

Teachers Read this First!

This packet is meant as a guideline and will provide suggested activities for a day focused completely on learning about our earth and ways to protect it. Included are worksheets for children, suggested books, and step-by-step instructions for experiments. Make this packet work for you and your children. It does not have to be followed word for word. These activities work best with children kindergarten through 2nd or 3rd grade.

Supplies List

- Bible or storybook Bible
- Crayons, markers, or colored pencils
- Play-doh (yellow, orange, red, brown, blue, and green)
 - Legos (same colors)
 - Biodegradable Packing Peanuts

Suggested Read Alouds

The Lorax by Dr. Seuss We Are Extremely Very Good Recyclers by Lauren Child Recycling by Rebecca Pettiford

Earth! My First 4.54 Billion Years by Stacy McAnulty



Vocabulary to Know

Environment: the world a person, animal, or plant lives in

Recycle: change trash into a item that can be resused

Recyclable: items that can be recycled

Inner Core: the very center of the earth; it is the hottest part of the planet

Outer Core: the only liquid layer of the earth

Mantle: the rocky shell between the crust and the core of the earth

Crust: the thin shell surrounding the mantle; it is divided into the oceanic crust and the continental crust

Biodegradable: able to be broken down by living organisms such as bacteria.



Why do we celebrate Earth Day?

The first Earth Day was celebrated on April 22, 1970. It was organized by U.S. Senator Gaylord Nelson and activist Denis Hayes. In 1990, Earth Day was celebrated internationally for the first time. Over 140 countries participated.

The original Earth Day was not much of a celebration. It was a day of organized demonstrations in response to an oil spill in Santa Barbara, California in 1969. More than three million gallons of oil spilled into the ocean and killed more 10,000 species of marine wildlife. People who helped clean up from this disaster wanted laws to change to help protect the environment.



Today we celebrate Earth Day to learn about our Earth and how we can protect it.

Why should we take care of the earth?

The biggest reason to care for the earth is because God created it and he told us to care for it. After God created Earth, he created man and woman and he planted the Garden of Eden. Then, God placed Adam in the garden and had him care for and watch over it. Adam and Eve were allowed to eat the fruits of the trees and spend their days with God on the beautiful Earth.



How do we celebrate Earth Day?

Learn

Leaning about our planet and how to take care of it are great ways to celebrate Earth Day. Reading fun books is one way to help us learn. Science experiments is another way.

Recycle

Recycling is one of the ways we protect and care for our planet. When we recycle, we keep trash from building up in landfills. In some cities, recycling is as easy as putting out your trash can of recyclable items. In other cities, you have to take your recyclable items to a recycling center. Either way, recycling helps our protect our planet! On Earth Day, find a way to recycle in your city.

Clean up litter

Litter is what we call trash that ends up on the ground instead of in a trash can. Maybe the wind blew it out of a dumpster or maybe someone missed the trash can. Either way, litter can be a real problem if someone does not pick it up and throw it away correctly. On Earth Day, you and your family can pick up trash along a well walked path in your town. Be sure to wear gloves and don't pick up anything that looks dangerous.

Plant

Plants are really great for our environment. They take the carbon dioxide that we breathe out and turn it into oxygen for us to breathe in. We need plants to breathe! Earth Day is a great day to go outside and add some plants to your garden.

Get outside

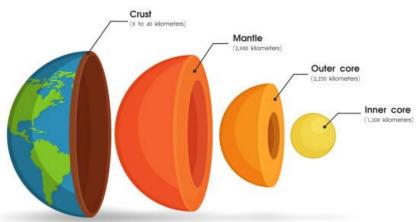
If you cannot do any of the other things listed, simply going outside to play and enjoy the earth that God gave us is a wonderful way to celebrate Earth Day!





Read Genesis chapter 1 with your parent and draw your favorite part in the box below.

STRUCTURE OF THE EARTH



To help us understand what the earth is made up of, choose one of these two activities:

- 1. Make a playdough earth. Use yellow for the inner core, orange for the outer core, red for the mantle, and brown for the crust. Then, add blue and green playdoh for the oceans and continents.
- 2. Make a Lego earth-slice. Using the same colors listed about, make a slice of the earth using Legos.





*If you are doing this with older siblings, have them draw and label a cross section of the earth.

**After this activity, read Earth! My First 4.54 Billion Years by Stacy McAnulty or similar title.



Did you ever wonder what happens to trash after you throw it away?

Usually, it ends up in a landfill where it is left to break down and become a part of the earth, but sometimes that can take a long time! There are even some things that never break down, like Styrofoam.

