



food heroes

## Challenge 17: Web of Life

Quest 3 of 3: Save Our World



# Web of Life

Start  
Quest

12-1

12-2

13-1

13-2

14-1

14-2

15-1

15-2

16-1

16-2

17-1

17-2

Level  
Up

## Introduction

Let kids become entangled, immersed and treasurers of the harmony of life they are interwoven into with the “Web of Life” challenge.

Children will understand how to connect a food chain, understand that each part of the food chain needs all parts.

## Lesson Objectives

- ★ Students will describe a monoculture.
- ★ Students will sequence 3 different food chains.

## You Will Need...

- |                      |                     |                        |
|----------------------|---------------------|------------------------|
| ★ Food Journal*      | 1 sheet per student | ★ Chain of paperclips* |
| ★ Homework Sheet     | 1 sheet per student | ★ Stapler or Tape*     |
| ★ Food Chain Papers* |                     |                        |

\*Additional preparation needed

# Lesson Plan

## Class Warm Up

### Discussion Question:

What do fish eat? What do chicken eat?

### Vocabulary Preview

1. **Web of Life** - The complicated connection of all the animals and plants that live together
2. **Food Chain** - A line showing how each living thing gets food, and how energy is passed from creature to creature

## Class Story

Welcome back to adventures with our Food Heroes! As part of their mission to Save the World, the Food Heroes have started doing volunteer work with Sage. Community volunteers are people who do work to help make their community a better place – not for any money. Today, the Food Heroes join Sage and a group of kind, local volunteers to clean up litter. Litter is trash that people have thrown on the ground. They are walking together on the street and in parks, cleaning up trash.

“I can’t believe how much trash people just throw onto the ground!” exclaims Kai. “Don’t they realize that someone will have to pick it up for them?”

“Why don’t we pass the time by singing some songs?” asks a volunteer gently.

“Do you all know the hand-washing song?” asks Clay. “We can teach it to you!”

Everyone in the group happily sings the hand-washing song as they work and laugh.

“Look up there!” cries Jade suddenly. “It’s a hawk!” Everyone gasps

## Helpful Hints

Get the class warmed up for this lesson by asking a discussion question.

Every part of nature can be reborn!



in surprise and sees a majestic hawk gliding in the sky. The hawk swoops down into the field and catches a mouse!

“Ah, the beautiful web of life,” sighs Sage.

“What is the web of life? Why is it a web?” asks Terra.

“Well, the web of life is the complicated connection of all the animals and plants that live together,” explains Sage. “For example, that hawk ate that mouse. But what does the mouse eat?” asks Sage.

“Umm, some grass?” guesses Ava.

“That’s right Ava!” says Sage, “That little mouse that ran past our feet eats grass. And what does the grass need to survive?”

“Water, soil, and sunlight!” replies Jade.

“Exactly,” nods Sage, “All the tall grass around us needs sunlight and healthy soil. But there are so many connections that could happen in between the hawk, the mouse, the grass, the soil, and the sunlight. Maybe instead of a mouse, a rabbit eats the grass, then the hawk eats the rabbit. Or maybe a snake eats the rabbit! There are many chains along the web that can happen. But no matter where you are, each chain will always bring you back to the soil and sunlight! Isn’t the web of life amazing?”

“Wow, the Web of Life sounds amazing!” Says Kai,

“Great! Do you understand now?” says Sage.

“Oh yes,” replies Terra. “We are all connected to the living things in our surroundings: to the animals, to the grass, and to the sun, soil, and water!”

“But doesn’t that mean we, as humans, are at the top of the food chain?” asks Kai. “Because we eat plants and animals, but nothing eats us.”

“Yes, that’s also true,” says Sage. “Humans are at the top of the food chain and by littering, by doing bad things for our world and our oceans, we hurt this web of life. What we do makes a difference.”

“I understand,” nods Ava. “We need to keep the web of life flowing!”

“What we do makes a difference in the world,” agrees Jade.

“Thanks for the lesson Sage, and thank you to the volunteers and everyone who helped us learn about the web of life!” says Clay.

Wow! The web of life is really important right? Why don’t we do one more coloring activity to remember the importance of the food chain.



I wish I might.  
I wish I might,  
change the world  
with every bite.



## Mini-Lesson

### The Food Chain:

Discuss with the class that every food chain begins with the sun, because it helps plants grow that are then eaten by animals. Using the Food Chain poster, go over each chain, explaining the steps. There are two sets of food chains for scaffolded learning, some are numbered, and some are not.

Demonstrate putting the strips into order. Tape or staple the chain together. Use this food chain as an example: Sun (1), grass (2), bug (3), rat (4), cat (5).

Brainstorm with the class what would happen to the food chain if we took the insect out? What is going to happen to the rat now that the insects are gone?

Highlight to the class that if one animal or plant is gone from the food chain, all of the other animals are in trouble. This is bad for humans and all animals attached to the food chain.

For example, bees are responsible for making all of the fruits and vegetables we eat. Imagine if we couldn't eat our favorite fruit or veggie ever again! That would be terrible, wouldn't it? We have to make sure that there are enough animals and plants to keep all of the different food chains together.



