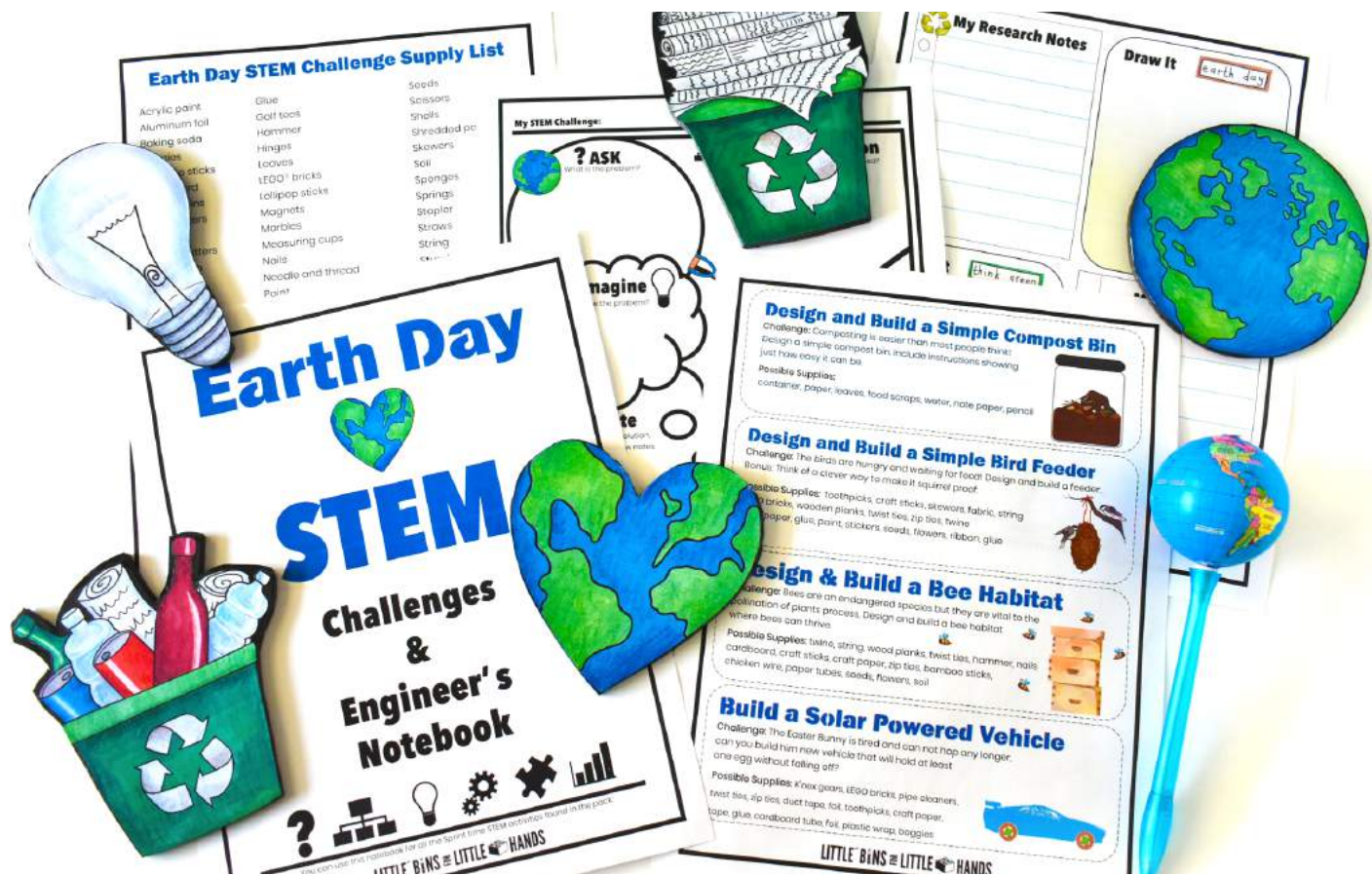


# Earth Day Science & STEM Pack



## Introduction

Welcome to your Earth Day STEM Pack! I hope it sparks creativity and curiosity within your young scientists, engineers, and inventors.

You will find an abundance of Earth Day theme science and STEM activities for K-2nd grade. I have added instructions and extra information to several of the packs.

Feel free to use this pack with one junior scientist or a whole group of junior engineers. You may copy activities as many times as you like for your class, but please send your friends to grab their own pack instead of sharing files. Visit [www.littlebinsforlittlehands.com](http://www.littlebinsforlittlehands.com) for more fun ideas.

~ Thank you!

# Earth Day STEM & Science Projects Pack

What's Included in the pack:

Earth Day STEM Challenge Cards, STEM Challenge Guide,  
and Engineers Notebook

Earth Day Science Activities and Experiments Journal  
Pages with Supplies, Process, and Simple Science  
Information.

Earth Day Scientific Process Guide and Resource

Earth Day Math Coloring Challenge

Earth Day Recycle Sorting Activity

Earth Day Screen-Free Coding

Build a Compost Jar

Greenhouse Window Template

Birdseed Ornaments Recipe

Earth Day Seed Bomb Recipe

Earth Day Writing Prompts

Earth Day Extras: I-Spy, Word Search, Bingo

# Earth Day STEM Projects Pack

## SUPPLIES:

Printable STEM Challenge And Engineering Notebook Pack  
Printable STEM Cards and Supplies List  
STEM Supplies

## INSTRUCTIONS:

Print out the STEM materials and let the kids get busy! Encourage using the STEM design process (included) to extend the activity for older kids.



# Earth Day Math Challenge

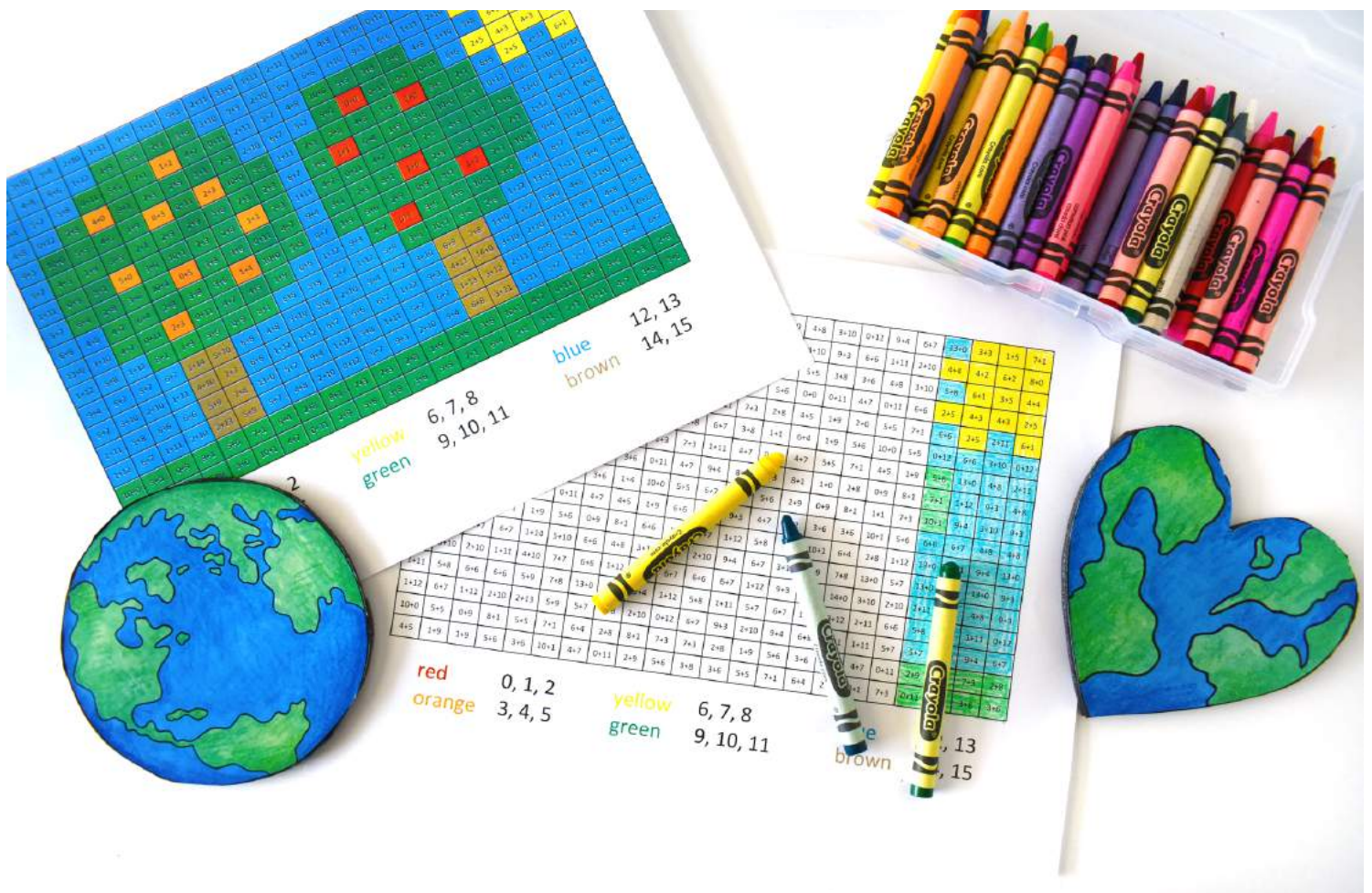
## SUPPLIES:

