

Where in the world?

#FollowTheFlipFlop



Lesson Plan 3: Mozambique

Objectives

- To learn that the sharing, responsible use and conservation of the Earth's natural and human resources are necessary for the continued existence of life
- To encourage the development of caring attitudes and responsible behaviour towards the environment
- To understand some of the natural, social or economic processes which create, sustain or change environments



Where in the world?

Lesson Plan 3: Mozambique

Overall Objectives

- To give children an understanding of identity and a sense of their place in the world
- To give children an understanding about Mozambique
- To widen their knowledge about Climate Change and Mozambique
- To encourage the development of caring attitudes and responsible behaviour towards the environment, and involvement in the identification, discussion, resolution and avoidance of environmental problems
- To understand some of the natural, social or economic processes which create, sustain or change environments
- To learn that the sharing, responsible use and conservation of the Earth's natural and human resources are necessary for the continued existence of life
- To increase empathy and solidarity between children across the world

Materials Needed

- Carbon Footprint Survey and Template (appendices)
- World Map (appendices)
- Crayons / Colouring pencils
- Paper
- Pencils
- Video (found on serve.ie)
- Camera / phone to photograph and record your completed actions!

Where in the world?

Lesson Plan 3: Mozambique

Activity 1 - Where in the World? - My Actions at Home Beira & Dondo, Mozambique

Time Required: 20 - 30 minutes

Objectives

- To encourage the development of caring attitudes and responsible behaviour towards the environment, and involvement in the identification, discussion, resolution and avoidance of environmental problems
- To understand some of the natural, social or economic processes which create, sustain or change environments
- To learn that the sharing, responsible use and conservation of the Earth's natural and human resources are necessary for the continued existence of life
- To encourage learning around interdependence, solidarity and respect

Area of curriculum supported by Activity 1:

- become aware of some of the effects of different weather conditions on human, animal and plant life in the local environment,
- identify ways in which weather influences the lives of people
- recognise and investigate human activities which may have positive or adverse effects on local and wider environments
- Develop some awareness of the distinctive human and natural features of some places in Ireland and other parts of the world
- Come to appreciate the need to conserve the Earth's resources.

Materials Needed:

- Videos of Carbon Footprints (Youtube)
- Carbon Footprints and Climate Change comic strip (see Appendices)
- The Carbon Footprint Survey & My Energy Outputs prompt sheet
- Carbon Footprint Drawing
- A4 Paper

Steps (Part One)

1. Read the Carbon Footprints and Climate Change comic strips (See Appendices) for a basic understanding on Carbon Footprints and Climate Change. Alternatively, watch some videos about Carbon Footprints. There are many on Youtube (we like this one! - What is Carbon Footprint? - Environmental Science for Kids <https://www.youtube.com/watch?v=DKDq1RMHscQ>)
2. Does the student understand what a carbon foot print is, and how it relates to them?
3. Ask them to have a look at The Carbon Footprint Survey (see appendices)
4. The Carbon Footprint Survey will ask a series of questions that will direct the student to colour lines around the footprint drawing (alternatively, draw your own foot with 13 rings around it - see Appendices for inspiration!). The more greenhouse gases you produce, based on your answers, the bigger the carbon footprint grows. Different colour crayons will represent the four categories of behavior surveyed:
 - Housing and Home Energy: **RED**
 - Transportation: **BLUE**
 - Personal Habits: **GREEN**
 - Recycling Habits: **BROWN**

You can also use the 'My Energy Outputs' question sheet to ask students which category they would fit them into (Red, Blue, Green or Brown) and if they say yes to any question, they can add another ring to their footprint!

