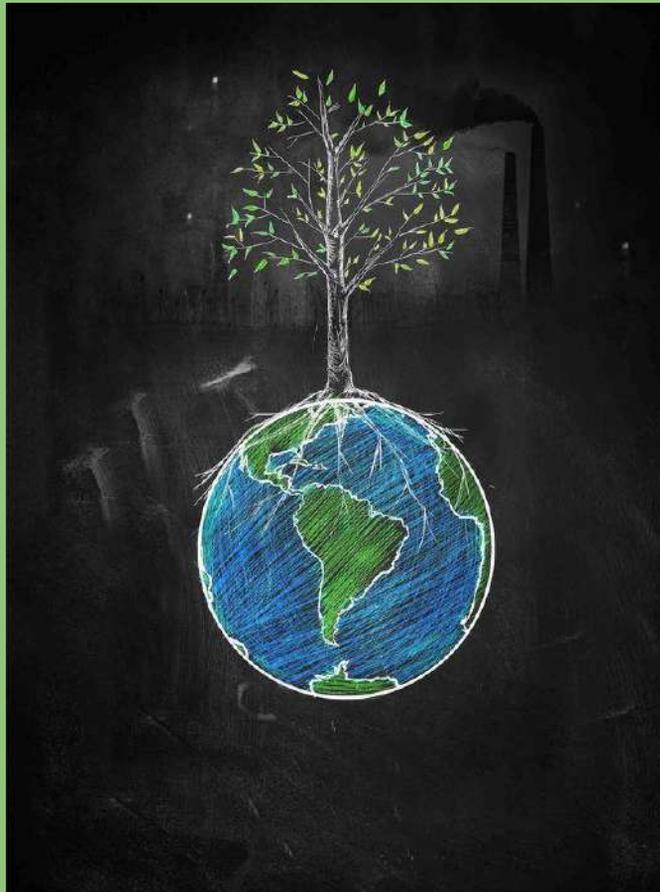




THE QUARANTINED
JUNIOR NATURALIST'S
GUIDE TO:

Sustainability and Earth Day



HELP, PROTECT, AND EXPLORE THE ADIRONDACKS!

What is Earth Day?

-Earth Day is a holiday that is held on April 22nd of each year. On this day, we try to remind people of what they can do to make the world a better place! Every year, kids and adults alike gather all over the world to do something to clean and take care of our Earth and promote environmental sustainability.



BUT...What is environmental sustainability?

-environmental sustainability is using the Earth's natural resources responsibly so that we can keep our planet healthy for generations to come!

Read this passage about Earth Day and answer the questions below:

Earth Day was celebrated for the first time on April 22nd, 1970.

Created by a Wisconsin senator, Mr. Gaylord Nelson, Earth Day was organized to create awareness for a variety of international environmental issues. These issues included oil spills, pesticides, toxic dumping, and animal extinction. Rallies took place all over the country and brought together 10% of our population from all walks of life! This overwhelming support and connection in our countries' people allowed the Environmental Protection Agency to be created by the end of the year as well as allow the passage of The Clean Air, Clean Water, and Endangered Species Acts!

By 1990, the movement went global, and reached 200 million people in 141 countries. Today, Earth Day is celebrated in 193 countries by around 1 billion people! This year marks **50 years** of this amazing movement!

1. Which environmental issue listed above do you feel most passionate about and why?

2. The population of the United States in 1970 was around 205 million people. If 10% of the population rallied together, how many people is that?

Vocabulary Words

Renewable Energy Energy from a source that is not depleted when it is used. (ex. Solar and Wind Power)

Non-Renewable Energy A resource that cannot be readily replaced by natural means. (ex. Oil and Coal)

Compost-Organic material which is rapidly decomposed to create nutrient rich soil for planting.

Conservation-Preservation and protection of the natural environment.

Recycle- To treat or process a used material in order to make it available for reuse. (ex. Turning a yogurt cup into a toothbrush!)

Clean Air Act- A federal law created to limit the amount of air pollution on a national level.

Clean Water Act- A law federally regulating water pollution throughout the country.

