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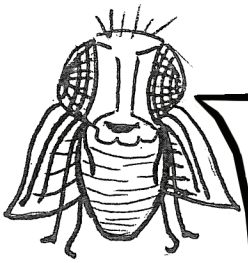
Clackamas County
www.clackamas.us

# An apple isn't JUST an apple...

An interactive zine about the food you eat...



And the food you don't.



Hi!
I'm a fruit fly
And I'm a friendly spy!
If you saw what I saw you might be surprised…

I eat the food that you don't eat.
Your food scraps are always a tasty treat.

But when you throw out entire meals
It makes me want to cry
I wonder if you've even tried
To look beyond the orange peel…

The parts of food that don't normally get eaten, like banana peels and zucchini ends.




*What are 3 reasons people eat food, starting with the* ***most important reason?***

***1*** _____

***2*** _____

***3*** _____

# Draw what food means to you.

# Word Search

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

| | | | |
|---|---|---|---|
| **Air** | **Food** | **Leftovers** | **Share** |
| **Apple** | **Greenhouse gas** | **Lunch** | **Waste** |
| **Compost** | **Land** | **Pollinate** | **Water** |
| **Energy** | **Landfill** | **Resources** | **Zine** |

**Compost**: A mixture of decaying organic substances, as dead leaves, food scraps, or manure, used for fertilizing soil.

**Energy**: The ability to do work. Energy can exist in different forms, like electrical, mechanical, chemical, thermal, or nuclear. Sources of energy include fossil fuels, solar, wind, hydroelectric, and geothermal.

**Greenhouse gas**: Gases in the air that trap energy from the sun. The most common greenhouse gases are water vapor, carbon dioxide, and methane.

**Landfill**: A system of trash disposal in which the waste is buried between layers of earth to build up low-lying land.

**Natural resources**: Something that is found in nature and can be used by people. Earth's natural resources include light, air, water, plants, animals, soil, stone, minerals, and fossil fuels.

**Pollinate**: Deposit pollen on a flower or plant to allow fertilization

**Zine**: A homemade magazine.


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You need food in order to grow and stay healthy.

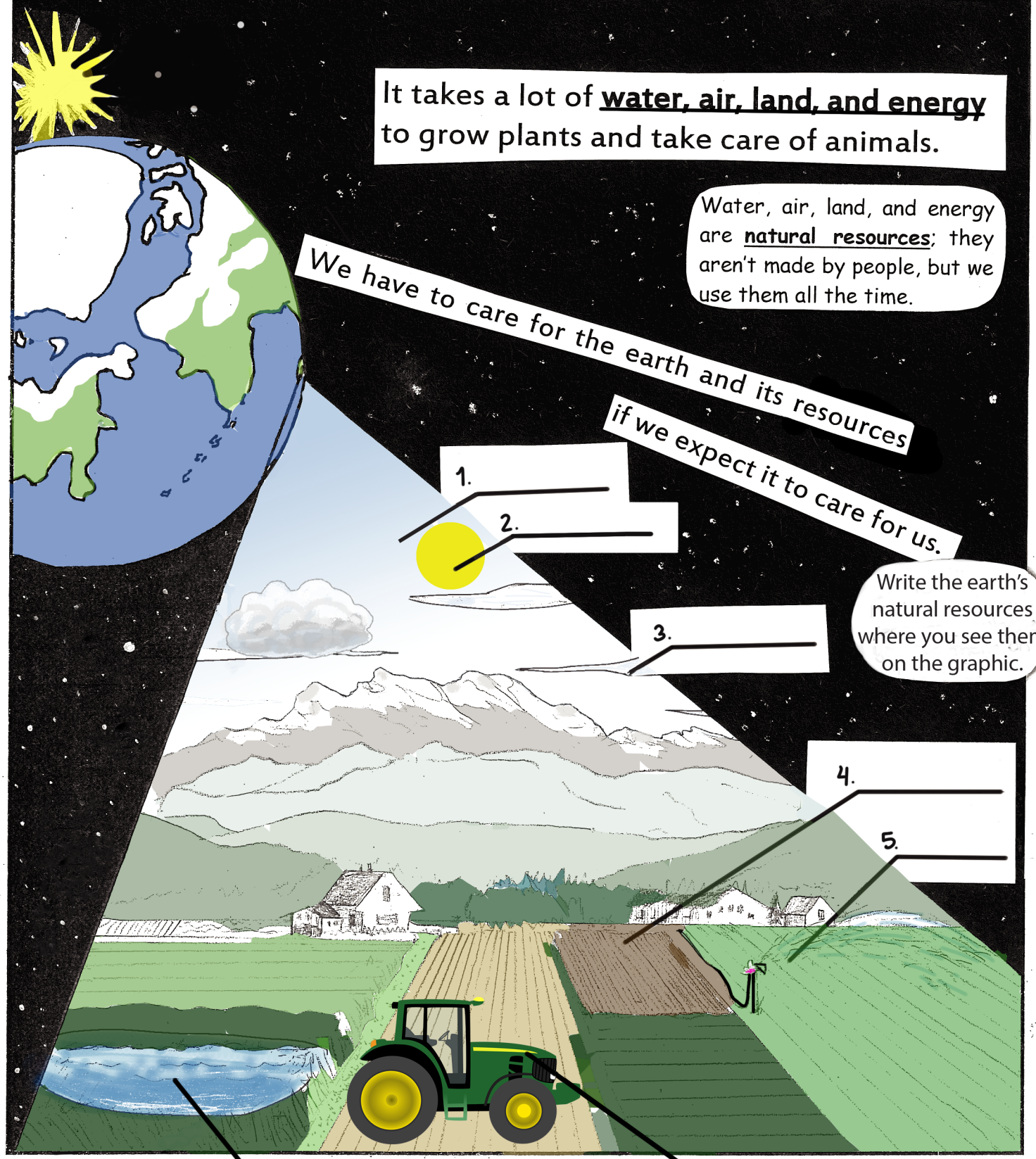
But there's nothing easy about producing food.