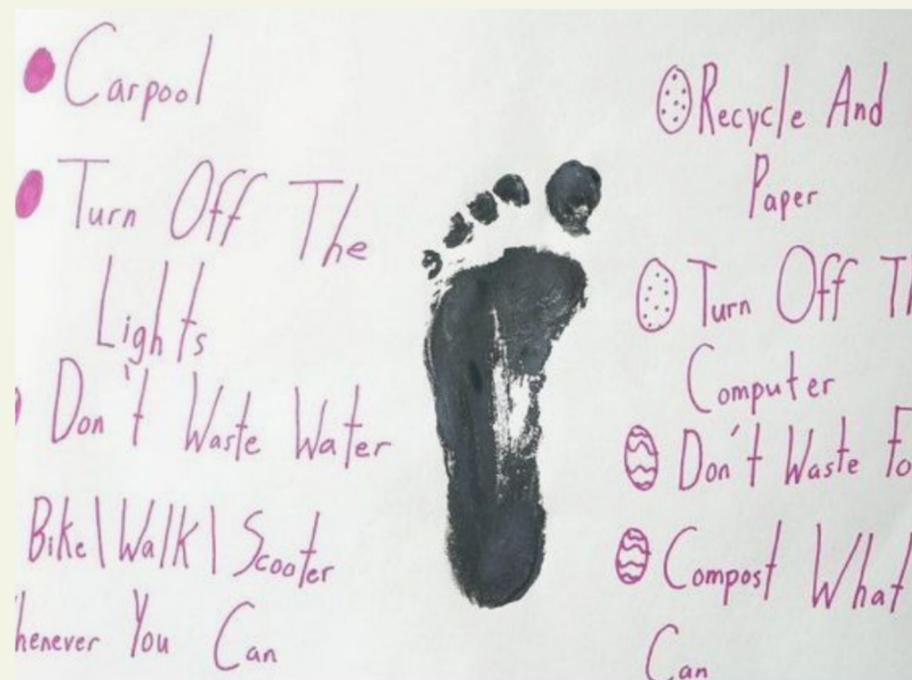
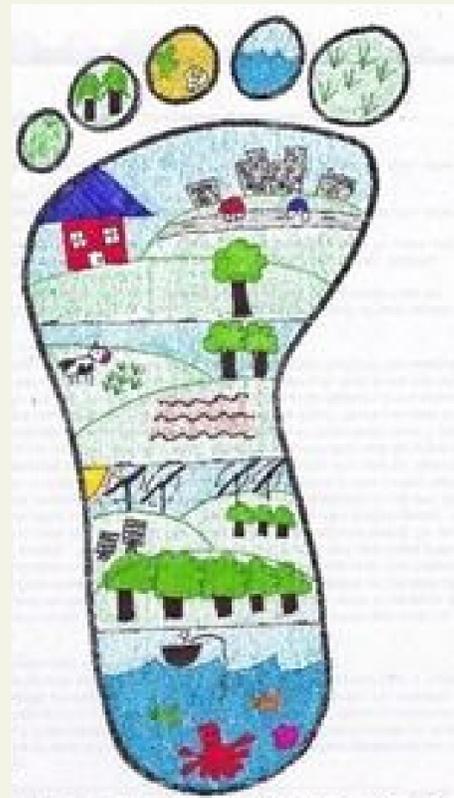
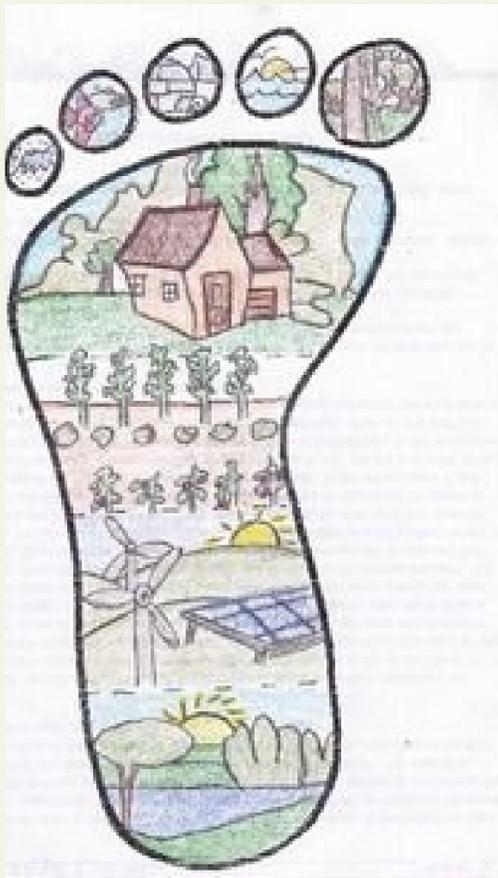
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Activity 1 - Where in the World? - My Actions at Home Beira & Dondo, Mozambique

