



SOCIAL PLASTIC® YOUTH REBELS

Be part of the Solution and not the Pollution!



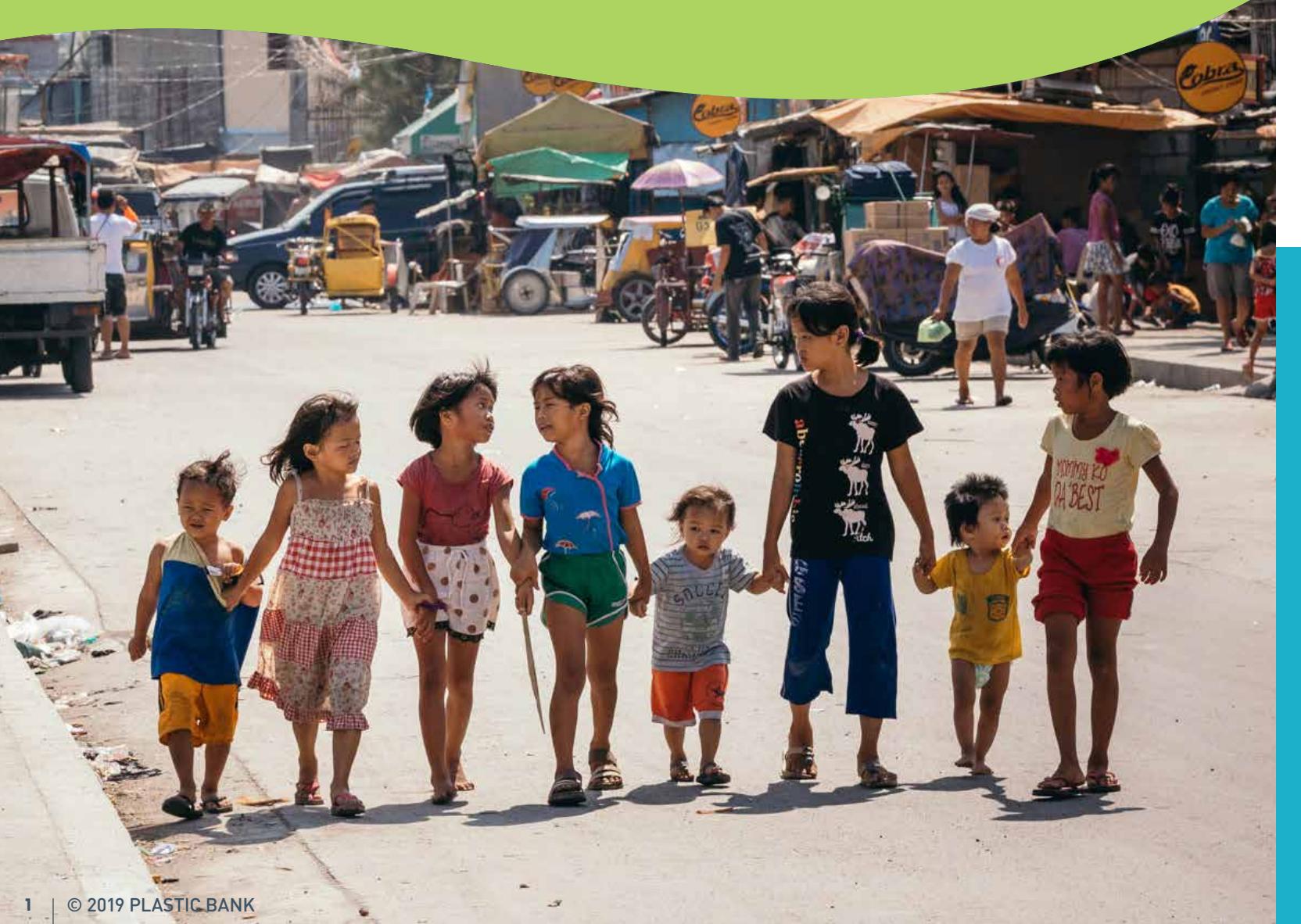
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INTRODUCTION

SIMPLY BEING ALIVE CREATES AN ENVIRONMENTAL IMPACT



We may think our contribution to plastic pollution is small, but did you know that the average person produces 65 to 185 lbs. of plastic waste per year? In 2010, we produced 219 billion pounds of plastic waste. What's truly alarming is that only 10% is recycled!¹ Meanwhile, plastic is difficult to dispose of and takes a very long time to decompose.

As of 2019, we have produced over 8.3 billion tons of plastic and by 2050 it's projected to be over 40 billion tons². All of it is still here and causing huge environmental problems. 8 million tons of plastic enter the oceans annually and create plastic islands as big as whole countries. What's worse is that as nature decomposes plastic into smaller particles called microplastics, it leads to the deaths of over 1 million seabirds and 100,000 sea mammals annually. Furthermore, microplastics enter the food chain and through our food, also into our bodies causing harm to our own health³.

The ocean is the largest ecosystem on Earth, it is the planet's life support system. Oceans generate half of the oxygen we breathe and, at any given moment, they contain more than 97% of the world's water. Oceans provide at least a sixth of the animal protein people eat⁴.

If this trend continues, there will be more plastic in the ocean than fish by 2050. Our oceans, the creatures that inhabit them, and ultimately, we humans are all in trouble.

While we can reduce our plastic use, living without plastic is not a practical solution either. Just think about all the ways we use plastic: it's integral in our cars, our technological devices, medical devices, the interior of airplanes, packaging of food, cleaning products, drinking containers, furniture and building material like pipes and insulation⁵.

We are calling for a rebellion! ...a rebellion for how we use plastic. That's why Plastic Bank was founded by two Canadians, David Katz and Shaun Frankson, to prevent the flow of plastic waste into the ocean while improving lives. The company does this by revealing the value of the plastic through recycling, putting the value into the hands of the poor and by providing companies a closed-loop supply chain solution of environmental and social material, Social Plastic®. The award-winning Social Plastic is generated through a growing global movement—the Social Plastic rebellion—now present in Haiti, Brazil, Canada, Germany, the Philippines and Indonesia.

Join the Social Plastic Rebellion!

We have created a movement to engage all sectors of society: businesses, schools, government, civic groups and religious groups to change the way in which we view and use plastic, not as trash, but as a resource.

Our vision is to reveal the value of plastic, turning it into a currency becoming too valuable to be thrown away. All plastic can be returned for future use. #circulareconomy #socialplastic

We "Gather Together" as a movement of Social Plastic Rebels. Through the Social Movement, we restore the planet for future generations, where plastic no longer enters the ocean. We are turning off the tap of plastic waste entering the ocean and causing harm.

This material is aimed to empower young Christians to learn about the ocean and plastic. It is our hope that we all act powerfully with determination powered by the vision to create a better future for everyone and future children.

HOW TO USE THIS MATERIAL

The six lessons build on a theological foundation of Christian stewardship for creation and connect to current plastic use and management. The hope is that this increased awareness will motivate action and make a difference in local communities, while being connected to a global movement.

This curriculum is part of our Interfaith Stewardship Program and can be used together with our Action Tool Kit to mobilize leadership and action in churches worldwide. This program reveals the value of plastic by incorporation into the Social Plastic Ecosystem™.

This 'Social Plastic Youth Rebels' curriculum may be used together as part of a campaign for the whole church using all the Plastic Bank Interfaith materials, which can also be downloaded from our website. It can be also used as a stand-alone curriculum for youth movements. Each lesson includes a facilitator's guide and a lesson plan with a theological reflection, a discussion on the topic, and some practical activities. We focus more on activities for adaptability than theological discussion.

The manual has six sessions, which build on each other:

- The beauty of creation and its marvelous grandeur
- A call for humanity to sustain and care for this wonderful gift of creation
- The cry of Earth's pollution and the mismanagement of plastic
- A challenge to mindset and the commitment of oneself as being part of the solution not the pollution
- The opportunity of a transformed Earth where human beings facilitate ocean and faith stewardship
- An invitation, as followers of Christ, to become Social Plastic Rebels

Let's get started!

WEEK ONE

THE BEAUTY OF CREATION...MORE THAN JUST WATER AND TREES

1. Facilitation guide

• The big idea

- Creation is a gift: Together we draw out the goodness of creation and the importance of our dependency

• Learning outcomes

- In this lesson
 - » *The goodness of creation*
 - » *The implications of everything belonging to God*
 - » *How creation sustains us and life on the planet*
 - » *Individual relationship to creation*

• Materials needed and preparations

- Bibles
- Texts for use
 - » *Genesis 1, especially Verse 31*
 - » *Psalm 24:1-2*
- Paper, sticky notes and writing utensils
- PowerPoint Lesson 1
- Computer, Projector and Speakers
- Whiteboard and markers

2. Devotion and activities

• Opening

- Give out Bibles, paper and writing utensils
- Show slides with landscapes for a few minutes
- Ask the participants to write down what they feel and think while seeing the pictures
- Ask them to share in pairs the most important impressions they had
- After sharing, let them share with their partner, why these impressions stood out and what thoughts and feelings were triggered by them
- Now have 2-3 people share their discoveries in front of the whole group

• Lesson

- Show the video "Earth's Life Support systems"
- Have a discussion about the importance of life cycles and ecosystems to our survival.
- Ask them how this connects us to creation and how we should relate to nature.

