

#### ECO-CHALLENGE WEEK/MONTH



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ECO-GUARDIANI

# Welcome to...



### ECO-CHALLENGE WEEK/MONTH

**Hey, Eco-Guardians!** 

The Eco-Challenge can be done in a week or one day/week for a month. It's easy to adapt to either version, as the focus is all about learning how to take care of our planet. Before we start, remember that to help the Earth, we need to understand how our actions affect it.

The Eco-Guardian activities are Eco-Friendly challenges, where individuals set goals to adopt more eco-friendly actions. The challenges are focused on reducing waste; conserving energy and water; promoting recycling; protecting eco-systems; and advocating for environmental causes.

So, get ready for a fun, engaging challenge of fun activities and important lessons. Together, we'll learn how to protect nature and keep our planet healthy

#### Let me explain some of those words you just read.

#### 1. So, what does 'eco-friendly' mean?

Eco-friendly means doing things that are good for the environment, like using less plastic, saving water and energy and not harming nature. It's all about being a good friend to the Earth by taking care of it and making sure it stays healthy and safe for everyone and everything that lives on it.

#### 2. What is an 'eco-system'?

An ecosystem is like a community of living things (plants, animals and tiny creatures) that work with each other and their environment in a specific area. The teamwork and these connections help to maintain a balance in nature and ensure that all living things have what they need to survive.

#### 3. Is there more than one 'eco-system'?

Yes. Each piece, or ecosystem, is connected to the other ecosystems.. In an ecosystem, if one type of plant or animal becomes too many or too few, it can cause problems. For example, if there are too many rabbits eating all the plants, the plants might not grow back and other animals that eat those plants might not have enough food.

If there are too many fish eating all the smaller fish in a lake or ocean, there won't be enough smaller fish left for bigger fish to eat. This can cause the number of bigger fish to decrease, since they won't have enough food. That means the natural balance of the ecosystem will be changed, affecting all the animals and plants that rely on each other for survival.

Imagine a forest ecosystem where trees provide homes for birds and squirrels and help regulate the temperature by providing shade. If humans cut down too many trees for building houses or making paper, that changes the balance.

Without enough trees, the soil can wash away into nearby rivers and streams, making them muddy and full of dirt. This can harm the plants and animals that live in the water. Without shade from trees, that area can become hotter, affecting the plants and animals that are used to, and need, cooler temperatures

#### 4. What is the 'natural balance'? What does that mean?

Natural balance is like a big puzzle where every piece fits together perfectly. If you take away one piece, the whole puzzle might not work right. In nature, it's the same way. Each plant and animal has a job to do. When everything works together, it keeps the environment healthy and strong.



An Eco-Guardian is a young champion of the Earth, committed to protecting and preserving the environment. Eco-Guardians are true SuperHeroes!

Eco-Guardians are curious learners who seek to understand how nature works and how we can live in harmony with it. An Eco-Guardian focuses on specific, day-to-day activities that individuals can do to help protect the environment. They include actions like not wasting food, conserving water, recycling and reusing items. Each of these actions has a clear, direct impact on the environment:

- Waste-Free Food: When we don't waste food, we help the planet by reducing the amount of garbage that goes into landfills. And less things in landfills means reducing the resources used in production, transportation, and disposal of waste. This also means we don't use up more resources like water and land to grow food that no one eats.
- Water Conservation: Using less water means there's more water available for animals, plants, and for us to drink. Conserving water also helps prevent our lakes and rivers from drying up.
- Recycling and Reuse: By recycling things like paper, plastic and metal and reusing items instead of throwing them away, we reduce the amount of waste that ends up in landfills. This also helps save energy and resources because making products from recycled materials uses less energy than making them from new materials.

As Eco-Guardians, your everyday actions contribute to a larger effort alongside Environmental Stewards, who focus on broader environmental strategies. From recycling and conserving water to spreading the word about how to care for our planet, Eco-Guardians make a real difference. Each step you take plays a vital role in safeguarding our environment for the future.



#### **Conserve Resources:**

They make sure to use only what they need, whether it's water, electricity or paper, to help protect the Earth's precious resources.

#### **Protect Nature:**

Eco-Guardians look out for plants and animals by creating safe habitats, cleaning up natural areas, and learning about local wildlife.

