



## REGENERATIVE SCHOOL BUS

**REGENERATIVE AGRICULTURE  
FIGHTS CLIMATE CHANGE**

**STUDENT WORKBOOK**

**10-12 YRS**

## SLOW FOOD

Slow Food is a way of living and a way of eating. It is a global, grassroots movement with millions of supporters in 164 countries that links the pleasure of food with a commitment to community and the environment.

**Slow Food seeks to steward a dramatic and lasting change in the food system.**

At Slow Food Barbados we reconnect locals with the people, traditions, plants, animals, fertile soils and waters that produce our food while protecting the rich heritage, traditions and culture that food makes possible. Furthermore, we want to reinvigorate the youth's interest in food and bestow on them the knowledge of where it comes from.



## EDUCATIONAL GARDENS + REGENERATIVE SCHOOL BUS

Slow Food identified educational gardens and working with youth as a key to developing Good, Clean and Fair food systems. Slow Food's physical Educational Gardens at schools and institutions island wide instill a love of Good Clean and Fair in students, while integrating garden activities into the school curriculum and building school community. The Regenerative School Bus is a way of taking students on a virtual field trip, bringing gardens and farms to so many more students than our existing gardens can reach.

Exposing students to possibilities and inspiring youth, with a hope of instilling a life long love for regenerative agriculture, health and wellbeing.

## PROJECT BACKGROUND

With rising rates of non-communicable diseases (NCDs) like diabetes, hypertension, heart disease and stroke; and with the increasing rates of childhood obesity in the Caribbean, the "Improving Household Nutrition Security and Public Health in CARICOM" or Food and Nutrition ("FaN") project focuses on improving dietary diversity to help in lowering the burden of NCDs in the region. The project is generously funded by the International Development Research Centre, Government of Canada.

In collaboration with CARICOM Secretariat and other partners, the FaN project created the Health and Family Life Education (HFLE) curriculum at the Early Childhood Development level and revised the curriculum at the Primary Education Level to include more information on unhealthy diet and physical inactivity as risks for NCDs.

## PROJECT RESOURCES

The FaN project partnered with CARICOM Secretariat to develop digital 'edu-tainment' materials to help deliver the revised HFLE curriculum in classrooms. These include a collaboration with Slow Food Barbados' educational consultants to deliver (3) three educational videos, filmed on farms in Jamaica, St. Kitts & Nevis, and St. Vincent & the Grenadines which focus on regenerative agriculture/farming, nutrition, and cooking. The videos are accompanied by worksheets, games, and challenges designed for students aged 6-9 years old and students aged 10-12 years old. Paired with a teaching guide, each video and the corresponding lesson has been designed for use in a fully virtual situation or an in-person hands-on setting in the classroom.

# WHY REGENERATIVE AGRICULTURE?

One of the most pressing topics of our time, climate change. Also referred to as global warming, is an often under taught and misunderstood concept. A concept with the potential to significantly impact our lives and the lives of today's youth, if adequate education is provided covering the WHYs and HOWs.

Regenerative agriculture is a method of producing food, on a small or large scale, which does not deplete the health of the environment. By design, regenerative agriculture increases the health of the environment, biodiversity and humans with every harvest.

**Regenerative agriculture produces healthy soil, biodiverse ecosystems, abundant organic harvest, nutrient dense food and healthy people.**

Regenerative agriculture seeks to keep the soil structure intact (no till / no dig farming); keep the soil covered (cover crops or mulch), does not introduce chemicals (synthetic fertilisers, pesticides or herbicides), Invites beneficial insects to create a biodiverse system.

By creating systems of regenerative agriculture we have the potential to: Draw down carbon through photosynthesis, and capture and store water in the soil structure, diverting run off to the oceans by infiltrating clean, chemical free water into the water table.

The United Nations Sustainable Development Goals suggest that major mindset shifts and action must be taken by the year 2030. Slow Food Barbados believes, that through education, a generation of regenerative youth will evolve, who will have far greater impact on this earth, than any adult will be able to make by the year 2030. **Our health and the health of our planet depends upon the issues that we choose to educate the next generations on.**



## SLOW FOOD ETHOS

Slow Food envisions a world in which all people can access and enjoy food that is good for them, good for those who grow it and good for the planet.

Our approach is based on a concept of food that is defined by three interconnected principles: good, clean and fair.