- Bible discussion

» *Read Genesis 1: 31 and Psalm 24: 1-2*

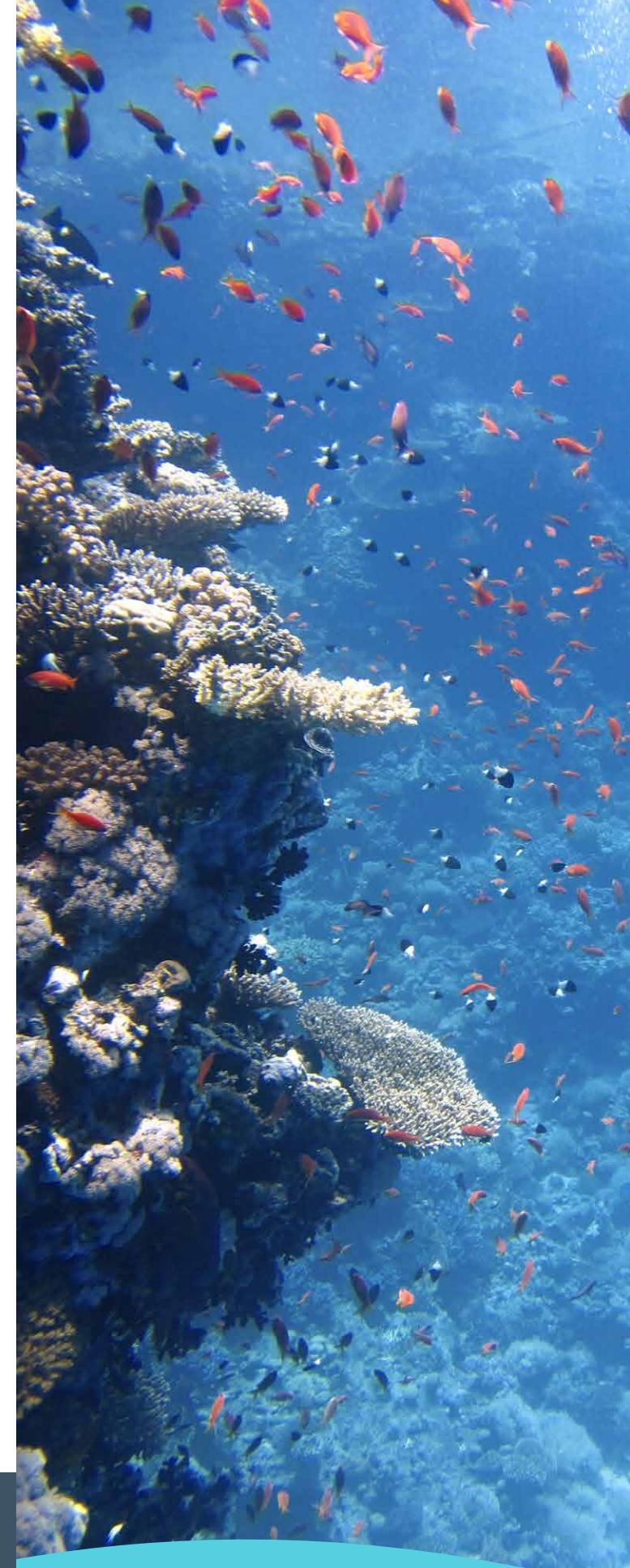
- › 'Now God saw all that he had made, and indeed, it was very good! The twilight and dawn were the sixth day'. [Gen 1:31 ISV]
- › 'The Earth and everything on it belongs to the LORD. The world and its people belong to him. The LORD placed it all on the oceans and rivers'. [Psalm 24:1-2 CEV]

» *The two passages have these main statements*

- › God created everything and it was very good.
- › Creation is very good. Why?
 - *Displays the glory of God through its beauty, creativity, and diversity.*
 - *Provides the resources to live, flourish, and develop, like oxygen, water and nutrition.*
 - *Is a self-sustaining system, where life and resources are replenished and renewed.*
- › Everything is interconnected, interdependent, and builds on other systems.

» *Creation includes us belonging to God:*

- › Everything we have, all the resources we have access to, even our lives are a gift to be appreciated and respected.
- › The resources given to us are not ours to take. Rather we steward and treat them with care.
- › We are responsible to care for creation in the way we treat God.



LET'S DISCOVER THE OCEAN...

How does the ocean provide for life on Earth?

- **The ocean is 71% of the planet's surface and contains 97% of the Earth's water.** The ocean also provides 50% of the oxygen that we breathe. That's over half the fresh air we breathe!! Seaweed called kelp, algal plankton and phytoplankton (tiny microscopic organisms) through photosynthesis converts carbon dioxide and sunlight into sugars for energy while releasing oxygen—just like the trees⁶!
- **The ocean regulates climate by absorbing the sun's heat and transporting it through ocean currents around the globe.** The ocean is always cooling and warming the planet. It's also the main driver in the water cycle, which gives fresh water to drink through evaporation, where water from the ocean evaporates into clouds and comes down as rain.
- **The ocean supports life and ecosystems.**
 - Whales, dolphins, fish, jellyfish, starfish and many more creatures live in the sea.
 - Ocean diversity includes the tiniest animals, like plankton, and the largest animal in the world—the blue whale!
 - The ecosystems support ocean life of all kinds:
 - » *Ocean ecosystems: coral reefs, seaweed forests, and seagrass beds. Coastal ecosystems: mangroves and coral reefs also protect land from big storms.*

God built the earth over water and the oceans (reference Psalm 24). Without water, life would not exist. Without water, the oceans and their vital ecosystems could not exist. Water is a blessing and gift to Creation.

OUR WORLD OCEAN PROVIDES⁷:



THE AIR WE BREATHE **>50%**

The ocean produces over half the world's oxygen and stores 50 times more carbon dioxide than our atmosphere.



CLIMATE REGULATION **70%**

Covering 70% of the Earth's surface, the ocean transports heat from the equator to the poles, regulating our climate and weather patterns.



TRANSPORTATION **76%**

Percent of all U.S. trade involving some form of marine transportation.



RECREATION

From fishing to kayaking and whale watching, the ocean provides us with so many unique activities



ECONOMY **282 BILLION**

Amount the U.S. ocean economy produces in goods and services. Ocean dependent businesses employ almost 3 million people.



FOOD

The ocean provides much more than seafood. Ingredients from the sea are found in surprising foods such as peanut butter and soymilk.



MEDICINE

Many medicinal products come from the ocean, including ingredients that help fight cancer, arthritis, Alzheimer's disease, and heart disease.



LET'S DISCUSS OUR RELATIONSHIP TO CREATION:

• Discussion:

- Divide them into groups of five
- Show the slide with the question: For you, how has your relationship with creation changed by what you learned today?
- Let them write down their answers for a few minutes
- Distribute the Sticky Notes and give each group 3 pieces.
- Let them discuss their answers in their small groups
- Each group decides which three answers they want to share with the group
- Collect the answer, stick them on the whiteboard, cluster the answers by topics with the help of the group. Then write headings for each topic with the participation of the learners
- Repeat the headings and summarize the learning of the session
- Discuss as a group some practical things they can do to be better stewards of creation.

3. Closing:

- Generate a Creation prayer in gratitude:
 - Erase everything on the white board and put a few markers in front of it.
 - Write: "Thank you God for Creation. I thank you for..."
 - Ask those who want to come forward to continue the prayer by writing what part or feature of creation they want to thank God for.
 - Read the prayer aloud together to close the session.

WEEK TWO

CARING FOR NATURE— USING WITHOUT POLLUTING

1. Facilitation guide

• The big idea

- Stewardship is not dominion, but the use of natural resources in a loving way that promotes sustainability and re-enforces the goodness of creation through our actions instead of diminishing it.

• Learning outcomes

- In this lesson, learners will have:
 - » Explored the concept of stewardship as caring for creation
 - » Examined Bible texts for contemporary application on stewardship
 - » Investigated the urgency of applying good stewardship in the area of creation care.
 - » Understood the partnership with Plastic Bank as an avenue to be good stewards

• Materials needed

- Prepare the following Scripture texts:
 - » Genesis 1: 26-28
 - » Psalm 72: 8, 12-14
- Prepare the following materials:
 - » Download or stream the following two videos <https://www.youtube.com/watch?v=3QclCtbcK3Q> and <https://www.youtube.com/watch?v=SdLQLaZ010U&t=222s>
 - » Computer, speakers and projector
 - » Paper, markers and leaf shaped post its
 - » PowerPoint Lesson 2

2. Devotion and activities

• Opening

- Watch the video
- <https://www.youtube.com/watch?v=3QclCtbcK3Q> with the group
- Discuss the following questions:
 - » What is your reaction to the video?
 - » How is the story of the video part of your personal story?
 - » What is the missing action?
 - » How can we rewrite this story into a positive one?

• Lesson

- What is stewardship:
 - » The missing piece in the opening video was stewardship. Stewardship is the life principle where we enhance what God has given us and care for it with love, instead of exploiting and destroying it.
 - » This is what we were told from the beginning.
 - » Read Genesis 1: 26-28 and Psalm 72: 8, 12-14

“

God said, “Now we will make humans, and they will be like us. We will let them rule the fish, the birds, and all other living creatures.” So God created humans to be like himself; he made men and women. God gave them his blessing and said: Have a lot of children! Fill the earth with people and bring it under your control. Rule over the fish in the ocean, the birds in the sky, and every animal on the earth.

(Gen 1:26-28 CEV)

May he rule from sea to sea, from the Euphrates River to the ends of the earth.

(Psa 72:8 ISV)

For he delivers the needy when he calls, the poor and him who has no helper. He has pity on the weak and the needy, and saves the lives of the needy. From oppression and violence, he redeems their life, and precious is their blood in his sight.

(Psa 72:12-14 ESV)

4-1



When we hear the word **RULE**, we think that we are the boss and call all the shots, but this is not exactly the case. When we read the verses of Psalm 72, we see that to rule is mainly a responsibility, not a privilege. The king's job was to help those with problems and in need. He had his power not to bully others around, but to serve those in need, to help and to protect.

