

Educational Toolkit

Resources, tools and activities to help educate students on climate change





About

Aimed primarily at 4th and 5th grade students, these educational activities will provide students' relevant background on the mission behind Cool Globes, introduce and strengthen childrens' knowledge on climate change, and challenge them to learn and do more for the world. With adult supervision and support, many of these activities can extend beyond 4th and 5th grade.

Created and curated by Mollye Fryday: an experienced, Certificated Teacher with a MA in Education.

Objectives

- Students will be able to define climate and climate change while becoming aware that the Earth has an optimal temperature range which needs to be maintained.
- Students will identify the major causes of climate change, sources of carbon dioxide and energy. How does our Globe naturally “heat up?”
- Students will demonstrate awareness that there are ways to slow climate change How can our Globe be cooled?
- Students will learn about activism and ways they can be called to action to help slow climate change.
- Students will conduct an energy audit of their own house or apartment and reflect upon their personal and family consumption.

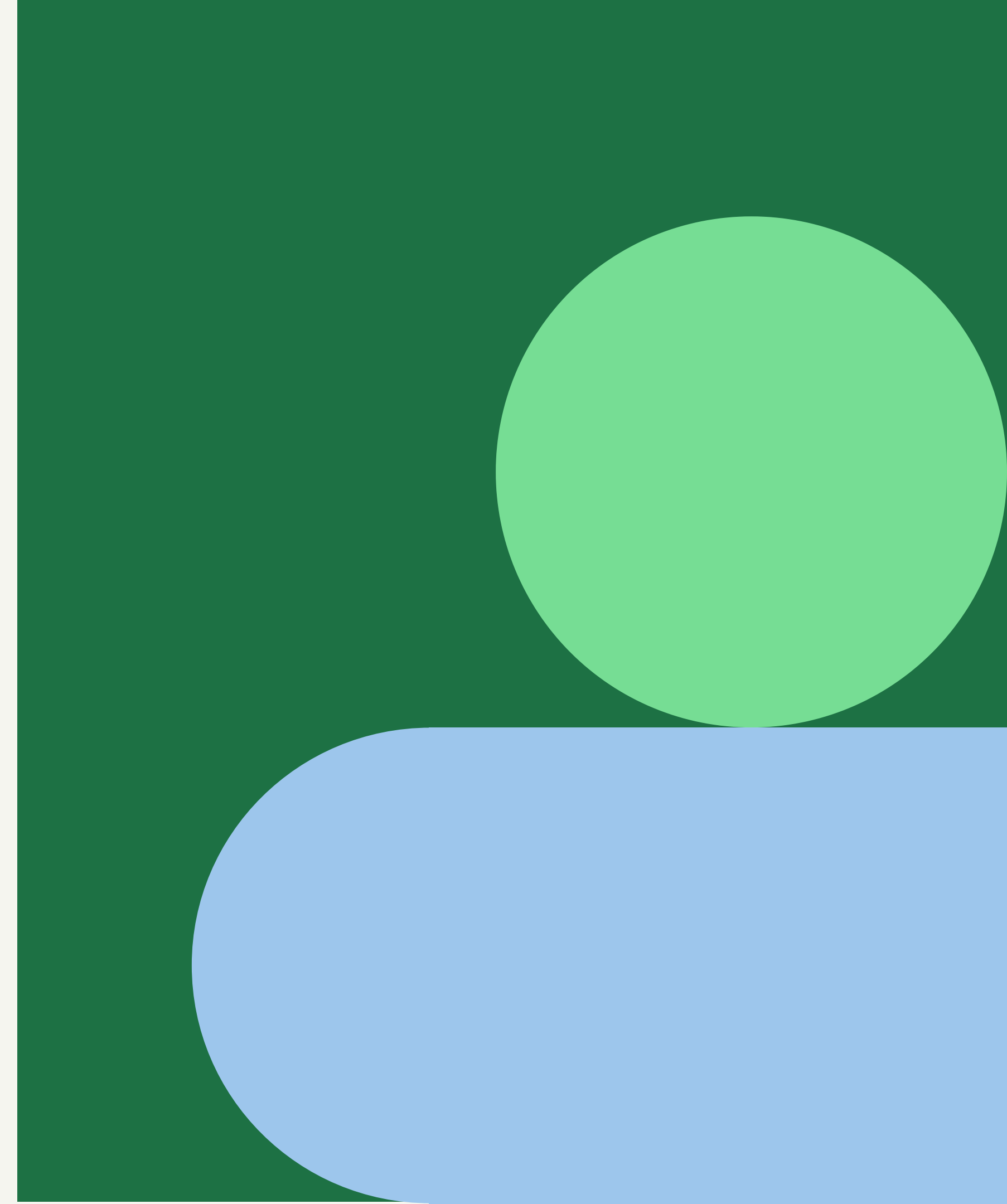


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- Environmental Awareness project ideas from Nature Matters
- List of activities students can partake in to help combat climate change



Reading Recommendations

The Lorax **By Dr. Seuss**

Dr. Seuss's beloved story teaches kids to treat the planet with kindness and stand up and speak up for others. Experience the beauty of the Truffula Trees and the danger of taking our earth for granted in a story that is timely, playful, and hopeful. The book's final pages teach us that just one small seed, or one small child, can make a difference.

The Magic School Bus and the Climate Challenge **By Joanna Cole and Bruce Degen**

Like it or not, global warming is a hot topic that will affect the younger generation more than anyone. So why not turn to the teacher kids love most, Ms. Frizzle! Only the Friz can boil all the hoopla down to the scientific facts in a fun and informative way.

With trademark simplicity and wit, Joanna Cole explains why the earth is getting warmer, and Bruce Degen's bright, action-filled illustrations make the science easy to understand and fun to learn. This team brings a new, improved understanding to climate change, engaging kids and empowering all. Teachers will cheer!