#### Promote Earth Friendly Actions:

They encourage others to make smart choices to help protect our planet and share ideas, like choosing reusable over disposable items.

#### Learn and Educate:

Always eager to learn more about the environment, Eco-Guardians also teach their friends, family, and community about what they've discovered and how everyone can help.

#### **Take Action:**

Whether it's participating in a community clean-up, starting a recycling program at school or simply making sure to turn off lights when leaving a room, Eco-Guardians are always looking for ways to make a positive impact on the planet.

Being an Eco-Guardian means being a friend to the planet, showing kindness and respect to all living things and working towards a healthier, greener future for everyone.

### ECO-CHALLENGE WEEK/MONTH

## **ECO-GUARDIANS**



Day 1:

**Waste-Free Food** 



Day 2:

**Water Conservation** 



Day 3: Ecosystem

**Protection** 



**Day 4:** 

**Reuse and Recycle** 

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**Day 5:** 

**Nature Appreciation** 



Wrap Up:

**Pledges/Certificates** 

### ECO-CHALLENGE WEEK/MONTH

#### **ECO-GUARDIANS ICONS**













## Day 1: Waste-Free Food

#### LEARNING OUTCOME



Every time we eat, there's a big journey that our food has gone on before it reaches our plate. It starts from the ground where it grows, gets harvested by farmers, then travels on trucks to get to stores or our school cafeteria. All of these steps take a lot of work, water, and energy. And guess what?

It also costs money to make all this happen. When we make sure to eat all the food we take and don't waste it, we're actually helping save all that water, energy, and even money. This means there's less need to produce more food than we really need, which is really good for our planet. It's like being a superhero for the Earth every time you finish your meal and make smart choices about what and how much food you take.

By framing food waste reduction as an impactful action that can help save resources and money, this explanation helps students understand the broader environmental and economic benefits of their choices.

## Activity: Waste-Free Food

#### PORTION CONTROL to help avoid food waste

#### **Activity Overview:**

- 1. Introduction (10 minutes): Explain the concept of portion sizes and how overserving leads to food waste. Show visual aids that depict standard portion sizes for different types of food.
- 2. Portion Estimation Game (20 minutes): Set up stations with different types of dry foods. Each child or team visits stations to estimate what they think is a single serving of each type of food and puts that amount on a plate.
- 3. Measure and Learn (15 minutes): After everyone has made their estimates, use measuring cups to show the actual recommended portions. Compare these to the children's estimates to see who got closest to the recommended portions.
- 4. Discussion (10 minutes): Discuss why it's important to serve just enough food and what could be done with leftovers to prevent waste. Talk about how using correct portions at home can help save food.
- 5. Wrap-Up (5 minutes): Summarize what they learned about portion control and challenge them to apply these ideas at home during meals.

## Activity: Waste-Free Food



#### **PORTION CONTROL:**

Objective: Help children understand how to estimate and choose appropriate food portions to reduce food waste.

#### Educational benefits include

- Environmental Awareness: Demonstrates a direct action to reduce food waste.
- Math Skills: Engages with practical math and estimation skills.
- Practical Life Skills: Teaches skills that are immediately applicable at home.

#### Materials needed:

- Various types of dry foods (like beans, rice, pasta, and pretzles) that can be handled easily and are low for allergy risk
- Measuring cups and spoon
- Large bowls for each type of food
- Plates or trays for portioning out the food
- Other dry food items to display for kids to 'guess' without touching the portion size without risking food allergies (crackers, small cookies, dry cereal)
- List (next page) of recommended portions for common foods kids like

Visual aids showing standard portion size for common foods used for this activity or picture of an item with comparison (like size of hambuger, see next page) for kid-friendly foods.

For reliable and comprehensive information on portion sizes, especially for educational purposes, you can refer to the U.S. Department of Agriculture's (USDA) ChooseMyPlate website. The ChooseMyPlate guidelines are based on extensive research and are widely recognized as a credible source for dietary recommendations. Here's the link to the website: **ChooseMyPlate.gov** 

On this site, you'll find detailed guidance on portion sizes, balanced meals, and other nutritional information that is suitable for different age groups, including children. This resource can be very useful for both educators and parents looking to educate kids about healthy eating habits.