Why? Because rulers are given their authority from another, it does not belong to them but is entrusted to them for a purpose by God. This is also the case, when God commanded us to rule over the earth. It is a responsibility not a privilege.

So let's talk about responsibility. It means that our footprint on nature should not be to harm, but for good. It means we leave something better for the next person, or generation, compared to what we initially found.

In many ways, that has happened⁸.

- In 1950, 75% of the world population lived in extreme poverty and in 2018 it fell to less than 10%.
- In the 1800s, 8 out of 10 people were illiterate, today 8 out of 10 are literate.
- Two hundred years ago, 40% of all children died before they turned 5 years old, now it is about 4%.
- Also 200 years, most people lived in autocratic political systems, where human rights violations were rampant. Today more than 50% of all people live in democracies.

In many aspects, we have been good stewards that have created wealth and wellbeing for more and more people. Yet, our huge progress has now become a threat to the lifegiving systems of our planet. A lot of progress has already happened in reducing pollution, but some big challenges still exist, including the accumulation of plastic waste and the increasingly harsh changes to the climate in some parts of the world.

But before we discuss these topics, let's step back and reflect on our own stewardship. We have seen humanity has used its potential to develop and improve some aspects of life very dramatically, but on the other hand, this development has led to other problems and pollution.

- Activity: my stewardship assessment

- » Take a sheet of paper and divide it into two columns.
- Put a "+" over one column and "-" over the other.
- » Write in the "+" column all the aspects, where you have developed your potential and you have been a good steward with your life with the resources you have been given.
- » Write in the "-" column all the things that come to your mind, where you have not been a good steward, where you wasted time and resources or where you have been careless.
- » Form groups of four and share the following questions:
- » Now look at the two columns. Which one is longer? What makes you feel proud or grateful of your achievements? What makes you sad or ashamed?
- » If you see the "-" column, what can you do to change it from "-" to "+"?

God has given us the capacity to transform our "-" to "+". We can make something positive out of something negative, because that is what God does and we were created in His image.

- The power of stewardship:

- » Watch the Plastic Bank video: <https://www.youtube.com/watch?v=SdLQLaZ010U&t=22s>
- » Discuss as a group:
 - What problems does Plastic Bank address?
 - How is this a "-" to "+" transformation?
 - What principles of stewardship do you see applied?
 - How could you apply these principles in your life?

3. Closing

• The "+" tree:

- Draw a tree with a trunk and branches on the whiteboard
- Give the participants leaf shaped post-its and markers
- Invite them to write from their "+" list on the leaves, one point per leaf.
- Invite them to come forward to post all the leaves on the branches
- Ask them to read the leaves of the other participants and reflect on the richness that has God blessed your group with.
- Close with a prayer

WEEK THREE

OUR WORLD TODAY- PLASTIC LIVES LONGER THAN YOU WILL

1. Facilitation guide

• The big idea

- Pollution is a result of failed stewardship, it has reached a point where we need urgent action. We have all failed in our stewardship and creation suffers because of us.

• Learning outcomes

- In this lesson, learners will have: Examined the scope and consequences of plastic pollution
- Embraced that the earth is a living organism and is suffering from our pollution
- Evaluated their own contribution through their plastic footprint

• Materials needed

- Scriptural text for this lesson: Romans 8:22
- Copies of the "how long does it take to be gone" Quiz for each participant
- Whiteboard or Flipchart and markers
- Laptop, projector, speakers
- PowerPoint for Lesson 3
- Download video <https://www.youtube.com/watch?v=mT4Qbp89nIQ>
- Copies of Plastic Fact Sheet for each participant
- Copies of Pledge Form for each participant.

2. Devotion and activities

• Opening

- "How long it takes to be gone" quiz
 - » Give each participant a copy of the quiz (see end of this lesson).
 - » Explain that there are eight waste items and three time estimates for the decomposition of each.
 - » Each participant will guess the estimate they think is correct. No use of internet allowed to cheat!
 - » Ask them to swap paper with their neighbor, then show the slide with the answers and let their neighbor correct the answers and return it to the owner afterwards
 - » Have some small prizes for the three to four participants with the most correct answers

• Lesson

- Brainstorm plastic usage:
 - » We all use plastic every day in different forms. Ask them to brainstorm where and how they use plastic and what things that they use which contain plastic. List it on the whiteboard. This could be things like:

- ✓ TOOTHBRUSH
- ✓ SHAMPOO BOTTLES
- ✓ CANISTERS
- ✓ APPLIANCES
- ✓ CONTAINERS
- ✓ TEXTILES
- ✓ BAGS
- ✓ PACKAGING

- ✓ STRAWS
- ✓ WATER BOTTLES
- ✓ TOOLS
- ✓ ELECTRONICS
- ✓ PENS
- ✓ COSMETICS
- ✓ COOKING UTENSILS
- ✓ TAPE

- ✓ CUPS
- ✓ PLATES
- ✓ CAR PARTS
- ✓ FOOD WRAPPERS
- ✓ SHOWS
- ✓ FURNITURE
- ✓ DISPLAY ITEMS
- ✓ DIAPERS

So, we use plastic in everything. Believe it or not, plastic is a new technology. When your parents were your age, there was not much plastic around, but plastic has replaced other materials, because it is durable, strong and cheap.

HERE IS A SHORT HISTORY OF PLASTIC⁹:

1862

Alexander Parkes creates the first ever man-made plastic—it's called Parkesine.

1907

Bakelite makes an appearance—totally man-made, totally synthetic. Jewellery, clock and radio housings were all soon made of Bakelite.

1939

Nylon is invented by DuPont and women go wild!

1982

Fleece is invented—it's a clothing phenomenon.

1869

Celluloid is created and is used to make billiard balls as it's cheaper than ivory!

1920

PVC is created and is used in place of natural rubber which was getting pricey.

1954

Styrofoam makes an appearance and changes the face of packaging.

2012

Everywhere you look there's plastic: TV controls, handles, bits of your car, kitchen utensils, bath, shower tray, DVD, medical inhaler, computer mouse, light switches, buttons...the list goes on.

PLASTIC POLLUTION

Look at the plastic factsheet¹⁰:

A blue whale weighs 140 tons and is the biggest animal on earth. Today, about 8 million tons of plastic waste enter the ocean annually so the volume of plastic waste entering the ocean matches 57,142 blue whales in weight. As there are only about 25,000 blue whales in the wild, the plastic waste we throw in the ocean every year, is double the weight of all blue whales in the world.

By 2050, all the plastic waste in the ocean will be as heavy as all the fish together. For 1kg of fish, there will be 1kg of plastic waste!

BEATING THE BOTTLE KNOW YOUR RECYCLABLES

- ALUMINUM AND TIN CANS
- PAPERS (NEWSPAPERS AND MAGAZINES)
- PLASTIC BOTTLES
- BATTERIES (CAR AND DRY-CELL BATTERIES)
- ELECTRONICS (COMPUTERS, TELEVISIONS, MOBILE PHONES)
- CARDBOARDS
- GLASS BOTTLES

A TOTAL OF
8.3 BILLION
METRIC TONS OF PLASTIC
HAS BEEN PRODUCED
SINCE THE 1950s.

91%
OF PLASTIC WASTE
ISN'T RECYCLED.

PLASTIC TAKES
450 YEARS
TO DECOMPOSE.

GLOBALLY,
1 MILLION
PLASTIC BOTTLES ARE BOUGHT
EVERY MINUTE
AND IS EXPECTED TO
RISE TO TRILLION BY

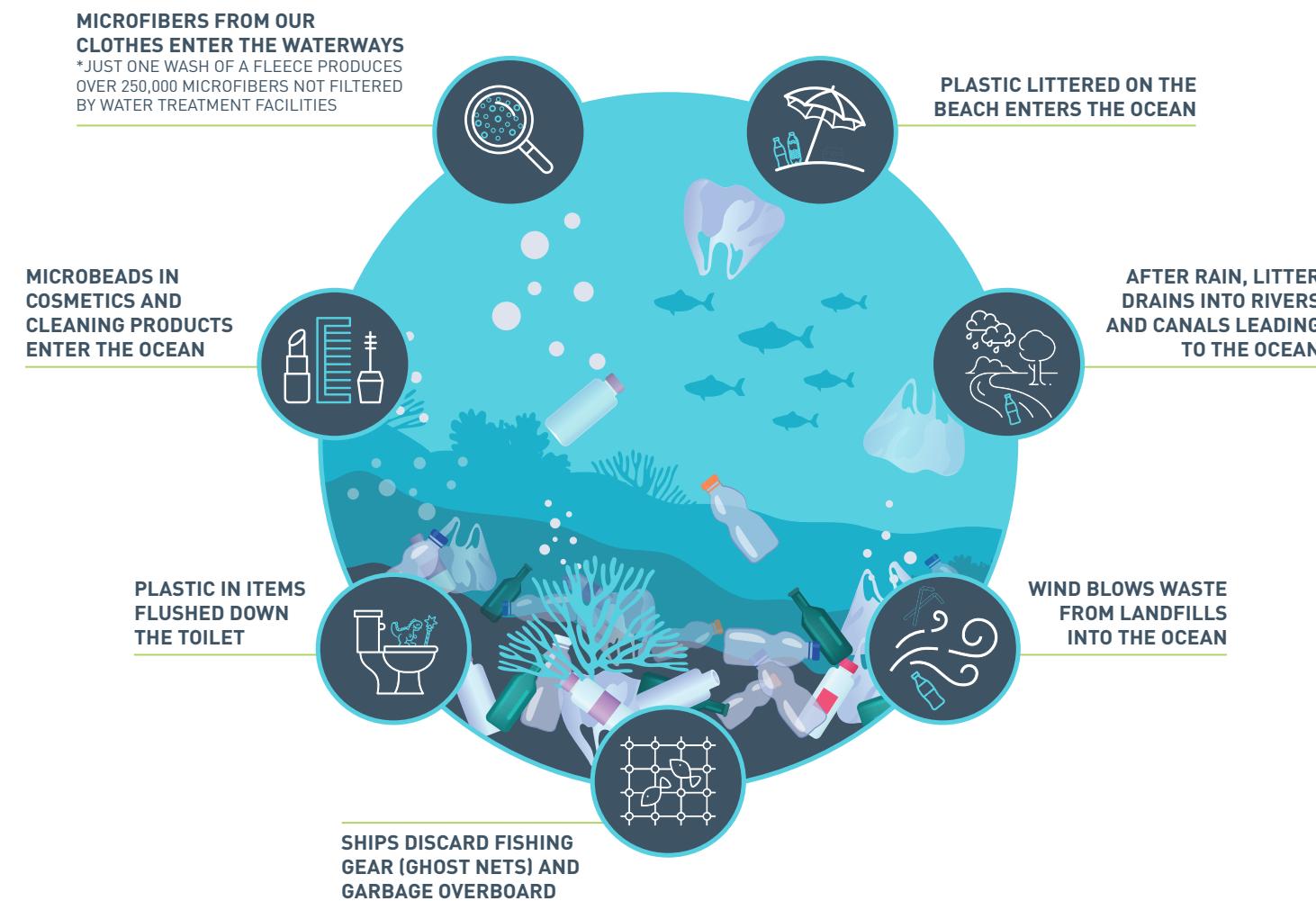
2021.