Steps (Part Two)

1. Trace around the outline of your foot on a piece of A4 paper
2. Looking again at your Carbon Footprint and asking yourself the Energy Output questions, consider what changes you need to make to take the next step towards a smaller carbon footprint
3. In the outline of your own foot, draw / write what you need to do to make your carbon footprint smaller. This can be pictures, a poem, a short story etc.
4. Hang the Carbon Footprint and your Future Footprint side by side as a reminder of what needs to be done to make your footprint smaller! Be sure to send us some pictures!



Where in the world?

Lesson Plan 3: Mozambique

Activity 2 - Where in the World will you #FollowTheFlipFlop? Beira & Dondo, Mozambique

Time Required: 30 - 40 minutes

Objectives

- To give children an understanding of other cultures
- Develop a sense of global citizenship and solidarity

Area of curriculum supported by Activity 2:

- People and other lands - how people help each other and depend on one another,
- interdependence of people in locality,
- Ireland and other countries
- An environment in a non-EU country- Study some aspects of the environments and lives of people in one location in another part of the world:
 - Location of these areas peoples and communities that live there
 - language(s)
 - myths and stories,
 - art and culture
 - clothes
 - play and pastimes
 - features of the natural environment
 - interrelationships of the lives of people and these features settlements:
 - homes and other buildings
 - common building materials and features
 - foods and farming
 - work and work-places
 - similarities to and contrasts with Ireland
- Develop an awareness of the interdependence of these people and people in Ireland
- Begin to develop a sense of belonging to local, county, national, European and global communities.

Where in the world?

Lesson Plan 3: Mozambique

Activity 2 - Where in the World will you #FollowTheFlipFlop?

Beira & Dondo, Mozambique

Materials Needed:

- World Map (See Appendices)
- Mozambique Fact Sheet (See Appendices)
- #FollowTheFlipFlop Video (see serve.ie)
- #FollowTheFlipFlop Answer Sheet (see Appendices)

Steps:

1. Invite student to point out Mozambique on the world map (see Appendices)
2. Ask them what they know about Mozambique
3. Show them the Mozambique Fact Sheet (read it to them depending on age / ability) and ask them if anything surprised them or if there is anything they don't understand
4. Show video of Mr. Flip-Flop visiting Beira and Dondo in Mozambique and ask them to complete the question sheet (or simply ask them the questions yourself once the video has ended!) (see Appendices)

Finally, you can decide to do one, two..or all of these activities!:

From what the students have learned about Mozambique;

- Learn about **Growing Your Own Food** and Create your own Biodegradable Seed planter and learn about the importance of GIY (Grow It Yourself) as a response to Climate Change (See Appendices for guidelines)

or

- Design a '**Solidarity Symbol of Friendship**' for Ireland and Mozambique using a blank A4 sheet and some nice colours and pictures!

or

- Create a traditional capanula (sarong type fabric worn in Mozambique), decorate it and share your creation with us! (See Appendices for guidelines)

or

- Design a poster sharing a message of unity from Ireland across the continent of Africa to Mozambique

Please email any photos or videos to siobhan@serve.ie as we would love to share your beautiful creations!

If uploading to social media, please tag SERVE and use the #FollowTheFlipFlop hashtag so that we can follow your exciting actions!



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Lesson Plan 3: Mozambique

Activity 1 - Carbon Footprints and Climate Change

CARBON FOOTPRINTS - WHAT ARE THEY?



The term carbon footprint is how much carbon goes into the air because of something done by people (not by nature).

Doing something that burns fuel will make carbon dioxide gas in the smoke. (There is carbon in Carbon Dioxide) which is released into the air

Just as walking on the sand leaves a footprint, burning fuel leaves carbon dioxide in the air, which is called a carbon footprint.

Total carbon footprint/emission quantification would include energy emissions from human activities - that is, from heat, light, power and refrigeration and all transport related emissions from cars, freight and distribution

WHAT IS CLIMATE CHANGE?