## Activity: Waste-Free Food

#### PORTION CONTROL to help avoid food waste

Recommended Portion Sizes for Common Foods can be adjusted for the child's age and activity level, but these are a good baseline for educational use:

- 1. Grains (like rice, pasta, oats)
  - Uncooked: 1/4 cup per serving (about 45-50 grams)
  - Cooked: 1/2 cup per serving
- 2. Beans and Legumes (like lentils, chickpeas)
  - Uncooked: 1/4 cup per serving (about 45-50 grams)
  - Cooked: 1/2 cup per serving
- 3. Cereal and Breakfast Grains
  - Dry Cereal: 1 cup per serving
  - Oatmeal: 1/2 cup cooked per serving
- 4. Snacks (like nuts and seeds)
  - Nuts: 1/4 cup per serving (about 30 grams)
  - Seeds: 1/8 cup per serving (about 15 gram)

#### And more kid-friendly foods:

- 1. Pretzels
  - Standard Size Pretzels: About 1 ounce or roughly 15-20 small pretzel twists per serving
- 2.Ice Cream
  - Ice Cream: 1/2 cup per serving (about the size of a tennis ball)
- 3.Cookies
  - Cookies: 1-2 average-sized cookies per serving (depending on size, about 2-3 inches in diameter)
- 4.Meat (cooked) such as beef, poultry, pork): 2-3 ounces per serving (for children, about the size of a deck of cards!)
- 5. Cheese:
  - Slices or Cubes: About 1-1.5 ounces per serving, which is roughly the size of two dice or a single slice from a standard block of cheese.
- 6. Standard Size Crackers (like saltines or snack crackers): About 5-7 crackers per serving, depending on the size and type of the cracker.
- 7. Juice: For Children: About 4-6 ounces per serving. This is roughly half a cup to three-quarters of a cup.
- 8. Milk: For Children: About 8 ounces per serving, equivalent to one cup.

## Day 2: Water Conservation

#### LEARNING OUTCOME



Talk about the importance of fresh water and how saving water helps protect this precious resource.

Every ecosystem needs water and as water becomes scarcer, these ecosystems are threatened. Did you know that less than 1% of all the water on Earth can be used by people? The rest is salt water (the kind you find in the ocean) or is permanently frozen and we can't drink it, wash with it, or use it to water plants. Note: You may want to use a circle to show how much of the circle is 1%.)

As our population grows, more and more people are using up this limited resource. Therefore, it is important that we use our water wisely and not waste it.

#### Resource:

https://www.epa.gov/sites/default/files/2017-02/documents/wsourwater-drop-guide.pdf

## Activity: Water Conservation



#### **Water Use Sorting Game**

Teaches children about water conservation by identifying which activities use more water and discussing ways to reduce consumption, while using Problem Solving and Critical Thinking skills to categorize activities based on their impact and brainstorming solutions.

#### **Materials Needed:**

- Cards with different water-using activities listed, e.g., taking a bath, running the dishwasher, watering the garden, washing a car. (See next page.)
- Two large bins or areas marked as "High Water Use" and "Low Water Use"
- Printed information on average water usage for each activity (can be simplified for quick reference and Included in the list onthe next page).

#### **Activity Overview:**

- 1. <u>Introduction</u> (5 minutes): Briefly explain how different daily activities have varying impacts on water usage and introduce the game.
- 2. Activity Sorting (15 minutes): Give each child or small group a card with a water-using activity. One at a time, ask them to decide if their activity is a "High Water Use" or "Low Water Use" and place the card in the corresponding bin or area. After placing the card, quickly discuss the actual water usage of that activity (using your printed reference list on the next page) to see if they guessed correctly.
- 3. <u>Group Discussion</u> (10 minutes): Discuss why certain activities use more water and share simple ways each activity's water usage can be reduced. Encourage students to think of alternative methods or habits that could save water.
- 4. Wrap-Up and Reflect (5 minutes): Summarize the key learnings about high and low water use activities and encourage children to think about how they can apply water-saving strategies at home.