AN ESTIMATED
100,000
TURTLE AND MARINE
MAMMALS WHICH INCLUDE
DOLPHINS, WHALES AND
SEALS, DIE EVERY YEAR DUE
TO PLASTIC MARINE LITTER.

AN AVERAGE PERSON EATS
70,000
MICROPLASTICS EACH YEAR.

Plastic has not been around for long, but it now plays a crucial role in our lives. We do not think much about it, but it is everywhere, and we all use it. Plastic has become a big industry and despite its advantages, plastic creates problems, especially when it is used wrongly and mismanaged.

HOW DOES PLASTIC GET INTO THE OCEAN?¹¹



OUT OF THE TOP 10 WASTE ITEMS FOUND IN BEACH CLEAN UPS,⁸ ARE MADE OF PLASTIC WASTE¹²:



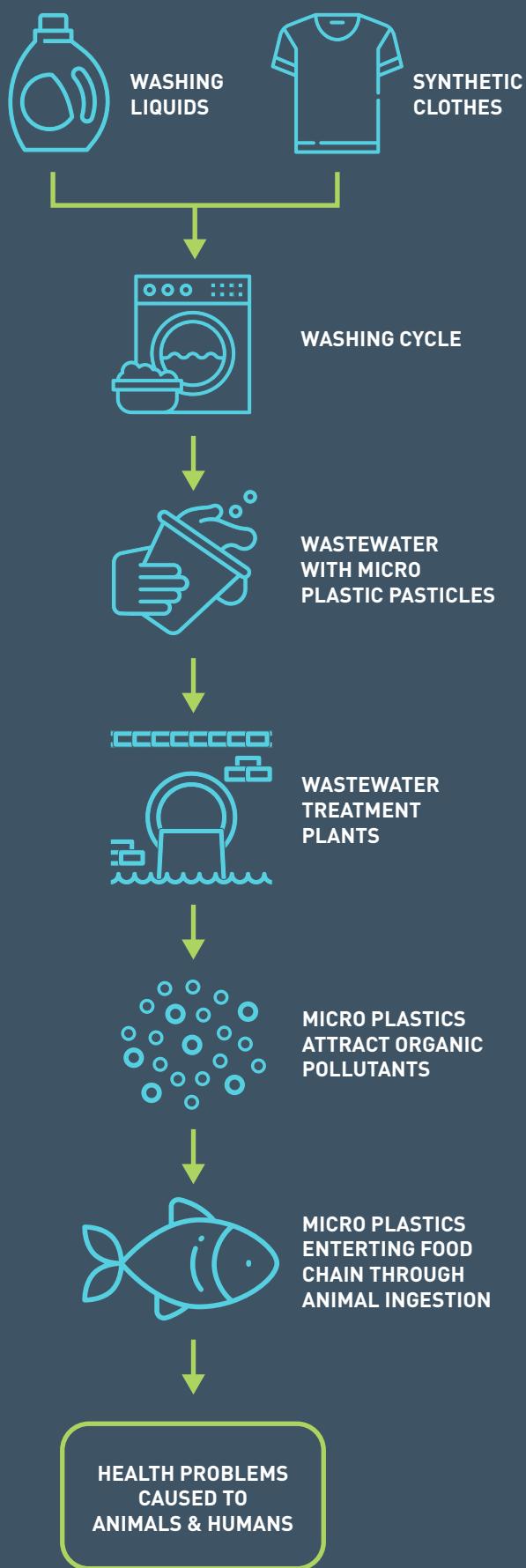
Microplastics:

Microplastics are small plastic particles in the water, which enter the water streams, through either leaks, pollution from fiber or cosmetics which use microbeads and pellets, or the breakdown of larger plastic parts. They enter the food chain and have been found in the tissues of most ocean animals, human tissues and feces.

Often, dangerous toxins are attached to these microparticles and the health risks of these are still unknown.



THIS IS THE PROBLEM...



- Read the word:
» *For we know that the whole of creation has been groaning together in the pains of childbirth until now. (Rom 8:22 ESV)*
 - Discuss with the whole group the following questions:
» *How do you see plastic pollution causing pain to creation?*
» *What affects you most?*
» *How am I part of the problem?*
» *What do you think will happen if we keep going like that?*
» *What can you do to address plastic pollution?*
 - A way forward
» *There is indeed hope to solve this pollution crisis and we can be a part of it, we can transform plastic from a problem into a solution. How? Now, our church is partnering with the Plastic Bank, where we watched a video last week on stewardship. Here is another Video by their CEO David Katz giving a TED talk.*
 - Let us watch:
» <https://www.youtube.com/watch?v=mT4Qbp89nIQ>
- 3. Closing**
- Over the next three weeks, we will look at how we as a youth group can do our part to join the solution and not contribute to the pollution, but it will take our full commitment. I am very excited at how we will become part of a global movement changing the world together.
 - Now let us join together and sign this pledge form to commit to change the pain of creation through being healers of creation.

Give out the Pledge forms:

Pledge to Save the Ocean¹⁴:

I, _____ (write your name), as a follower of Jesus Christ and member of his Church, embrace God's invitation to become a steward of creation and take this pledge to become a healer of creation, to save the ocean, to share in the responsibility for our future, for our oceans, and our planet.

- I pledge to be more mindful in my behavior towards the earth and its oceans
- I pledge to make every effort to tread more lightly by monitoring my use of plastics, buying less, and recycling when possible
- I pledge to reduce my carbon footprint, to become more aware of my choices, and to consume sustainably
- I pledge to seek to educate someone each day about the plight of our precious planet
- I pledge to actively support my church and participate in the local Plastic Bank program

Place: _____

Date: _____

Signature: _____

- Read the Pledge aloud as a group
- Close in prayer

LESSON 3 MATERIALS

How long does it take to be gone? (give to each participant)

GUESS FOR EACH ITEM HOW LONG IT TAKES TO DECOMPOSE BY ITSELF: CROSS ONLY ONE ANSWER PER ITEM

PAPER TOWEL	ALUMINUM CAN	MILK CARTONS	PLASTIC BOTTLES
<input type="radio"/> 2-3 DAYS	<input type="radio"/> 10-50 YEARS	<input type="radio"/> 5 YEARS	<input type="radio"/> 4.5 YEARS
<input type="radio"/> 2-4 WEEKS	<input type="radio"/> 100-200 YEARS	<input type="radio"/> 10 YEARS	<input type="radio"/> 45 YEARS
<input type="radio"/> 6-8 WEEKS	<input type="radio"/> 200-500 YEARS	<input type="radio"/> 15 YEARS	<input type="radio"/> 450 YEARS
CIGARETTE BUTTS	DISPOSABLE DIAPERS	TINNED STEEL CAN	PLASTIC BAG
<input type="radio"/> 6-8 YEARS	<input type="radio"/> 450 YEARS	<input type="radio"/> 5 YEARS	<input type="radio"/> 50-100 YEARS
<input type="radio"/> 8-10 YEARS	<input type="radio"/> 500 YEARS	<input type="radio"/> 50 YEARS	<input type="radio"/> 100-200 YEARS
<input type="radio"/> 10-12 YEARS	<input type="radio"/> 550 YEARS	<input type="radio"/> 500 YEARS	<input type="radio"/> 200-1000 YEARS

HOW LONG DOES IT TAKE TO DECOMPOSE:

PAPER TOWEL: ~ 2-4 WEEKS

BANANA PEEL: ~ 3-4 WEEKS

PAPER BAG: ~ 1 MONTH

NEWSPAPER: ~ 1.5 MONTHS

APPLE CORE: ~ 2 MONTHS

CARDBOARD: ~ 2 MONTHS

COTTON GLOVE: ~ 3 MONTHS

ORANGE PEELS: ~ 6 MONTHS

PLYWOOD: ~ 1-3 YEARS

WOOL SOCK: ~ 1-5 YEARS

MILK CARTONS: ~ 5 YEARS

CIGARETTE BUTTS: ~ 10-12 YEARS

LEATHER SHOES: ~ 25-40 YEARS

TINNED STEEL CAN: ~ 50 YEARS

FOAMED PLASTIC CUPS: ~ 50 YEARS

RUBBER-BOOT SOLE: ~ 50-80 YEARS

PLASTIC CONTAINERS: ~ 50-80 YEARS

ALUMINUM CAN: ~ 200-500 YEARS

PLASTIC BOTTLES: ~ 450 YEARS

DISPOSABLE DIAPERS: ~ 550 YEARS

MONOFILAMENT FISHING LINE: ~ 600 YEARS

PLASTIC BAGS: ~ 200-1000 YEARS

WEEK FOUR

TRANSFORMATION NOW— THE GOOD NEWS FOR YOU AND FOR NATURE

1. Facilitation guide

• The big idea

- We have redemption in Christ. This includes our relationship with creation. Now, we can reveal the value in plastic instead of discarding it as waste.