Printable Earth Day Math Challenge

Crayons or Colored Pencils

## INSTRUCTIONS:

Print out the Earth Day theme math sheet, solve the problems, and color the answers to reveal a scene!



# How To Make Seed Bombs & Birdseed Feeders

## INCLUDED:

You will find a supplies list and instructions on each sheet for making your own seed bombs and birdseed ornaments.

Homemade seed bombs make a great DIY Mother's Day gift too!



## Earth Day DIY Seed Bombs

### Needed Supplies:

3-4 Packages of Flower Seeds  
3 Sheets of Construction Paper (we used blue, green, and white)  
Food Processor  
Scissors  
Water

### Instructions:

Start by cutting your construction paper into one inch squares. Place each color separately in a container.

Once you have cut up all your paper squares and each container is ready, add water. Cover the paper completely and allow to soak for 20 minutes.

When the 20 minutes is finished (the hardest part is always waiting), take one container and squeeze the excess water out of the paper. Place the paper in a food processor and pulse until the paper becomes pulp!

Put the pulp back into its container. Go ahead and repeat with the other two colors. You should have three containers of pulp!

Divide the pulp into three containers of seeds between the three containers gently mixing the pulp.

Start by taking a small amount of each color from each container and forming it into a ball. You can use a rolling pin if you wanted the great tool! To make a seed bomb that resembles the Earth try not to mix up the colors too much.



## Earth Day Bird Seed Feeder

### Needed Supplies:

1/2 cup cold water  
1/2 cup boiling water  
2 packets of gelatin  
2 Tablespoons of corn syrup  
1 1/2 cups of bird seed, "Country Mix"  
Cookie Cutters  
Straws cut in 2" pieces  
Parchment paper  
Twine or other kind of string (biodegradable if possible)

### Instructions:

Put 1/2 cup of cold water in a bowl. Add 2 packets of gelatin and 2 tablespoons of corn syrup. Stir until the gelatin is completely dissolved. Now add a half cup of boiling water (adult help required) to the bowl, and stir it slowly until the mixture is completely dissolved.

Add 2 tablespoons of corn syrup and again, stir until dissolved.

Spray the tablespoon with a little non-stick spray and the corn syrup will slide off.

Put the mixture in the bird seed, stir until the gelatin/ corn syrup mixture is completely dissolved. Let this rest for a couple of minutes.

Put the seed mixture into the cookie cutters. Fill the cookie cutters with the mixture. Press again. Pop the straws out & thread the twine.

Let the mixture sit overnight. Pushing the seeds into the mixture with detailed cookie cutters.

Leave plenty of room between the straws so the seeds will hold shape around the hole. To make sure you hang it near other branches.



# Window Green House Template & How To Make A Compost Bottle

INCLUDED:

You will find simple directions included on the printable.



# Recycle Theme Sorting Activity

## SUPPLIES:

Recycle and sort activity sheets

Scissors

Glue stick

## INSTRUCTIONS:

Print, cut, and paste! Kids can explore and sort which items are recycled and which items are composted with this simple to set up activity.



# Earth Day Coding Activities

INCLUDES:

Printable Algorithm Game

Printable Binary Code Craft

Screen-free coding is a great way to add a little low-key tech to your STEM lessons.

Both activities have their own instructional pages as part of the packs!



# Earth Day Theme Extras

## SUPPLIES:

- Printable I-Spy Sheets
- Earth Day Bingo Game
- Earth Day Word Searches
- Earth Day Writing Prompts

## INSTRUCTIONS:

Perfect for early finishers or a quick anytime activity with a spring theme!



# Earth Day Science Activities

## INCLUDED:

Printable Experiment Sheets  
Printable Science Process Guide  
Instructional Cover Pages  
Science Experiment Supplies

## INSTRUCTIONS:

Each science activity sheet has a cover page which lists supplies needed, describes activity set up and process, and provides simple science information! There are 10 specific Earth science activities in this pack.



# Oil Spill Clean Up

Supplies:

Water

Cooking oil

Food coloring

Dish soap

Cotton balls or swabs

Spoons

Feathers

Set Up/Process:

STEP 1: Fill a baking dish with water and add a drop of blue food coloring if desired to tint your water blue like an ocean.

STEP 2: Add a 1/4 cup of oil to the water creating an oil spill in the ocean,

STEP 3: Brainstorm how to clean up the oil. Encourage the kids to use a spoon to scoop up the oil or use the cotton ball to absorb the oil.

What else could you try to clean up the oil? What happens when you add dish soap to the oil and water?

STEP 4: If you have feathers available, add them to the water. What happens to the feathers? Can you clean the feathers? Have the kids make a soapy water mixture and try to clean the feathers. What are the results?

## OIL SPILLS

Kids will get a better understanding of what happens when thousands of gallons of oil spill into the ocean. The effort these methods take to remove even a small amount of oil is great. This activity is a great reminder to take care of the environment around us.

Oil spill disasters can take weeks and months to clean up and kill so many of the plants and animals in the surrounding areas.

# Water Filtration

## Supplies:

Plastic funnels or plastic water bottles  
Coffee filters  
Rocks, sand, and gravel (varying sizes)  
Rubber bands  
Cups, water, dirt, and small debris

## Set Up/Process:

The goal is to filter the dirty water using the materials you have on hand.

**STEP 1:** Set up the filter by either cutting the bottom off of a water bottle or using a funnel. Using a rubber band secure a piece of coffee filter around the spot of the water bottle or funnel. This opening is where the water will filter through into another container.

**STEP 2:** Layer the filter materials. First, add the sand. Next, add small gravel. Then, add larger rocks or stones.

**STEP 3:** Time to filter the "dirty water." Add 1-2 tablespoons of dirt to clean water along with small pieces of debris like bits of twig and leaves. Hold the homemade funnel over another container, and slowly pour the dirty water through the filter.

Does the homemade filter get the water clean? What happens if you change the order of materials in the filter?

What's happening?

Water filtration is a method of cleaning water by passing it through a filter. Permeability is how easily a liquid can pass through a substance like the sand or rocks.

The rocks and sand perform an essential job: they help to clean our water! Sand, gravel, and rocks make good water filters because they form permeable layers. ... Water can pass slowly through these tiny spaces, and some of the dirt particles and debris get trapped.

# Water Pollution

## Supplies:

Trash items

Coffee grounds

Oil (optional)

Water

Plastic bin or large jar

Plastic ocean animals (optional)

## Set Up/Process:

STEP 1. Head outside and pick up trash!

STEP 2: Set up the container. You can choose to use a large jar or a plastic bin. You can turn the plastic bin into an ocean by adding plastic ocean animals if desired. Fill either container with water.

STEP 3: Add the trash including coffee grounds and even a small amount of oil.

STEP 4: Set the container aside and observe what happens to the water. Additionally, you can have the kids remove the trash and observe the water quality even when there is no longer trash in it.