Climate change (or global warming), is the process of our planet heating up.

Scientists estimate that since the Industrial Revolution, human activity has caused the Earth to warm by approximately 1°C. While that might not sound like much, it means big things for people and wildlife around the globe.

Unfortunately, rising temperatures don't just mean that we'll get nicer weather - if only! The changing climate will actually make our weather more extreme and unpredictable.

As temperatures rise, some areas will get wetter and lots of animals (and humans!) could find they're not able to adapt to their changing climate.

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My Energy Outputs

- How do I get to / from school? - **Fuel in the car**
- What kind of car do we use? Is it big? Is it fuel efficient? (**The larger the car, the more carbon dioxide is emitted.**)
- Where does my breakfast come from? Do we buy it locally or does it need to travel by plane? - food that travels great distances – **burning fuel (gasoline/jet fuel)**
- Do I eat meat regularly?
- Do I have a mobile phone? Where / how was it made? Do I need to charge it often? - **burning fuel**
- Do I use a computer or like to play computer games? - **burning fuel**
- Where will my dinner come from? Will we cook - how much electricity would that take? Where is the food from? How far did it have to travel?
- Will I watch TV tonight? Will I keep the lights on? (even when I'm not in the room?) - **burning fuel (natural gas/coal/nuclear energy)**
- Do we buy organic / non organic produce? (**pesticide production and transportation burn fuel**)
- Will I leave the tap running while I brush my teeth? Do I waste water? - cleaning water for our use uses **fuel (natural gas/coal/nuclear energy)**
- Will the heating be on in the house if it is not needed? **burning fuel (natural gas/coal/nuclear energy)**
- Will I take a shower or a bath today? (**burning fuel**)

What can I do?

- **Shop Locally!** The growing, processing, packaging, delivery, and distribution of food requires energy from farms, factories, trucks, grocery stores, and more. Because a vegetarian diet does not include meat, a vegetarian tends to have a smaller carbon footprint than a nonvegetarian.
- **Buy Organic where possible!** The production of organic food puts less stress on the environment, so your carbon footprint is smaller if you tend to eat organic food.
- **Conserve Water!** Water that goes down our drains and sewers must be processed through water treatment plants, even if the water is clean. Using only the amount of water you really need helps reduce your carbon footprint.
- **Recycle!** Recycling is good for the environment because it keeps excess waste out of landfills and trash incinerators. If you recycle on a regular basis, your carbon footprint is smaller.
- **Compost!** Composting is good for the environment because it keeps kitchen and garden waste out of the trash and it encourages natural gardening practices. If you compost at your house, your carbon footprint is smaller.
- **Save Electricity!** - Turn off lights when you aren't using them. Don't watch as much TV or play as many games! Try to have shorter showers.



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Carbon Footprint Survey

Some of our lifestyle choices and day-to-day activities emit excess carbon dioxide and other greenhouse gases into the atmosphere. The amount of greenhouse gases we produce is referred to as our “carbon footprint.” Too much carbon dioxide and other greenhouse gases in our atmosphere can lead to unnatural climate change, which can have a harmful effect on our planet. Take this survey to get a sense of the size of your family’s carbon footprint.

Housing and Home Energy

1. If you live in a single family home, colour 4 rings **RED**; If you live in an apartment or other type of home, colour 2 rings **RED**
2. If you *don't* use energy-efficient light bulbs such as CFLs (compact fluorescent), colour 1 more ring **RED**
3. If you light an open fire at night, colour 1 more ring **RED**

Personal Habits

1. If you are a vegetarian, colour 1 ring **GREEN**; if you are *not* a vegetarian, colour 2 rings **GREEN**
2. If you *never* eat organic food, colour 1 more ring **GREEN**
3. If you take baths, run the faucet while brushing your teeth or washing the dishes, or water your lawn several times a week, colour 1 ring **GREEN**.