Endangered Species Act- A law created to protect any species in the United States that is threatened or on the brink of extinction.

Earth Hour- A movement created by the World Wildlife Foundation encouraging people to turn off all non-essential electricity for an hour as a symbolism of our commitment to the planet. This year, the event was held on March 28th from 8:30-9:30pm, but doing an Earth Hour at anytime is ALWAYS encouraged!



Types of Renewable Energy

Solar Energy

Solar cells turn the Sun's light energy into electricity. The cells are called photovoltaic cells and are typically seen in large fields and on top of people's homes!

Pros: Using solar panels lowers our carbon footprint and save money on your monthly electric bill.

Cons: The initial cost is expensive and battery backups are necessary to use the energy at night, when we need lights the most.



Wind Energy

Wind energy is harvested by using wind to turn the propeller-like blades, which in turn spins a rotor and make electricity.

Pros: A standard wind turbine (2 megawatts) can power around 500 homes per year. Because they are so tall, the open area around them can be farmed.

Cons: Wind is a fluctuating source of energy, and like solar, must be stored in batteries.



Note that it is important not to cut down trees to put up a wind farm, that kind of defeats the purpose, right?!

Hydroelectric

Hydroelectric is the process of using the energy created by running water. This is done by the creation of dams.

Pros: It is a renewable and green source of energy which doesn't pollute. It is also the most affordable source of energy when you look at how long dams will last, with little fixing needed.

Cons: Dammining can mean serious environmental consequences including flooding and changing water flow which drastically

effects all the animals living in the river!



Oceanic Energy

Oceanic energy can be harvested in multiple ways including harnessing the ocean's waves as well as the power from tides and currents.

Pros: The ocean's waves are plentiful and create a serious amount of energy. The ocean's tides are also very predictable and aren't going anywhere.

Cons: Different types of energy harvesting can impact marine life and actually perform worse in rough weather.



Fun Activities to do on Earth Day (and everyday!)

Check off any that you do this month to help conserve our planet!

- Plant a Tree
- Help clean up garbage and recycling in a local park
- Conserve water
- Turn off the lights for Earth Hour (and whenever they aren't in use)
- Learn how to recycle and compost
- Eat more locally-sourced food
- Buy reusable products such as grocery bags, water bottles, and mason jars for buying products in bulk!
- Look into your local environmental policies and get in touch with your local officials
- Plant native wildflowers for pollinators!
- Ask questions!
- Get outside!
- Talk to others about what we can all do to live a more sustainable life everyday!

Thank
a Tree



Recycling is SUPER important, but did you know that there's a reason that the saying goes, **REDUCE, REUSE, RECYCLE**, in that order?



Benefits of Reducing and Reusing

- Prevents pollution caused by reducing the need to harvest new raw materials
- Saves energy
- Reduces greenhouse gas emissions that contribute to global climate change
- Helps sustain the environment for future generations
- Saves money
- Reduces the amount of waste that will need to be recycled or sent to landfills and incinerators
- Allows products to be used to their fullest extent

What are some items you use everyday that you could choose to reduce or reuse before they end up recycled or in a landfill?

According to the Environmental Protection Agency...

-267.8 millions tons of trash was thrown away in the United States in 2017.

-About 75% of the food that made its way to landfills could've been **composted!**

Composting is just decomposition of organic materials in a rapid manner. Everything from **biodegradable** food scraps to yard trimmings can be put into a compost pile and eventually come out as nutrient-rich soil!

Check out the items below and circle which ones you think can be composted!

Banana Peel

Toilet Paper
Roll

Grass Clippings

Leaves

Dorito Bag

Newspapers

Meat Scraps

Eggshells

Milk Products

Halloween Jack
O Lantern!

Coffee Grounds (and filter!)

Styrofoam Cup

****Google "Do the Rot Thing: A Teacher's Guide to Compost Activities" for an awesome PDF version of a guide by the Central Vermont Solid Waste Management District full of composting activities for kids of all ages!****

What are some things that you enjoy doing outside in a clean, healthy environment?