## TALKING POINTS

Once the trash is in the water, ask the kids how they feel seeing the dirty, polluted water. Have they been to a beach and seen trash along the shore or in the water?

What types of pollution are added by people living in their area?

How can we remove pollution from the water and save the ocean?

What could be done to stop trash from entering storm drains and flowing into the water? Make sure to have the kids check out storm drains near where they live or by the school.

# What Do Seeds Need?

Supplies:

Potting cups or disposable cups

Seeds

Assorted potting materials such as dead leaves, sand, soil

Set Up/Process:

STEP 1: Fill containers with assorted materials. Set up several containers for each planting material that you choose.

STEP 2: Plant a seed in each one!

STEP 3: Place in a warm and sunny place and water all containers regularly.

Simple Science:

This seed experiment can be set up in many ways. The important part is to change only one thing at a time. Here, the type of planting material is the variable or one thing that changes in the experiment.

This experiment determines the best planting material for the seeds.

Make sure to water each container with the same amount of water each time. Each seed container was given 5ml of water every five days. All containers were equally exposed to light.

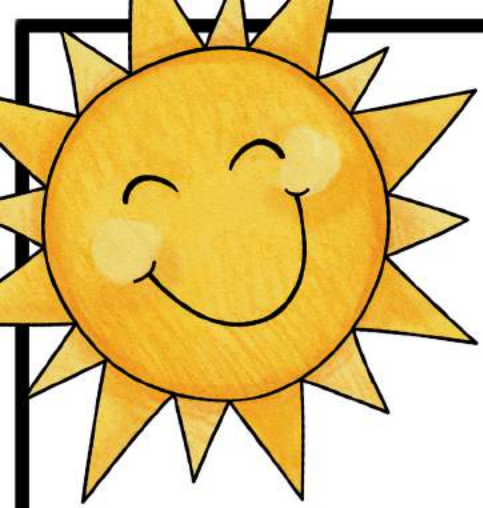
You can also test the following:

Do seeds need light to grow?

Do seeds need water to grow?

Do seeds need air to grow?

Remember only one variable should change each time.



PRINTABLE

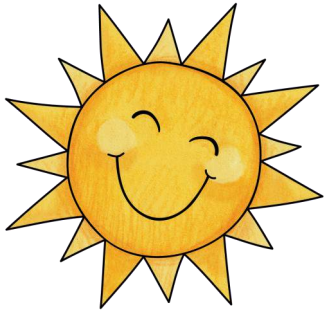
# EARTH DAY ALGORITHM CODING GAME

FOR KIDS  
3 LEVELS OF DIFFICULTY



LITTLE BINS  
FOR LITTLE HANDS





## Screen-free coding with an Earth Day theme! Learn about algorithms as you play games.

### SET UP & PLAY

Print out one of the sets of grids to set up your board. Choose a blank grid with either recycling bins. Cut out the corresponding recycling items for your pieces.

Place the recycling items on the board in some of the blank spaces (not every space). You can play where one item (like the tin cans) are obstacles to move around and another item (like the plastic bottles) need to be collected.

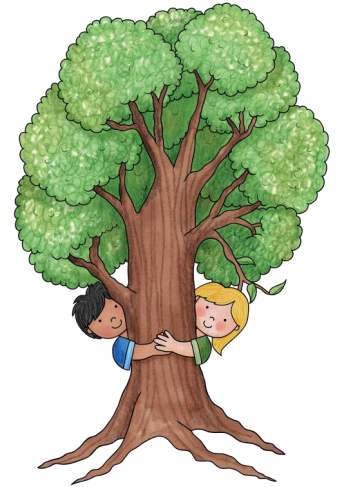
Your arrows are your direction cards and how you write the code to solve the puzzle. Included are left, right, and straight arrow pieces. You can use and re-use the grids over and over again and even laminate the sheets.

Use a small figure, or the printable kids, as an object to move through the board to get to the recycling bins or vice versa.

Use the directional cards to create an algorithm to reach the desired object. You can change the obstacle cards to create a new board each time. Use either the recycling items on the same board! Start simple using just a few and work your way up!

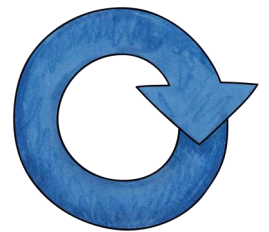
**Easier version:** Place out one directional card at a time as you move the object one square at a time with or without obstacles to go around.


**Harder version:** Think out the sequence of actions ahead of time and place out a string of directional cards to show your program. Run your program (move your piece) according to your directions. Check your results. Did you make it? Do you need to fix a card?