## Class Activity

### Food Chain:

Let's connect different plants and animals to make our own food chains!

Split the students into groups and distribute each the cut-out plants and animals from one strip from the Food Chain slip or have them cut them out themselves.

Groups will figure out which order the different sets of animals should go in!

Sun	Flower	Bee	Lizard	Cat
Sun	Tree	Moth	Lizard	Big Bird
Sun	Plant	Worm	Chicken	Human
Sun	Grass	Bug	Rat	Cat

Call on students to realize what happens when you take one member out of the food chain.

After each round, switch food chains with other groups.

Turn this into an arts n' crafts activity by having groups stick their food chains with glue onto colorful strips of paper!

## At-Home Activity

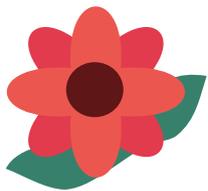
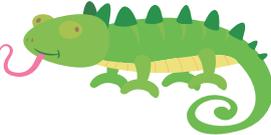
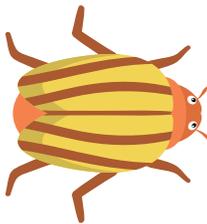
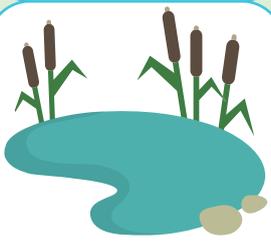
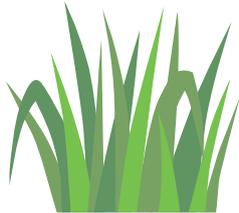
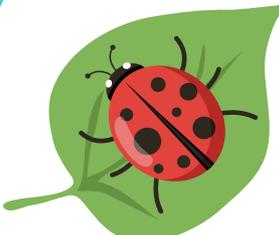
On the "Fill in the Food Chain" homework sheet, fill in the missing labels, pictures, and numbers for different food chains.

Complete a Food Journal.

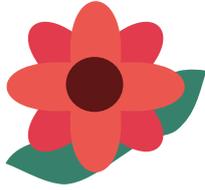
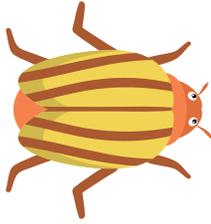
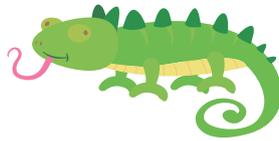
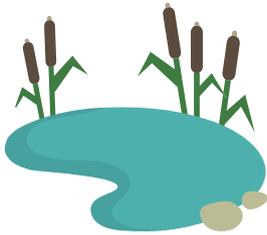
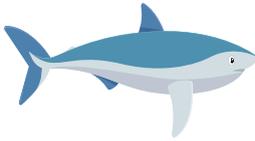
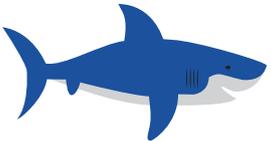
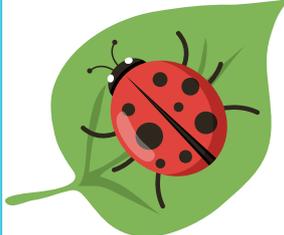
There are two versions of the cards. In one version, each card will have a different number to give students a clue about the correct order of the food chain. Depending on your students, you may choose to use the numbered or regular cards.



# Food Chain

				
Sun	Flower	Bee	Lizard	Cat
				
Sun	Tree	Moth	Lizard	Big Bird
				
Sun	Water Plants	Small Fish	Big Fish	Shark
				
Sun	Plant	Worm	Chicken	Human
				
Sun	Grass	Bug	Rat	Cat

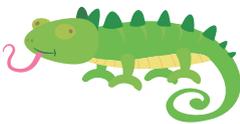
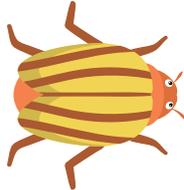
# Food Chain

1 	2 	3 	4 	5 
Sun	Flower	Bee	Lizard	Cat
1 	2 	3 	4 	5 
Sun	Tree	Moth	Lizard	Big Bird
1 	2 	3 	4 	5 
Sun	Water Plants	Small Fish	Big Fish	Shark
1 	2 	3 	4 	5 
Sun	Plant	Worm	Chicken	Human
1 	2 	3 	4 	5 
Sun	Grass	Bug	Rat	Cat

# At-Home Mission

Name: \_\_\_\_\_

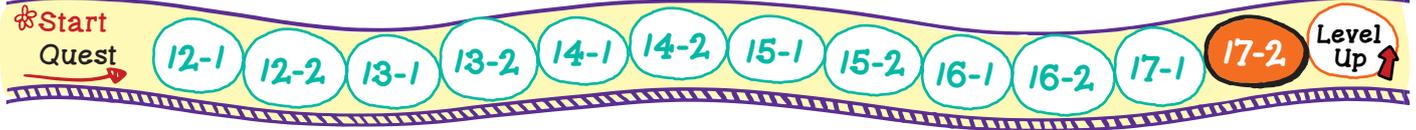
Fill in the missing labels, pictures, and numbers for the following food chains. The first one has been completed for you. Remember, all food chains start with the \_\_\_\_\_.

