



Make a difference

Junior Council members report on how kids can help the environment.

When the 12 members of The Week Junior's Junior Council began meeting for the Spring 2024 session, they decided they wanted to use their voices to raise awareness about the importance of protecting the planet. The children came up with specific ideas, conducted research on the topic, interviewed experts, and wrote their stories. We hope their work inspires you to take action! If you do, write to us about it at hello@theweekjunior.com.

INVESTIGATE NATIVE PLANTS IN YOUR AREA



By Eden, 11, North Carolina Native plants are ones that grow naturally in your area. Planting and growing them is a great way for you to help the

environment. Here are three things to know. **Native plants support the ecosystem.**

Flowers and other plants that are found locally nourish wildlife, including pollinators like hummingbirds, butterflies, and bees. Because native plans have evolved to adapt to local soil conditions, they don't need chemical fertilizers to survive. Native plants also naturally live longer,

which helps the Earth because
plants help absorb
carbon dioxide—a gas
that traps heat in the
atmosphere and
contributes to climate
change—from the air.
For example, one native tree

can absorb 48 pounds of carbon dioxide each year. **Local experts can help.** Visit a garden center in your area for advice on which native plants

might grow best for you. Or join a community garden to learn about native plants. Finally, some libraries have "native seed libraries" and distribute seeds for people to plant.

Native plants can grow nearly anywhere. All you need is a small patch of soil or a gardening pot. If you use a pot, pick a container with large drainage holes at the bottom. Place the plants into the ground or into a container, using potting soil, and follow any directions for watering them. Then get ready for pollinators to pop by!

GET OUTSIDE IN NATURE



By Thomas, 10, California Going for a walk in nature is good exercise, but did you know it also benefits your brain? "When you walk in a natural environment, like a

park, it allows your mind to wander, giving it a break," said Marc Berman, chair of the department of psychology at the University of Chicago. Consider these facts about the upside of being outdoors.

Even short bursts of time outside can help. Berman led a study that showed that spending one hour interacting with nature could help people improve their memory and attention span by as much as 20%. When people are at a park or in the woods, their brain doesn't encounter distractions, like traffic, crowds, and noise.

Being outdoors is beneficial year-round.

For many people, getting outside may be more enjoyable in warmer weather. Berman's research found, though, that people still get nature's brain-boosting benefits from an outdoor walk during cold and rainy days. Berman explained that walking in nature is similar to "eating your vegetables or exercising"—it's still good for you even if you don't like doing it at first. Enjoying nature indoors has positive effects too. No one can be outside all the time, and that's OK. Research shows that people can boost their memory and attention just by looking at photos of nature scenes. Another idea is to bring nature inside by growing houseplants. Berman suggests placing them in areas of your home where you'll see them frequently, like your bedroom or living room.

GATHER ROCKS TO LEARN ABOUT THE EARTH



By Minerva, 10, New York

When I was younger, I would pick up rocks that captured my attention and put them in my pockets. Now I have a large, beautiful collection. One of the best things about rock collecting is that it's easy to get started. "Wherever you walk, there is a rock— and each one has its own story," said Kate Kiseeva, assistant curator at the American Museum of Natural History. Because rocks can be up to 4 billion years old, they can reveal clues to

scientists about the age of the Earth and how the Earth's surface has moved around. Kiseeva said that when young people pay attention to the rocks around them, they can better understand the natural world. These suggestions can help you get started with your own rock collection.

Know the rules. Some places, like US national parks, don't allow the removal of rocks. Others, like some state parks, have zoned areas or designated days for collecting rocks. Wherever you visit, be sure to seek out the rules and follow them.

Get advice from experts. If there is a museum near you with a rock collection, plan a visit and don't be afraid to ask questions! Free apps, such as Rock ID, can help you find out more about the rocks you discover.

Become a "rock hound." Anytime you go to a park, beach, or stream, you can look for interesting pieces for your collection. In Central Park in New York City, I found granite that attracts magnets!