## Activity: Water Conservation



#### **Water Use Sorting Game**

Use a mix of high water use and low water use cards for each group of children, if using as a group activity.

#### **High Water Use Activities**

- 1. Taking a bath: Approximately 35-50 gallons per bath.
- 2. Watering the lawn with a sprinkler: About 265 gallons per hour.
- 3. Washing a car with a hose: Around 40-100 gallons per wash.
- 4. Running a dishwasher: 6-16 gallons per load.
- 5. Washing clothes in a washing machine: 40-45 gallons per load.
- 6. Flushing the toilet: About 1.6 gallons per flush.
- 7. Showering for 15 minutes: Approximately 30-45 gallons.
- 8. Filling a swimming pool: Thousands of gallons (varies based on size).
- 9. Using a hose to clean driveways or sidewalks: Around 8-18 gallons per minute.
- 10. Leaky faucet: About 67 gallons per week, if dripping consistently.
- 11. Filling a hot tub: Around 400 gallons.
- 12. Running a hose for slip 'n slides: Approximately 240 gallons per hour.
- 13. Deep watering trees with a garden hose: About 10 gallons per minute.

#### Low Water Use Activities

- 1. Brushing teeth with the tap off: Less than 1 gallon.
- 2. Taking a shower: 2 gallons per minute.
- 3. Washing a car using a bucket and sponge: Approximately 3 gallons.
- 4. Using a dishwasher: 3-5 gallons per load.
- 5. Flushing the toilet: About 1.28 gallons per flush.
- 6. Fixing leaks: Saves thousands of gallons per year.
- 7. Using a broom to clean driveways or sidewalks: Zero gallons.
- 8. Collecting rainwater for gardening: Zero gallons.
- 9. Using leftover cooking water to water plants: Zero gallons.
- 10. Hand-washing a small amount of dishes: 2-4 gallons.
- 11. Watering plants using a watering can: About 1-3 gallons depending on the size of the watering can.

## Day 3: Ecosystem Protection LEARNING OUTCOME



Students will understand the interconnectedness of different ecosystem components and recognize the importance of their daily actions in maintaining ecological balance.

They will be able to identify specific ways in which they can contribute to ecosystem protection, demonstrating awareness of how individual and collective efforts support environmental stewardship.

This outcome emphasizes both cognitive understanding and actionable knowledge, aligning with the goals of fostering environmentally responsible behavior among the students.

Objective: To help students understand how different parts of an ecosystem are connected and depend on each other.

#### Materials:

- Yarn or string
- Cards with pictures representing different ecosystem components as listed in the Step-by-Step Activity Guide on the next page
- Tape or pins to attach yarn to cards
- Poster board or a wall space



## Activity: Ecosystem Protection

#### **Step-by-Step Activity Guide**



#### 1. Introduction (10 minutes):

- Start Simple: "Today, we're going to learn about ecosystems, which are like communities where plants, animals and everything in nature live together and help each other survive."
- Highlight a few key components: sunlight, water, plants, animals, and something simple about waste like trash or recycling.
  - Explain Ecosystem Components:
    - Sunlight and Water: "Plants need sunlight and water to grow. Just like you need food and water."
    - Plants: "Plants are important because they give food and oxygen to animals and us."
    - Animals: Simplify the categories:
      - "Some animals only eat plants (like rabbits); we call them herbivores."
      - "Some animals eat other animals (like lions) and we call them carnivores."
      - "Some animals eat both plants and other animals (like people do) and these are called omnivores."
    - Decomposers: "Things like worms and mushrooms help clean up the forest by breaking down dead leaves and trees. They make the soil healthy so the plants will grow."
    - Pollinators (like bees): "Bees and other pollinators help plants reproduce by moving pollen. Without them, many plants can't make seeds and fruits."

#### **Step-by-Step Activity Guide (Cont'd)**

#### 2. Building the Habitat Web (20 minutes)

- Set Up: Lay out the cards on a table or pin them on a poster board.
- Create Connections: Give the yarn to a student and let them choose a card to connect from the sun or water to a plant. Continue passing the yarn to other students to connect plants to animals, animals to decomposers, etc.

#### 3. Discuss Connections

Each time a connection is made, ask the students to explain (with your help) why these two things are connected. For example, "Why do rabbits need plants?" or "What happens when the mushrooms break down dead wood?"

