to keep their populations in check
- Keystone species - A species that influences the survival of many other species in an ecosystem
- Lorax - Speaks for the trees
- Native species - Species that normally live and thrive in a particular ecosystem
- Natural disasters - A natural event such as a flood, earthquake, or hurricane that causes great damage to habitats and/or loss of life

- Natural resources - Materials or substances such as minerals, forests, water, and fertile land that occur in nature and can be used for economic gain; may be renewable or nonrenewable
- Nonrenewable - A natural resource that is not replaced in a useful time frame.
- Once-ler - Inventor of the Thneed, which caused a loss of habitat for many animals due to deforestation and pollution
- Overconsumption - The excessive use of material things, including food and natural resources
- Overpopulation - The number of people (or other animals) in an area exceeds the capacity of the environment to support life at a decent standard of living.
- Ozone layer - a layer in the stratosphere (at approximately 20 miles) that contains a concentration of ozone sufficient to block most ultraviolet radiation from the sun
- Pollution - Release of harmful materials into the environment; such as smogulous smoke or gloppity glop
- Recycle - The process of making new products from materials that were used in another product.
- Recycling - Convert waste into reusable material.
- Reduce - To use less of something, such as carpooling or limiting how many plastic bottles you use
- Renewable - A natural resource that can be replaced at the same rate at which the resource is consumed
- Reusing - A method of resource conservation that involves using products more than once
- Species - A group of similar organisms that can mate with each other and produce fertile offspring.
- Suess - Author of the "Lorax" book from 1971 that illustrated many harmful effects of industry and humans on ecosystems
- Sustainable - A lifestyle that meets the needs of the present without compromising the ability of future generations to meet their own needs; in other words, living a life that only uses what is needed and readily available
- Toxic Waste - Waste materials from industry that are poisonous to humans or other living things

Column	Description of Task	Points Earned

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Vocab Card Template - Can be cut apart and folded to create vocab cards.

Front

Back

Crossword Puzzle Template

Use the graph to create a crossword puzzle by writing terms from the vocabulary set. Use the space on the back to add clues for each term – across and down.



Clues

Across

Down