It takes a lot of **water, air, land, and energy** to grow plants and take care of animals.

Water, air, land, and energy are **natural resources**; they aren't made by people, but we use them all the time.

We have to care for the earth and its resources if we expect it to care for us.

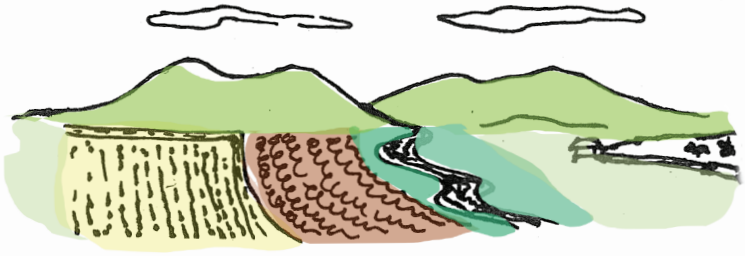
Write the earth's natural resources where you see them on the graphic.



When you throw good food away, all those natural resources get wasted too.





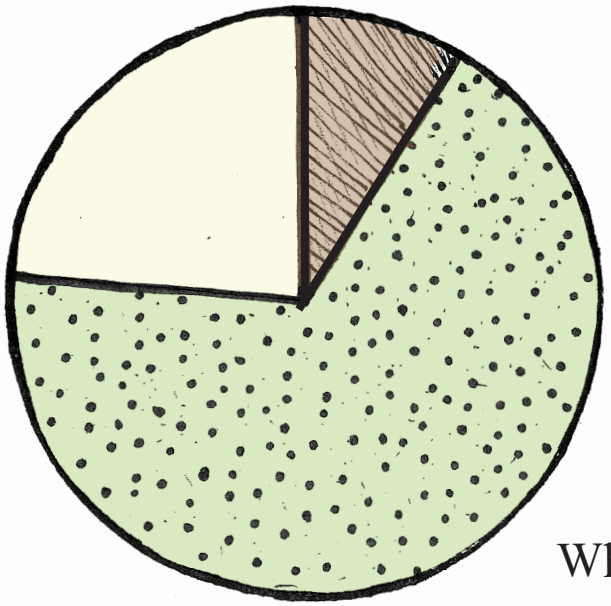


How much good food do you think goes in the garbage (or compost) every day in this country? Enough to fill...

A. A swimming pool?
B. Your school gymnasium?
C. A football stadium?
D. A grocery store?



Here's the breakdown of the food we throw out in Oregon.



Plant-based products and vegetables (66%)

Bakery goods (10%)

Meat, eggs, and dairy (24%)

Which category do we throw out the most?

_____

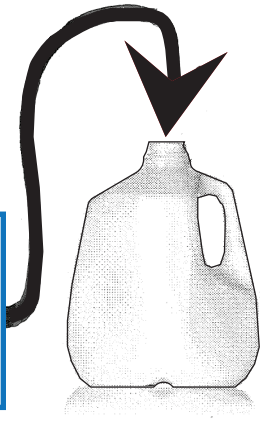


# THROWING OUT A VEGETABLE IS DIFFERENT FROM THROWING OUT A PIECE OF MEAT

Different foods need different amounts of water in order to be produced.