What Is Climate Change? **By Gail Herman, Who HQ, and John Hinderliter (from the Who Was series)**

The earth is definitely getting warmer. There's no argument about that, but who or what is the cause? And why has climate change become a political issue? Are humans at fault? Is this just a natural development? While the vast majority of scientists who study the environment agree that humans play a large part in climate change, there is a counterargument. Author Gail Herman presents both sides of the debate in this fact-based, fair-minded, and well-researched book that looks at the subject from many perspectives, including scientific, social, and political.

Reading Recommendations

Winston of Churchill: One Bear's Battle Against Global Warming **By Jean Davies Okimoto, Illustrated by Jeremiah Trammel**

Churchill, Manitoba is the polar bear capitol of the world. Every winter, tourists flock to the tiny town to watch the bears hunt and frolic on the frozen waters of the Hudson Bay. This year, though, the tourists are in for a big surprise...Winston! A smart, fierce, brave bear, Winston of Churchill has noticed that their icy home is slowly melting away. . This timely, funny story draws attention to the polar bears' plight and helps children understand that in the face of global warming, everyone must do their part, no matter how small.

How We Know What We Know about Our Changing Climate **By Lynne Cherry and Gary Braasch**

When the weather changes daily, how do we really know that Earth's climate is changing? This climate change book for kids shows the science behind the headlines—evidence from flowers, butterflies, birds, frogs, trees, glaciers and much more, gathered by scientists from all over the world, sometimes with assistance from young "citizen-scientists." And here is what young people, and their families and teachers, can do to learn about climate change and take action!

Under the Weather: Stories About Climate Change **By Tony Bradman**

From the effects of rising sea levels to changes in animal behaviour and human lifestyles, these powerful stories portray the issues surrounding climate change in personal terms and so bring them vividly to life. Offering warnings and inspiration in equal measure, the stories cover a wide range of localities from Siberia and Canada to Australia, UK, Sri Lanka and the Philippines. Writers include award-winning Linda Newbery as well as exciting newcomers like Australia's George Ivanoff. Whether read from cover to cover or dipped into for one or two stories, this book will enlighten and inspire everyone to consider how climate change will affect us all.

Reading Recommendations

Fever in the Oceans **By Stephen Aitken**

Temperatures all over the world are rising due to climate change, effecting the marine life around the world. Provide even the youngest readers information about the oceans, the changes in climate and its affects on the oceans, and what they can do to help preserve our planet with Fever in the Oceans. Bright, colorful illustrations and straightforward text make this topic accessible for even the youngest audience. Hot Facts and Cool Ideas sidebars provide additional information and Dr. Know experiments provide a fun look at climate. Looking Glass Library is an imprint of Magic Wagon, a division of ABDO Publishing Group.

Fever on the Land **By Stephen Aitken**

Temperatures all over the world are rising due to climate change, effecting the plant and animal life. Provide even the youngest readers information about Earth, the changes in climate and its affects on the plants and animals, and what they can do to help preserve our planet with Fever on the Land. Bright, colorful illustrations and straightforward text make this topic accessible for even the youngest audience. Hot Facts and Cool Ideas sidebars provide additional information and Dr. Know experiments provide a fun look at climate. Looking Glass Library is an imprint of Magic Wagon, a division of ABDO Publishing Group

Climate Change: A Hot Topic! **By Simon Basher**

Do you know your carbon cycle from your carbon footprint? Can you tell your greenhouse effect from your green house? And what exactly is a tipping point? If any of these questions leave you confused, then Basher Science: Climate Change is the book for you. From El Nino and hurricanes to deforestation and population growth of scale - this is a totally comprehensible guide to a fast-moving, essential topic. Subjects covered in this book include: ice caps, the greenhouse effect, global warming, the butterfly effect, atmospheric systems, acid rain, ocean systems, acidification, fossil fuels, heat waves, urbanization, carbon footprint, recycling, renewable energy, biofuels, and nuclear power.

Reading Recommendations

The Problem of the Hot World By Pam Bonsper

What happens when five forest friends discover their trees are no longer growing? When there is no more grass to eat? When there is no more water? When the world is too hot? This book follows the friends- a fox, a bear, an owl, a mole, and a deer- on an exciting adventure to find out where the water went and how to get it back.

The Great Kapok Tree: A Tale of the Amazon Rain Forest By Lynne Cherry

Lynne Cherry journeyed deep into the rain forests of Brazil to write and illustrate this gorgeous picture book about a man who exhausts himself trying to chop down a giant kapok tree. While he sleeps, the forest's residents, including a child from the Yanomamo tribe, whisper in his ear about the importance of trees and how "all living things depend on one another" . . . and it works. Cherry's lovingly rendered colored pencil and watercolor drawings of all the "wondrous and rare animals" evoke the lush rain forests. Features stunning world maps bordered by detailed illustrations of fascinating rainforest creatures. An IRA Teacher's Choice (1991), ABA's Pick of the Lists,

Kate, Who Tamed the Wind Liz Garton Scanlon and Lee White

A wild wind blows on the tippy-top of a steep hill, turning everything upside down for the man who lives there. Luckily, Kate comes up with a plan to tame the wind. With an old wheelbarrow full of young trees, she journeys up the steep hill to add a little green to the man's life, and to protect the house from the howling wind. From award-winning author Liz Garton Scanlon and whimsical illustrator Lee White comes a delightfully simple, lyrical story about the important role trees play in our lives, and caring for the world in which we live.