• Learning outcomes

- Examined our own plastic footprint
- Investigated the principle of redemption
- Applied the principle of redemption on how we use plastic

• Materials needed

- Scripture Text: Colossians 1: 19-20
- Read training Toolkit Week 4
- Laptop, Speaker, Projector and PowerPoint for week 4
- Download videos:
 - » <https://www.youtube.com/watch?v=ocWgSgMGxOc>
 - » <https://www.youtube.com/watch?v=Rl5lmb3hygQ&t=10s>
- Copies of the Plastic Footprint chart for all participants
- Copies for the Waste Segregation Handout for each participant.

2. Devotion and activities

• Opening

- Watch the butterfly metamorphosis video
<https://www.youtube.com/watch?v=ocWgSgMGxOc>
- Discuss as a group
 - » What spoke to you most in this video?
 - » What is the secret of this transformation? (the caterpillar has to die)
 - » How is this an illustration of God's work in us? (Christ died for us)
 - » How could there be a metamorphosis for plastic waste?

• Lesson

– Discover the word:

- » For God was pleased to have all of his divine essence inhabit him. Through the Son, God also reconciled all things to Himself, whether things on earth or things in heaven, thereby making peace through the blood of his cross. (Col 1:19-20 ISV)
- » Jesus was God in human form, and he became the perfect example of the human being, inviting us to be reconciled through him. His goal was to bring humanity back to God and to a reconciled life that was good and properly ordered. This goal was to cost him everything, even to suffer on the cross and to die.
- » Because of this, we have the chance to come back to God and to start a new and better life. This better life also promises peace, peace with God, with ourselves, with others and with creation. This is expressed through Christ who reconciled "all things".
- » "All things" means everything. It means you have peace with who you are, peace with your parents, peace with the people who you do not like, your teachers and everybody else, but it also means you will make sure other species can live and the ecosystems that sustain life can function as well. A concrete way of living this peace is my relationships with plastic. What will this reconciliation look like for the plastic we use?
- » Let us talk a bit more about it.

THE FRAMEWORK FOR THIS IS CALLED THE "5 R" SYSTEM

What are the "5 R"s?:

- Rethink: Do we need all this plastic? Are there better ways?
- Reduce: Avoid goods with plastic packaging!
- Refuse: Don't take single use plastic, like straws and plastic cutlery
- Reuse: Be creative in using bottles or packages as containers or art
- Recycle: A lot of plastic is recyclable and can be made into new products

Let us discuss each in detail:

RETHINK:

Many plastic items are in packaging, which we only use for a short time and then throw away. This is called "single use plastic". Many items are not harmful and are better long term: like eating an apple instead of drinking a single packed apple juice pack or using a bamboo toothbrush instead of a plastic one.

REFUSE:

As much as possible, refuse single used plastic and plastid that is disposable. You can always say: No, thank you very much!



PLASTIC BAGS



PLASTIC CUTLERY



CUPS & BOTTLES



STRAWS



SINGLE CONDIMENT
SACHETS



FOAM CONTAINER

REDUCE:

Turtles are not able to discern the difference between a plastic balloon from a jellyfish, they think it's food. This is very dangerous for them and even endangers their lives. We need to reduce our plastic footprint through our behavior.

Here are a few steps to help you.

- If somehow releasing balloons is fun, it is not for the ocean, because this is where they often end up.
- Often cosmetics and hygiene articles contain micro beads. If you see these on the ingredients list: polyethylene (PE), polypropylene (PP) polyethylene terephthalate (PET) or polymethyl methacrylate (PMMA), don't buy them, they are dangerous.
- Synthetic clothing also releases micro fibers, when we wash them. You can use a microfiber catcher or a laundry bag in your washing machine to prevent them from entering the ocean.

REUSE¹⁶:

Creative ways to reuse plastic:

You can find many ways to creatively use plastic, which you have at home. There are so many ways for you to use it and to craft useful and beautiful items from plastic. You can even save money, as you do not have to buy items, as you can make your own. You can find many ideas on the internet, like on Karma Streams. Check out their home page at <https://mykarmastream.com/15-awesome-ways-to-reuse-plastic-bottles/>

We listed a few ideas for you :

- Plastic juice cups or plastic yoghurt pots – You can use these as flower pots or containers for storage
- Hard plastic containers – Can save you money from buying a lunch box
- Plastic bottles – Can be reused as water bottles. You can also cut them in half and use them as containers for pencils or as flower pots as well.
- Plastic bags – As some plastic bags are made of strong material, you can reuse them as shopping bags or for storage. You can also braid them into bracelets and other items.
- Plastic toys – You might have some toys at home nobody is using, you can sell them online or just give them away



RECYCLE:

Recycling is a good idea and it needs to be strengthened as only 9% of all plastic is recycled. That is not much and needs to change. It's important to know the different types of plastic and which types can or cannot be recycled in your recycling bins. We have a list for you today that will help you to segregate your waste at home. Remember that the best solution is to avoid single-use plastic.

Plastic transformed:

- Here is a powerful story from Haiti, how plastic waste become a drinking bottle that changed the lives of many people. It helps clean the oceans and gives income to the poor:
- Watch here: <https://www.youtube.com/watch?v=R15lmb3hygQ&t=10s>

Discuss the following as a group:

- What do you see as the main message of the video?
- What feelings does it evoke in you?
- What are the principles of transforming plastic we can see?
- What action in your home, family and school can apply these principles?

3. Closing

- Today, we will close with two assignments for homework First, we want to ask you to track your plastic footprint and we have a plastic collection sheet for you, which we are going to talk through in a minute. Second, we want you to talk to your family about segregating waste at home. We have a handout for you that teaches you and your family to segregate your waste properly.

- Plastic footprint¹⁷

- » Each day next week, segregate all the plastic waste you produce and fill out the chart every day. To know the monthly number, divide the weekly total by 7 and then multiply by 30. To calculate the yearly number, multiply the weekly total, just multiply the weekly total by 52.

ITEM	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY	TOTAL PER WEEK	TOTAL PER MONTH	TOTAL PER YEAR
PLASTIC CUPS										
PLASTIC BAGS										
PLASTIC STRAWS										
PLASTIC BOTTLES										
CANDY & SNACK WRAPPERS										
STYROFOAM CONTAINERS										
PLASTIC FOOD PACKAGING										
ALL OTHER PLASTIC ITEMS										

- If you want to know the weight of all the plastic you use, put all the plastic in a big garbage bag. And put it on a weighing scale by the end of the week and write down the weight at the bottom of the chart. Then calculate the weight for the whole year (the weekly weight x 52). Please bring the chart to the next session. We will calculate the total weight of our yearly plastic footprint as a group.

- Waste Segregation Guidelines
 - » Rationale: 80% of our waste can be reduced, reused and recycled instead of going to the landfill.
- Goals:
 - » Minimizing garbage by, for example, buying items with less packaging and storing items properly so that they do not rot.
 - » Reuse items or repurpose them instead of buying new ones, for example, using paint pails as flower pots.
 - » Recycle or compost waste
 - » About 50% of our household waste is kitchen waste that can be composted to become organic fertilizer. 30% of our waste consists of recyclable waste, which is paper, glass, metal and plastic.
 - » This leaves only 20% as waste, which is also referred to as Residual Waste.

CATEGORIES FOR WASTE SEGREGATION:

BIODEGRADABLE WASTE

- COFFEE POWDER WASTE
- EGG SHELLS
- FOOD LEFTOVERS
- FRUITS & FRUIT PEELS
- FLOWERS
- FISH
- GREENS
- CORN HUSK, SILK AND STEM
- ROTTEN FRUITS
- VEGETABLE PEELS
- VEGETABLE WASTES
- TEA POWDER WASTE
- TENDER COCONUT
- TISSUE PAPER

RECYCLABLE WASTE

- ALUMINUM FOILS
- BROCHURES
- CARTOON BOX
- GIFT WRAPPING PAPER
- GLASS AND BOTTLES
- METALS AND METAL OBJECTS
- PAPER, BOOKS, MAGAZINES
- PAMPHLETS
- PLASTIC BOTTLES, CONTAINERS AND PACKAGING
- PRINTOUTS
- RUBBER
- CARDBOARD
- TICKETS
- TIN

RESIDUAL WASTE

- CDS
- SPONGE
- TETRA PACKS
- TOYS AND DOLLS
- SNACKS PACKETS
- SWEEPING DUST
- DRAIN SLIT
- ASHES
- BROKEN GLASS
- DISPOSABLE DIAPERS
- BATHROOM CLEANING BRUSH
- SANITARY NAPKINS
- HUMAN HAIR / NAILS
- WAXING STRIPS
- SOILED COTTON
- USED COSMETICS
- COTTON EAR BUDS



WEEK FIVE

PLASTIC IN HEAVEN? – HOW POLLUTION WILL BE FINISHED

1. Facilitation guide

- The big idea
 - God wants us to live in harmony with Him, ourselves, others and creation to create peace and continual growth. This is called Shalom in the Bible. Shalom in our use of plastic brings transformation and healing to our earth.
- Learning outcomes
 - In this lesson, learners will have:
 - » Explored the concept of Shalom and its applications in life
 - » Compared the framework of the circular economic model to the linear one.
 - » Examined how waste management needs to be transformed
 - » Created opportunities to reveal the value of their own plastic use to display Shalom
- Materials needed
 - Scripture for this week is Isaiah 65:27-25
 - Remind students during the week to do their plastic footprint, calculate the total weight and bring the paper to the session.
 - Materials for the Linear vs Circular Game
 - Read material for week four from the Training Kit
 - Laptop, Projector and PowerPoint for Week 4
 - Flipchart and markers
 - A tennis ball (or equivalent) for each 15 students (15+ - 1 ball. 30+-20balls...)