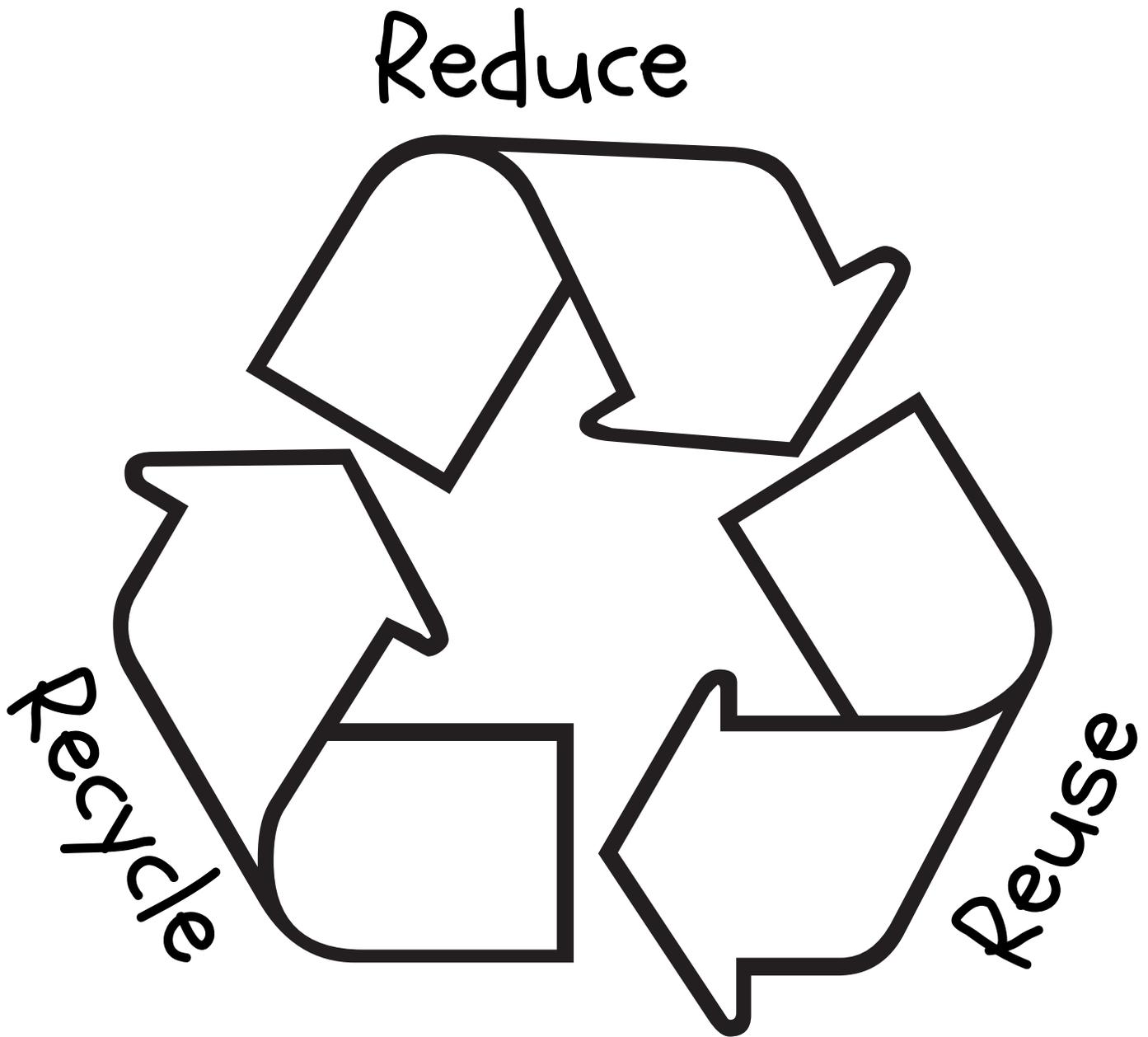
- GOOD: quality, flavoursome and healthy, nutrient dense food
- CLEAN: production that does not harm the environment or humans
- FAIR: accessible prices for consumers and fair conditions and pay for producers

**ST. KITTS AND NEVIS:  
FARMER MACKIE**

Waste streams,  
closed loop systems  
and factors affecting  
health and the environment

## WHILE YOU WATCH:

As you watch Farmer Mackie listen for the 7 words he uses when he explains how his farm produces as little waste as possible and colour one arrow when you hear each of the 3 most important R's



# WHILE YOU WATCH:

As you watch Farmer Mackie listen for the 7 words he uses when he explains how his farm produces as little waste as possible!

\*HINT: They all start with Re-

Refuse

Reuse

Repair

Repurpose

Rot

Recycle

Regenerate

# WHILE YOU WATCH:

As you watch Farmer Mackie listen for the 7 words he uses when he explains how his farm produces as little waste as possible!

\*HINT: They all start with Re-

R

R

R

R

R

R

R

# TAKE IT TO THE NEXT LEVEL...

6 of the 7 R's starts the Prefix Re-. Can you explain by writing and drawing what your group thinks ROT means?



Rot :

Handwriting practice lines consisting of multiple sets of three horizontal lines (top solid, middle dashed, bottom solid) for writing.