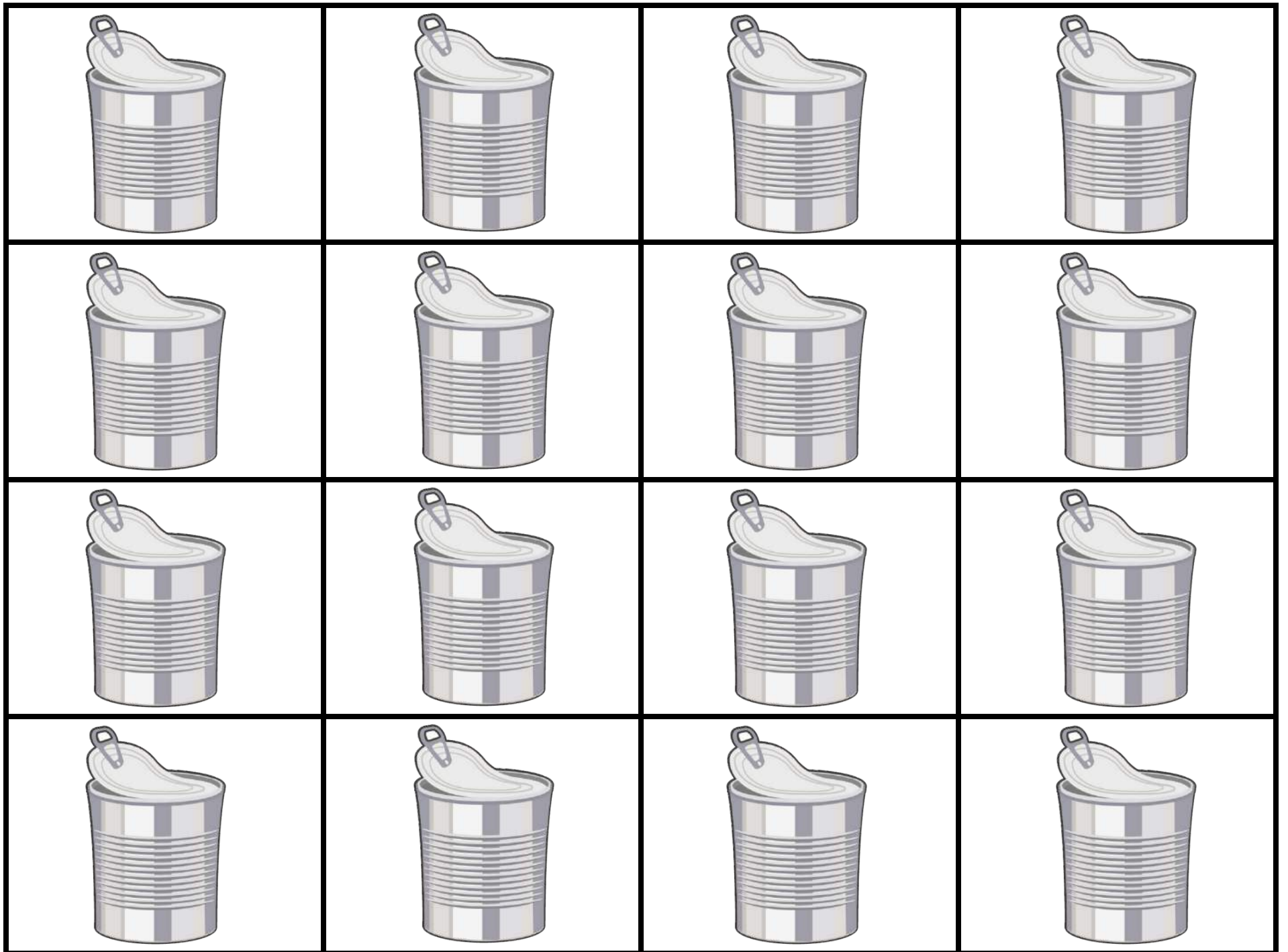
### QUICK STEM

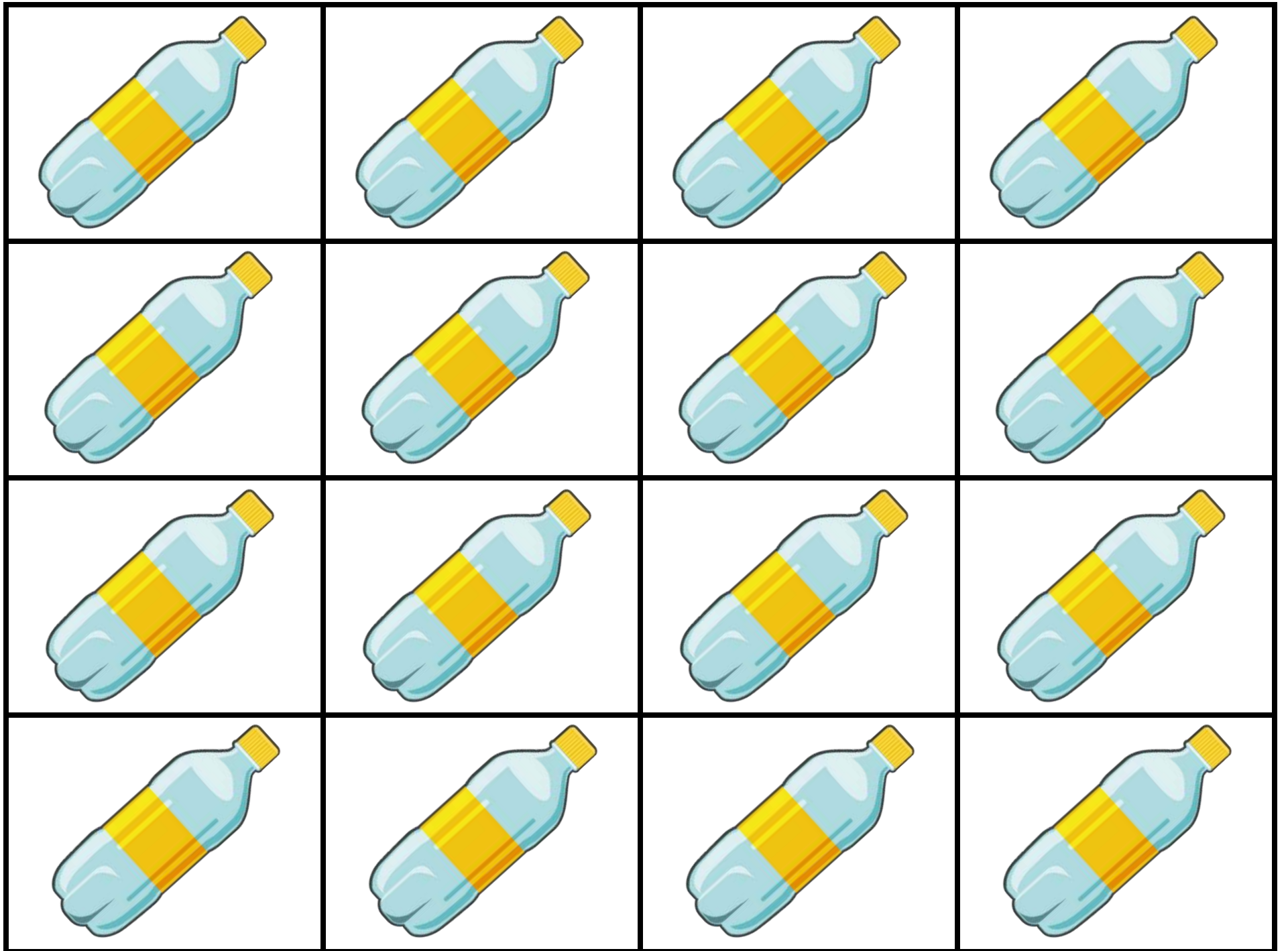
Coding is its own language. For programmers, it's like learning a new language when they write code for a new program. An algorithm is a series of actions that are strung together to solve a problem or tell something what it should do. Our printable algorithm coding game is perfect for learning how these actions string together to create a program through hands-on play!