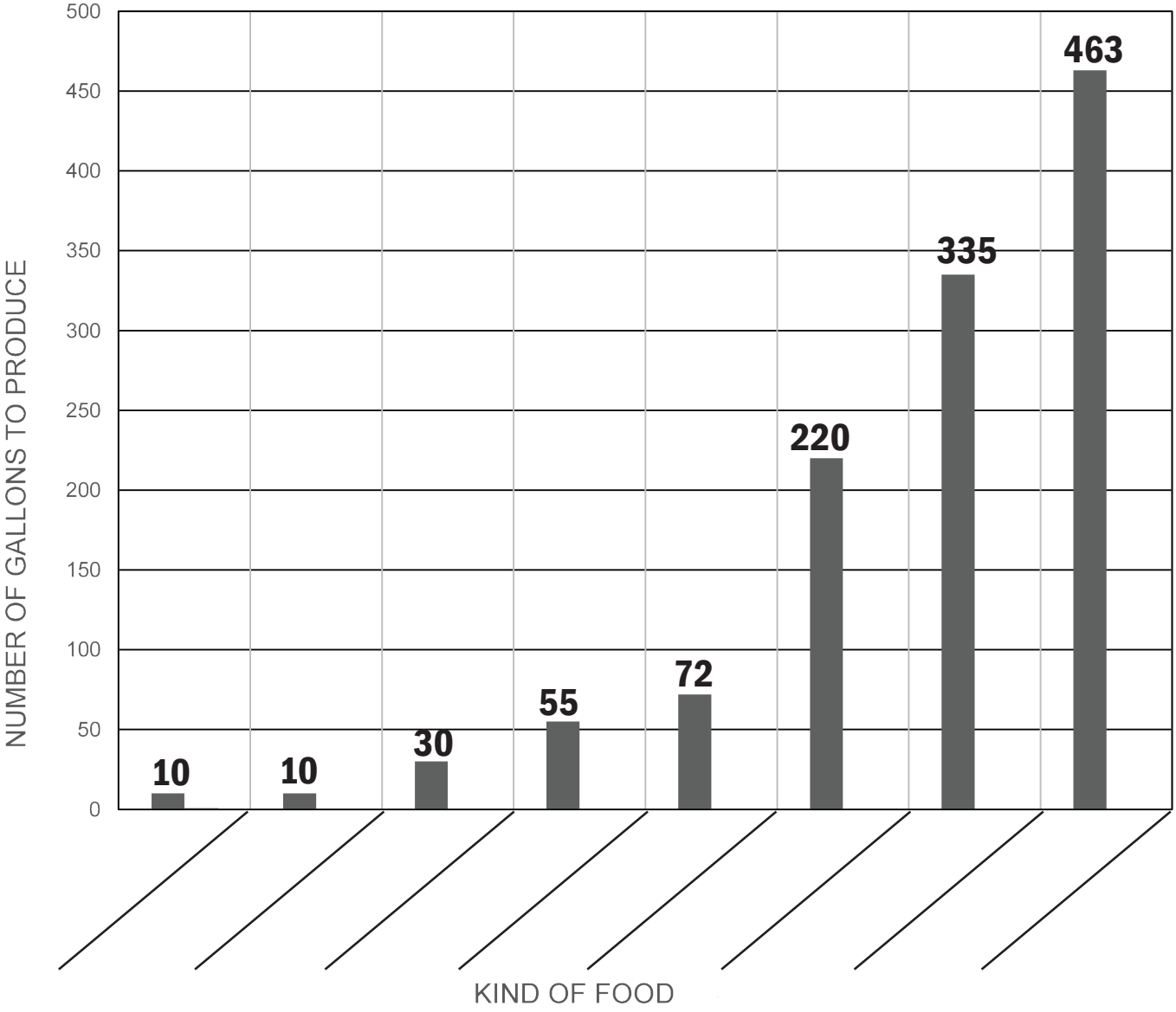


Let's measure water use in GALLONS. What's a gallon? Milk jugs like this one measure one gallon.



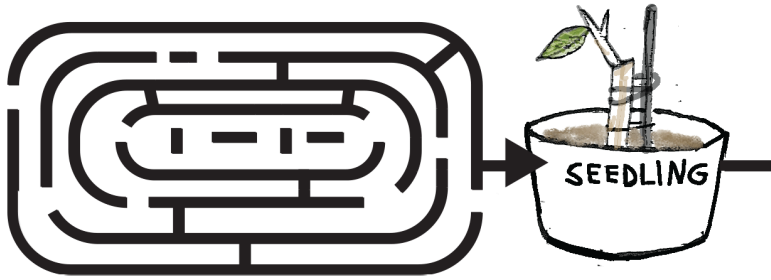
| FOOD | Gallons of water |
|---|---|
| 1 Cup of chopped tomatoes | 10 |
| 1 Cup of milk | 30 |
| 1 Apple | 72 |
| 1 Package of pasta | 220 |
| Personal Pizza | 335 |
| 1 Hamburger patty | 463 |
| 1 Medium Potato | 10 |
| 1 egg | 55 |