2. Devotion and activities

- Opening
 - Review of Plastic Footprint
 - » Remind participants to bring their Plastic Footprint charts to the session. Ask two people to open their calculators on their phones and add all the totals of plastic weight of each participant. [The two calculations should match]. Write the total number of plastic weight for the whole group on the white board or flipchart.
 - » Ask people if they were surprised?
 - » Did they expect more or less?
- Linear vs. circular
 - » Space for teams to move around
 - 2 large cardboard boxes per team (one for 'resources' and one for 'waste')
 - Recovered clean plastic cut up into pieces (enough to fill one large box per team)
 - Empty small boxes (5 per team) e.g. lunch boxes or recovered ice cream tubs

- This is how it works:
 - » Divide the group into teams of 4 or more.
 - » Some teams are 'Linear' and stand in a line. At the start of the line is the 'Production leader'. At the end of the line is the 'Production Finisher' and 'Production Recorder'. Other teams are 'Circular' and form a circle. At the 'start' of the circle is the 'Production Leader' and the 'Product Finisher' and 'Production Recorder' are at the 'end' (i.e. next to the 'Production Leader').
 - » All other team members stand in a line/circle between the start and end.
 - » At the start of line/circle there is a large cardboard box of resources (cut up plastic). Each Production Finisher has four of the lunch boxes. The Production Leader starts the game with one of the lunch boxes and fills it with plastic from the resources. It is then passed along the 'production line' to the Production Finisher and each time a full lunch box reaches the end the Product Recorder counts it. Lunch boxes can only travel in one direction along the line. For the linear teams the Product Finisher will need to empty the resources into the waste box before sending an empty lunch box back along the line to the start. The circular team will be able to empty the resources back into the resource box and pass the box directly to the Production Leader.
 - » Set a length of time for teams to record as many finished 'Products' as possible.
 - » At the end of the game students examine: the difference in the amount of waste between linear and circular teams; the difference in the amount of resources each team has left over - did any team run out of resources? The difference in numbers of final products should be recorded.
- Option:
 - » Appoint one or more independent 'Quality Controllers' who walk between teams and ensure that all 'finished' products are up to standard i.e. full to the top with plastic.
- Discuss as a group:
 - » What is the difference between the two systems that you observed?
 - » What is the difference in the way resources are used?
 - » How is waste created differently?
 - » What system is more sustainable long-term?

• Lesson

- Discover the word: Shalom
- » Read the following text:

“

The Lord says, "For behold, I create new heavens and a new earth; and the former things will not be remembered or come to mind. But be glad and rejoice forever in what I create; for behold, I create Jerusalem for rejoicing and her people for gladness. I will also rejoice in Jerusalem and be glad in My people; and there will no longer be heard in her the voice of weeping and the sound of crying. No longer will there be in it an infant who lives but a few days, or an old man who does not live out his days; for the youth will die at the age of one hundred and the one who does not reach the age of one hundred will be thought accursed. They will build houses and inhabit them; they will also plant vineyards and eat their fruit. They will not build and another inhabit, they will not plant and another eat; for as the lifetime of a tree, so will be the days of My people, and My chosen ones will wear out the work of their hands. They will not labor in vain, or bear children for calamity; for they are the offspring of those blessed by the Lord, and their descendants with them. It will also come to pass that before they call, I will answer; and while they are still speaking, I will hear. The wolf and the lamb will graze together, and the lion will eat straw like the ox; and dust will be the serpent's food. They will do no evil or harm in all My holy mountain," says the Lord.

(Isa 65: 17-24 NASB)

”

- Small group discussion:

- » Divide the group into small groups of 4-5 participants each.
- » Give each group a piece of flipchart and a marker
- » Each group assigns its leader and secretary
- » Then for 15 minutes discuss the following questions in your groups:
 - » Ask each participant to share what part of the texts spoke to them
 - » What message do you take away?
 - » What makes you aspire to embrace this message in your life?
 - » How could we as a group apply this message?
- » Allow for some groups to report their answers
- The text illustrates the concept of Shalom. Literally, Shalom means peace, but it has a much deeper meaning than the absence of war or conflict.

Amy Sherman quoting Cornelius Plantinga Jr. (Kingdom Calling, 2011):

[Shalom is] the webbing together of God, humans, and all creation in justice, fulfillment, and delight.... We call it peace, but it means far more than mere peace of mind or cease-fire among enemies. In the Bible shalom means universal flourishing, wholeness, and delight. (pp. 33-34)

It is the understanding that all of our relationships are in harmony and are flourishing. These include the relationships with God, oneself, others and creation as we can see in the text.

As Christians, we are invited to live in Shalom in all aspects of life. This also applies to our behavior as consumers and how we run our economy.

Linear versus circular

Circular life cycles show the principle of Shalom

Remember there is no waste in nature, it just keeps flourishing. Everything is replenished through cycles.

Here is a short review.

Let us start with the water cycle¹⁸:

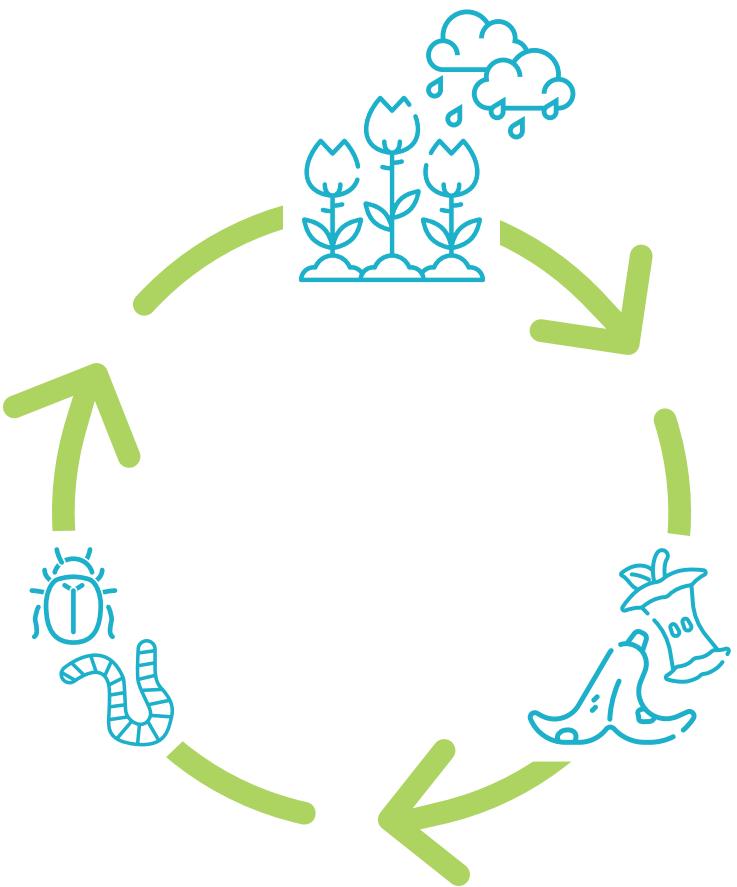
Water evaporates over the ocean, builds clouds and rains then over the land. Through rivers, the water goes on to make the sea. There would be no vegetation and life without these cycles.



Another cycle that helps us to flourish is the composting cycle¹⁹:

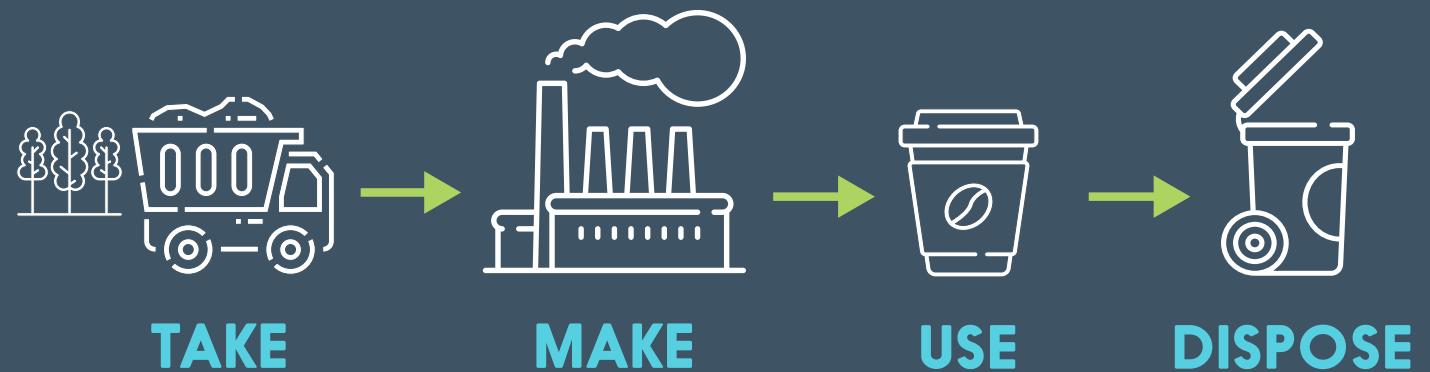
Biological matter dies and is composed through bacteria and insects into new nutrients. These new nutrients feed plants to produce new biological matter.