What happens if we have too much trash? What should we do to limit the amount of trash in our landfills?

There are lot of ways we can prevent our landfills from filling up too fast. First, we can *reduce* the amount of singleuse items we use. Second, we can find ways to *reuse* more of our products. Third, we can *recycle* items into new things!

Today would be a good day to watch Pixar's Wall-E. Ask your child questions like, "Why did the humans have to leave Earth? " and "How did they know it was ok to return?"



Reduce

To reduce our trash, we need to stop using items that can only be used once. For example, plastic water bottles are used once but can take 450 years to break down. If you purchase a metal or plastic reusable water bottle, then you won't have as much to throw away!

Reuse

When we reuse items more than once, then we have less to throw away. Maybe you just prefer that plastic water bottle so you reuse it over and over instead of throwing it away after it's emptied the first time.

Recycle Recycle

When we recycle items instead of throwing them away, they can be made into something new. Plastic water bottles can be made into new plastic bottles, make-up containers, and planters. They can even be made into shoes and clothing!



When we reduce our trash, we find ways to use items that break down faster or can be reused rather than items like plastic that take a long time to break down. For example, we can use paper bags at the grocery store instead of plastic bags. Another example is using biodegradable packing peanuts instead of Styrofoam.

Packing Peanut Experiment

Supplies:

- biodegradable packing peanuts
- Shallow bowl of room temperature water
- timer

Directions:

- Packing peanuts are usually made from Styrofoam. How long does Styrofoam take to break down? [It never breaks down!] These packing peanuts are biodegradable which means they *can* break down.
- 2. Place shallow bowl of water in front of the child. For more fun, use three bowls—1 hot, 1 room temperature, 1 cold.
- 3. Add biodegradable packing peanuts to the water. You can do one at a



time or several at a time.

- 4. Use the timer so see how long it takes for packing peanuts to melt in the water. If you have Styrofoam peanuts, you could try the experiment again with those and see the difference.
- 5. Record your findings on the data sheet on the next page.
- 6. Make observations about the experiment. Did it work like you thought it would? What did you like or dislike about the experiment? Which water temperature worked best?



THINK ABOUT IT!

Now that you have completed the experiment, discuss with your children how this relates to our life experiences? Now that we know biodegradable things are better for our planet, what changes can we make to how we live or the products we use?



Data Sheet				
Use this page to record your data from the experiment.				
Time it takes to melt	Hot Water	Room Temperature	Cold Water	
Time it takes to melt 1 peanut				
Time it takes to melt 5 peanuts				
Time it takes to melt 10 peanuts				
Time it takes to melt 25 peanuts				
Describe your observations (which melted fastest, which melted slowest, did it work like you thought? What did you like about it?):				



Now that we understand why we should reduce the amount of trash we make and how we can do that, let's brainstorm some ways we can reuse items instead of throwing them away.

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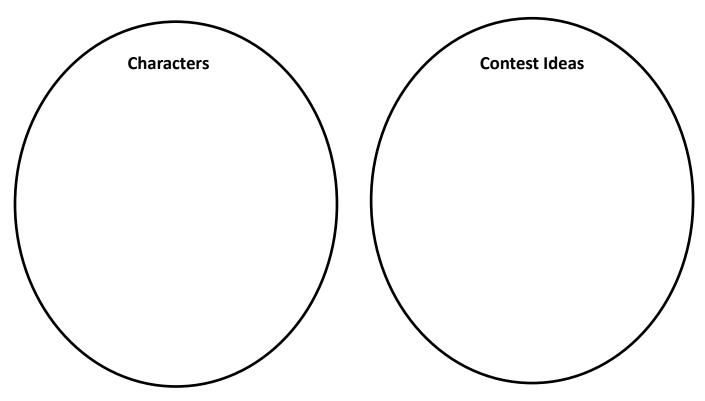


Read & Write

When an item is recycled, it is broken down and remade into something new. For example, old newspapers can be recycled and made into new paper. Many cities have recycling plants that do this work by machine. Machines sort out the items by glass, paper, or plastic and then other machines break them down.

With your parent, read a book about recycling from your local library. Then, write a story about children who help their town by starting a recycling contest. You can write the story yourself or you can tell the story to your parent and they can write it for you.

Brainstorm some ideas here, then write the story on the next two pages.



*Dictating to a parent can be just as good as writing on their own for children. Dictating can often help the creative juices flow unhindered by pencil grip or spelling questions.

Title:	
Ву:	

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Earth Day Discussion

- **1.What was your favorite part in this unit?**
- 2. What did you learn today?
- 3. How can we help protect the earth?