1  Sun	2  Tree	5  Big Bird	4  Lizard	3  Moth
5 Shark	1  Sun	4  Big Fish	3  Small Fish	2 Water Plants
 Sun	2  Leaves	5 Human	3 Worm	 Chicken
Sun	 Rat	5 Cat	Bug	2 Grass

Parent's Signature: \_\_\_\_\_



# Web of Life



## Introduction

Let kids become entangled, immersed and treasurers of the harmony of life they are interwoven into with the “Web of Life” challenge

Children will receive an introduction to climate change and its effects.

## Lesson Objectives

- ★ Students will identify the differences between climate and weather.
- ★ Students will identify different ways they can decrease their environmental impact on the planet.

## You Will Need..

- |                   |                     |                              |               |
|-------------------|---------------------|------------------------------|---------------|
| ★ Food Journal*   | 1 sheet per student | ★ Rainbow coloring supplies* |               |
| ★ Homework Sheet* | 1 sheet per student | ★ Eco-friendly Posters*      | 1 per student |

\*Additional preparation needed

# Lesson Plan

## Class Warm Up

### Review:

Review what food chains are and how it is really important that they don't break. If the food chain breaks, it can hurt the other animals and plants. It can even hurt humans.

### Discussion Question:

What is weather? Climate? Climate Change?

### Vocabulary Preview

1. **Weather** - Daily state of the atmosphere
2. **Climate** - Average weather over a long period of time
3. **Climate Change** - A change in the world's climate due to an increase of the global temperature mainly caused by too much carbon dioxide and other gases in the atmosphere

## Mini-Lesson

Introduce to the class what climate change is, and the importance of the issue.

To better explain climate change, break the words down. Explain that climate is the weather that stays the same for a very long time (years), whereas whether changes every day. For example, if it's sunny today but raining tomorrow, this is weather.

Now, put the two words back together. Climate change is just a big word that means the world's climate is changing from what it has been in past years. Today, the climate is getting warmer.

## Helpful Hints

Get the class warmed up for this lesson by asking a discussion question.



Discuss with children why the change in the Earth's climate is a bad thing. It's bad that our Earth is warming up because plants, animals, and humans need the Earth's climate to stay the same and not get warmer.

Every living thing on Earth is used to the climate we have had for a very long time. Now that the Earth is getting warmer summers could become hotter and our winters might not be as cold. Animals and plants depend on the climate to tell them so many things like when to eat or when to travel to a different place. For example, polar bears live in cold places with lots of ice that is now melting because it is too warm. Now polar bears are losing their homes.

Climate change can easily break the food chains that are already being harmed by overfishing, pesticides, trash, and more. It is also bad for humans when we have a planet that is too warm. We need the food chains to be complete so that we can eat all the same plants and animals that we normally do.

Brainstorm with students the reason our planet's climate is changing.

This is because humans are using a lot of materials that come from the Earth, and when we finally get the materials out of the Earth, bad gases are released into the air. Too much of these gases make the planet warm up.

Brainstorm with students what we can do to help the planet.

Relate back to the solutions taught throughout other classes.

## Class Story

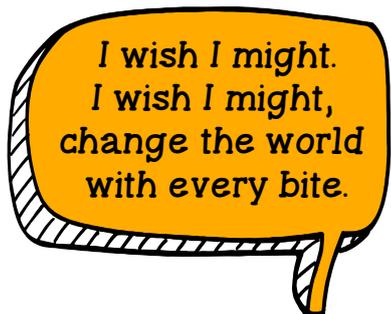
*"So, what do you think, now that you know about climate change and how it affects the web of life?" asks Sage.*

*"It makes me sad," says Terra. "I know that this problem is so big, but we are so small. We are only a few people."*

*"Don't think like that!" says Ava hopping up. "We are only a few people now, but that means we need to do everything we can so our little bit can count. If everyone did a little bit, our combined effort will solve the problem!"*

*"I think we need to do everything we can to stop it!" agrees Clay. "It doesn't just affect us;*

*it affects our friends and our family!"*



I wish I might.  
I wish I might,  
change the world  
with every bite.



“Not just them, Clay,” says Jade, nudging Clay. “It affects everyone everywhere!”

“I have a plan of exactly how we can start,” says Kai firmly. “We can make posters! We can make posters about how to stop climate change and how to make the world a better place from everything we’ve ever learned about being a Food Hero. Let’s ask the helpful volunteers to post them nearby!”

“What a great idea!” says Sage smiling. “Spreading knowledge is spreading love. Can I help your mission?”

“Of course!” cry the Food Heroes. “Grab the paper and the markers!”

The Food Heroes get busy and creative making their colorful eco-posters to spread knowledge and love. When they are done, they hold them up

“These posters are beautiful!” Says Ava, giddy with excitement. “I can’t wait to post these posters up to help others learn more about the things we care about!”

“I agree!” Says Kai, “It is so important to recruit new Food Heroes and partners along the way!”

Sage nods in agreement, proud of all the work the Food Heroes are doing!