There is no waste in these cycles, which is God's economy. We are called to imitate this principle of circularity, and our economy should function the same way.



Our current linear model²⁰:

However, it does not. As in our game at the beginning. Our economy works linear.



The linear system produces waste and spoils resources. As we live on a planet with limited resources, this model is limited as we will one day arrive at the point where we will run out.

In opposition to the linear model is the circular model. It replenishes resources and waste is significantly reduced.

The circular economic model²¹:

The small circles: Applying circular principles in our homes, where you and your family reuse and recycle all their plastic.

The large circle: Companies design and produce products where most parts can be reused and recycled.



Last week, we looked at the video of Haiti and the Shell drinking bottle. It is a great example of what impact the circular use of plastic can have.

Here some results from that program:

Shell Social Plastic Bottle Program

In 2017, Shell Oil partnered with Plastic Bank to collect and recycle nearly two and a half million pounds of plastic waste in Haiti.

To accomplish this feat, Shell designed a reusable water bottle, committing to fund the recovery of 4 pounds of plastic for every bottle sold. 500,000 Social Plastic bottles were produced and sold at retail locations in the Netherlands and the United Kingdom.

Collectors in Haiti were paid with Shell's Social Plastic premium price, above market value in addition to the market value for plastic, providing a stable livable income for hundreds of collectors and their families. And 2,296,226 lbs of plastic were collected.

3. Closing

- Reflection circle:
 - » Have the whole group form a circle either sitting or standing (for groups bigger than 15 form more circles)
 - » Each participant shares one life-changing learning from the lesson.
 - » The one you throw the ball to starts
 - » The person throws the ball to the next person of their choice after sharing.
 - » Finish with a prayer.



1,400
NUMBER OF
COLLECTORS ENGAGED



30%
AVERAGE INCREASES IN
INCOME FOR COLLECTORS
PER MONTH



36 MILLION
NUMBER OF EQUIVALENT
PLASTIC BOTTLES*



88%
INCREASE IN INCOME
ABOVE THE POVERTY LINE**

WEEK SIX

OVER TO YOU – PLASTIC REBELS CHANGING THE WORLD

1. Facilitation guide

• The big idea

- Jesus came to us to bring the Good News. As his followers, we are invited to be his Ambassadors. We are Ambassadors of Shalom, meaning we promote and advocate to reveal the value of plastic through our lives.

• Learning outcomes

- In this lesson learners will have:
 - » Reviewed content from the previous lessons
 - » Examined the concept of being an Ambassador
 - » Designed and planned activities for revealing the value of plastic in their community.

• Materials needed

- All materials for the Jeopardy! Game
- Scripture Text 2 Corinthians 5:20
- Ideas for the forming of Plastic Rebels Ambassadors Club
- Read section of the Action Toolkit on how to get organized and how to run a waste audit.
- Certificates of Completion for all participants

2. Biblical Reflection and Activities

• Opening

- Jeopardy! Game
 - » Use the instructions at the end of this session for this game
 - » Have some small prizes for the winning team (waste-free if possible)

• Lesson

- We have learned a lot about plastic, the Plastic Bank, and how to reveal the value of plastic through the way we consume and treat our waste. It is not enough just for us to know these things we also have the task to be ambassadors of this knowledge and to pass it on and mobilize the whole church and even the whole community.

Discover the word:

Therefore, we are ambassadors for Christ, invited to cooperate with God's Plan and His work of reconciliation: we implore you on behalf of Christ, be reconciled to God. (2Co 5:20 ESV)

Paul writes in 2 Corinthians that we are called to be ambassadors for God. This includes also to advocate for a lifestyle that reveals the value in plastic as promoting us being good stewards of creation.

One part of our partnership with the Plastic Bank is for us to promote an Ambassador Program, where we enliven and engage our community to join us in following Christ and to be a good testimony in dealing with our plastic waste in a transformational manner.

Therefore, we are now planning the next activities. Here are some possibilities to keep the group engaged:

Forming a Plastic Rebel Ambassador (PRA) Club

• SUMMARY

- A Plastic Rebels Ambassador Club can be a great way to work with a focused and interested group of young people to teach more about social Plastic in a fun, hands-on way. Projects can be used to educate the PRACs themselves or to educate a broader community (other students, school staff, parents, neighborhood).

• METHOD

- Identify an adult sponsor (teacher or parent) and other adult volunteers.
- Determine the age group of members for the PRA Club. The students can be of all ages or target certain grades of students.
- Set a meeting day/time. Some clubs meet during lunch once or twice a month and others meet after school.
- Use the activities listed in this lesson to help plan "fun meetings" and projects for the PRA Club.
- Take fun photos to document the success of the PRA Club.

Poster Making Contest²²

Time: Choose the length of time the contest will run

• SUMMARY

- PRA Club can plan a poster contest to encourage other young people to showcase their artistic talent and their commitment to the environment by participating in a recycling or reuse poster contest.

• METHOD

- Have the PRA Club plan the contest.
- The following could be considered:
 - » Prizes:
 - » The following are a few ideas to reward the winning entries: display winning posters in the school, the local library, municipal building or a local business, feature 12 winners in next year's calendar, give winners a copy of their artwork in a recycled-content frame.
 - » Eligibility:
 - » Will all young people from the parish be eligible or from the whole community?
 - » Poster Requirements:
 - » Posters created by young people must be their own original artwork. Copyrighted characters (such as Superman) or copyrighted clip art will not be accepted.
 - » Materials:
 - » Consider giving guidelines as far as the size of the posters, media to be used, etc. If the winning posters will be displayed or framed, set the size and layout to meet the needs of the display.
 - » The following is an example of guidelines you might set:
 - » Young people may use a variety of media, such as watercolor, pen and ink, crayon, chalk, markers, computer graphics, etc. Brighter colors reproduce better, light pencil marks will not show up. Participants are encouraged to incorporate recycled or recyclable materials in their creations.
 - » NOTE: If participants incorporate recyclables into their artwork, depth is restricted to half an inch.
 - » Size & Layout: Minimum: 8 ½" x 11"

- » Maximum: 11" x 17"
- » LANDSCAPE LAYOUT ONLY

• Themes:

- Will the poster contest have a theme? The following are a few examples to consider:
 - » Ocean Plastic
 - » Recycling of Plastic
 - » A waste free community

• Decide on who will be the jury and what the winning criteria will be

Plastic Rebel of the month/week²³

• SUMMARY

- Recognize the Plastic Rebel of the week or month. Members who have made a difference by doing something to help reduce plastic waste can be nominated by members, church leaders, and parents.

• METHOD

- Have the PRA Club plan the contest.
- The following could be considered:
 - » Nomination Process:
 - » Is there a nomination form to be completed and submitted? To whom will the nominations be sent?
 - » Selection Process:
 - » How often will the winners be announced (weekly, monthly, etc.)? Will nominees be grouped into age categories or all considered together? Who will select the winners? The Pastor/priest? The PRAC?
 - » Recognition:
 - » Will winners be recognized through an announcement at church? On a bulletin board? Will the broader church community be notified (notification sent home to parents, recognition in a local paper)?
 - » Award:
 - » Is there an award for the Plastic Rebel of the Week/Month?
 - » A certificate, ribbon or trophy?
 - » The PRA Club can make a trophy out of garbage/recycling items that can rotate from winner to winner.

Plastic Rebel campaign²⁴

• SUMMARY

- Have the PRA Club choose and coordinate a parish or community-wide campaign to make their parish greener. This could be a bottle drive, or any other zero waste idea to reduce waste and recover resources.

• METHOD

- Select a goal (improve recycling, use both sides of a piece of paper before recycling - double-sided paper program, no car idling near the school, no more plastic water bottles, etc.).
- Get baseline data. Measure how the school is doing before you start.
- Work together to decide what will make a difference and what steps need to be taken.
- Publicize the campaign, make posters, announcements, signs and more.
 - » Take photos throughout.
 - » Measure impact of campaign.
 - » Publicize and celebrate results.



Video contests²⁵

• SUMMARY

- Have the PRA Club plan and make a video of how to recycle plastic. This video can be shown in every classroom or at the whole church to help educate everybody on the importance of recycling and how easy it can be to choose to recycle.

• METHOD

- Have the PRA Club create a video to educate others about revealing the value of plastic in the church or at home. The PRA Club can write the script, select actors, set the stage and create a fun way to educate others. It may be possible to get a middle school or high school student to be the videographer for your project.

• More stuff and ideas of what you can do:

- A beach or community clean up
- Visit a recycling factory
- Request your school to make a presentation to the students
- Creatively organize a Social Plastic Sunday activity for the whole parish

3. Closing (this is a moment to celebrate as your group has achieved a remarkable six weeks and now will help change the world)

- Awarding ceremony:

- » Have certificates ready for each participant
- » Have either the Priest, or another leader from the church to hand out certificates to all participants and congratulate them on their achievements

- » Announce the next meeting of the PRA Club and create a Facebook or Social Media group with the members to exchange updates and achievements.
- » Ask the priest to offer a blessing over the whole group

Jeopardy!-style game²⁶

• Objectives:

- To increase young people's knowledge of simple concepts and to gauge their subject mastery

• Ages:

- Middle School and older

• Materials:

- For drawing the game board and scoreboard, large pieces of paper (flip chart paper, butcher paper, poster board, etc.) or blackboard, wall, or even sidewalk; markers or chalk, paper and writing utensil for writing down questions and answers (for your use)

• Time:

- 30–45 minutes, depending on discussion length

• Procedure:

- Jeopardy! is a popular game on American television in which contestants are given an answer, and they have to guess the question. Typically, there are four or five columns each with a different subject within an overall theme, and five rows. The top row is worth the least, typically 10 points, and is the easiest answer in the column. Answers get progressively more difficult as you move down the column, until the answers in the bottom row are worth, say, 50 points. See the illustration below.