How to...



RAISE AWARENESS ABOUT WILDLIFE



By Hannah, 10, Connecticut

You might think kids don't have much power to protect animals in the wild, but just by learning about human threats to wildlife, you can help. Increased awareness is a reason many animals that were once in danger are now making a

comeback, said Danielle Brigida, the senior director of wildlife communications at World Wildlife Fund, which provides support for conservation programs around the globe. "You can make a huge difference," she said. Try one of these ideas to raise awareness of the importance of protecting wildlife.

Host a fundraiser. My friends and I have a bake sale at the end of every school year, and we donate our profits to the World Wildlife Fund. We share facts about endangered species with posters at our table. You could also sell crafts, jewelry, or artwork.

Organize a lunch-and-learn. A lunch-and-learn is when someone talks about a certain subject during lunch. To have a

> successful lunch-and-learn, you can ask a wildlife expert, such as someone who works at a nature center, to come speak at your school.

Spread the word. Make signs for your sale or lunch with the location, date, and time, and hang them where lots of people will see them. You can also prepare fact sheets about

wildlife to hand out.

DISCOVER THE POWER OF MUSHROOMS



By Aiden, 11, Washington

In the area of the US where I live, the Pacific Northwest, you can find mushrooms nearly anywhere. I love studying and foraging (searching widely) for mushrooms. I even grew a lion's mane mushroom at home. I feel passionate about mushrooms because they are a vital part of our ecosystem. Here's why.

They can help prevent wildfires. Megafires (wildfires that burn more than 100,000 acres of land) have become a bigger problem in the US in recent years. This is partly because our forests are becoming overgrown. The first step is to thin forests by cutting down small trees. Instead of burning those trees, which is expensive and releases carbon dioxide, mycologists (scientists who study mushrooms) are using saprophytic mushrooms, which help dead trees break down. "We grind trees on-site and use the mushrooms

to rapidly rot the trees before they become fuel for a fire," said researcher Jeff Ravage, who studies how native fungi can help our forests. Scientists grow saprophytic mushrooms in a lab for this purpose, then bring them to the forests.

They are important to our ecosystem.

"Mushrooms break down soil, which makes it possible for other plants to grow, "said Melany Kahn, author of Mason Goes Mushrooming. Without this important contribution, it would be difficult for people to grow fruits and vegetables.

They help us understand nature. You can interact with mushrooms in many ways. You can try mushroom foraging by taking a walk in a park or forest near you. Mushrooms can be tricky to spot at first, but if you find one, there are probably others nearby. Look for them at the base of trees, on forest floors, and in the cracks of sidewalks. When you find a mushroom, you can always touch it—just don't taste or swallow it. If you're interested in learning more, consider participating in activities with mycological societies (groups that organize fairs, classes, and field trips about mushrooms). Visit the North American Mycological Association at NAMA.org to find a society near you.

TRY BEING A FLEXITARIAN



By Nicholas, 11, New York Many people choose to eat a plant-based diet to keep themselves and the planet healthier. A "flexitarian" diet, which is semi-vegetarian, can

have similar benefits and may be easier for some people to follow.

People who choose a flexitarian diet eat mostly plant-based foods, with occasional servings of animal protein—between 9 and 26 ounces of meat or poultry per week. Skipping one portion of meat or poultry a week can help preserve our natural resources. It can decrease

greenhouse gas emissions and conserve water. It also requires less energy to cultivate crops than to produce meat. A paper published in the journal Science Advances suggested that shifting to a more plant-based diet could reduce global warming. "Reducing our reliance on animal products, especially red meat and processed meats, and embracing a more plant-centric diet is the way to go forward to help the planet," said Diana Boqueva, co-author of Food in a

Planetary Emergency.