# TAKE IT TO THE NEXT LEVEL...

6 of the 7 R's starts the Prefix Re-. Can you explain what your group thinks ROT means?

Rot :

Handwriting practice lines consisting of 18 sets of horizontal lines. Each set includes a solid top line, a dashed middle line, and a solid bottom line, providing a guide for letter height and placement.

## VIEWING COMPREHENSION/DISCUSSION QUESTIONS:

6 of the 7 R's starts the Prefix Re-. Can you explain by writing or drawing what REGENERATE means?

1) Farmer Mackie describes his Closed Loop System on his farm. Can you describe another example of a closed loop system?

2) What are some of the elements on Farmer Mackie's farm which make his space a sustainable farm?

3) Farmer Mackie described Food Security. What do you think food security means and why is it important?

3) Why did Farmer Mackie say that Farm to Table food is more nutritious than imported food?

## EXTENSION DISCUSSION QUESTIONS:

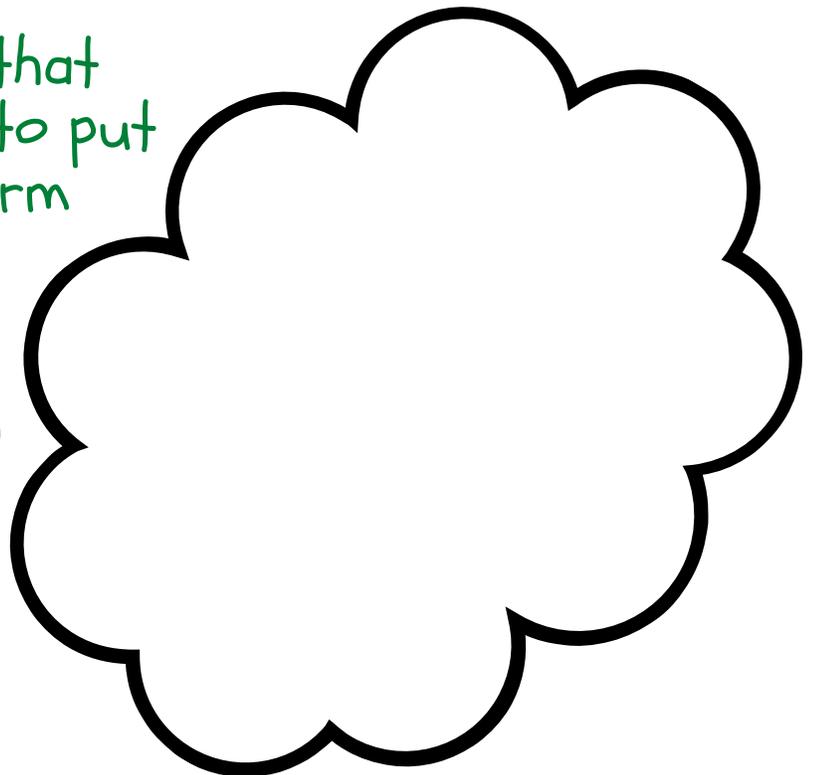
FACT: There is no such thing as waste, only stuff in the wrong place.

1) Farmer Mackie uses the 7 R's to produce no waste on his farm. He used the words "Closed Loop System" to describe it. Discuss what a Closed Loop System is and is not:

IS

IS NOT

2) Farmer Mackie says that there is a better place to put an egg carton. Brainstorm some ways you could reuse an egg carton:



## EXTENSION DISCUSSION QUESTIONS:

1) Can you think of an example of a closed loop system that exists in the natural world and needs no human intervention to operate.

2) Can you come up with a list of possible threats to food security in your country.

3) Eating farm to table food helps to keep our carbon foot print down. Can you explain how?

# WHILE YOU WATCH:

As you watch Farmer Mackie listen for the 7 words he uses when he explains how his farm produces as little waste as possible!

Put up your hand when you have 4 in a row

Call out BINGO when you have a full board!

REUSE

REPAIR

RECYCLE

REGENERATE

REFUSE

ROT

REFUSE

REPURPOSE

ROT

REPURPOSE

REPAIR

REUSE

REPAIR

RECYCLE

REUSE

REGENERATE

# WHILE YOU WATCH:

As you watch Farmer Mackie listen for the 7 words he uses when he explains how his farm produces as little waste as possible!

1 square for each use of the word in the video.