Transportation

1. For every small car in your family, colour 1 ring **BLUE**
2. For every medium or large car in your family, colour 2 rings **BLUE**
3. If you *don't* regularly change the air filter in your car and check the pressure, colour 1 more ring **BLUE**
4. For every airplane trip you've taken in the past year, colour 1 more ring **BLUE**

Recycling and Waste

1. If you usually recycle your household trash, colour 1 ring **BROWN**; if you *never* recycle, colour 2 rings **BROWN**
2. If you never compost your garden and kitchen waste, colour 1 more ring **BROWN**

Source: energystar.gov



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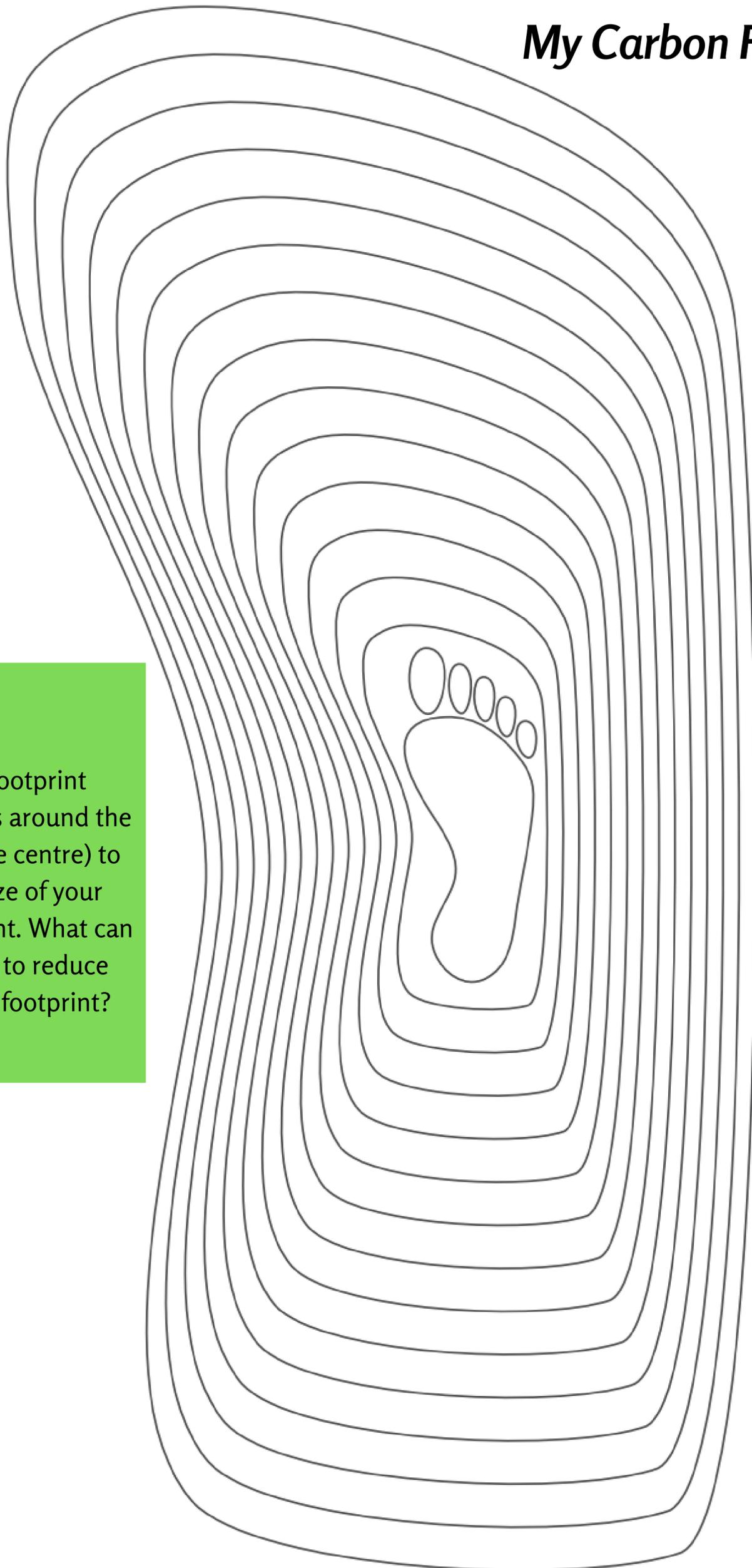
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My Carbon Footprint

Your Carbon Footprint

Based on the Carbon Footprint Survey, colour the rings around the footprint (start from the centre) to estimate the relative size of your family's carbon footprint. What can you and your family do to reduce the size of your carbon footprint?