Reading Recommendations

Seeds of Change: Wangari's Gift to the World **By Jen Cullerton Johnson and Sonia Lynn Sadler**

As a young girl in Kenya, Wangari was taught to respect nature. She grew up loving the land, plants, and animals that surrounded her -from the giant mugumo trees her people, the Kikuyu, revered to the tiny tadpoles that swam in the river. Although most Kenyan girls were not educated, Wangari, curious and hardworking, was allowed to go to school. There, her mind sprouted like a seed. She excelled at science and went on to study in the United States. After returning home, Wangari blazed a trail across Kenya, using her knowledge and compassion to promote the rights of her countrywomen and to help save the land, one tree at a time. *Seeds of Change: Planting a Path to Peace* brings to life the empowering story of Wangari Maathai, the first African woman, and environmentalist, to win a Nobel Peace Prize. Engaging narrative and vibrant images paint a robust portrait of this inspiring champion of the land and of women's rights.

How We Know What We Know about Our Changing Climate **By Lynne Cherry and Gary Braasch**

When the weather changes daily, how do we really know that Earth's climate is changing? This climate change book for kids shows the science behind the headlines—evidence from flowers, butterflies, birds, frogs, trees, glaciers and much more, gathered by scientists from all over the world, sometimes with assistance from young "citizen-scientists." And here is what young people, and their families and teachers, can do to learn about climate change and take action!

Texts on Activism

Greta's Story: The Schoolgirl Who Went on Strike to Save the Planet
by Valentina Camerini, Moreno Giovannoni (Translator), Veronica Carratello (Illustrator)

The New 50 Simple Things Kids Can Do to Save the Earth
By EarthWorks Group and John and Sophie Javna

Mission: Save the Planet: Things YOU Can Do to Help Fight Global Warming!
By Sally Ride

How to Save the Whole Stinkin' Planet
By Lee Constable and James Hart

10 Things I Can Do to Help My World
By Melanie Walsh

Compost Stew
By Mary McKenna Siddals

Just a Dream
By Chris Van Allsburg

Additional Resources:

What is Climate Change?

<https://climatekids.nasa.gov/climate-change-meaning/>

How do we know the earth is getting warmer?

<https://climatekids.nasa.gov/climate-change-evidence/>

Climate Basics for Kids

<https://www.c2es.org/content/climate-basics-for-kids/>

[Comprehension Questions to support this article](#)

Why is Carbon important?

<https://climatekids.nasa.gov/carbon/>

Reduce, Reuse, Recycle

<https://www.solarschools.net/knowledge-bank/sustainability/reduce-reuse-recycle>



2021

Climate Change Videos

NASA KIDS CLIMATE CHANGE VIDEO LIBRARY

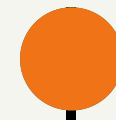
[HTTPS://CLIMATEKIDS.NASA.GOV/MENU/WATCH/](https://climatekids.nasa.gov/menu/watch/)

VIDEO ON CO₂

[HTTPS://WWW.YOUTUBE.COM/WATCH?
V=931DRXJDQT4&FEATURE=YOUTU.BE](https://www.youtube.com/watch?v=931DRXJDQT4&feature=youtu.be)



Language Arts Activities



GRAMMAR EXERCISE: PROOFREADING

Why is the climate changing? Find the mistakes.



FILL IN THE BLANK COMPREHENSION PAGE

How does the climate affect the earth?



COMPREHENSION QUESTIONS TO SUPPORT NATIONAL GEOGRAPHIC ARTICLE ABOUT CLIMATE CHANGE



COMPREHENSION QUESTIONS TO SUPPORT C2ES ARTICLE ON CLIMATE BASICS



CLIMATE CHANGE VOCABULARY WORD SEARCH

Proofreading Exercise

Directions: Underline or circle the 12 errors in this paragraph. Write the correct answer above it. Errors can be capitalization, punctuation, spelling, or grammar.

Why is the Climate Changing?

They're are meny reasons why the climate is changing. won of the major reasons is that human activities, ranging from farming and manufacturing to transportation and heating, have increased greatly. Whith a growing population, we are consuming more food and energy. For example, we still use fossil fuels, such as coal and gas, to generate electricity in our citys homes and factories. Also agriculture and cattle farming Emit the greenhouse gases nitrous oxide and methane. people travel for work and leisure, and cars and airplanes use gasoline and diesel fuels. Additionally, in order to make room for the larger population, large areas of forests have been cleared to make room for agriculture and houses This deforestation removes carbon dioxide from the atmosphere. As a result, more greenhouse gases have been emitted, warming our planet and causing climate change

Proofreading Exercise: Answer Key

Answer Key

Why is the Climate Changing?

There are many reasons why the climate is changing. One of the major reasons is that human activities, ranging from farming and manufacturing to transportation and heating, have increased greatly. With a growing population, we are consuming more food and energy. For example, we still use fossil fuels, such as coal and gas, to generate electricity in our cities, homes, and factories. Also, agriculture and cattle farming emit the greenhouse gases nitrous oxide and methane. People travel for work and leisure, and cars and airplanes use gasoline and diesel fuels. Additionally, in order to make room for the larger population, large areas of forests have been cleared to make room for agriculture and houses. This deforestation removes carbon dioxide from the atmosphere. As a result, more greenhouse gases have been emitted, warming our planet and causing climate change.

Directions: Use the words below to fill in the missing blanks.

leaving glaciers weather warmer climate livelihood animals
people habitats extremes

How Does Climate Change Affect Our Planet?

_____ change is impacting all parts of the earth. As the environments around us change, so do the lives of the people, _____, and plants living here. The natural _____, or homes, of animals are being threatened by fires, warmer climates, droughts and changes in the availability of food and water. Also as the climate changes, people are _____ their homes to escape floods, droughts, fires, and other _____. We are seeing more extreme _____ as a result of shifts in rainfall patterns and other atmospheric changes. As the land on earth is getting _____, conditions are drier and therefore more vulnerable to drought and wildfires. The warming temperatures are causing the seas to also warm, changing the lives of sea creatures and the people who depend on the water for their _____. Finally, melting _____ contributes to rising sea levels as well as shrinking sea ice across the Arctic. With all of these changes, difficult challenges are arising for the _____, plants, and animals on the earth.