Put up your hand when you have 5 in a row

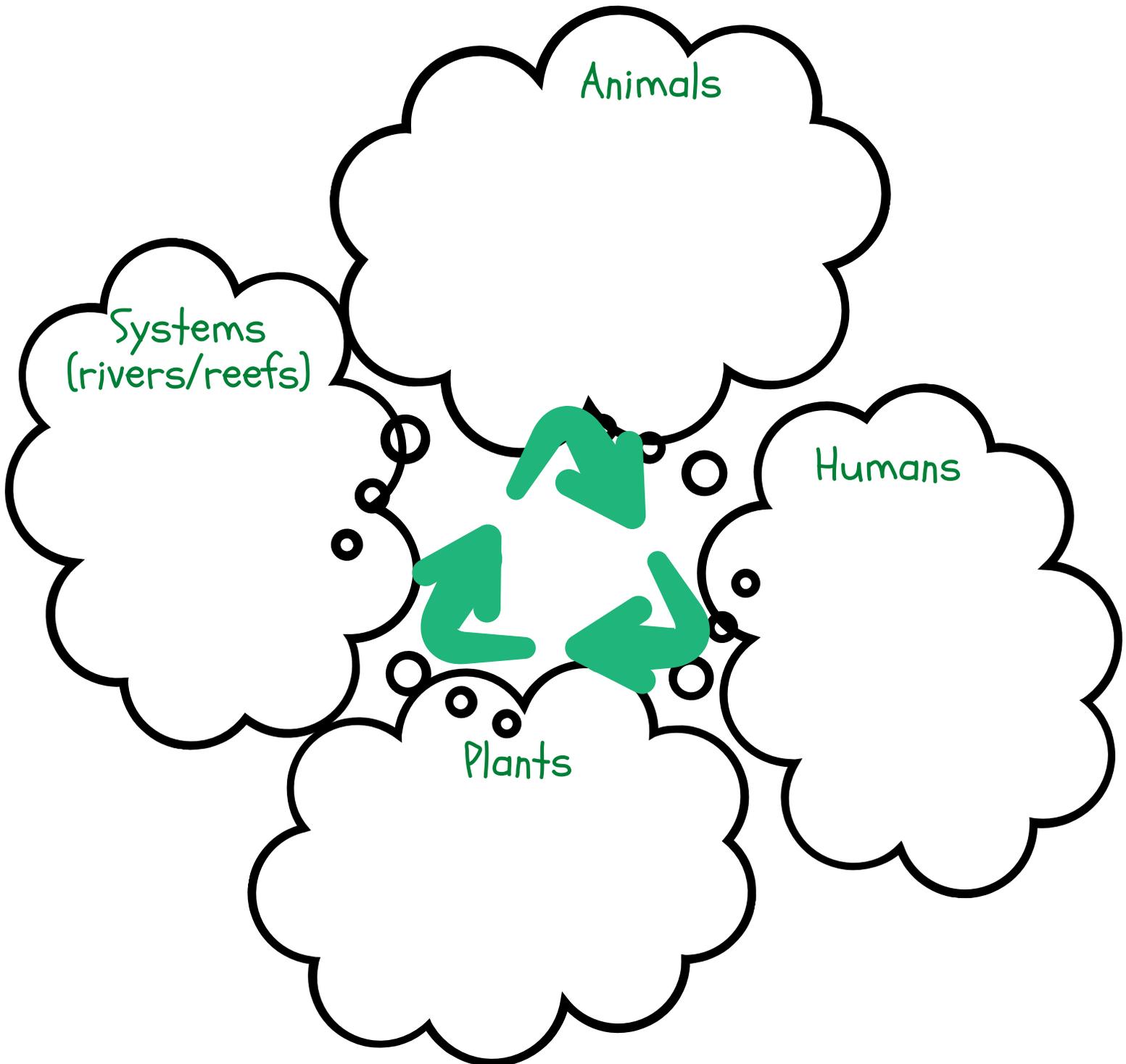
Call out BINGO when you have a full board!

REUSE	REPAIR	RECYCLE	REGENERATE	REGENERATE
REFUSE	ROT	REFUSE	REPURPOSE	REPURPOSE
ROT	REPURPOSE	WILD	REUSE	REUSE
REPAIR	RECYCLE	REUSE	REGENERATE	REGENERATE
REPAIR	RECYCLE	REUSE	REGENERATE	REGENERATE

# BRAINSTORM SESSION:

Farmer Mackie is very conscious of the waste he produces. Can you brainstorm in your groups some of the things that would happen to us if we didn't recycle at all and lived amongst garbage and waste?