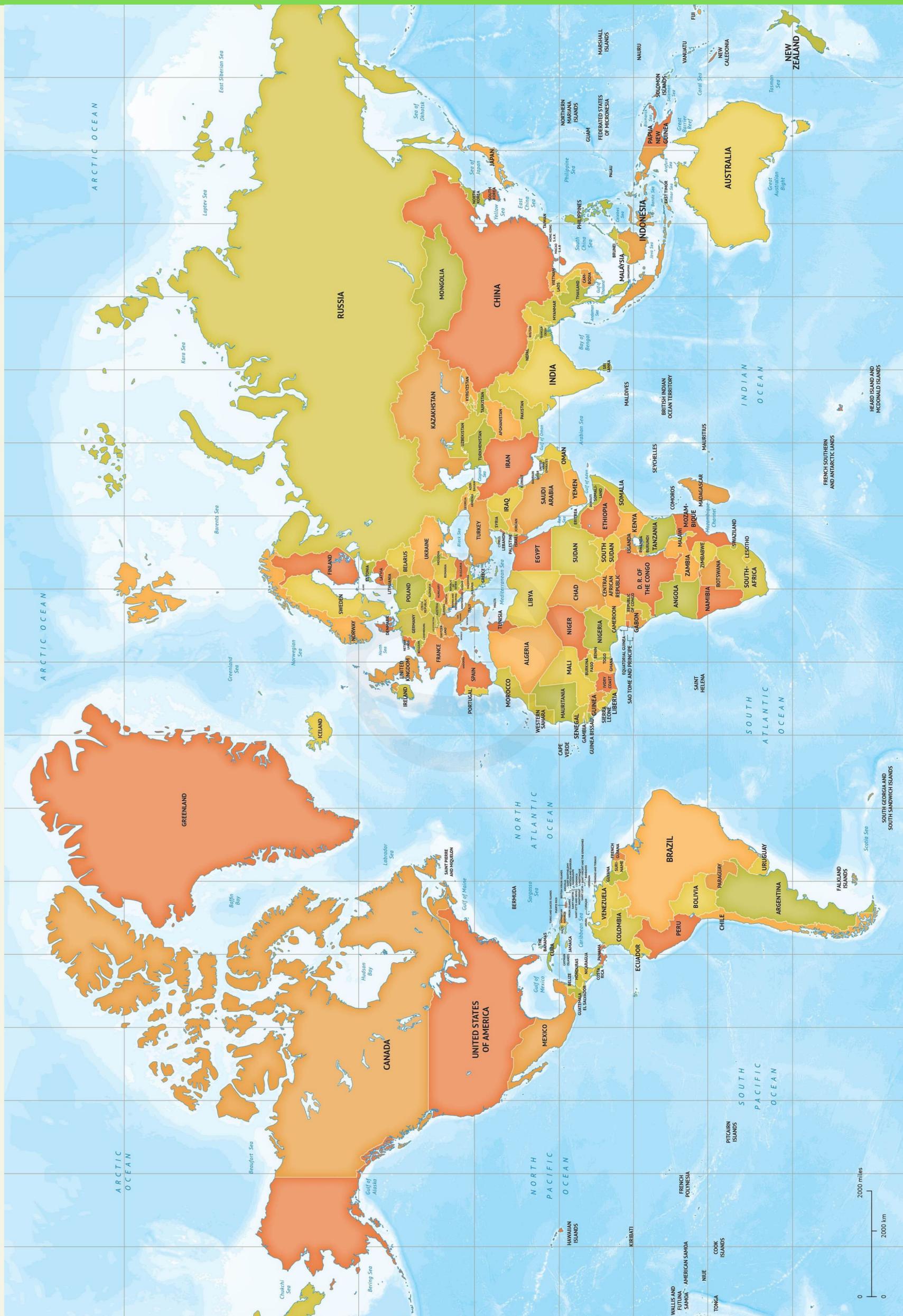
Source: energystar.gov

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World Map



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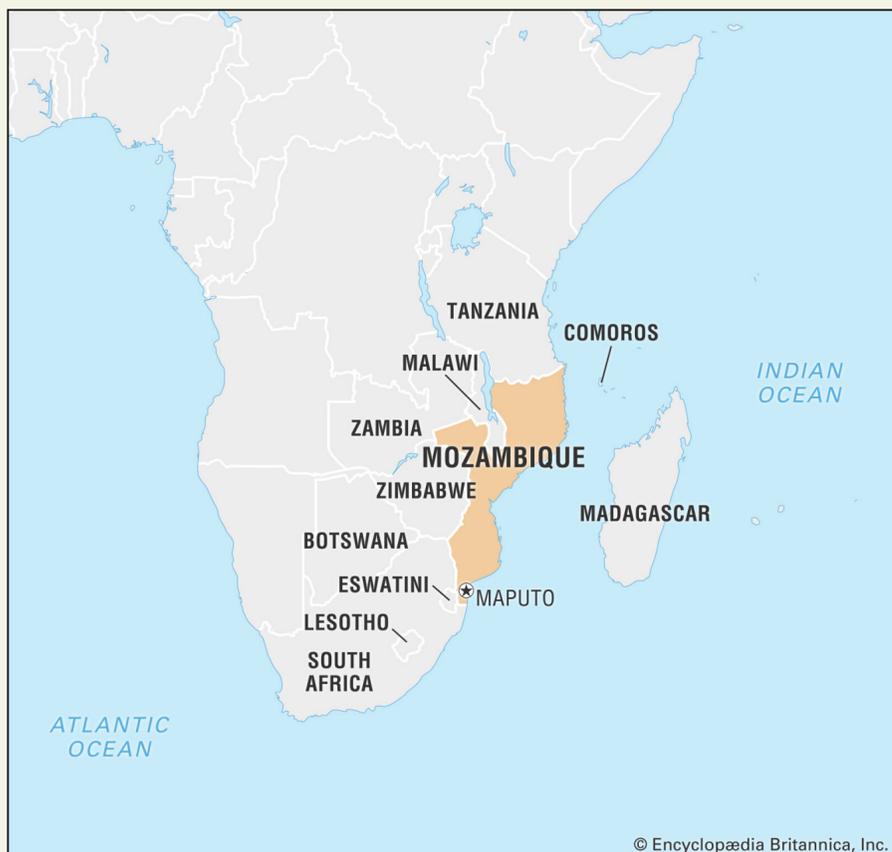
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Mozambique Fact Sheet - Did You Know?

- The Republic of Mozambique is in southeast Africa, opposite the island of Madagascar.
- Its capital is Maputo.
- It is bordered by the Indian Ocean to the east and Tanzania to the north, South Africa to the south west and Zimbabwe to the west.
- Mozambique has a tropical climate with two seasons, a wet season from October to March and a dry season from April to September.
- Sadly, Mozambique is still a very poor country with half its people living on less than \$1 a day.
- 24.5 million people live in Mozambique.
- The main languages include Portuguese and indigenous languages.
- Christianity is the main religion. Some people keep their native faiths or follow Islamic teachings.
- The life expectancy is **51 years old**.
- The powerful Limpopo and Zambezi Rivers run through the country. **Can you remember where else the Zambezi runs through?**

Source: kiddle.co



Mozambique (highlighted in orange)



OFFICIAL NAME: Mozambique

WORLD REGION: Africa

FORM OF GOVERNMENT: Presidential Republic

CAPITAL: Maputo

POPULATION: 24.5 million people

OFFICIAL LANGUAGE: Portuguese

CURRENCY: Mozambican metical

AREA: The country has 313,661 square miles of land.

CLIMATE: Tropical

DID YOU KNOW?