About two years ago, I went from being a vegetarian to becoming curious

about meat products. I started introducing meat into my diet, which brought more variety to my meals. I also really enjoy having a healthy balance of both meat and plant-based foods.

If you're currently eating both meats and plants, you can try being a flexitarian in a few steps. First, eat more plant-based foods, such as fruits, vegetables, and nuts. Then you could

swap out some of the meat and poultry you eat with plant-based sources of protein like beans, chickpeas, and lentils. Finally, continue to make being

flexitarian fun and interesting. Talk to your family about having a

different vegetable each week, or take turns trying out new recipes.

How to...

COLLECT RAINWATER TO REUSE LATER



By Aryn, 12, Texas At my school in Austin, I noticed that rainwater is collected in barrels to be used later. I thought it was a good idea and decided I wanted to learn more.

When rainwater is collected, it allows people to use less tap water (water that comes from a faucet). This preserves fresh water supplies and saves energy. "If people are using less tap water to keep their landscape healthy, then our processing plants are not using extra energy to keep up with the demand," said Christopher Charles, conservation program director at City of Austin Water. Collecting rainwater in a barrel can save hundreds of gallons of tap water per year. Follow these steps to make this a family or school project.



Start small. Ask an adult at home or school if you can leave watering cans and buckets outside to collect rainwater. Pour the collected water into a covered container until you're ready to use it so it doesn't evaporate.

Think bigger. If you live in a home that has rain gutters on the roof, you can talk to an adult about directing the spouts into larger barrels or buckets. Home improvement stores sell rain barrel kits to help make rainwater collection easier. Be sure to check with your local water department to find out whether your family may need to get a license or permit to have a rain barrel.

Discover the many uses of rainwater. In addition to watering plants, rainwater is useful for washing cars, mopping floors, cleaning outdoor furniture or toys, filling swimming pools, and flushing toilets.

RECONSIDER GRASS LAWNS



By Steven, 11, California In California, where I live, lawns are responsible for 50% of residential water use. The state is scheduled to vote on a rule that would reduce statewide water

use by 14%. To comply, water agencies may give homeowners incentives (payments) to replace grass lawns with drought-tolerant plants, which need little or no water to grow. This is called xeriscaping (zehr-eh-skay-ping). Xeriscapes also require less fertilizer and pest control, which is better for air and water quality.

My family turned to xeriscaping to help the environment and to save water. We replaced our front lawn with decomposed granite (finely graded rock) and succulent plants, which require little water. "By xeriscaping, homeowners' need for watering can come down to a trickle," said Alessandro Ossola, a xeriscaping expert at the University of California, Davis. Consider these additional benefits of xeriscaping.



Families can earn money. In some areas, residents can get rebates (money back) for replacing grass with certain plants. "You can reach out to your local water agency to find out more," said Allison Armstrong of the California Department of Water Resources.

There are many options. Your local nursery can help point out native plants to grow. It can also tell you what non-native, drought-tolerant plants will thrive without harming the ecosystem. For example, my family incorporated agave tequilana, a drought-tolerant plant from Jalisco, Mexico, where my grandparents are from. It saves time. My family now spends fewer hours maintaining the yard. Ask an adult if you can xeriscape a section of your yard. "If your family likes it, you can discuss doing the rest," said Ossola.

MAKE CHANGES AT HOME TO PROTECT OUR PLANET

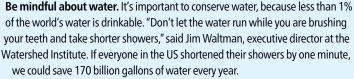


By Annika, 9, New Jersey

When I visited India a few months ago, I saw people making many environmentally friendly choices, such as using washable wooden forks and spoons. I wondered what similar things we could do in the US to help our planet. I've learned a few that we can try.

Repurpose toys and unopened gifts. Find a new home for toys and other items you no longer use. You could pass your old toys or games to your younger relatives or neighbors. By finding new owners for your old things, you will be practicing

sustainability and helping to avoid adding more waste to landfills.





people see you taking action, they will follow."

How to...

other forms of transportation besides cars.