This is a version adapted for groups of young people. To play, organize the kids into teams. Choose one team to go first, perhaps by asking each team to guess the number of fingers you are holding behind your back. The team chooses a category and then, typically, the easiest row, without knowing what the answer is. You then read the answer to the team and if they get the question right, they are awarded 10 points, and you then move to the next team, and so on. If the team misses the question, you move to the second team and give them a shot. If the second team gets the answer correct, it gets 10 points and then gets the chance to choose the next category and be the first to guess the right question. If they don't come up with the correct question, move to the next team and so forth. If no team gets the question right, read the question and briefly discuss so that everyone understands it (hence the educational value). Continue in this vein until you run out of questions.

To wrap up the game, you can play "Final Jeopardy." Write down a final answer and the question. Tell the teams what the category of the answer is, but don't tell them what it is. Now, ask each team to decide how much of its accumulated point total it wants to wager in trying to come up with the right question. Then, read the answer, and ask each team to silently write down the question. Ask them to read their questions. Those that have the correct question get to add their wager to their point total. Those that don't get their wager deducted from their point totals. This gives the teams yet another chance to win and makes the final result unpredictable, and the game, therefore, more exciting.

Obviously, you have an endless array of subject choices and questions/answers from which to choose. Here is one example, focusing on solid waste management:

CATEGORY 1	CATEGORY 2	CATEGORY 3	CATEGORY 4	CATEGORY 5
10 POINTS				
20 POINTS				
30 POINTS				
40 POINTS				
50 POINTS				



Categories:

1. Category 1: The Plastic Bank

- **10 Points:**
 - Answer: David Katz
 - Question: Who founded Plastic Bank
- **20 Points:**
 - Answer: Haiti
 - Question: Which is one country, where the Plastic Bank collects their plastic?
- **30 Points:**
 - Answer: Social Plastic
 - Question: What is the plastic called, the Plastic Bank is selling
- **40 Points:**
 - Answer: Money, Solar charging and school tuition
 - Question: What do collectors get in Haiti for collecting Plastic
- **50 Points**
 - Answer: Stop Ocean Plastic
 - Question: What is the vision of the Plastic Bank



2. Category 2: Plastic Pollution

- **10 Points:**
 - Answer: Ocean Plastic
 - Question: What do you call plastic waste in the ocean?
- **20 points**
 - Answer: Micro Plastic
 - Question: What do you call small plastic parts floating in the ocean?
- **30 points**
 - Answer: 2050
 - Question: When will the volume of plastic waste in the ocean match the volume of fish?
- **40 Points**
 - Answer: Only 9%
 - Question: How much of the plastic we use is being recycled?
- **50 points**
 - Answer: 100 000 turtles and sea mammals a year
 - Answer: What is the number of turtles and sea mammals dying because of ocean plastic?

3. Category 3: Plastic Solutions

- **10 Points:**
 - Answer: Rethink, Refuse, Reduce, Reuse, Recycle, Recover
 - Question: What is the 6 R framework to reduce our plastic footprint?
- **20 Points**
 - Answer: plastic bags, plastic cutlery, straws, foam food containers and condiments sachets
 - What are the plastic items, you should refuse?
- **30 Points:**
 - Answer: Plastic Footprint
 - Question: what do you call the plastic volume we consume?
- **40 Points**
 - Answer: Making Plastic a currency
 - Question: What is the main strategy of the plastic bank to reveal value in plastic?
- **50 points:**
 - Answer: Shell oil
 - Question: Which company invented the ocean bottle to recycle plastic waste from Haiti?

4. Category 4: circular economy

- **10 Points**
 - Answer: Take-Make-Use- Dispose
 - Question: What is the flow of the linear economy?
- **20 Points:**
 - Make-Use-Recover-Recycle
 - Question: What is the flow of the circular Economy?
- **30 points:**
 - Answer: The model of nature
 - Question: Which model is the circular economy based on?
- **40 points**
 - Answer: Not wasting resources
 - Question: What is the major advantage of the circular economy?
- **50 points:**
 - Answer: 6R circle
 - Question: What is the circular model to deal with plastic waste?



5. Category 5: Faith and Plastic

- **10 points**
 - Answer: It belongs to God
 - Question: To whom belongs the whole of creation?
- **20 points**
 - Answer: Stewardship
 - Question: What is our relationship to creation?
- **30 Points:**
 - Answer: human failure
 - Question: What is the cause of plastic pollution?
- **40 Points**
 - Answer: Redemption through Jesus Christ
 - Question: How have we been reconciled to a right relationship to creation?
- **50 points**
 - Answer: Shalom
 - Question: What is God's vision for our relationship with creation?

REFERENCES:

- ¹ Ritchie, H. & Roser, M., (2018) Plastic pollution: Our world in data. <https://ourworldindata.org/plastic-pollution> Accessed on 02.07.2019
- ² Gertz, E. (2016). the earth is becoming a plastic planet: Takepart <http://www.takepart.com/article/2016/01/29/earth-becoming-plastic-planet> Accessed 15.07.2019
- ³ Royte, E., (2018). We know plastic is harming marine life. what about us?: National Geographic. <https://www.nationalgeographic.com/magazine/2018/06/plastic-planet-health-pollution-waste-microplastics/> Accessed 15.07.2019
- ⁴ Marine Conservation Institute: Why we protect the ocean <https://marine-conservation.org/what-we-do/advocate/why-we-protect-our-oceans/> Accessed 15.07.2019
- ⁵ British Plastic Federation: Plastic Applications <https://www.bpf.co.uk/plastipedia/applications/default.aspx> Accessed 15.07.2019
- ⁶ National Ocean Service: Why should we care about the ocean? <https://oceanservice.noaa.gov/facts/why-care-about-ocean.html>
- ⁷ National Ocean Service: Why should we care about the ocean? <https://oceanservice.noaa.gov/facts/why-care-about-ocean.html>
- ⁸ From Forbes online: Why The World Is Getting Better And Why Hardly Anyone Knows It, by Steve Denning. Accessed on January 15th 2019 at <https://www.forbes.com/sites/stevedenning/2017/11/30/why-the-world-is-getting-better-why-hardly-anyone-knows-it/#2c5a0bf97826>
- ⁹ Marine Conservation Society, History of Plastic, <https://www.mcsuk.org/beachwatch> Assessed on January 11th, 2019
- ¹⁰ Impact Magazine, January to March 2019. From http://assistasia.org/impact_magazine/Ed27_JanMar2019.pdf Assessed on January 18th, 2019
- ¹¹ Wondrlust: Plastic Pollution: Facts and Figures, <http://wondrlust.com/knowledge/plastic-pollution-facts-figures/> Assessed on January 11th, 2019
- ¹² Blue Bird Marine Systems: Top 10 items found on beaches http://www.bluebird-electric.net/oceanography/Ocean_Plastic_International_Rescue/SeaVax_Hydro_Cyclonic_Vacuum_Ocean_Plastic_Filtration_System.htm Assessed on January 11th, 2019
- ¹³ From Healthy Options, Lifestyle New Digest, Assessed on January 21. 2019 <https://www.healthoptions.com.ph/newsdigest/a-plastic-planet-what-we-are-leaving-behind/microplastics-be-very-afraid>
- ¹⁴ Adapted from Oceans without Borders, assessed on January 21. 2019, <https://www.andbeyond.com/impact/oceans-without-borders/pledge/>
- ¹⁵ Adapted from Greenhome: <https://greenhome.co.za/refuse-reduce-reuse-recycle/>
- ¹⁶ Picture used from <https://mykarmastream.com/15-awesome-ways-to-reuse-plastic-bottles/>
- ¹⁷ Adapted from Earthday Network: End plastic pollution 2018 <https://www.earthday.org/wp-content/uploads/Plastic-Pollution-Calculator-Plan-and-Tracker.pdf> Assessed March 12, 2019.
- ¹⁸ Rookie Parenting Science: Water Cycle <https://www.rookieparenting.com/what-is-water-cycle/> Assessed March 12, 2019
- ¹⁹ Worm works, The Food Cycle <https://ourlocality.org/wormswork/welcome-2/the-food-cycle/> Assesed March 12, 2019
- ²⁰ Ministry for the Environment. 2018. Proposed mandatory phase out of single-use plastic shopping bags: Consultation document. Wellington: Ministry for the Environment.
- ²¹ Ministry for the Environment. 2018. Proposed mandatory phase out of single-use plastic shopping bags: Consultation document. Wellington: Ministry for the Environment
- ²² Adapted from "Don't Throw Me AWAY!" A Zero Waste Curriculum (2013) by Seven Generations Ahead
- ²³ Adapted from "Don't Throw Me AWAY!" A Zero Waste Curriculum (2013) by Seven Generations Ahead
- ²⁴ Adapted from "Don't Throw Me AWAY!" A Zero Waste Curriculum (2013) by Seven Generations Ahead
- ²⁵ Adapted from "Don't Throw Me AWAY!" A Zero Waste Curriculum (2013) by Seven Generations Ahead
- ²⁶ Adapted from Environmental Activities for Youth Clubs and Camps: Peace Corps, 2017. Assessed on January 24, 2019 at https://files.peacecorps.gov/documents/PC_Environmental_Activities_508_mNd3UVx.pdf



We want to hear from you! Please contact us at interfaith@plasticbank.com
For more information, you can check us out at <https://www.plasticbank.com/>