Fill in the blank answer key

How Does Climate Change Affect Our Planet?

Climate change is impacting all parts of the earth. As the environments around us change, so do the lives of the people, animals, and plants living here. The natural habitats of animals are being threatened by fires, warmer climates, droughts and changes in the availability of food and water. Also as the climate changes, people are leaving their homes to escape floods, droughts, fires, and other extremes. We are seeing more extreme weather as a result of shifts in rainfall patterns and other atmospheric changes. As the land on earth is getting warmer, conditions are drier and therefore more vulnerable to drought and wildfires. The warming temperatures are causing the seas to also warm, changing the lives of sea creatures and the people who depend on the water for their livelihood. Finally, melting glaciers contribute to rising sea levels as well as shrinking sea ice across the Arctic. With all of these changes, difficult challenges are arising for the people, plants, and animals on the earth.

Comprehension Questions

“National Geographic: Climate Change,” By Allyson Shaw

Part 1: TRUE OR FALSE. Circle the correct answer.

1. Over the past 650,000 years, the Earth has gone through seven ice ages and warming periods.

True False

2. Our Earth is surrounded by an atmosphere made up of liquids.

True False

3. The climate is warming about 10 times faster than the average previous warming times.

True False

4. There is no difference between climate and weather.

True False

5. Human activity has nothing to do with climate change and global warming.

True False

Part II: SHORT ANSWER. Write the answer in a complete sentence.

1. What is the name of the gas that is trapping heat that would otherwise escape earth's atmosphere?

1. Give two examples of something that could happen as a result of climate change.

1. What are three ways you could make a difference in keeping the Earth healthy?

Comprehension Questions

“National Geographic: Climate Change,” By Allyson Shaw

Part 1: TRUE OR FALSE. Circle the correct answer.

1. Over the past 650,000 years, the Earth has gone through seven ice ages and warming periods. (true)
2. Our Earth is surrounded by an atmosphere made up of liquids. (false)
3. The climate is warming about 10 times faster than the average previous warming times. (true)
4. There is no difference between climate and weather. (false)
5. Human activity has nothing to do with climate change and global warming. (false)

Understanding Climate Change

Directions: Read the article from the Center for Climate and Energy Solutions. Then answer the questions below.

1. Provide 3 pieces of evidence that prove the Earth is getting warmer.

1.

2.

3.

1. What are three ways people can help to “cool” the planet? In other words, what are three things we can do to help slow climate change?

1.

2.

3.



Bag an old T-shirt

Turn an old t-shirt into a handy, reusable bag for a trip the farmers' market, or, even better, a trip to the beach or the pool.

1. Lay the shirt flat on a table, and cut the sleeves off the shirt. Make the cut extend a couple of inches below the bottom of the sleeve to make the handle "holes" large enough to put over your shoulder.
2. Cut out the neck of the shirt. You can make the cut round-ish, square-ish, or V-shaped. Just make it big enough to put stuff in, but not so big it will all fall out.
3. Cut three strips of cloth from the sleeves. Make them about $\frac{1}{2}$ inch wide. Cutting all the way around the sleeve will give you about the right length.
4. Stretch the strips a bit to make them curl in.
5. On the bottom hem of the shirt, cut three small slits (just big enough to slip in the safety pin), dividing the width into thirds (more or less).
6. Stick the safety pin through the end of one of the strips you made, and close the pin.
7. Insert the pin, with strip, into one of the slits in the hem. Feeling for the pin, work the strip through the hem until you reach the next slit, then pull it out.
8. Remove the safety pin, and put it through the end of another strip. Repeat the process, pulling this strip through the next section of the hem.
9. Finally, pull a third strip through the remaining section.
10. Now, pull each string tight and tie its two ends together in a knot you can pull out (like a bow knot).
11. Tie all the strings together, if you wish.
12. Ta-da! Your recycled, reused, repurposed and multi-purposed bag is complete!

Climate Change Word Search

L J E A C P U J N G J T O X G
S A B B L N S X I O A N W Y R
V Y O P I S J M W T B E G E E
G M L C M P H C I R A R C R E
R A G F A F I B W T E U A E N
E N S C T G A B H N D A R C H
J Q V G E H N E E E I C E Y O
Q B L N R G R I R E U S E C U
Q Y D I A L L Z L I I Z L L S
A Y O M L P P A I O Q B T E E
W W V R O O W Q C J O D D U Q
W C W A S M S I V I T C A M P
O Y X W E F F I C I E N C Y P
E R U T A R E P M E T R T H C
M P V U H V B Q O J A O S R T

activism carbon climate coal cooling efficiency

energy gas glaciers globe greenhouse habitat ice

recycle reduce reuse solar temperature warming weather

Artistic Activities

MAKE A PAPER MACHE GLOBE

Directions to follow

MUSIC REFLECTION

Listen to the song and draw a picture about how it makes you feel or what you hear in the lyrics. A class can collectively do this. You can compile these drawings into a class book, or have students practice oral presentations presenting their drawing.

WRITE A POEM

Write a Haiku about caring for the earth. A haiku is a poem comprised of three lines. The first line has 5 syllables, the second line has 7 syllables, and the third line has 5 syllables.

CREATE A MINI GARDEN

Directions to follow

MAKE A BAG

Directions to follow

MAKE A POSTER

It can be confusing to figure out what items get trashed, recycled, and composted. Do your own research and then make a poster showing what you learned. You can hang it up at school in your classroom or in your cafeteria, or make copies and place them on trash cans throughout the school or even your house!