**Find the column that goes with each food and write its name on the bottom**



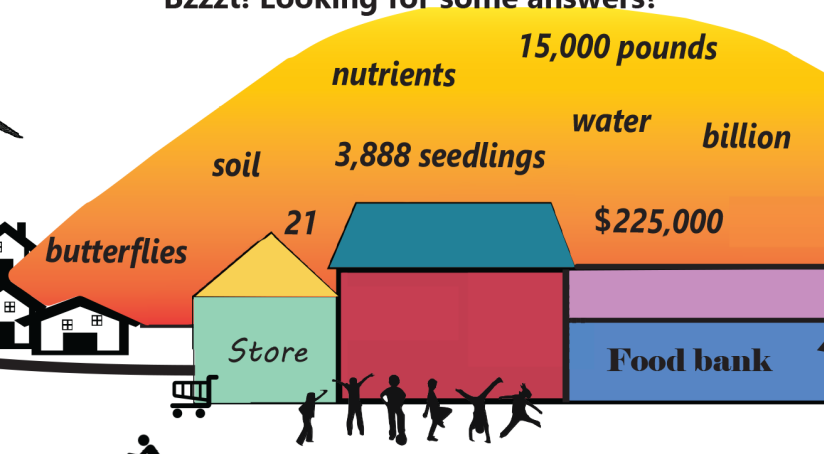



And grab some scratch paper!

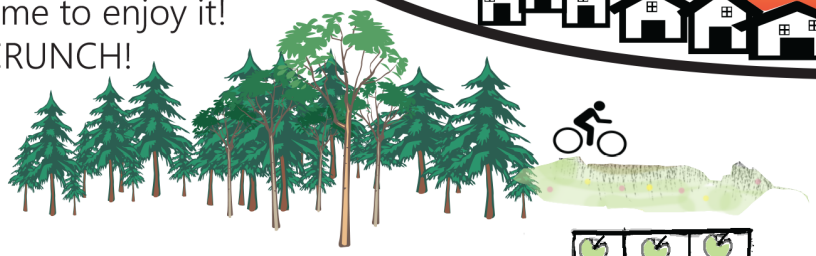


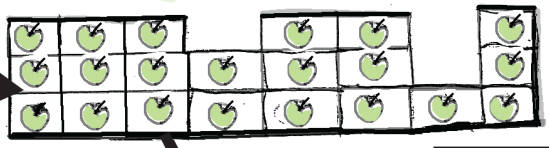



**Bzzzt! Looking for some answers?**




What a long trip this apple has been on! Now it's time to enjoy it! CRUNCH!



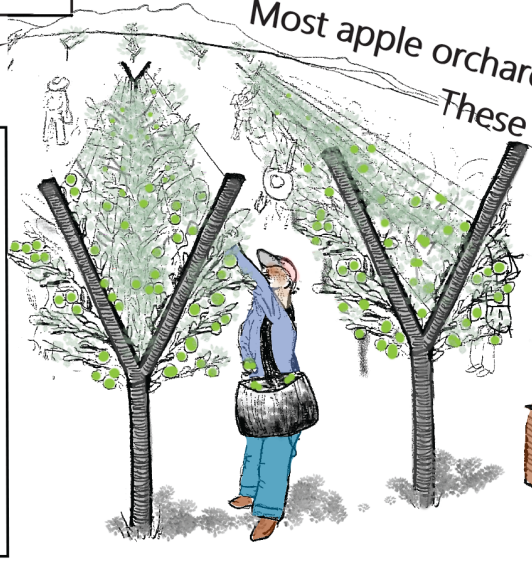


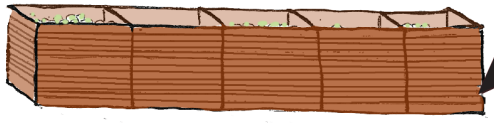
Fill in the blank: Ten to twelve _____ apples are grown in Washington State every year.

**a. billion**
**b. million**
**c. thousand**
**d. trillion**

Apples are often sorted mechanically by size, shape, and color. Then they're packed into boxes like these. How many boxes are there? There are _____ boxes.

Most apple orchards "train" their trees up V-shaped These are often made from heavy-duty





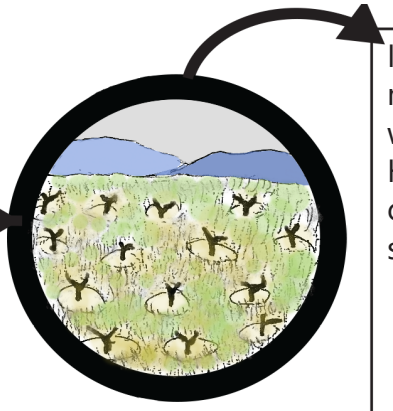
Nearly all apples are harvested by hand. A talented worker can harvest 45,000 apples in a day. If 3 apples equal a pound, how many pounds would that be?

$$3 \overline{)45{,}000}$$

As a new apple farmer, you're going to start by planting ten acres of seedlings. You can plant 388 seedlings per acre. How many total seedlings do you need?

seedlings

x _____ acres



It costs $4,500 per year to maintain one acre, and you won't have fruit for five years. How much will your ten acres cost you until you can start selling fruit?