1. _____

2. _____

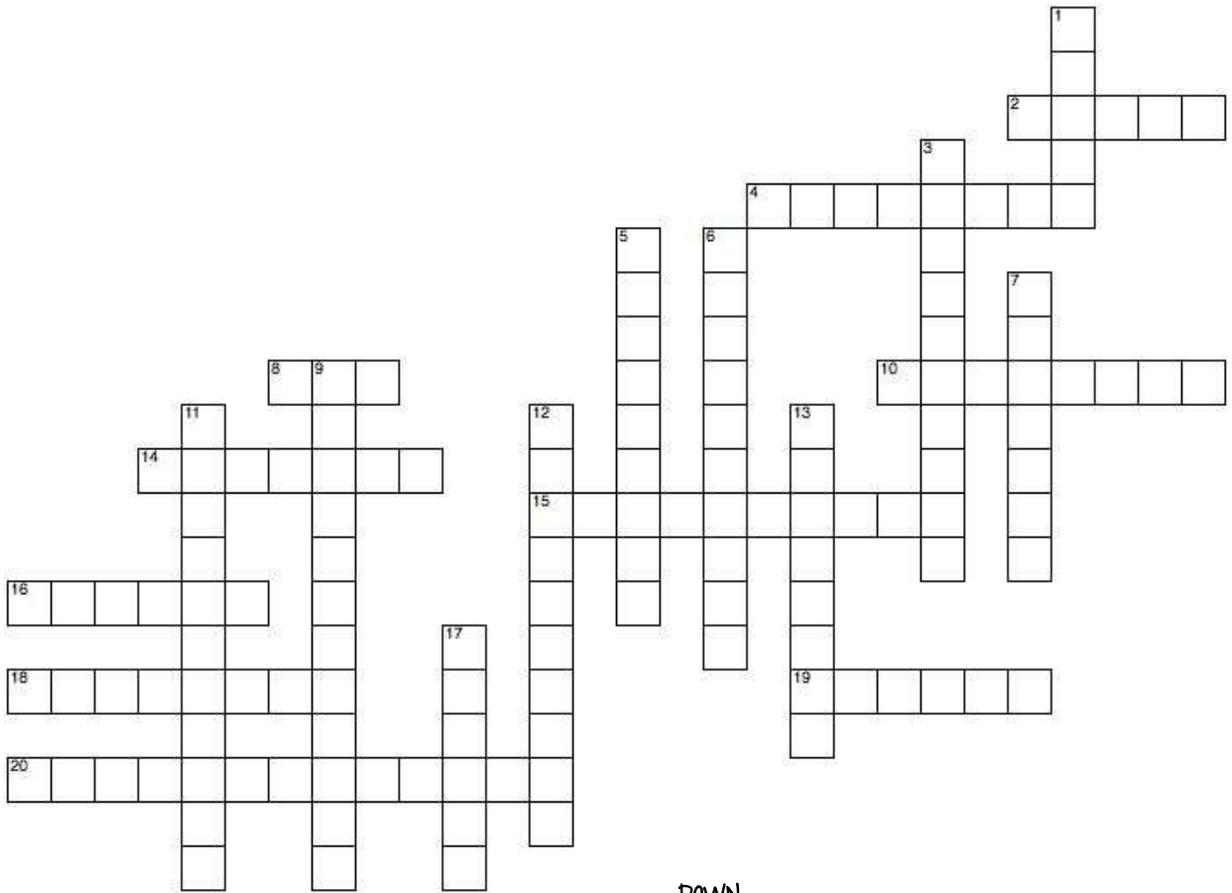
3. _____

Draw a picture of yourself having fun outside!