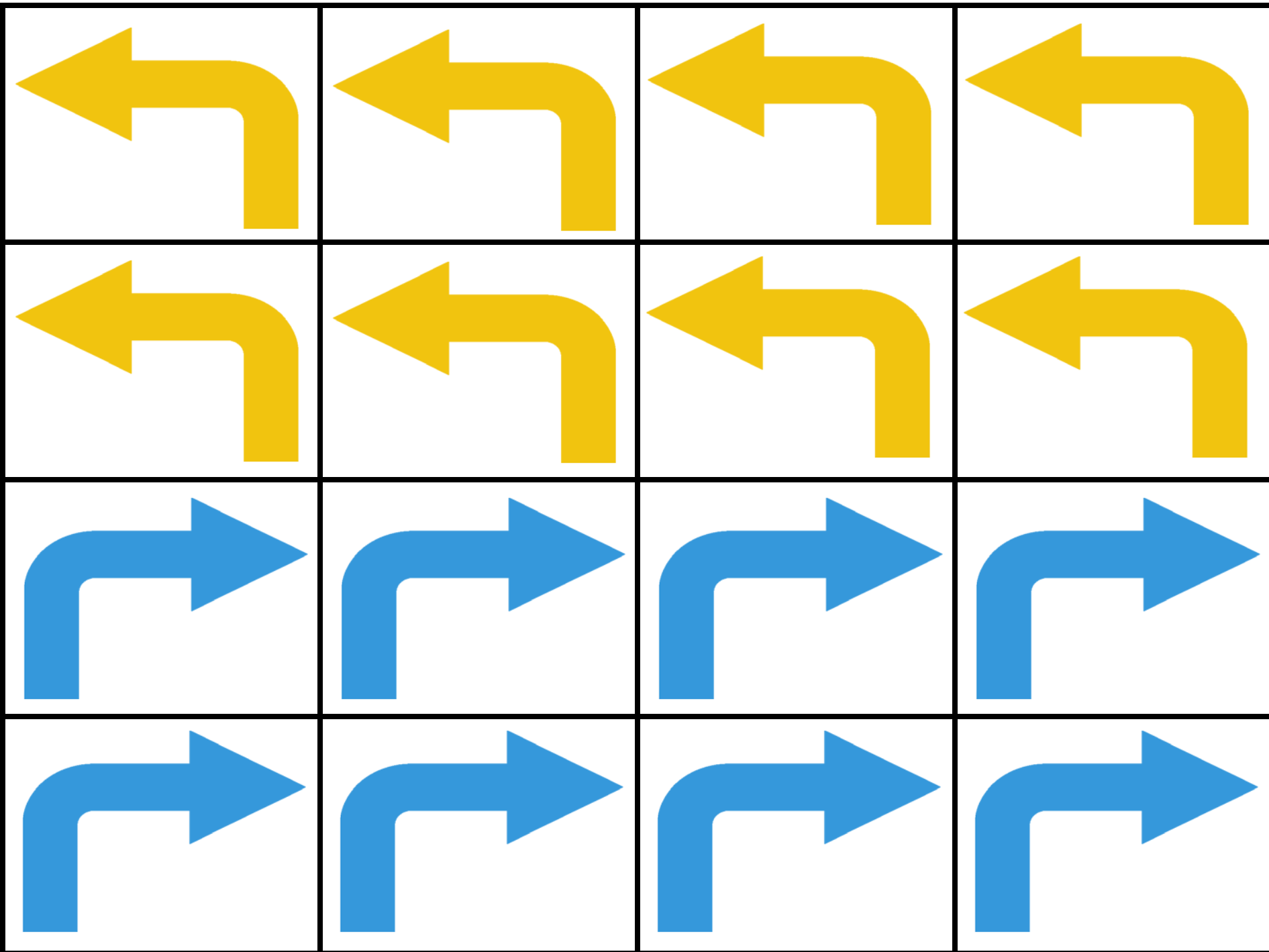


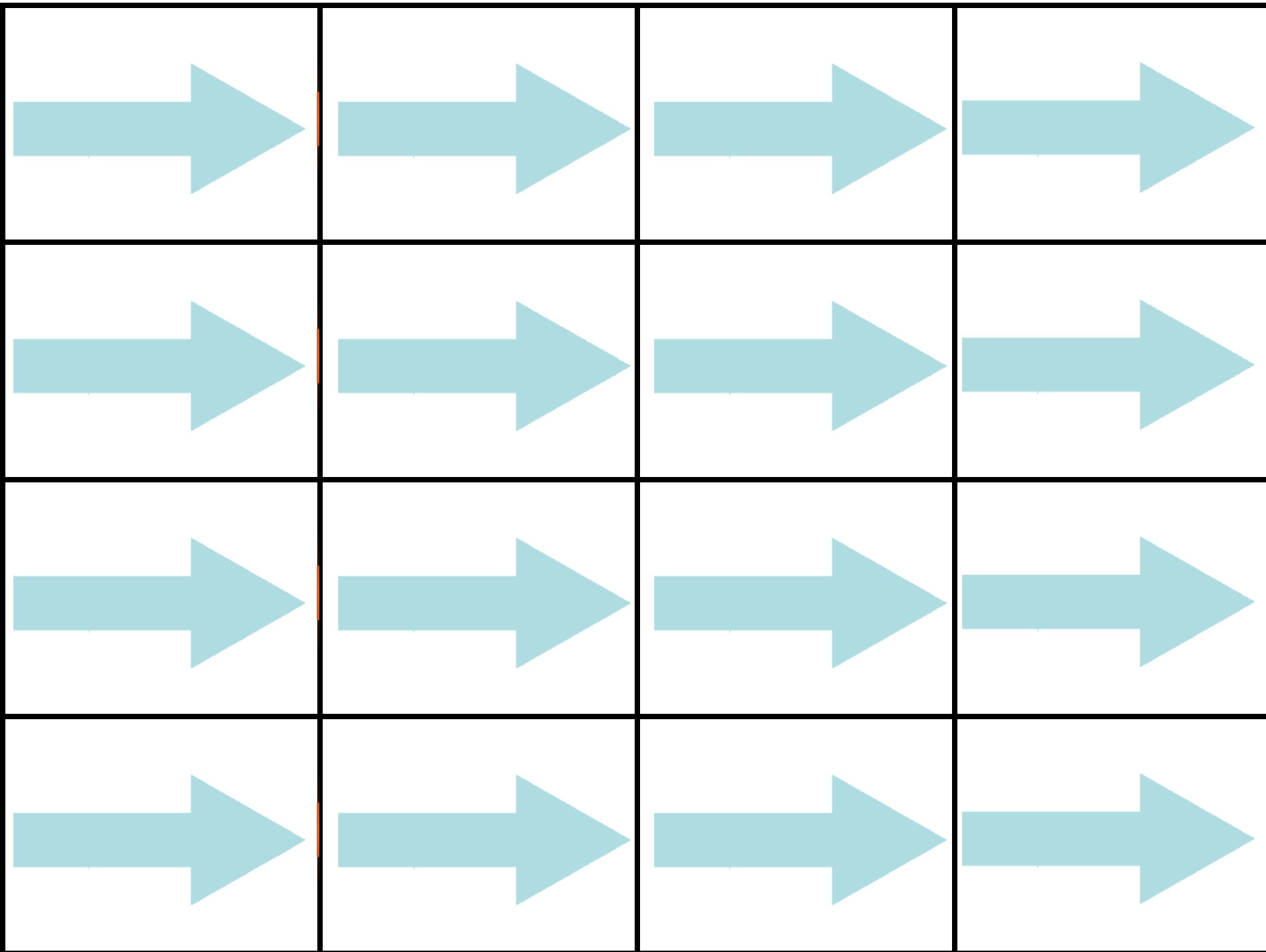
			


			