“I remember now,” says Jade, “that spreading knowledge is spreading love! And I’m always excited for the great work we will continue to do together!”

“This particular topic is so super important too!” Says Terra, pointing to the picture of the Earth that she drew on her poster. “Caring for our Earth and making sure our climate stays steady is critical for all of us living beings on this planet. Look at the trees, look at the sky, look at the ground we are standing on and even our friends around us! We are all part of this ecosystem and being kind to the environment is such an important part of life.”

Clay nods his head, gazing at the beautiful landscape surrounding them. “There are so many people in this world, and as Food Heroes, one of our goals is to make other Heroes and other family members care for our Earth in the same way!”

What are the Food Heroes saying about how their posters can help others? How can your poster impact your own community? What do you think is important to put on your poster?

Every part of nature  
can be reborn!



## Class Activity

### Eco-friendly Posters:

Call to Action!

In this art activity, we are going to draw and decorate eco-friendly posters to remind everyone to protect the marvelous web of life and to help stop climate change. You may have children create their own or use the example posters for coloring.

You will need recycled paper and coloring supplies. You can add more fun by adding scissors, glue, colorful paper, glitter, straw, artistic tools and other dry recycled materials!

The posters can focus on any environmental topic from the Food Hero challenges or personal interest.

Such as: cleaning the oceans, waste in landfills, clean air, water usage from too much meat, food journeys, protecting important animal and plant species etc.

Try this have a parade at school to showcase the students' work!

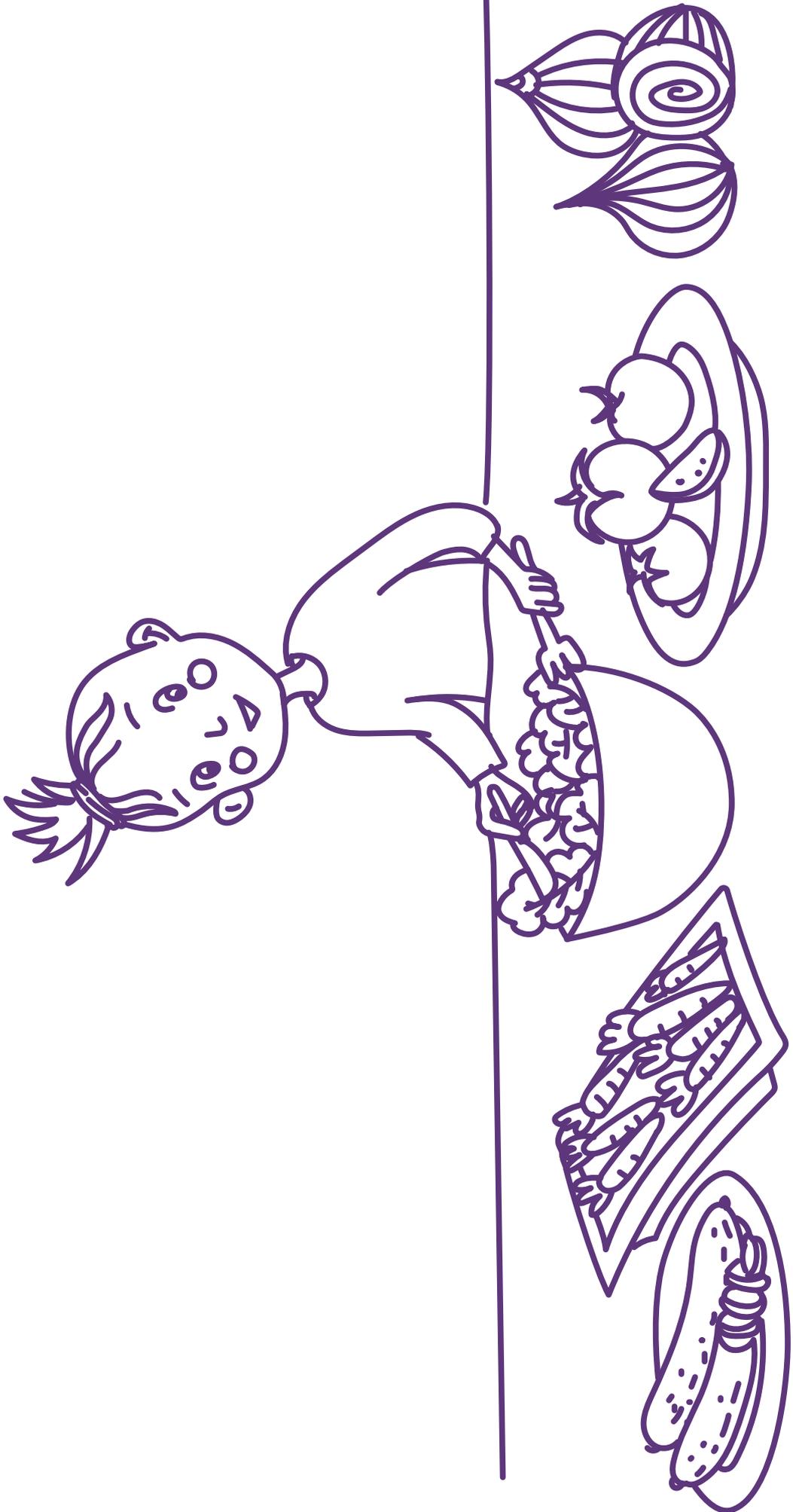
## At-Home Activity

For today's homework invite children to write and illustrate with a parent one way that your family can be more friendly to the Earth.