*FACT: There is no such thing as waste, only stuff in the wrong place.*

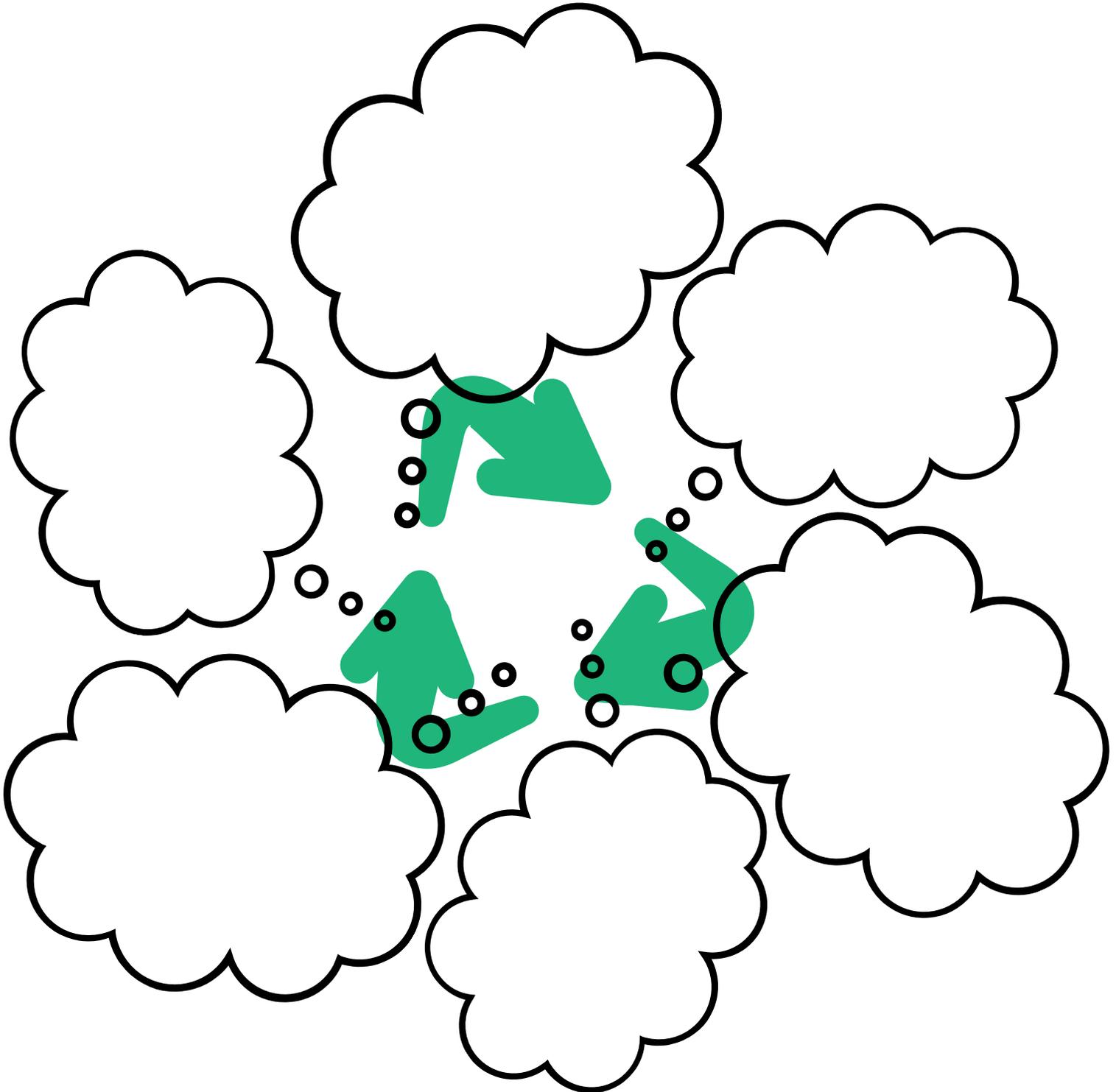


**HINT:** Think about what would happen to each of the prompts if they were covered in garbage

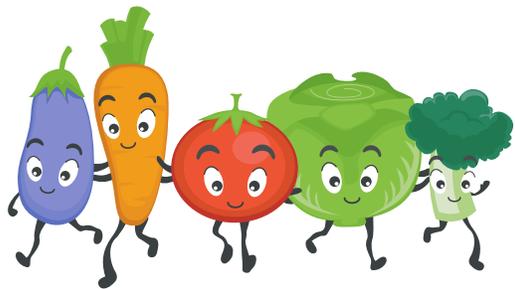
# BRAINSTORM SESSION:

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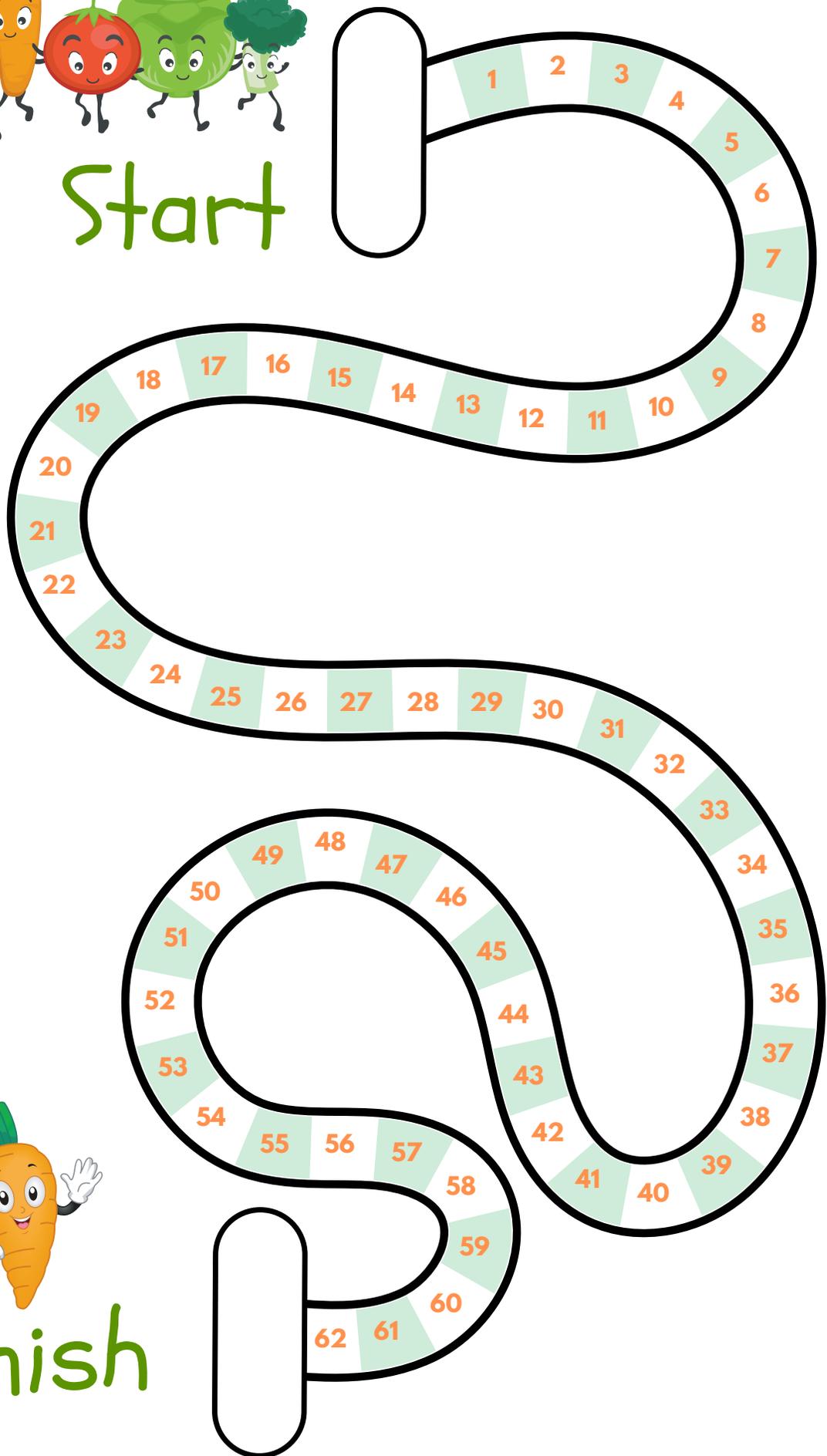
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**HINT:** think about smells, animals, and systems that waste pollution will kill or contaminate. Think about your health.