Sustainability and Earth Day 2020

Created by Up Yonda Farm Environmental Education Center



ACROSS

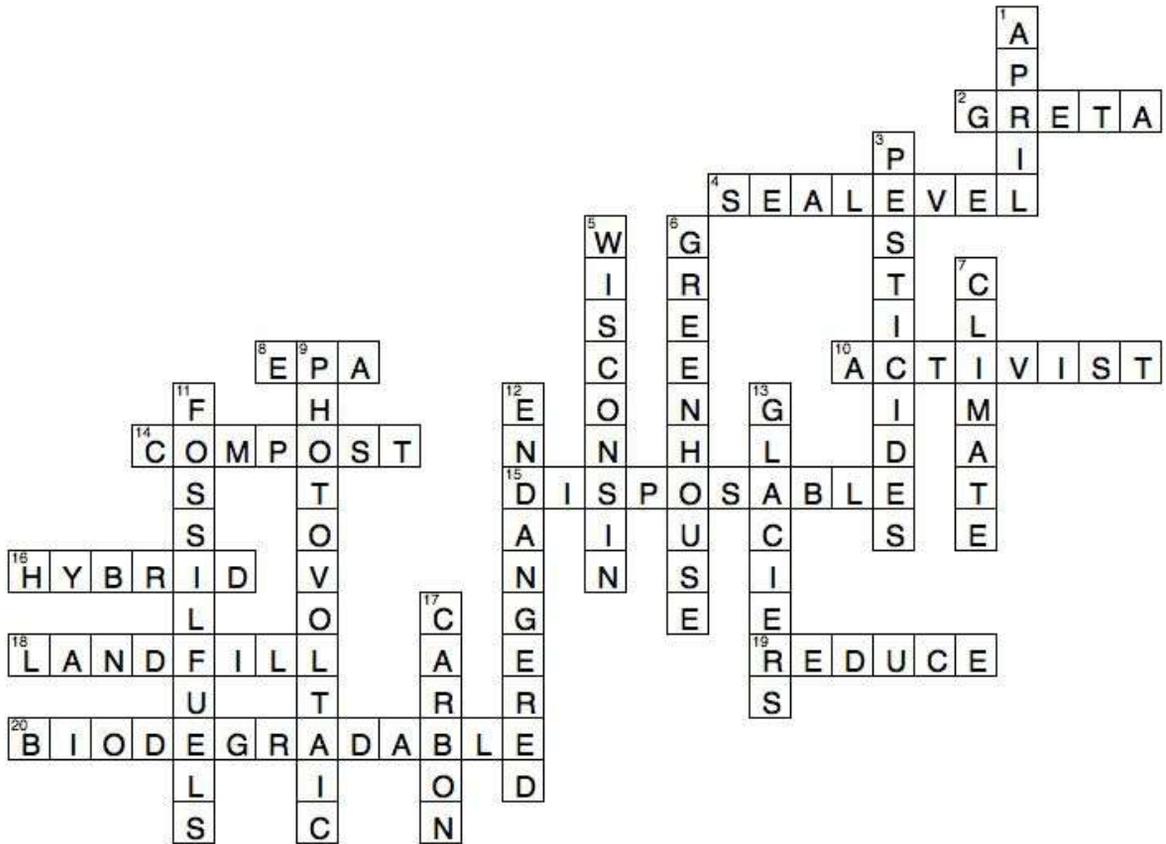
- _____ Thunberg, a young climate warrior.
- What is rising due to melting glaciers?
- The agency responsible for environmental protection, for short.
- Someone who is passionate about a topic and strives to make a positive difference in the world through social change.
- This creates nutrient-rich soil for your garden.
- Use a reusable water bottle instead of a _____ one.
- The type of car that can run on both gasoline and an electric motor.
- Where do the things that you throw out in the garbage go?
- _____, Reuse, Recycle, in that order.
- Something that is able to decompose through natural processes.

DOWN

- What month is Earth Day held in?
- Chemicals used to kill insects in agriculture.
- What state was the senator who created Earth Day from?
- The _____ effect, is the warming of the Earth's surface and the air above it.
- Weather is short-term, day-to-day atmospheric changes, _____ is the average weather of a place over a long period time.
- Type of cell used to convert light into electricity
- Non-renewable sources of energy.
- What is an animal if it considered at risk for extinction?
- These are melting due to our overconsumption of fossil fuels.
- The type of footprint we leave each time we use a fossil fuel.



Answer Key



Compostable Items:

- Banana Peels
- Toilet Paper Roll
- Grass Clippings
- Leaves
- Newspapers
- Egg Shells
- Jack O Lantern
- Coffee Grounds