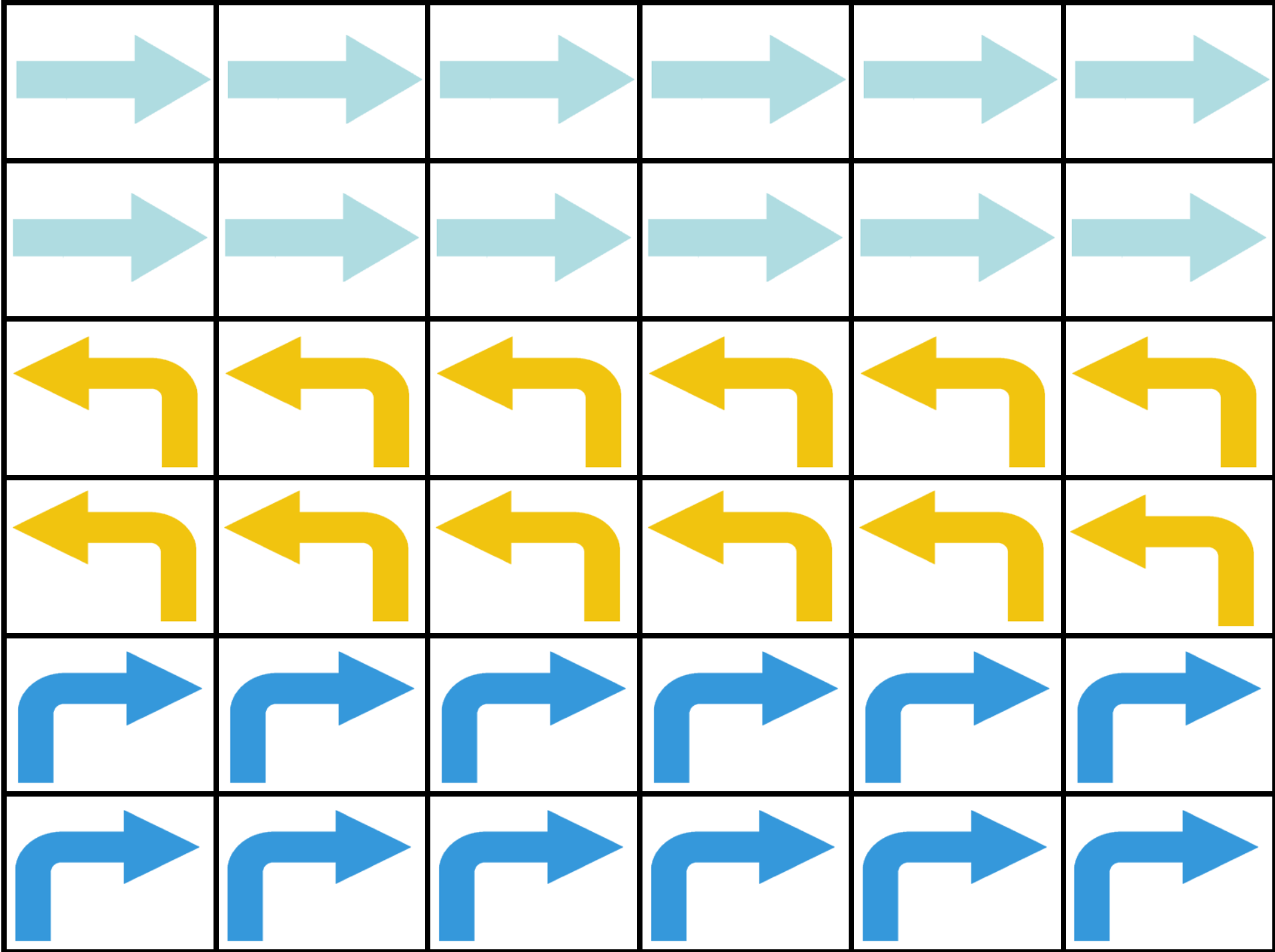


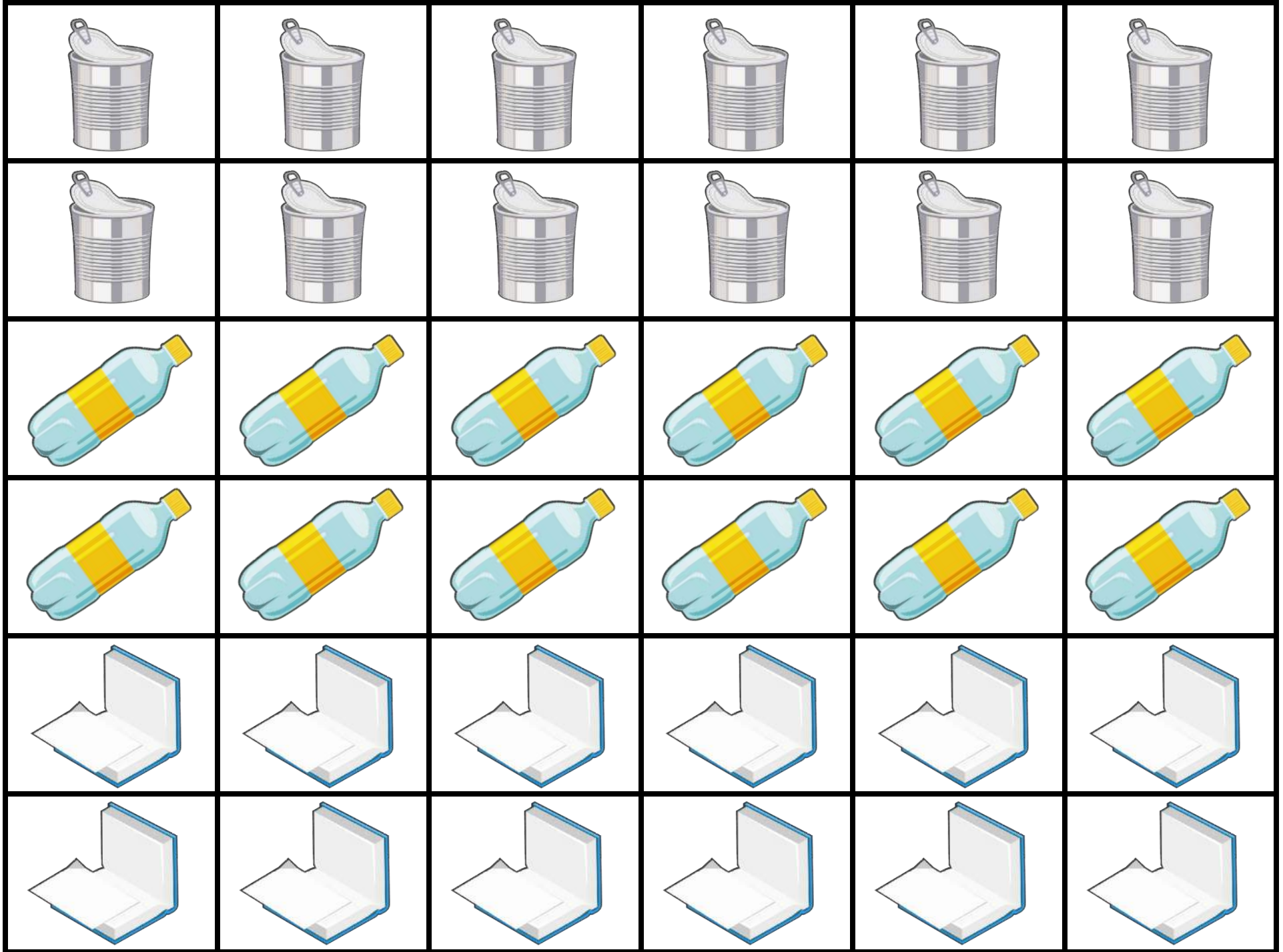


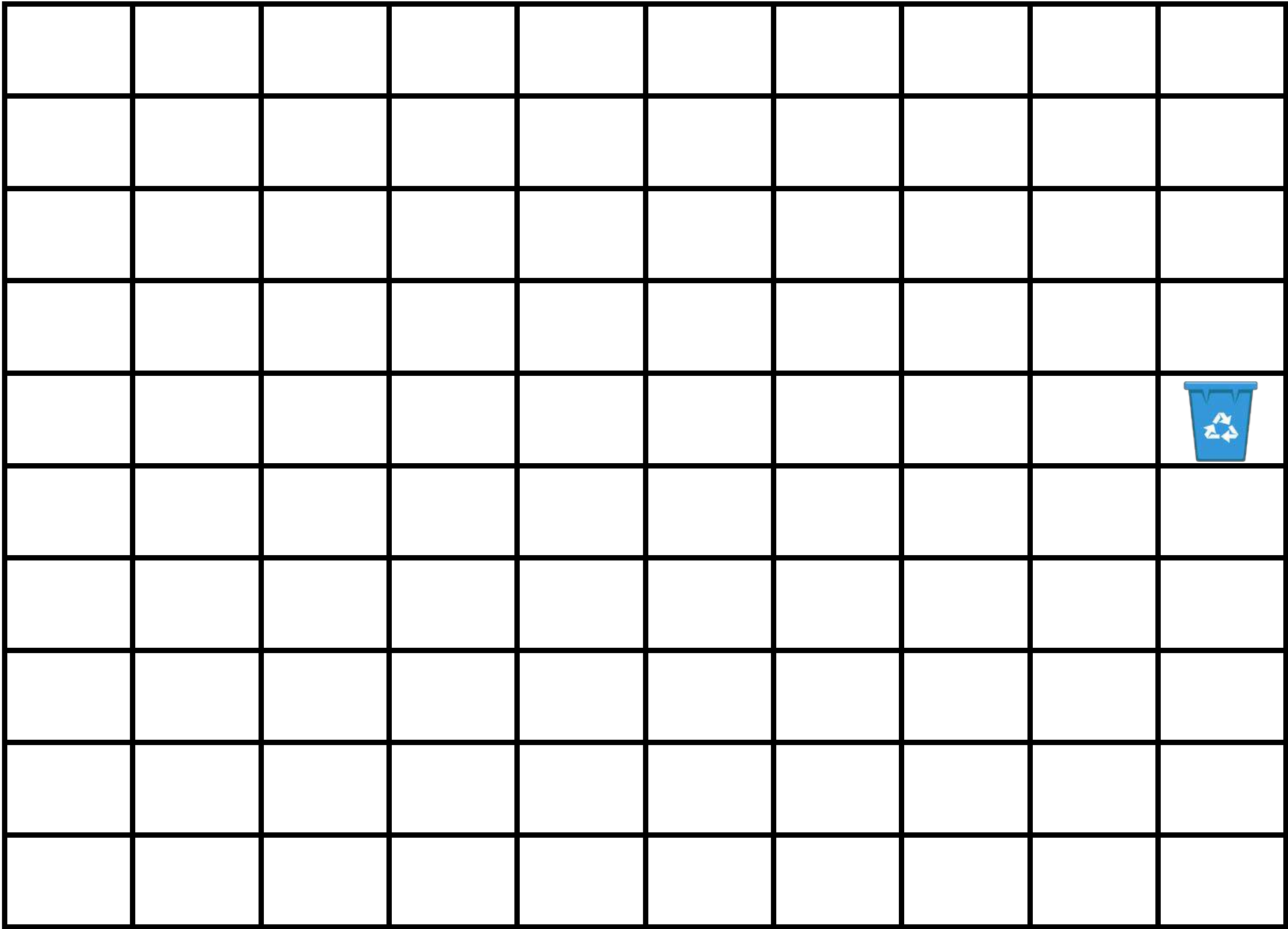


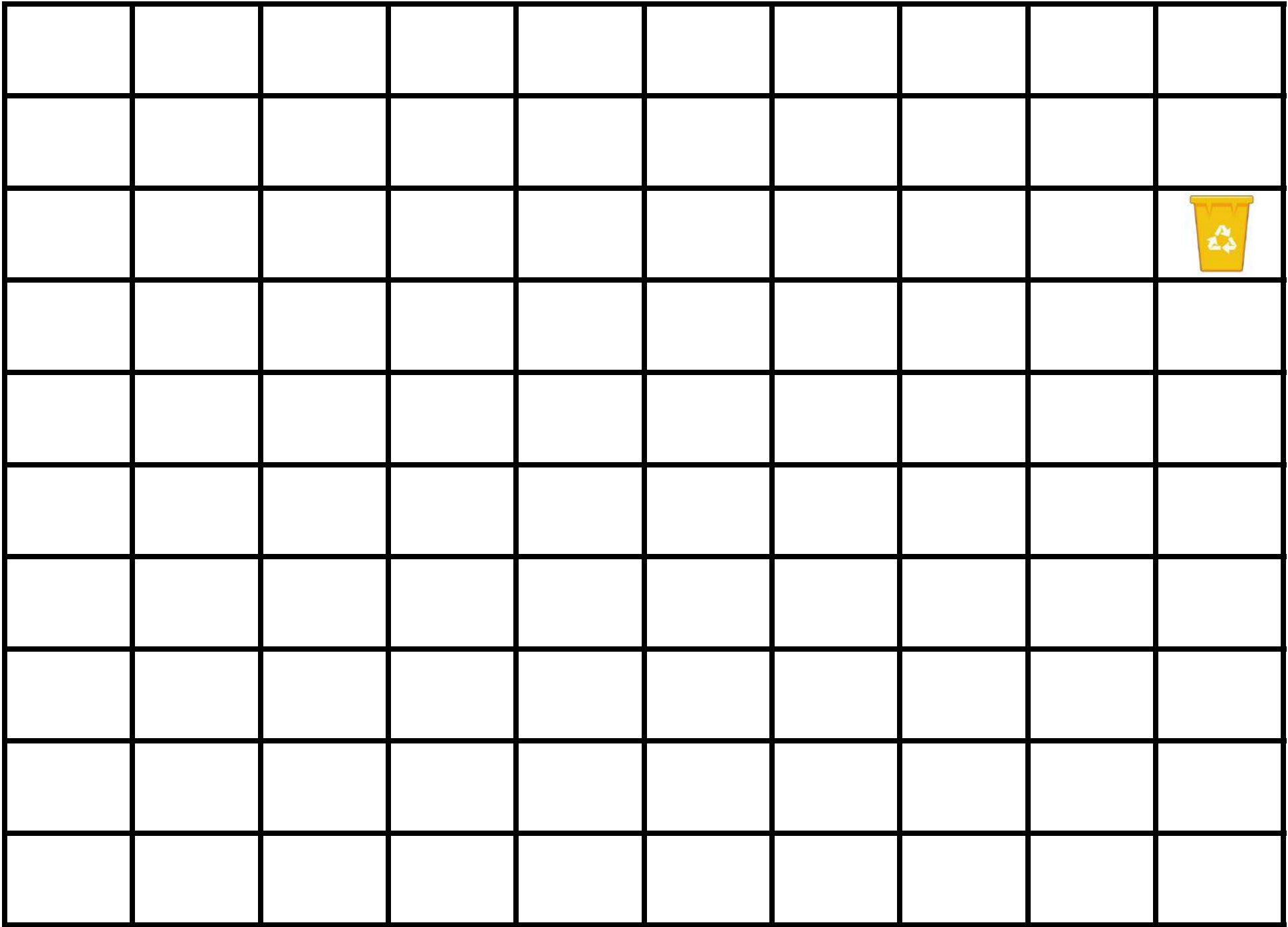
					

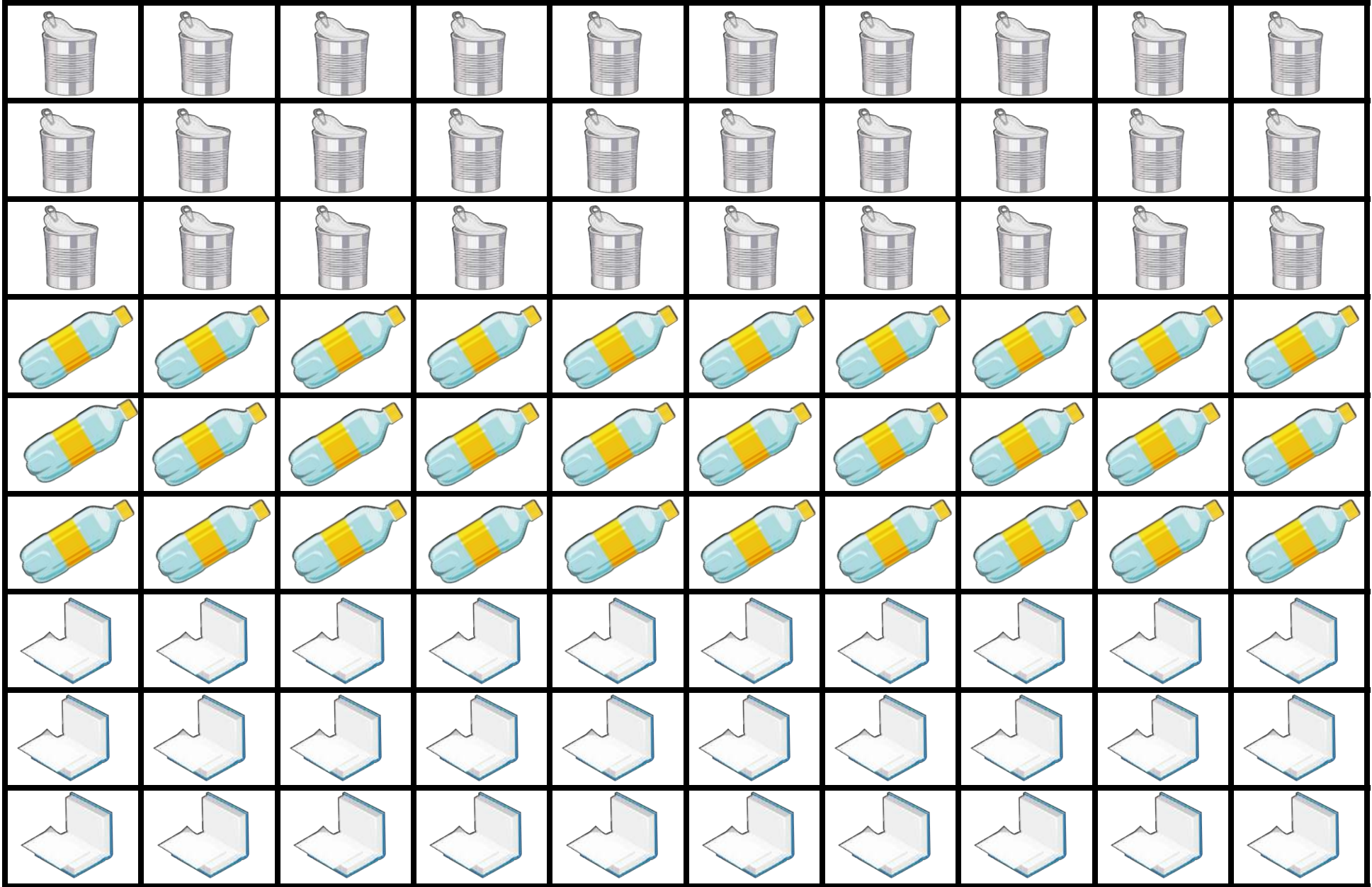
					

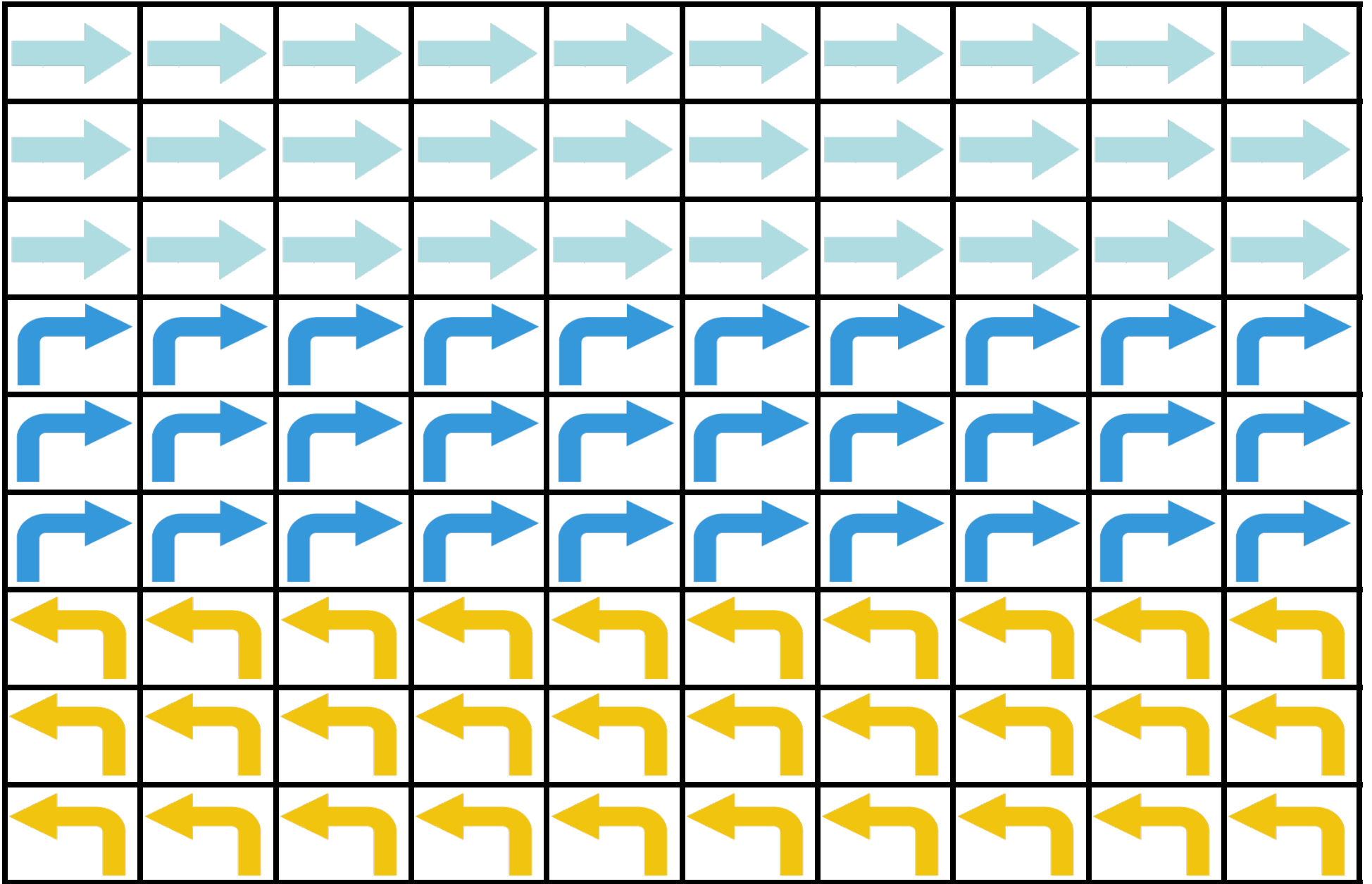














# BINARY CODE

Coding ornaments are the perfect craft activity for the kid who doesn't care too much for crafts! Screen-free coding and ornament making as you explore the binary code.

## SUPPLIES

- 3 Colors of Beads
- Pipe Cleaners
- Printable Binary Code Sheet

Choose one color bead for the number 1 and another color bead for the number 0. Choose a 3rd color bead to use as a spacer between letters.

Bend your pipe cleaner into any whimsical shape.

Choose a word or your name to be represented with the binary code. Use the printable sheet to write down the code.

If your word is too long for one pipe cleaner, simply attach another! Use ribbon or another type of fastener to hang in your window or tune into a keychain!