Start

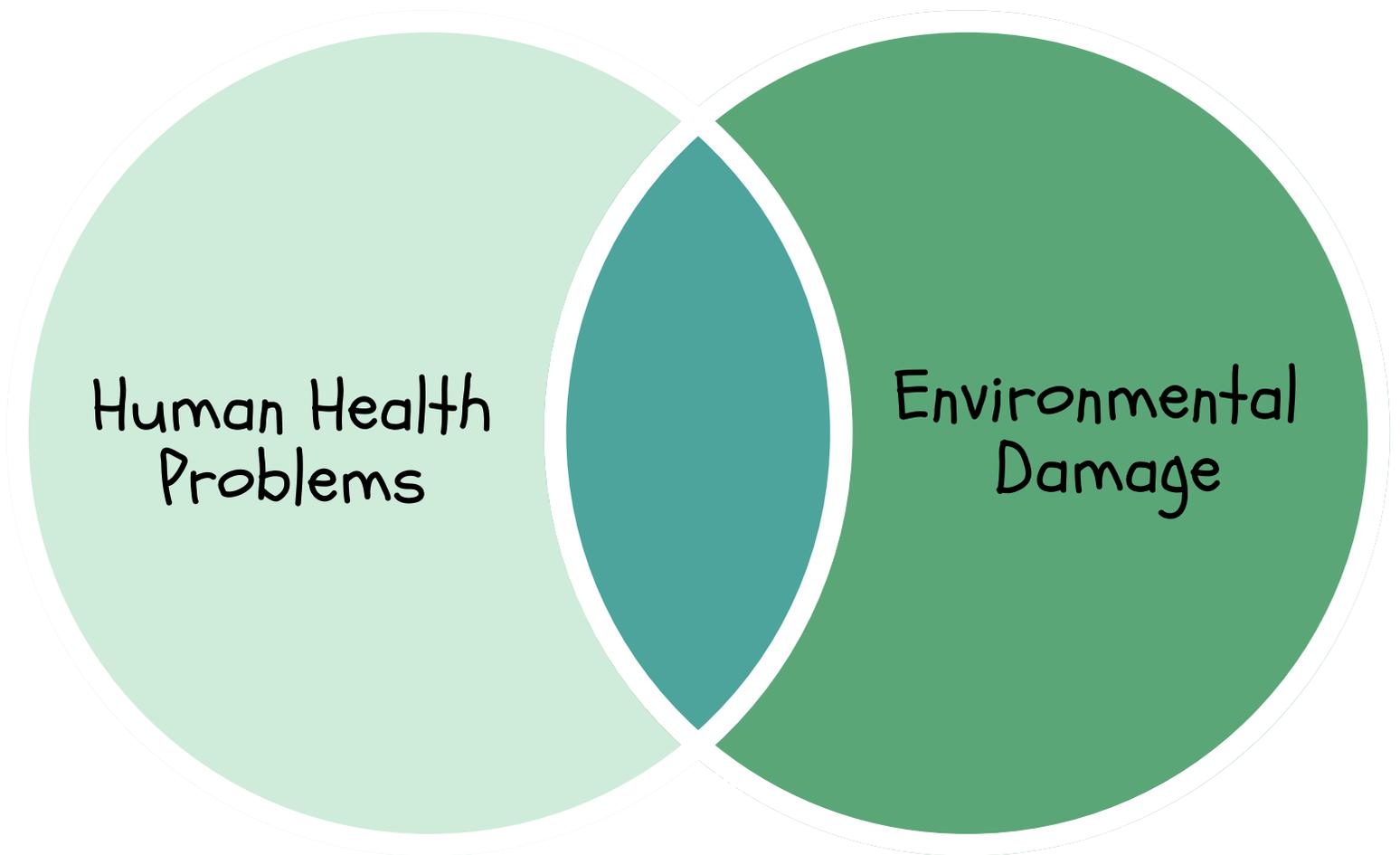


## IMAGE SORTING:

Farmer Mackie is very conscious of the waste he produces because he is worried about the health of the planet and his own health.

*FACT: There is no such thing as waste,  
only stuff in the wrong place.*

Can you sort the images into situations which would cause health problems for humans and ones which would cause damage to the environment.



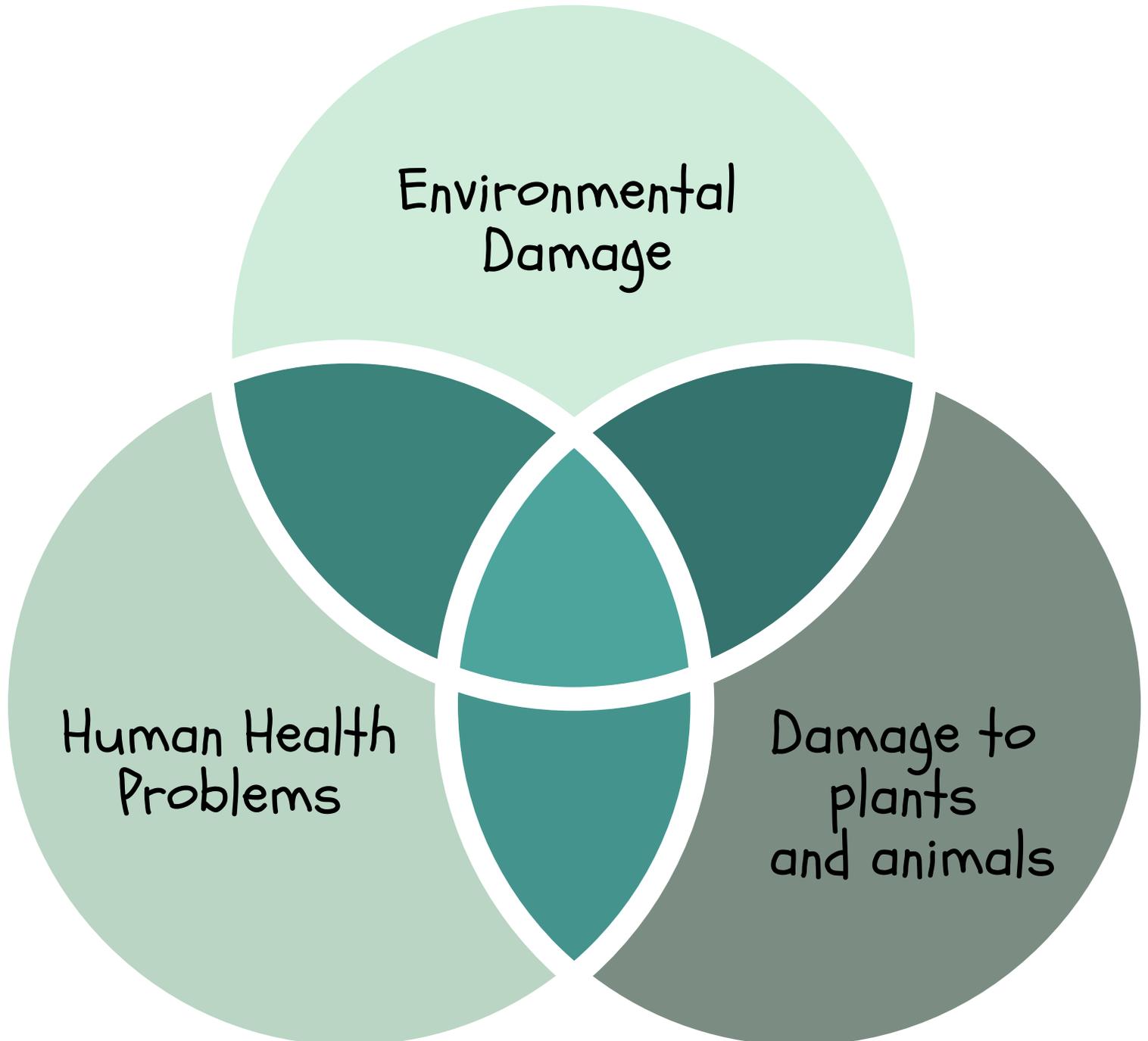
Drawing a huge Venn diagram on the board or floor outside is a great idea