#### 4. <u>Discussion. "What if...?" Questions and Reflection</u> (10-15 minutes)

- Impact of Changes: Once the web is complete, gently pull on one string to show how it affects the entire web. Discuss: "What if we lose all the bees, what do you think would happen?" or "What if there was no rain for a very long time?"
- Role of Humans: Talk about how humans can help or hurt ecosystems.
   NOTE: A list of sample "What if...?" questions is on the next page.

#### 5. Closure and Recap

"Today we learned how everything in nature is connected, like a big family. Each part of the family needs to be healthy for nature to be healthy."

• Encourage Observation at Home: Suggest that they watch for these connections in their own backyards or at parks.

#### **Additional Tips:**

- 1. Use Visual Aids: Pictures are very helpful for young learners. Ensure each card has a clear, colorful image.
- 2. Be Interactive: Let the kids handle the yarn and make connections themselves. This tactile part of the lesson helps them remember.
- 3. Adjust Language as Needed: Keep explanations straightforward, avoiding or simplifying complex terms.

#### Sample What If?" Questions and Answers:

These questions can be used to connect the concepts discussed in the Habitat Web with real-world scenarios, enhancing students' understanding of the importance of ecosystems and the impact of human actions on the environment. This approach not only educates, but also encourages students to think critically about their role as Eco-Guardian. Answers are for the adult or teacher.

#### 1. What if there are no bees left in the ecosystem?

 Answer: "Without bees, many plants wouldn't be able to produce fruits and seeds. This would affect animals that eat these plants and ultimately could lead to fewer plants and animals overall."

#### 2. What if the water in our ecosystem becomes polluted?

 Answer: "Polluted water can harm fish and other aquatic life, making it unsafe for them and for any animals (including humans) that drink or use the water."

### 3. What if we have more cars and factories adding pollution to our air?

 Answer: "More air pollution can lead to poorer health for all living things, damage plants, and contribute to climate change, which can change weather patterns and temperatures globally."

## 4. What if there are longer and hotter summers because of climate change?

 Answer: "Longer, hotter summers can dry out habitats, make it harder for animals to find water, caus ingsome plants not to grow as well. This changes the food available for animals and can even lead to fires that destroy habitats."

#### Sample What If?" Questions and Answers (cont'd)

### 5. What if we start using more renewable energy like solar or wind power?

 Answer: "Using renewable energy sources helps reduce pollution and slows down climate change, which can help keep our ecosystems healthy and stable for a longer time."

#### 6. What if a local forest is cut down for building homes?

 Answer: "Cutting down forests can destroy the homes of many animals and plants. It also means less clean air because trees help store CO2 and produce oxygen.

#### 7. What if more people start recycling and using less plastic?

 Answer: "If people use less plastic and recycle more, there will be less plastic pollution harming wildlife, especially in our oceans. Fewer resources are used and less waste ends up in landfills which is better for the entire ecosystem."

#### 8. What if a new park with many trees and plants is created in our city?

 Answer: "Creating a new park would help improve air quality and provide a home for many species. It would also give people a place to enjoy nature which can increase community happiness and health. Additionally, it helps to absorb rainwater, reducing flood risks."

### 9. What if all cars in our city were replaced by bicycles or electric cars for one day?

 Answer: "If we used only bicycles or electric cars even for just one day, it would reduce air pollution significantly. Less pollution means cleaner air for us to breathe and a healthier environment for plants and animals around us."

#### Sample What If?" Questions and Answers (cont'd)

#### 10. What if every student in our class made an effort to use less paper at school?

 Answer: "Using less paper means fewer trees need to be cut down to make that paper. Trees are important because they give us oxygen, help clean the air, and provide homes for lots of animals. By using both sides of the paper or using scrap paper for drawings, we help save trees."

## 11. What if every student turned off their electronic devices when not in use at school and at home? Discussion idea to integrate energy saving into the ecosystem of the habitat web.