The computer doesn't read the letter A like we read the letter A. It reads it in a series of 1's and 0's. Each letter has its own code of 1's and 0's. This code is called the ASCII Binary Alphabet.

The binary number system is a base-2 number system. This means it only has two numbers: 0 and 1. The number system that we normally use is the decimal number system. It has 10 numbers: 0-9.

Computers work best with an "on" and "off" system and that is just what the binary code is all about. 1 is "on" and 0 is "off".

# ALPHABET IN BINARY CODE

<b>A</b>	<b>01000001</b>	<b>J</b>	<b>01001010</b>	<b>S</b>	<b>01010011</b>
<b>B</b>	<b>01000010</b>	<b>K</b>	<b>01001011</b>	<b>T</b>	<b>01010100</b>
<b>C</b>	<b>01000011</b>	<b>L</b>	<b>01001100</b>	<b>U</b>	<b>01010101</b>
<b>D</b>	<b>01000100</b>	<b>M</b>	<b>01001101</b>	<b>V</b>	<b>01010110</b>
<b>E</b>	<b>01000101</b>	<b>N</b>	<b>01001110</b>	<b>W</b>	<b>01010111</b>
<b>F</b>	<b>01000110</b>	<b>O</b>	<b>01001111</b>	<b>X</b>	<b>01011000</b>
<b>G</b>	<b>01000111</b>	<b>P</b>	<b>01010000</b>	<b>Y</b>	<b>01011001</b>