Make a Paper Mache Globe

Materials:

- 2 cups flour
- 3 cups warm water
- Newspapers or tissue paper
- Mixing Bowl
- Pencil
- Paint
- Paintbrushes

Instructions:

- Choose a balloon. A punching bag balloon works best as it's round. But a regular balloon will also work.
- Blow up the balloon and tie off the end.
- Use a small bowl to place the balloon in. This just helps to keep the balloon steady. You can also line the bowl with plastic wrap so the balloon doesn't stick to the bowl when the paper mache is on.
- Cut the newspaper or tissue paper into strips.
- Mix your paper mache. Put 2 cups of flour into a mixing bowl. Add 2 cups of warm water and stir. Mix so all lumps are gone. You can add up to 1 more cup of water if you want your consistency thinner. Place this bowl (if microwave safe) in the microwave for 45 seconds. Stir again and it's ready to use.
- Cover your balloon with strips of newspaper or tissue paper. Use a brush or your hands to place the paper mache over the newspaper to use as a glue. You can do several layers, but then let it dry for a few hours or overnight, rotating the balloon periodically. Add a few more layers and let it dry once more.
- Draw on the continents using a pencil or black marker. It's okay if it's not perfect.
- Paint your continents green. After the green dries, you can look at a real globe and decide if you want to add any brown to show large mountain areas.
- Make your globe cool! What are some ways you can make an impact on climate change? Add some bicycles, solar panels, windmills, or any creative idea you have to make your globe a "cool globe."

A terrarium is like an aquarium, but for plants instead of fish. It is made in just about any glass container. It is planted to look like a miniature garden or forest enclosed in its own little world.

First, you want all the plants to thrive in the same kind of environment. For example, you could plant all succulents (including cactus), because they need very little water. Or you could plant all ferns, because they like it moist. You could put moss with the ferns, because moss likes it moist too. If you put a fern with a cactus, one or the other might not do well (the fern if it gets too dry, the cactus if it gets too wet).

You can use an open container or a closed container. An open container is best for succulents and cacti. They like lots of air. A closed container (with a lid) might be best for ferns, ivies, and begonias. They like it humid. But if you see a lot of water condensing on the lid, remove it for a while, then replace it.



Plants

Potting Soil

Charcoal

Rocks

You will need:

- **Clear glass container.** For example, aquarium of any size, goldfish bowl, cookie jar, pickle jar, vase with a broad bottom, brandy snifter, or even a shallow dish with a glass bowl turned upside-down over it.
- **Rocks** (around marble sized, depending on the size of container)
- **Activated charcoal** to filter the water and help prevent growth of fungi
- **Potting Soil** (sterilized)
- **Small plants** of different colors, shapes, & textures. Try to get miniature plants that aren't going to grow too big for the container.

1. Start with a layer of rocks, about one inch or so, at the bottom of your container. These will help the soil drainage, so the roots of your plants won't get water-logged.
2. Add a 1/2-inch-thick layer of charcoal.
3. Fill the container up to half-full with potting soil.
4. Plant your plants. When you remove them from their little pots, carefully tease the roots apart and remove some of the old soil so they will fit nicely in the terrarium. Arrange them to look nice. Leave some space for them to breathe and grow. Pat down the soil so they don't get uprooted easily.
5. Add decorative pebbles, rocks, pine cones, or whatever to make your terrarium look like a little garden world.
6. Water the plants, but not too much.
7. Place in indirect light.

Science Experiments

- Greenhouse gas effect (included)
- Global warming in a jar: click [here](#)
- Make a solar oven: click [here](#)
- How melting ice causes sea level rise: click [here](#), teacher guide [here](#)
- Earth globe toss game: click [here](#)
- Global warming demonstration: click [here](#)
- Recycle online game: click [here](#)

Experiment: Let's See the Greenhouse Effect in Action

(adapted from www.education.com)

Do this project on a sunny day

What will you need?

- Two identical large glass jars
- 4 cups cold water
- 10 ice cubes
- One clear plastic bag
- Thermometer

What will you do?

1. Take two identical glass jars each containing 2 cups of cold water.
2. Add 5 ice cubes to each jar.
3. Wrap one jar in a plastic bag (this is the greenhouse glass).
4. Leave both jars in the sun for one hour.
5. Measure the temperature of the water in each jar.
6. Measure the temperature of the water in each jar again after 3 hours.

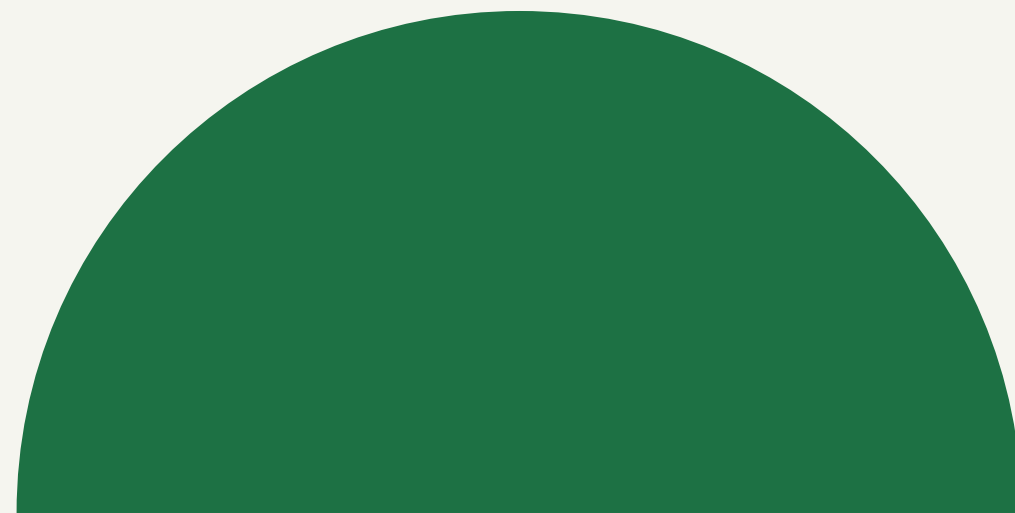
What will you learn?