Mozambique is one of Africa's most vulnerable countries to **climate change**. Poverty, weak institutional development and frequent extreme weather events make Mozambique especially vulnerable. **Climate-related hazards** such as droughts, floods and **cyclones** are occurring with increasing frequency, which is having a cumulative and devastating impact on a population that is insufficiently prepared.



Mozambique Metical

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Follow the Flip Flop: Beira and Dondo, Mozambique

Name _____

Class _____

Where is Mozambique located? _____

How many kilometres is Mozambique from Ireland? _____

What province is Beira in? _____

Which river meets the Indian Ocean? _____

What is a Cyclone? _____

What damage was caused by Cyclone Idai in Mozambique? (look up news reports on Youtube for further information) _____

Who does SERVE work in partnership with in Mozambique? _____

What do they do to support young people in Mozambique?

What is arable land? _____

What is Community Resilience? _____

What was your favourite thing that you learned about Mozambique?

What would you like to learn more about Mozambique (Let us know!)

What act of solidarity will you take to send a positive message to the children living in Beira and Dondo?



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Make a bio-degradable planter

Buying food that is locally grown from your farmer's market or local shop is a great way to minimize your environmental impact, but growing your own food takes it to the next level!

Long-distance transportation of produce relies heavily on fossil fuels. Growing your own food would help reduce the reliance on this transportation that is harming the environment. Also, by growing your own food, you are not using chemicals or pesticides that can harm environment.

You will need:

- Empty Toilet Roll
- Scissors
- Compost
- Seeds
- Container to stand planter in (a plastic bottle cut in half works well for one planter!)

Instructions

1. Cover your workspace well.
2. With a pair of scissors, cut evenly-sized strips all around one end of your toilet paper roll. Strips should be about an inch long. (see this video on Youtube for help: <https://www.youtube.com/watch?v=YWaE9CtnkjE>)
3. Next, fold the strips down. This will create a solid bottom to hold your soil and seeds.
4. Place a good amount of soil inside of your toilet paper roll. You'll want to make sure your soil is moist. **You don't want to fill it completely, so leave a little room at the top.**
5. Place your toilet paper roll inside of your waterproof container (a plastic bottle cut in half or an old box from a punnet of grapes works well too!).
6. Press all the seeds into the soil, making sure they are covered.
7. Place your container in a sunny spot and water as usual. In a few days, you should have sprouts, and then you can transfer them to the container of your choice. This is the easy part—the toilet paper rolls are biodegradable, so all you have to do is pop them directly into the dirt!



Finished Planters

Optional Activity!

Paint and decorate your seed planters with your own ideas and designs!

Source: poopurri.com

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Make a Capulana

A **capulana** is a type of a sarong worn primarily in Mozambique but also in other areas of south-eastern Africa. It is a length of material about 2 metres by 1 metre. It can either be used as a wrap-around skirt, dress or can become a baby carrier on the back. It is considered a complete piece of clothing. Capulanas have been in Mozambique since the establishment of the Arab/Indian trade routes. It was received from Indian traders as a means of trade for other goods. First, they came primarily in three colours: red, white, and black. White represented the protection of the ancestors, black represented evil, and red represented the spirit of war. After this time, Mozambicans preferred using Capulanas to the traditionally-used animal skins.

Today, there are many kinds of Capulanas of various designs and colours. They are used for a variety of occasions, including everyday casual-wear, carrying heavy loads, or even carefully tailored for special events. Early traditional colours and styles of capulana are highly coveted and sell for higher prices in markets today. In Mozambique they have a high value and are considered particularly beautiful. Brightly coloured, Capulana are often offered as gifts to women. Some couples make matching "Kapulana" outfits for special events or for a significant reason such as a traditional marriage between the two.

You will need:

Paper (or the template in Appendices)
Colours (markers, paint, crayons - whatever you have!)

Instructions

1. Design your capulana - what shapes / images will you have on your capulana and why? - alternatively, colour the design on the next page!
2. Choose colours for your capulana. Remember, colours are very important (white = protection, red = spirit, black = evil). What colours mean something to you?
3. Once your capulana is designed and coloured, write on the back about the capulana and what the design and colours mean to you.



Capulana Fashion



Capulana Baby Wrap

Source: kidworldcitizen.org

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