- Answer: "Turning off devices when we're not using them saves energy. Energy comes from power plants, and many plants burn fuels that can harm our air and water. By using less power, we help reduce pollution and protect our environment."
- Discussion: "Remember how in our habitat web, all parts are connected? Just
  like that, using energy wisely affects many parts of our ecosystem. When we
  save energy by turning off devices, we help reduce demand from power plants.
  Many power plants burn coal or gas, which can harm our air and water—home to
  many creatures in our web. By using less energy, we help keep habitats healthy
  and prevent damage to ecosystems, like the ones represented in our web."

## 12. What if we used our classroom technology to learn more about different ecosystems around the world? Discussion idea to integrate technology into the ecosystem of the habitat web.

- Answer: "Using technology like computers and tablets, we can explore
  ecosystems from rainforests to deserts without leaving our classroom. This can
  help us understand the importance of different habitats and why it's crucial to
  protect them. Plus, it shows us how our actions can impact places far away from
  where we live."
- Discussion: "In our habitat web, we saw how different animals and plants depend on each other. By using our classroom technology to learn about ecosystems around the world, we get a better understanding of how even distant ecosystems are important. This knowledge can inspire us to take actions that help protect these ecosystems. For example, learning about the rainforest might motivate us to support products that don't contribute to deforestation, preserving the homes of creatures in our web and maintaining the balance of the planet's ecosystems."

## Activity: Ecosystem Protection

#### Sample What If?" Questions and Answers (cont'd)



#### 13. What if we all decided to use less water at home?

 Answer: "Using less water helps make sure there's enough for all plants and animals. When we save water, it also means less work for our local water treatment plants, which helps keep our environment cleaner."

### 14. What if we started using reusable containers for our lunches instead of disposable ones?

 Answer: "Using reusable lunch containers helps reduce waste. Less trash means fewer things going to the landfill, which is good for the land and animals living near those areas. It also saves resources like plastic and paper."

### 15. What if we made sure to turn off our computers and tablets at the end of the day?

Answer: "Turning off electronic devices when not in use saves energy.
Using less energy helps prevent pollutionbecause there are less
greenhouse gas emissions that can harm our air and water. And that
helps keep our ecosystems healthier."

# Day 4: Recycle and Reuse

REUSE

Teach about the benefits and processes of both recycling and reusing materials. Emphasize that while recycling transforms waste into new products, reusing extends the life of items in their current form which can be even more energy-efficient, reducing environmental impact further.

#### **Recycling Process:**

Explain how recycling involves collecting, sorting, and processing materials like newspapers, plastic bottles, and aluminum cans to manufacture new products. This process saves materials and helps keep the air cleaner than making things from brand new stuff. When we make new things, we often use up more of the Earth's resources, like metals from the ground or trees from forests. Using things that'sthat have already been made into something else before means we don't have to use up as much of these resources. It also means we don't make as much dirty air that can hurt our planet."

#### **Reuse Benefits:**

Highlight how reusing items can significantly reduce the demand for new materials, conserve energy, and lower pollution levels. Reuse can be as simple as repurposing a plastic container for storage or as creative as turning old clothing into new fashion pieces. Encourage thinking about items in their homes that can be reused instead of discarded, fostering a mindset of resourcefulness.

## Activity: Recycle and Reuse

Bring in items from home that can be recycled or reused, and discuss how each item can be given a second life. A lot of items we use each day are made of plastic.

Examples: Plastic bottles are used for a lot of things we use each day, e.g. shampoo, glue, soda and juice; food storage containers and plastic bags; plastic cups and plates; plastic packaging for snacks and toys; plastic grocery bags.

Plastic isn't biodegradable which means that plastic is left to rot in landfills and oceans or burned which produces hazardous chemicals that are released into the air we breathe.

Talk about upcycling, too!



Upcycling is a creative and engaging way to teach kids about recycling and reuse. It involves taking used or discarded materials and transforming them into products of higher quality or value.

Incorporating these activities into Recycle and Reuse Day can make the concept of upcycling come alive for children in this age group. By engaging their creativity, problem-solving skills, and interest in the environment, you'll be instilling important values of protecting natural resources that can last a lifetime.