dollars

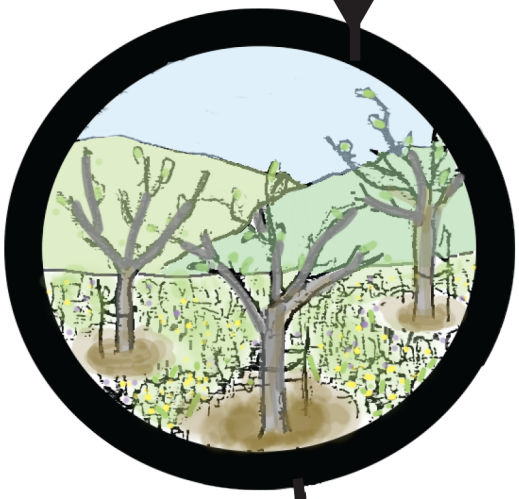
acres

X _____ years

You got a loan for $190,000 to help pay your costs until then. How much do you need to pay out of pocket?

_____





Apple blossoms appear in the springtime. Insects like _____ and _____ help pollinate the flowers so they can become fruit.





What else does a tree need in order to make fruit?

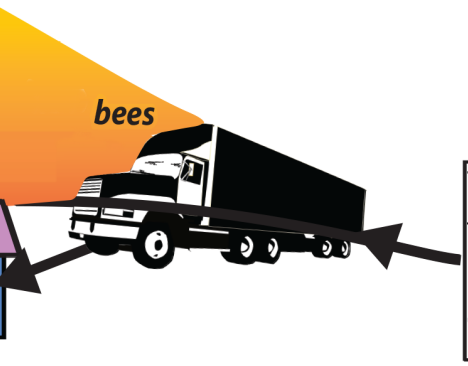
_____

_____

_____

frames, or trellises.

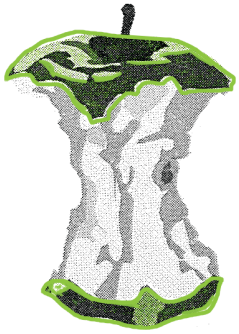
steel and wire.




The boxes are then transported, usually by refrigerated trucks, to different destinations.

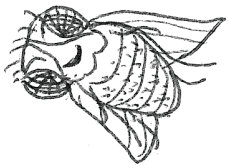


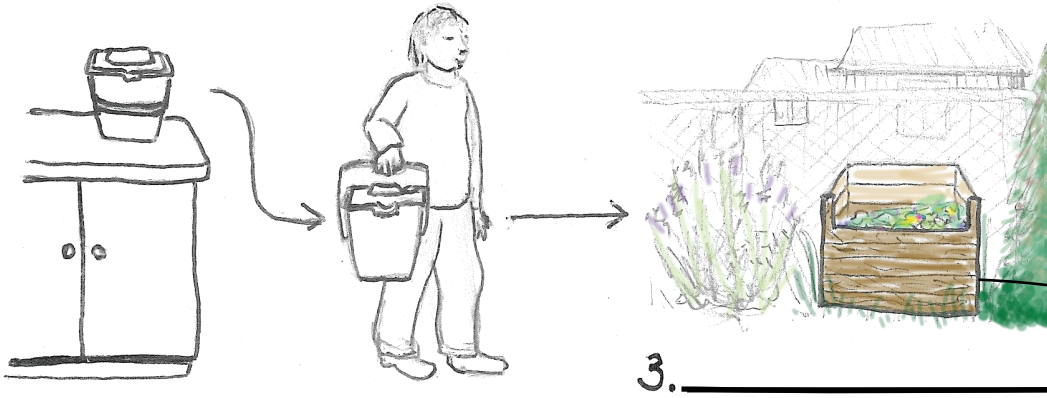
Each of these bins holds about 3,000 apples!



# That was a good apple!

**The next step in the apple's journey depends on where it goes. Follow each path and write down where the apple core ends up: <u>home compost</u>, <u>landfill</u>, or <u>city compost.</u>**





3. _____





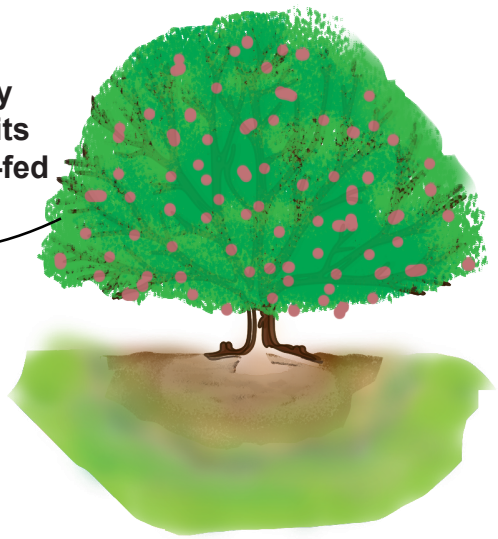

1. _____



2. _____



Although apples haven't been in North America forever, it seems like they have. Enjoy the tasty fruits from this generous, well-fed tree!