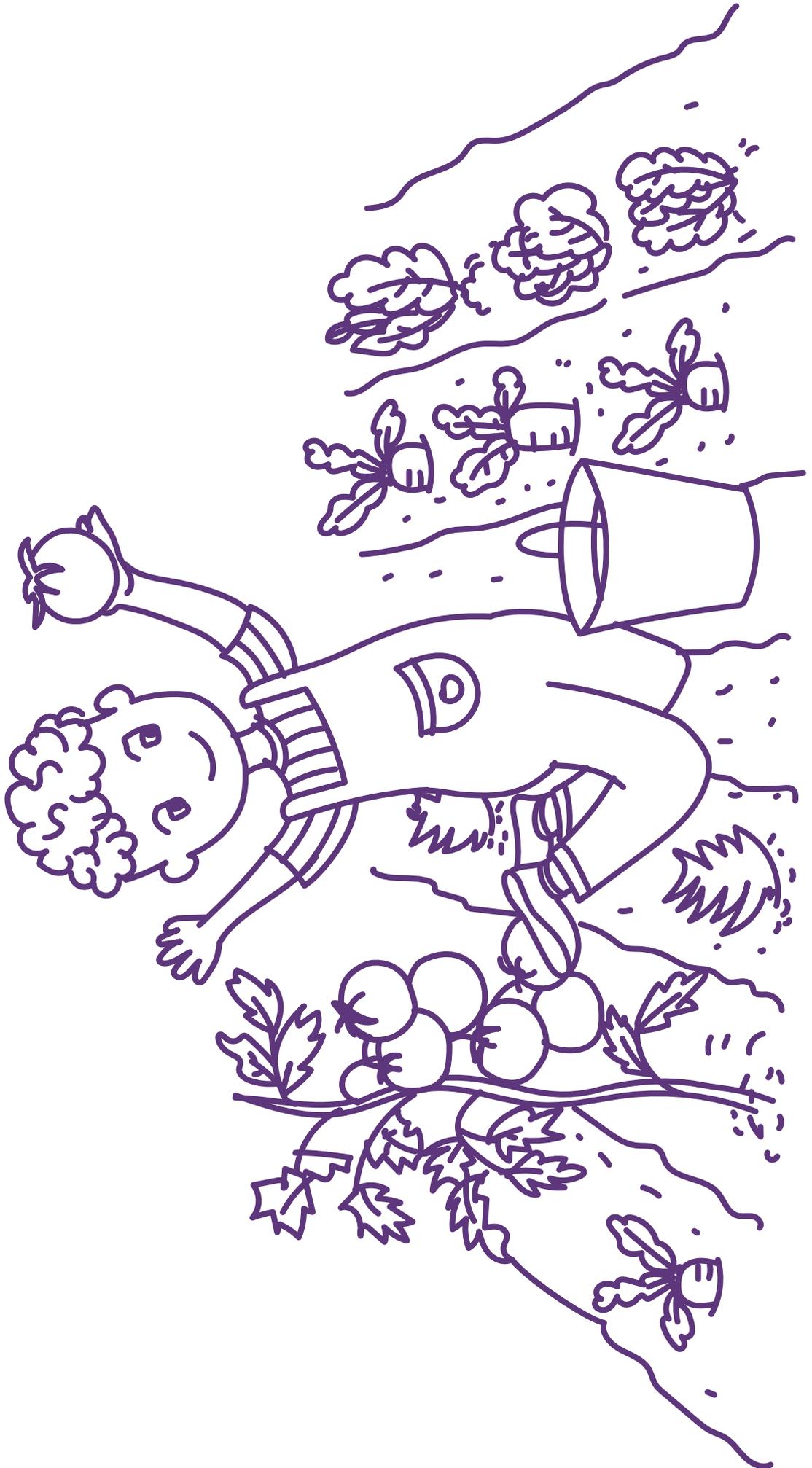
Complete a Food Journal.