You just showed the greenhouse effect! The greenhouse glass lets in the sun's energy and warms up the air inside the glass jar while trapping the heat inside.

Math Activities

Home Energy Audit
Click [here](#) or [here](#)

Climate Change Math
Worksheet



Climate Change
Math Word Problems

Directions: Read each question and solve. Write your answers on the line provided.

- Deforestation is the logging or burning of trees in forested areas. Each year about 13 million hectares of the world's forests are lost due to deforestation. How many hectares will be lost in 5 years? _____

How about in 12 years? _____

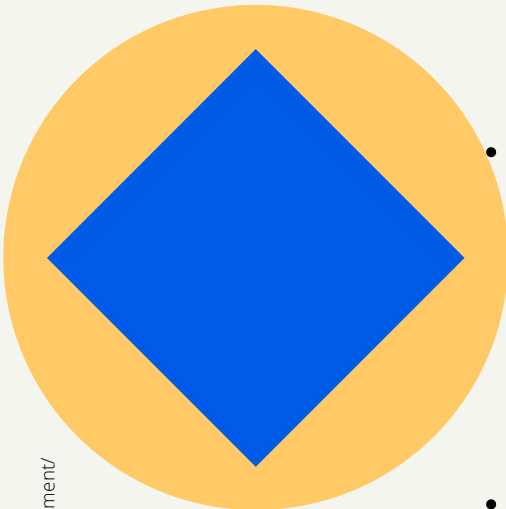
- Glacier National Park had 150 glaciers over a century ago. Today there are 35. How many glaciers have been lost? Include the number sentence.
- The electricity savings for a single Energy Star light bulb is about \$6 per year. How much would you save in 6 years?
- Replacing only one light bulb with an Energy Star-rated light bulb in every American home would reduce greenhouse gas emissions by 9 billion pounds. How many pounds would be reduced if each American household replaced 5 light bulbs with Energy Star-rated light bulbs?
- Flying is one of the largest emitting activities that anyone can undertake. A 10-hour flight (for example from Los Angeles to London) contributes 1,025 pounds of greenhouse gases. How many pounds of greenhouse gases would be emitted in 4 10-hour flights?
- The world population has exploded over the last 70 years. In 1950, there were 2,255,000,000 people. In 2020 there were 7,760,000,000. By how much has the population changed between 1950 and 2020?
- Carbon dioxide makes up 74% of all greenhouse emissions. Write 74% as a fraction.
- According to the National Park Service, the number of days per year with temperatures above 90 degrees may quadruple by the year 2100. If there were 12 days above 90 degrees in 2016, how many days would be that hot in 2100?

Climate Change Writing Prompts

- After visiting the virtual gallery of “Cool Globes,” reflect on your personal reaction to viewing the globes. What do you think about them? What resonates with you? How do you feel the artist expressed their views?
- After visiting the virtual gallery of “Cool Globes,” think about how you would create your own cool globe. What would it look like? What would your message be?
- Many cities suffer from serious air and noise pollution—as well as endless traffic jams—because of too many cars. Some people feel that cities with extensive public transportation systems should ban passenger cars and force people to walk, bike, or use public transportation. Do you think this is a good idea? Why or why not?
- Carpooling, recycling, and planting trees are all activities that are good for the environment. Write an essay convincing readers to actively participate in one of these activities.
- Pretend you are a journalist. Write your own news article about what you have learned about global warming and climate change.
- What are some of the greening projects in your city, neighborhood, or school? For an example, you can look at what the city of Davis is doing at Cool Davis.



Climate Change Writing Prompts

- 
- Our world produces hundred of millions of plastic bags, which are intended to only be used once. Should they be banned? And if they are banned, what would people use to line their trashcans, throw out dirty diapers, or take wet towels home from the beach?
 - The anthropologist Margaret Mead once said, "Never doubt that a small group of thoughtful committed citizens can change the world; indeed, it's the only thing that ever has." Do you believe that's true? Give examples of what you think a small group of thoughtful committed citizens can do to help our environment. Pick a subject (animal extinction, saving the rainforest, cleaner water for all people around the world, or whatever is important to you) and write about what people could do in their day to day lives to change the world for the better.
 - Your class has been studying ways of improving our environment. One of these ways is by recycling items you would normally throw away. This might be an empty paper towel roll, empty milk carton, or an old telephone book. Explain how you can create or recycle something from a discarded item or throwaway. Before you start writing, think about what item you are going to recycle. Think about what new item you are going to create from it. Decide on the materials needed for this project. Think about the clear, step-by-step directions for making your recycled item. Decide how this recycled item will be useful.
 - It can take between 450-1000 years for plastic bottles to decompose in a landfill. That means if water bottles were in existence in the 1300's and someone threw one out, it would only start composting now. Does reading something like this make you think twice before buying water bottles, or does the convenience for people outweigh the environmental impact? What do you think we should do to convince people not to use water bottles?
 - Water is life. There is the same amount of water now on Earth as when it was first created. For us, it's easy...we turn on the tap and there it is. Yet in Africa and Asia, women and children spend about 6 hours a day and walk an average of 3.7 miles a day just to collect water, according to water.org. This is time they could be spending in school or caring for their families. Think of five ways you and your family could conserve water so that everyone can do their part.