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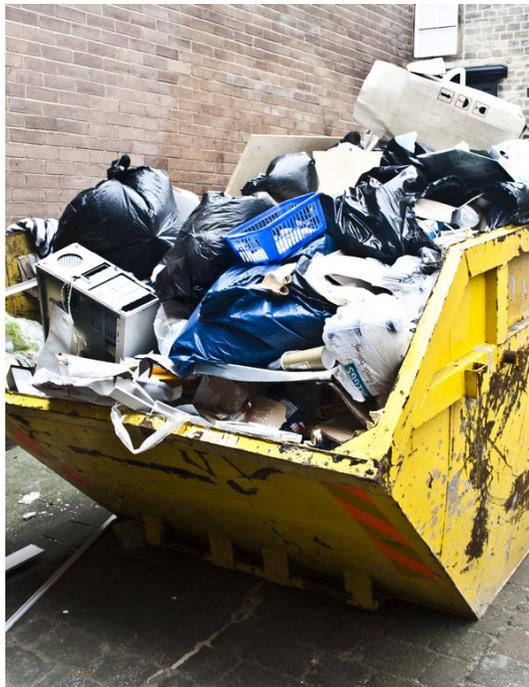
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# ACCOUNTABILITY CHALLENGE

M T W T F

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REMINDERS

NOTES

# ACCOUNTABILITY CHALLENGE

M T W T F S

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REMINDERS

NOTES

# TAKE ACTION PROJECT!

## THE PROBLEM

To be truly sustainable on an island we need to grow our own food without relying on anything bought or imported.

Creating a closed loop system within our homes, schools, or communities is important to keep costs down.

knowing how to feed ourselves after a natural disaster is a skill we should all have.

## THE SOLUTION

learn to grow as many seedlings as you can using only free items!



1. **RULES:** don't buy anything! All items must be garbage or recycling. OR be natural materials. EVEN your seeds, soil and water must be free, garbage, or found!

3. Brainstorm ideas for how to get seeds from what we already eat!

4. Make a plan for how to get water and soil!

2. Make a list of items I need to collect and gather from the recycle bin.

5. Start with a few seedlings and add a few more each week for a continuous harvest!

# TAKE ACTION PROJECT!

Find Items:

Collect Seeds:

Plant Seeds:

Grow plants:

1. Items I'll need to find:

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2. List of seeds I want to plant:  
Tip: don't plant stuff you don't like to eat!

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- 

3. My Ideas:

4. Planting plan / Watering Plan / Notes:

# TAKE ACTION PROJECT!

**RULES:** don't buy anything!

All items must be garbage or recycling. OR be natural materials.  
EVEN your seeds, soil and water must be free, garbage, or found!

Containers I could use:

Where I can get soil:

Where I can get water:

Where I can get seeds:



# REGENERATIVE SCHOOL BUS

RESOURCES PRODUCED IN COLLABORATION WITH



This work is carried out with the aid of a grant from the International Development REsearch Centre, Ottawa, Canada.