The tree benefits from the nutrients in the compost, not only making good apples, but also producing strong branches, roots, and bark.





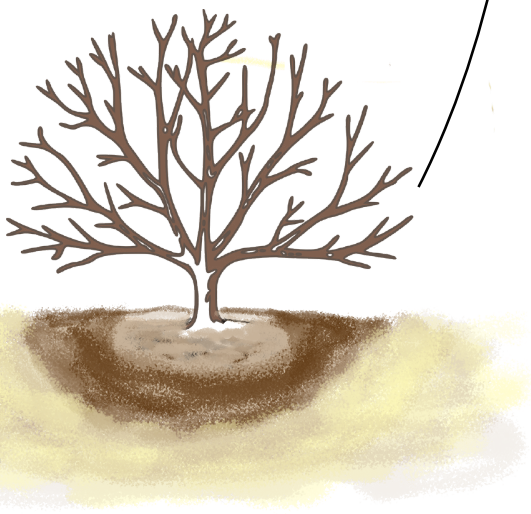
"Soil what's in it for us?"

Now that we've made compost, which is basically new soil, what happens to it? Fully-decomposed compost smells sweet and earthy, and provides nutrient-rich food for plants and trees.



In the spring, the tree gets nutrients from the compost.





Compost is applied around a tree in the fall.



# When you throw out food, what's the reason?

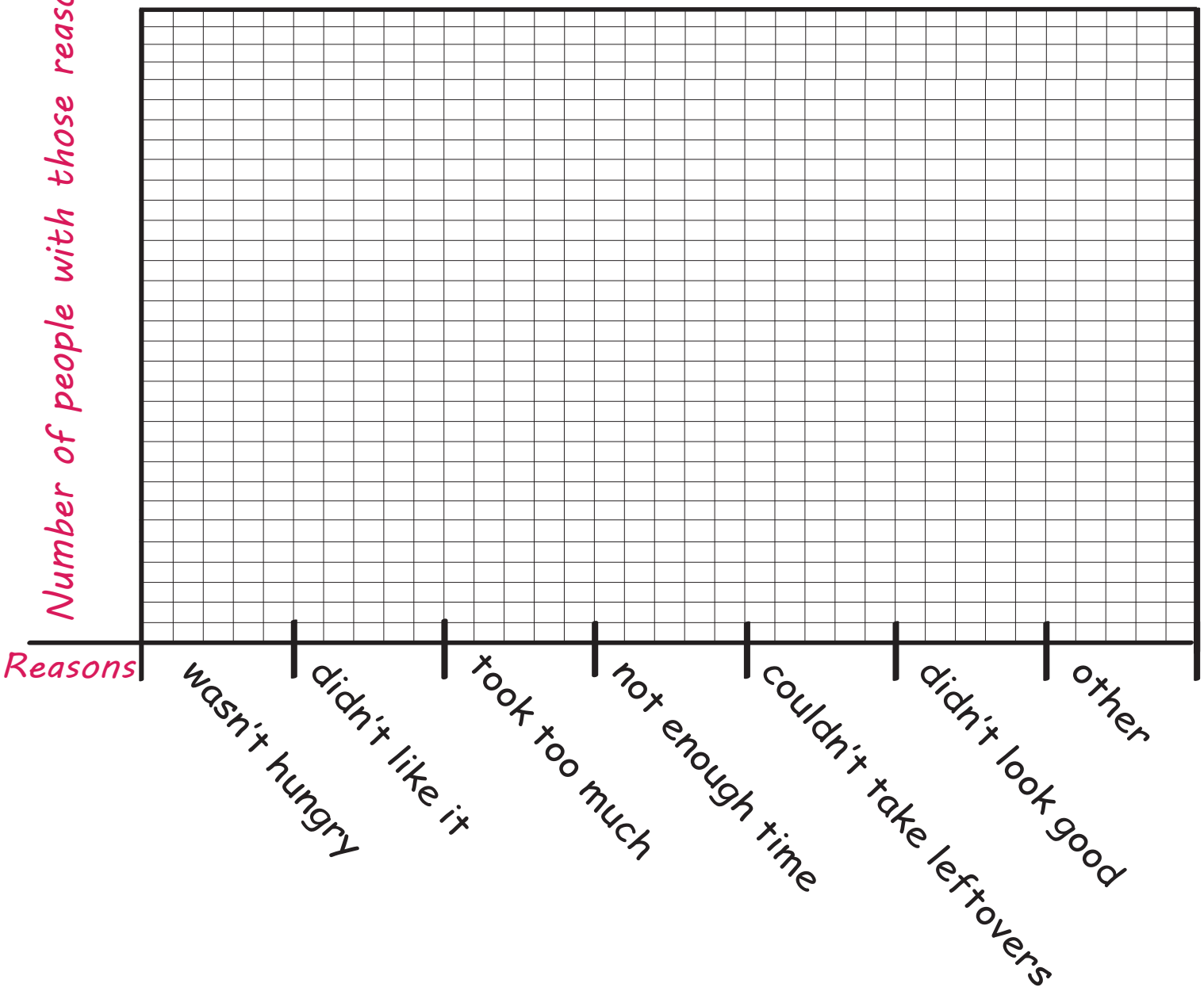
Think about the last lunch you ate. When you throw out food, what's the reason? Mark your personal reasons in the middle column. Then, talk to other people about what they threw out and why. Record their answers.