Climate Change Writing Prompts

- The mayor has to make a big decision—should some land in your community be used for a new shopping mall or for a park. Write a letter to the mayor telling what you think.
- Picture your favorite nature spot. It could be a park or a camping site, a beach or even your own backyard. Now envision what it would look like if no one had thrown out any of the garbage they've used there for the last two years. See in your mind all of the water bottles, plastic bags, and fast food bags littered all over. Two years worth! Do you think it makes much of an impact if each of us just takes care of our own little corner of the earth? Why or why not?
- A tract of land is being sold in your community. Fictitious bidders include the National Park Service, a children's hospital, a shopping-mall developer, an oil drilling company, and the U.S. Armed Forces. Choose one and become a lobbyist for one that group writing arguments on behalf of their interests.
- Write a story about something that has been recycled, like a can, newspaper, or plastic bag, and its adventures along the way.
- Studies show that very few people recycle. Why should we recycle and how would you convince your family to do it?

What You Can Do To Slow Climate Change

From small acts to large lifestyle changes, there is much you can do to help have an effect on climate change.

Save Energy!

- Use energy-efficient appliances and light bulbs, unplug appliances that drain electricity when they aren't in use, and turn off lights when you leave a room.
- Rather than turning up the heat on a cold day, add more layers of clothing. Or on a cold day, use a fan rather than the air conditioning.
- Conserve your water use. Make sure you turn off the faucet when brushing your teeth, take shorter showers, etc. Monitor your daily water use and see if you can cut it back.
- Decrease your own carbon footprint. Use your body! Walk, ride a bike or scooter, rollerblade, etc. to get around your local area rather than using a car. Also, try using public transportation.

The 3 Rs: Reduce, Reuse, Recycle

*The sourcing, manufacturing, transporting, and disposing of raw materials that we use for many products emit greenhouse gases.

- Shop at second-hand stores or join used goods exchanges instead of buying new clothes.
- Carry your own water bottle, straw, and utensils.
- Choose products and packaging that can be recycled or composted.
- Reuse household materials and goods to make new creations. A box can be the best toy!

What You Can Do To Slow Climate Change

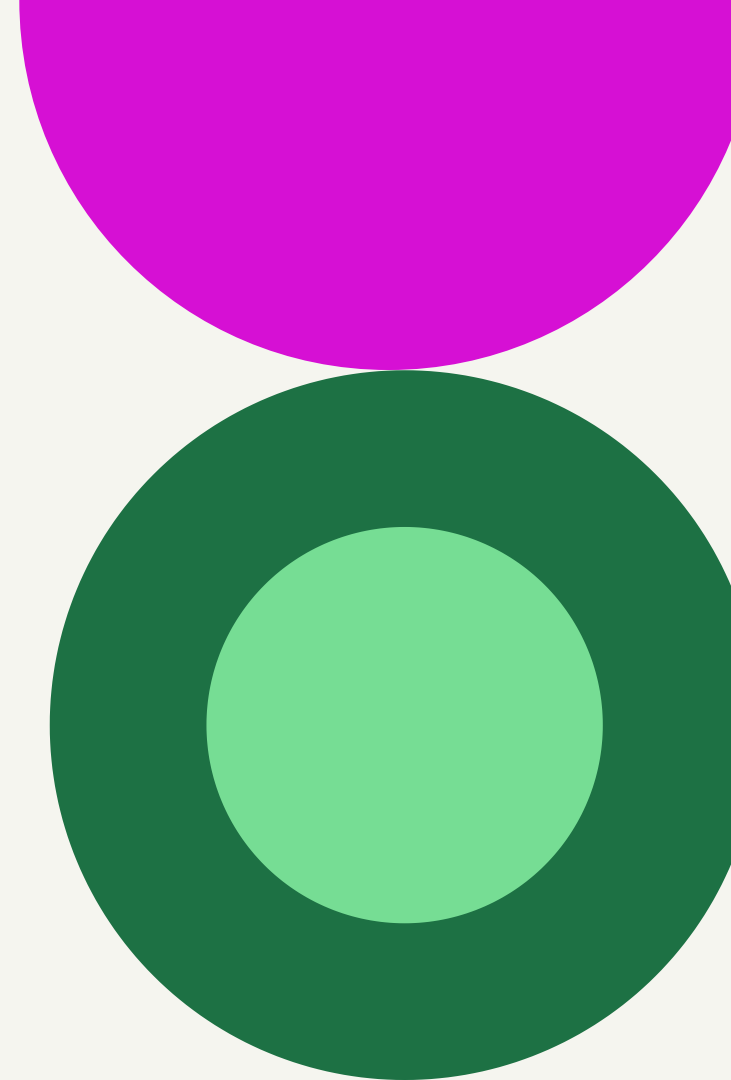
From small acts to large lifestyle changes, there is much you can do to help have an effect on climate change.

From National Geographic: 13 ways to save the earth from climate change. Click [here](#)

Be an Activist!

*Your voice and actions along with those of millions of other people can make a huge difference.

- Write to your local elected official to let them know that climate change policies are important to you.
- Find and join your local climate change or environmental group. One doesn't exist in your area? Start one!
- Find a place to volunteer. Organizations across the country encourage citizens to help plant trees and take part in other activities to help stop climate change in the local community.
- Attend a local global school climate strike, with the permission of adult in your life
- Attend rallies and protests to get your message out and meet like-minded individuals to help inspire you (with an adult, of course!)
- Plant trees in your garden or in your neighborhood.
- Buy locally grown produce.
- Try to eat produce that is in season.
- Compost!
- Grow your own garden.
- Eat less meat.