You can talk to your family about ideas for



TAKE ECO-FRIENDLY TRANSPORTATION



By Aleen, 10, Pennsylvania My town doesn't have a public transportation system, but we have a lot of visitors. This results in car traffic

during tourist season. When I visit bigger cities—even those that have city buses—I notice there are still many people driving cars. This is a problem because gasoline and diesel cars produce about 30% of energy-related carbon dioxide emissions in the US.

The good news is that everyone can help reduce these emissions if we choose to use

getting around in other ways. **Check out electric and hybrid cars.** About 90% of cars in the US use gasoline as their main fuel source. Hybrid cars (powered by a

90% of cars in the US use gasoline as their main fuel source. Hybrid cars (powered by a combination of electricity and gas) and electric vehicles can help reduce pollution.

Take available transportation. City buses, trains, ferries, and other types of public transportation help keep cars off the road. Many cities and school districts now use electric buses for some or all of their transportation. This year, five school districts in my home state received money from the US government to purchase electric school buses. You can ask your local officials to look into whether your school district could also receive money for electric buses.

Walk or bike. Ask an adult if you can walk or bike to school or to an activity. You can make the walk or bike ride more interesting by
 counting the number of birds you see along the way. You could also have a spelling bee with friends by challenging each other to spell out whatever you see along the way, such as "cement" or "caterpillar." Plus, by walking or cycling instead of catching a ride, you'll get physical exercise while you help the Earth!



FIND OUT MORE ABOUT SUSTAINABLE FOOD



By Vivaan, 13, Alabama By the year 2050, there may be as many as 10 billion people on Earth. But we don't have enough land for

traditional farming to feed the planet's growing population. Fortunately, we already have what may be the perfect food—algae. Algae will be a good food source in the future for several reasons. Here are a few facts to know.

It's efficient and sustainable. Algae crops don't compete with regular food crops, which need fresh water to grow. "Algae can grow in seawater, which otherwise could not be used to grow food," said Zackary Johnson, an associate professor in marine sciences and conservation at Duke University. Algae also grows 10 times faster than traditional crops do.



It's packed with nutrients. Like salmon, olives, and avocados, algae has healthy fats like omega-3s plus other nutrients and minerals that people and animals need. "It's a very attractive source of nutrition for now and into the future," said Johnson.

It won't necessarily taste like algae.

Algae does come with one major obstacle: the taste. Some people might even find the idea of eating algae revolting. However, a

few years from now, eating algae might not seem disgusting. Scientists at San Diego State University are currently working on methods to enhance the flavor of algae. If someday you find algae on your dinner plate, there is a good chance this sustainable superfood will be tasty.

TURN CARDBOARD BOXES INTO SOMETHING NEW



By Brennan, 12, Montana

When I was 7, I wanted a Nintendo Switch, but my parents said no. I protested by building multiple pretend "Switches" out of cardboard. I had such fun that even after I saved enough money to buy a real Nintendo Switch, I kept building with cardboard. I didn't know it, but when I was reusing cardboard for fun, I was reducing waste. Each year, more than half of the cardboard in the US ends up in

landfills. If we reused that cardboard instead, we could save many mature trees each year.

I interviewed Jodi Levine, who creates the crafts that appear in *The Week Junior*. She noted that in addition to preserving Earth's resources, making items from recycled materials flexes your creative muscle. "With a store-bought craft kit, everyone is going to make the same thing," Levine said. "But with recycled materials, everybody will make something different." She shared these crafting ideas with me.

Make cardboard animals. You can get creative with cardboard to make all kinds of creatures. One idea is to turn a couple of boxes into a pretend horse to ride.

Build tiny houses. With an adult's help, cut a cardboard milk carton in half. Use scrap paper and glue to add windows and doors.

Craft a lightsaber. Just attach a toilet paper or paper towel tube to a long skinny balloon, and you have a lightsaber!