Graph them on the next page!

| REASONS | Your Reasons<br>*Put a tally mark in this column next to your reasons* | Your class's reasons<br>*Put tally marks in this column for everyone's answers* |
|---|---|---|
| 1. I wasn't hungry. | | |
| 2. I didn't like it. | | |
| 3. I took too much and couldn't finish it. | | |
| 4. I didn't have enough time to eat. | | |
| 5. I couldn't take the leftovers with me. | | |
| 6. It didn't look good. | | |
| 7. Other _____ _____ | | |

Use this space to write down what kinds of food got thrown away.

# "Why we throw out food" BAR GRAPH




What was the most common reason a food was thrown out?

What foods were thrown out the most?

What might you do differently to waste less food at your future meals?

# Save the food!

## What you can do.

Some schools have a share table, where you can leave store-packaged food or whole fruits.



1. Do you have a share table like this at your school already?

YES NO




2. Why does it make sense to have a table like this at school?

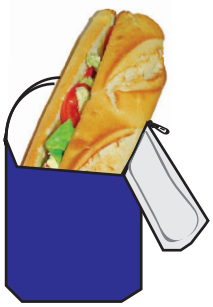
_____

_____

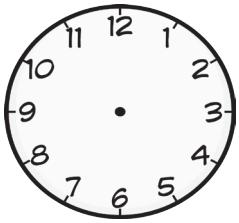
Fruit with a peel is also good to go here, even if you bring it from home!!



Most food from home can't go on the share table. Put it back in your lunch bag to eat later!



3. What time of the day are you the most hungry?

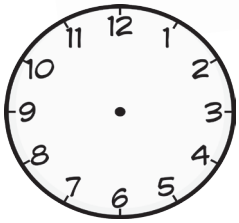


_____



4. Do you have recess before lunch, or after?

BEFORE AFTER



5. When's your favorite time of day for a snack?

_____

6. What are your favorite snacks?

_____

_____

_____

7. HOW MANY FRUITFLIES DID YOU COUNT IN THIS WORKBOOK?

_____

8. What would help you to eat more of your food?

_____

_____

_____

# Learn more, take action

**USDA Share Table Guide —** Many schools save packaged foods, milk, yogurt, and whole, uneaten fruits to be shared. If your school does not have a share table, consider starting one.
**USDA guidance on share tables**: bit.ly/USDAsharetable
**How to start a share table:** bit.ly/sharetable
**School food waste reduction infographic:** bit.ly/foodgraphic

**School Milk Dispensers (Video) —** Schools that serve milk from a dispenser throw away around 40% less milk than schools that serve milk in cartons! Watch the video to see if your school may benefit from using a milk dispenser.
**Video:** bit.ly/milkdispenser

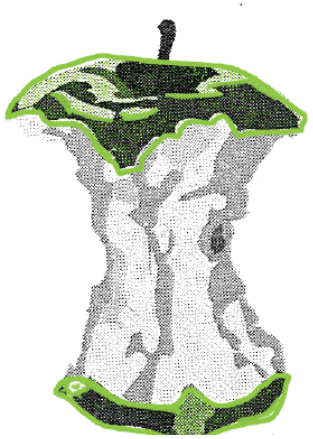
**School Waste Reduction Guide —** This guide, created by Portland Metro regional educators, is full of practical school waste reduction tips and resources.
**Guide:** bit.ly/schoolwastereduction

**Love Letter to Food (Video) —** This 3-minute video packs in a ton of information about how, where, and why food is wasted. Use the video guide to capture facts as you watch.
**Video:** bit.ly/lovelettertofood
**Video guide**: bit.ly/foodvideoguide

**World Wildlife Fund Food Waste Educators' Guide —** This guide offers teaching tools about wasted food.
bit.ly/foodwastekit

**Save the Food —** 40% of the food that is produced is thrown away. 20% of the food we each buy never gets eaten. Learn more about this problem and how you can help.
www.savethefood.com

**Eat Smart, Waste Less —** Eat Smart, Waste Less is a tool to help families waste less food at home. Take the challenge, and change your habits.
www.eatsmartwasteless.org



## Answer Guide

**Page 1**

1. Nutrients (to grow/live) 2. Taste
3. Social/Celebration/Any acceptable answer

**Page 3**



**Page 4**

1. Air 2. Energy 3. Water/Air 4. Land
5. Water 6. Energy 7. Water

**Page 5**

C, Plant-based products and veggies

**Page 7/8** (Answers clockwise from Start)

3,880 seedlings, $225,000, $35,000, bees/butterflies, nutrients/water/soil, 15,000 pounds, a. billion, 21