Environmental Awareness Projects
(from Nature Matters Curriculum Guide, 2019)

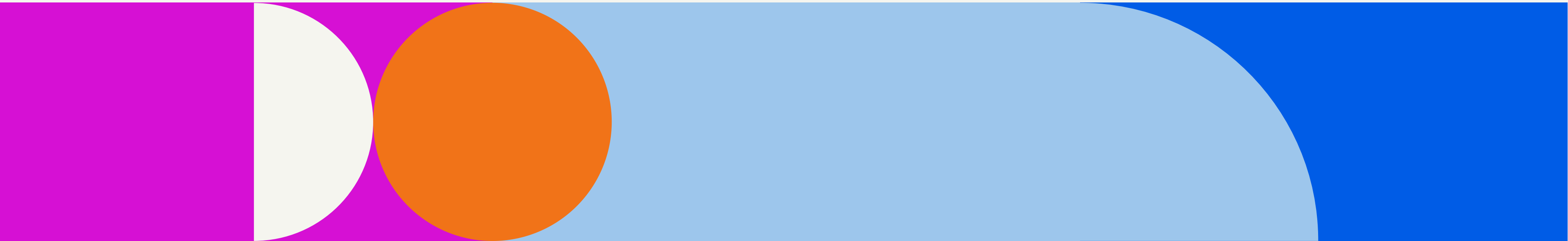
- Create a game to help other students learn more about environmental change (global warming, extinction, erosion, etc.). Incorporate numbers and statistics as you create the game.
- Create an advertising campaign to promote awareness of what problems the planet is facing and what people can do to prevent these changes. Use numbers to help describe these problems.
- Write a fictional story or play illustrating the future effects of change to our environment.
- Create a diorama or 3-D model of how your state or country might be changed as a result of climate changes brought on by global warming. Think about the dimensions of your diorama to ensure it is to scale compared to your country or state.

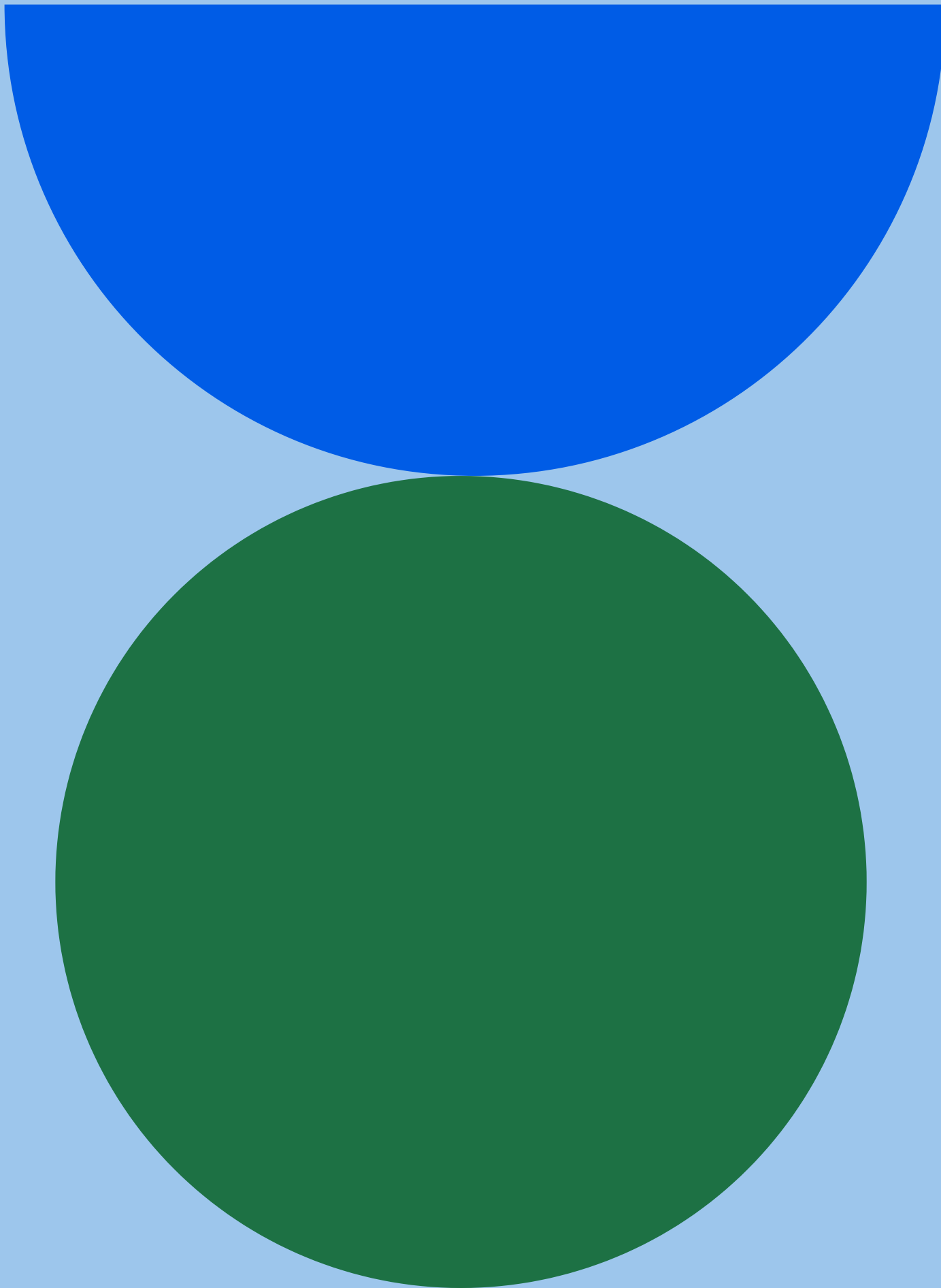


Environmental Awareness Projects

(from Nature Matters Curriculum Guide, 2019)

- Create a futuristic map of the world showing the effects of global warming and/or climate change on the physical features of the land, the earth's productivity, and the types of plant and/or animal life it can support.
- Create a food web showing how global climate changes affect the food chain and/or ecosystems.
- Invent an alternative form of energy and teach other students how it can be incorporated into everyday use. Use math to describe why your new form of energy is better.
- Write a letter to a government official that explains the need for further research into global climate change. Quantitative information may help you explain the importance of climate change research.





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