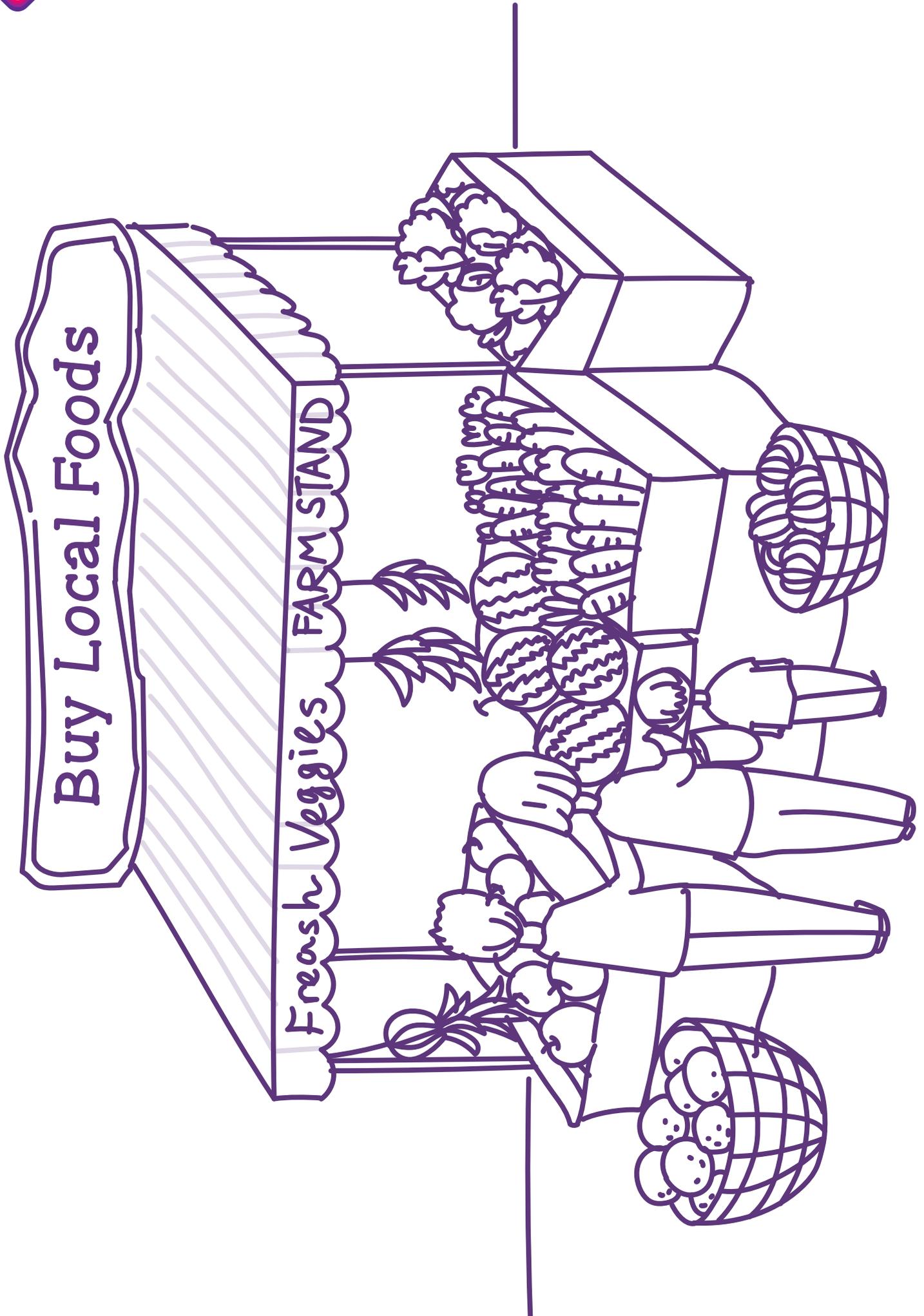


# Eat More Vegetables

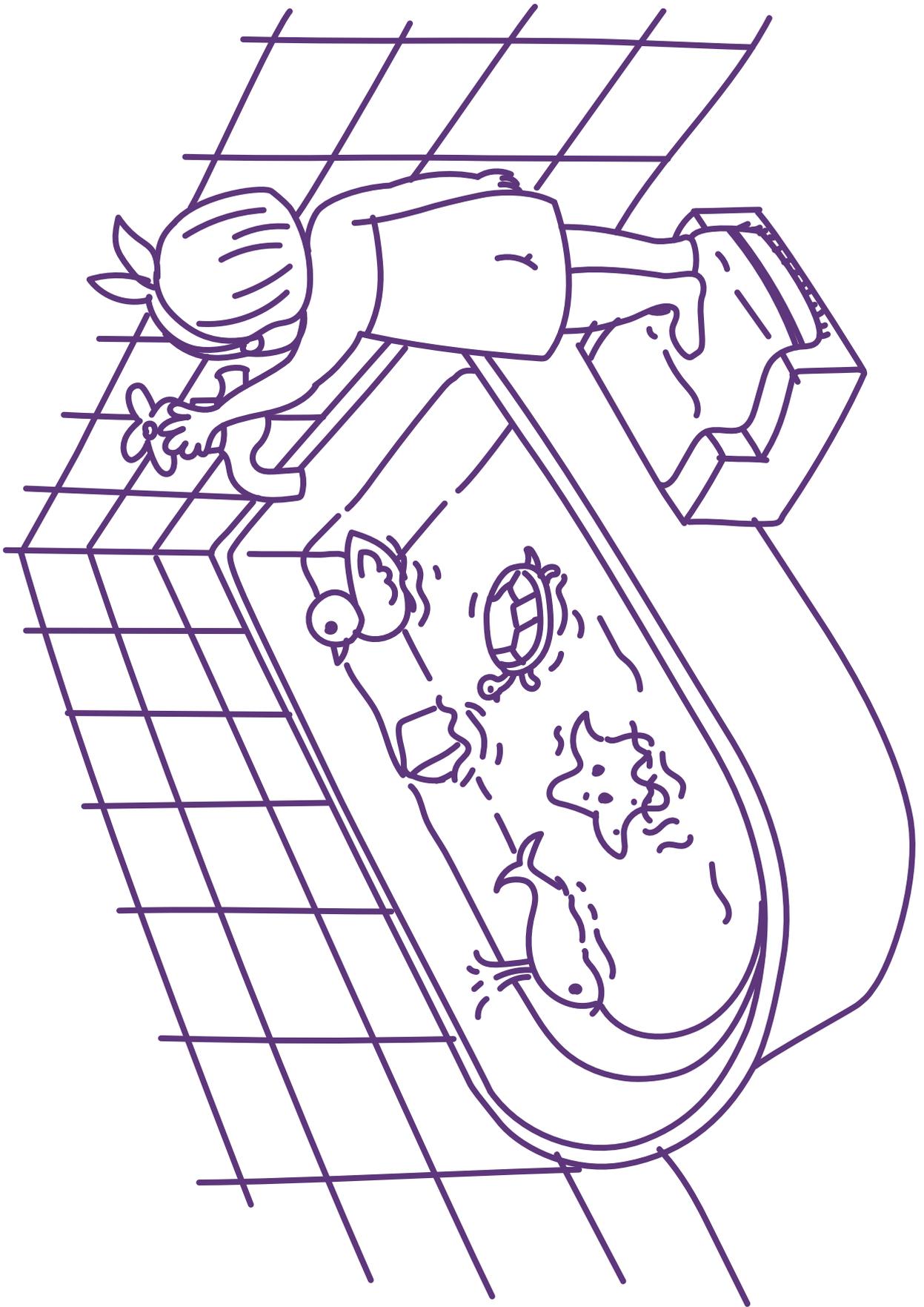


# Grow Your Food

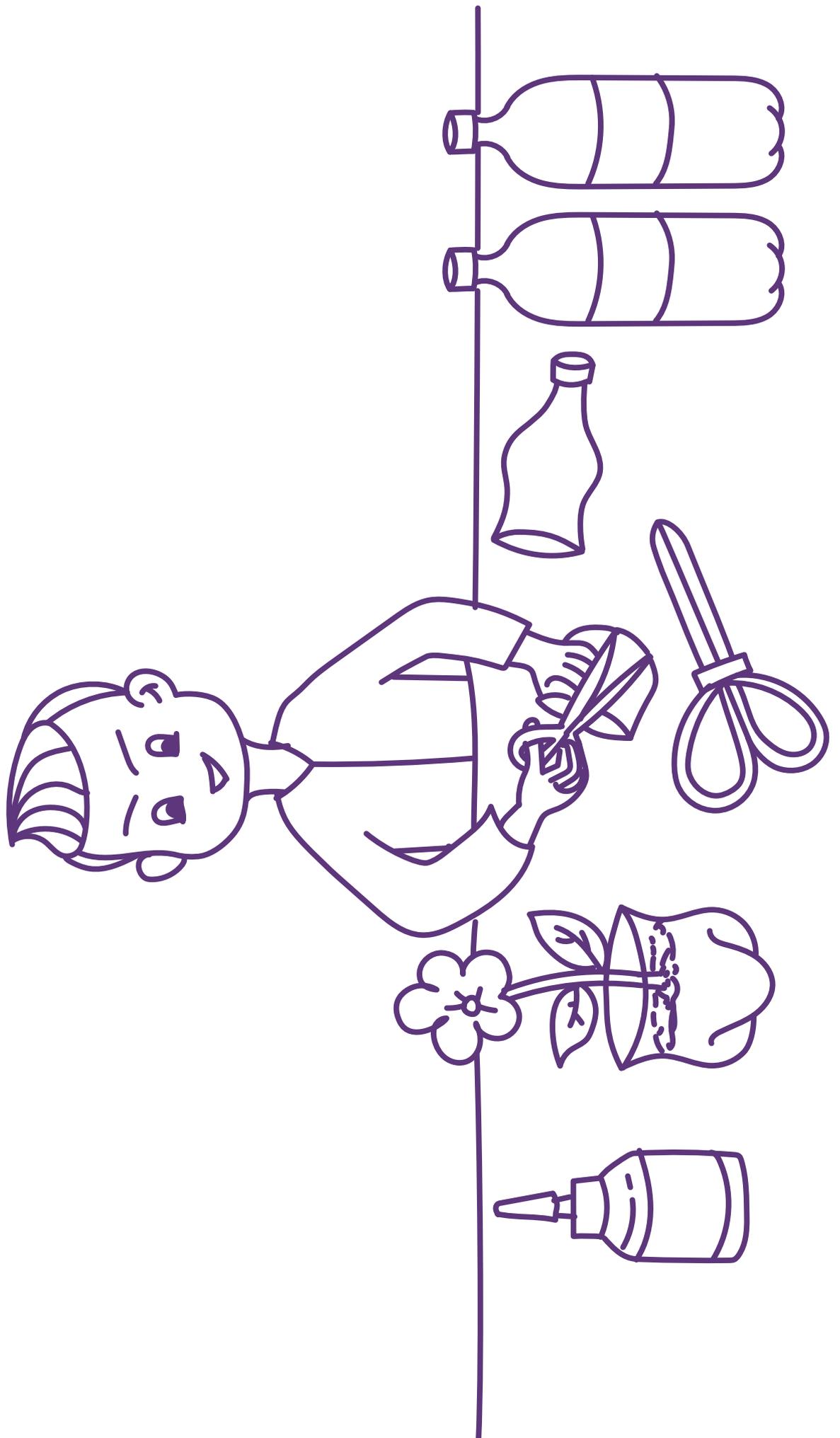




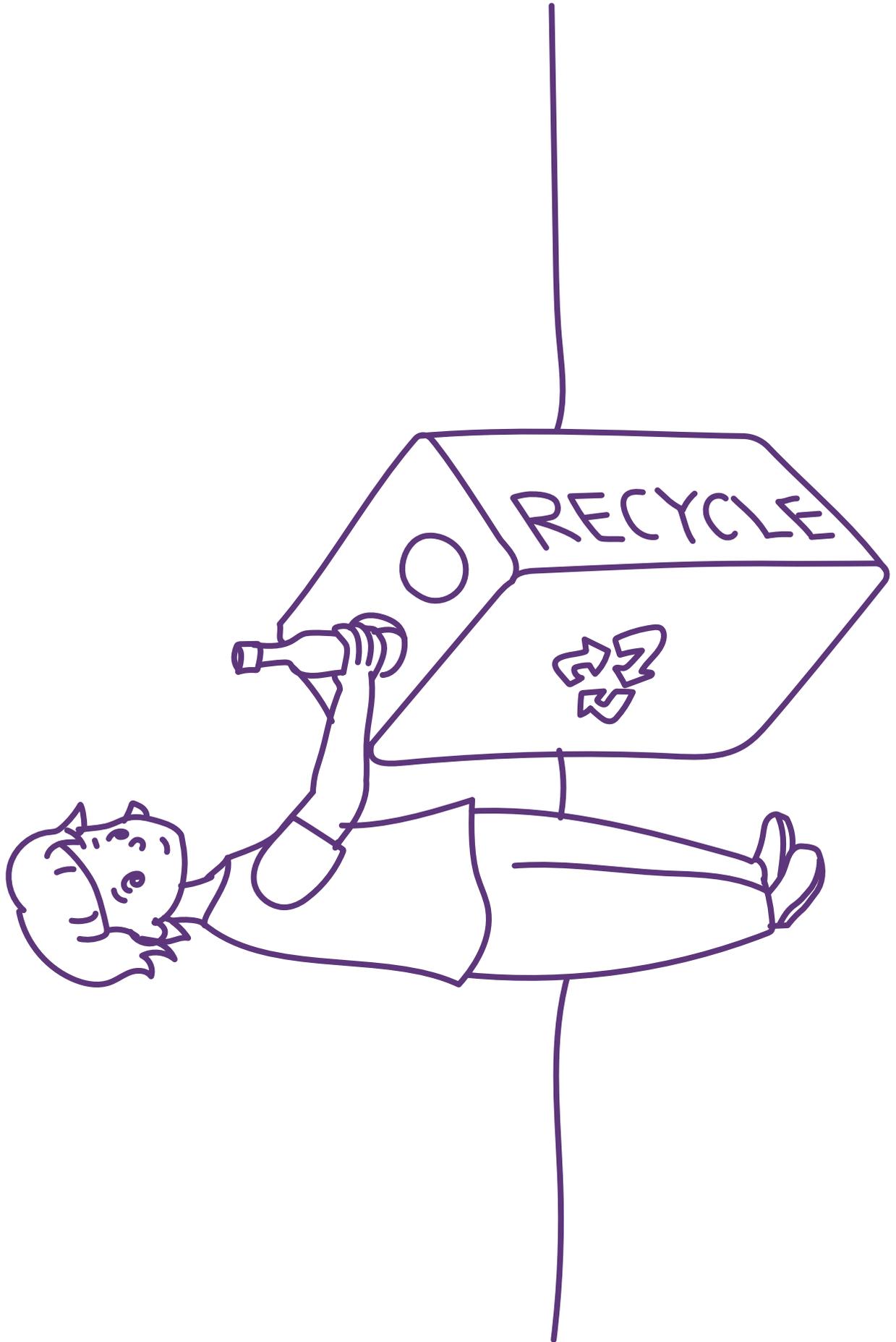
# Conserve Water



# Reuse



Recycle



# At-Home Mission

Name: \_\_\_\_\_

Write and illustrate with a parent one way that your family can be friendlier to the Earth. Here are a few suggestions to get you started:

- Donate old toys, books, clothes, and other items around the house to local charities so that the items can be reused.
- Turn off lights when they're not in use to conserve energy.
- Create a weekly grocery list to reduce food waste.



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Parent's Signature: \_\_\_\_\_

# Color the Web of Life!

Draw arrows to connect the food web!