**Page 9**

1. Landfill 2. City Compost 3. Home Compost

**Page 13**

23 fruit flies

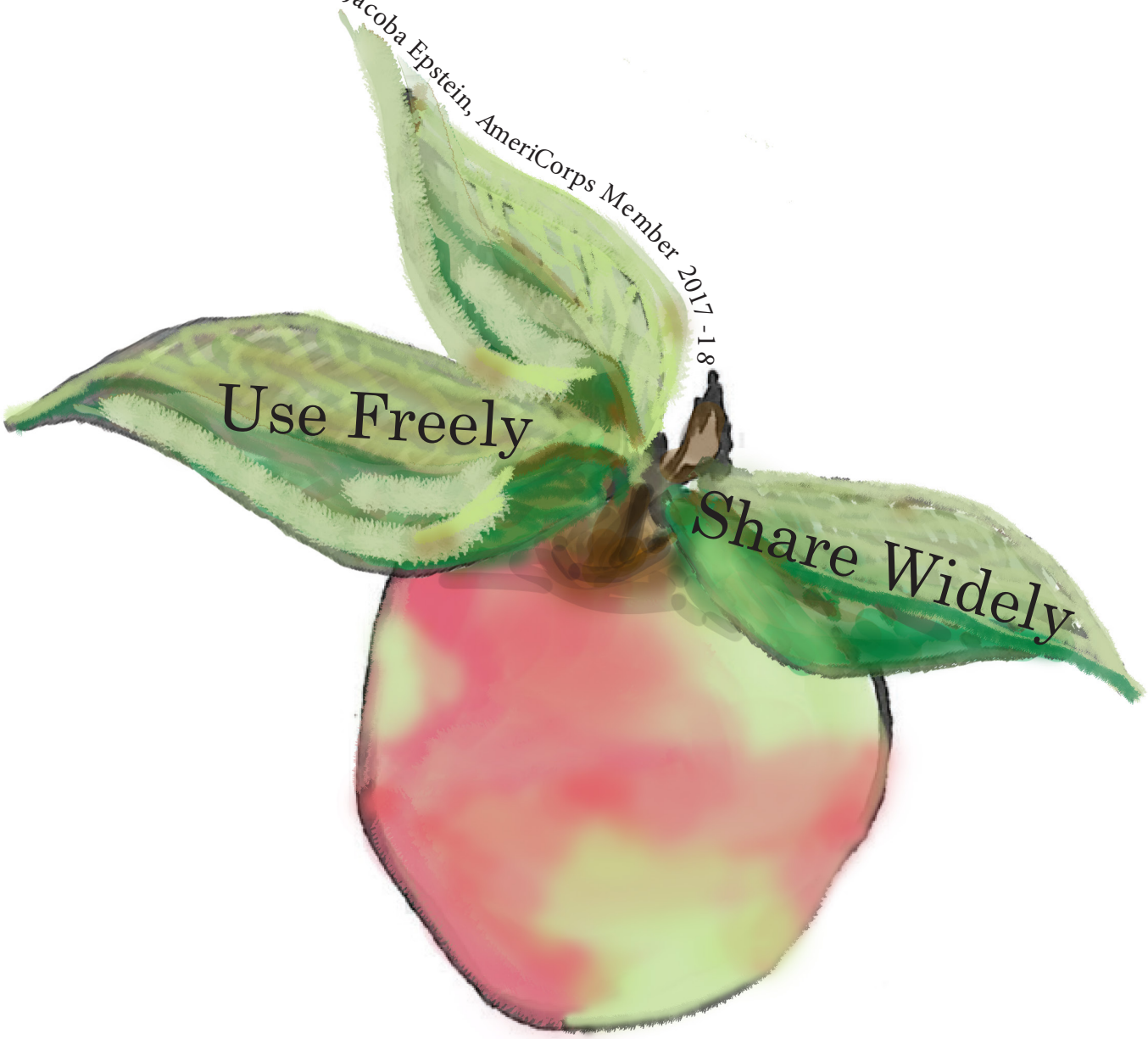
~Which vegetable can't you take on a boat? ➤Leeks! ~Why did the people dance to the vegetable band? ➤Beca

use it had a good beet! ~How do you fix a broken tomato? ➤Tomato Paste! ~What vegetable might you find in your basement? ➤Cellar-y. ~Why d

on't eggs tell jokes? ➤They'd crack each other up! ~Thanks for reading! Now "lettuce" all eat good food!

~Did you hear about the fat white carrot that went missing? ➤ They thought he would never turnip! ~What do you call a fake noodle? ➤ "Impasta!"

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**For more information, contact**
**WasteInfo@clackamas.us**
**503.557.6363**

Confluence Environmental Center

CLACKAMAS COUNTY
Resource Conservation and Solid Waste Program

AMERICORPS