## Examples: Upcycling Activities



- **DIY Bird Feeders:** Use plastic bottles or milk cartons, cut out openings, and decorate them. Attach strings for hanging and fill them with birdseed. This activity teaches about reusing plastics and provides a connection to helping local wildlife.
- **Upcycled Fashion Show:** Encourage kids to create outfits or accessories from old clothes, scraps of fabric and other recyclable materials. This could culminate in a fashion show where they present their creations. It's a fun way to learn about textile waste and the value of reusing materials.
- Seedling Starters from Toilet Paper Rolls: Show them how to use toilet paper rolls as biodegradable pots for starting seedlings. They can decorate the outside, fill them with soil, and plant seeds. This introduces the concept of plant growth in addition to upcycling.
- Wind Chimes from Recycled Materials: Gather materials like keys, metal lids, beads and sticks to create wind chimes. This project can be as simple or complex as desired, teaching about reusing various materials and exploring sound.
- Bottle Cap Mosaics: Collect bottle caps in various colors and arrange them into mosaic art pieces on a large board or canvas. This can teach pattern recognition and artistic expression while discussing the importance of recycling metals.
- **Homemade Board Games:** Encourage kids to design their board games using cardboard, bottle caps for pieces, and markers for decoration. They can invent their own rules and make their own game pieces. This not only promotes creativity, but also strategic thinking and social play.
- **Recycled Material Sculptures:** Challenge them to create sculptures or 3D art using a variety of recyclable materials. This could be a group project, encouraging teamwork and problem-solving, as they think about the structural and aesthetic aspects of their creation.

## Day 5: Nature Appreciation LEARNING OUTCOME

Nature Appreciation Day is the best way to finish the Eco-Challenge Week. After learning all about climate change, the environment and what kids can do to make a difference, getting outdoors is a great way to connect all of the week's activities and knowledge related to protecting our planet.

Use Nature Appreciation Day to teach the concept of biodiversity - the variety of life in the world or in a particular habitat or ecosystem - and its critical role in maintaining the health of our planet.

Biodiversity means having lots of different types of animals and plants. This is important because it helps our environment work well, like keeping our air and water clean, making soil good for growing things, helping plants grow by moving pollen around, and keeping our weather from changing too fast.

The goal is to instill a deeper appreciation for nature and a proactive attitude towards environmental conservation. It's about understanding the interconnectedness of all living things and recognizing that protecting biodiversity and natural habitats is not just about saving other species; it's about ensuring a healthy and safe future for everyone who lives here, including people. animals and plants. That means using things in a way that makes sure there's enough for everyone, now and in the future.

## Activity: Nature Appreciation



Spend some time outdoors, observing plants, insects, and animals. Encourage students to draw or write about their observations. Challenge students to name one way human interaction has harmed natural ecosystems and then name one way human interaction has helped natural ecosystems.

Here's the kid friendly version of that:

Think about how people can sometimes affect the environment. Sometimes, the things we do can hurt the homes of animals and plants.

For example, when we litter or cut down too many trees, it can make it hard for animals to find food or a safe place to live. But we can also do things to help nature! Like when we plant trees or clean up trash in parks, we're giving animals more places to live and helping to keep their homes safe. It's important to remember that even small actions can make a big difference in protecting our planet!

## Wrap-Up

# ECO-CHALLENGE WEEK/MONTH

#### Discussion:

At the end of the week, hold a discussion to reflect on the activities.

#### **Question:**

Ask students to share what they learned, which activities they found most impactful, and how they plan to continue being Eco-Guardians at home and in school.

#### Pledge:

Print out the Eco-Guardian Pledge for each student to print or write their name sign, if you haven't done this before beginning the Eco-Challenge Week for Eco-Guardians.

#### Award:

Distribute the Eco-Guardian Certificate with each child's name.



2024

#### I PLEDGE TO:

to protect and preserve our planet's ecosystems by consciously reducing waste, conserving water and learning about the environmental impact of my actions.

As an Eco-Guardian, I commit to taking daily steps that contribute to a healthier Earth and supporting the efforts of Environmental Stewards in safeguarding our natural resources for future generations.

Name

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#### **Certificate of Achievement**

for successfully completing the challenges and activities required to be reconized as an



is awarded to



## [Your Name]

and for your commitment to prove to receive waste earns you superhero status.

Your dedication to transcript the environment and taking steps to he's improve show you truly care about the Earth.

Month/Year