<b>H</b>	<b>01001000</b>	<b>Q</b>	<b>01010001</b>	<b>Z</b>	<b>01011010</b>
<b>I</b>	<b>01001001</b>	<b>R</b>	<b>01010010</b>		

## WRITE YOUR NAME IN CODE

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____



**WRITE EARTH IN  
BINARY CODE**

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**WRITE PAPER IN  
BINARY CODE**

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**WRITE TREES IN  
BINARY CODE**



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**WRITE REUSE IN  
BINARY CODE**



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# Scientific Process



# Ask a Question

What do you want to learn or test?



# Do Some Research

Gather information about what you want to learn.



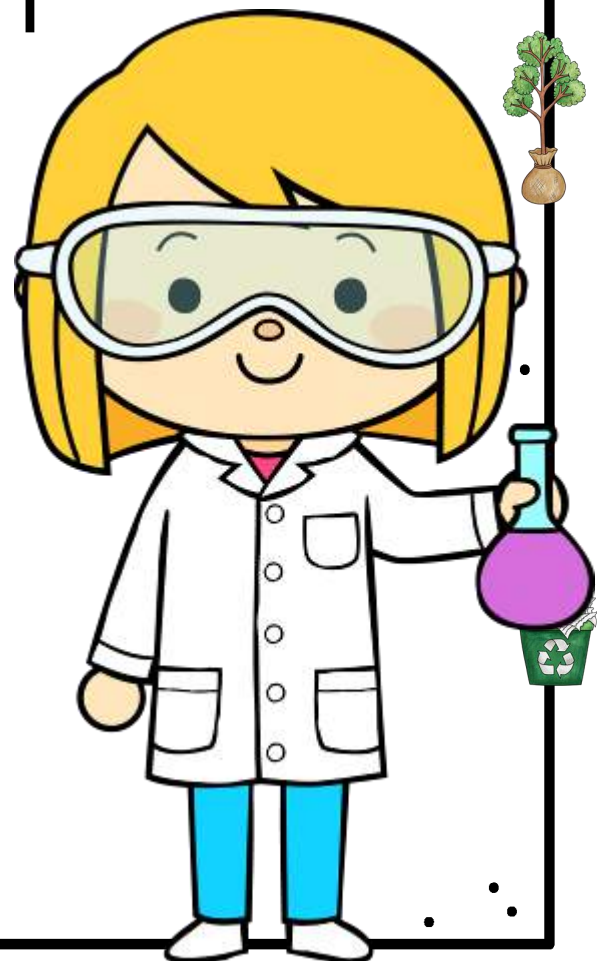
# Make a Hypothesis

Try to predict the answer!  
A hypothesis sounds like an  
*If I do this, then this will happen.*  
This being your experiment  
and outcome.



# Set Up An Experiment

Design a test or experiment to see if your hypothesis is correct!



# Record Data

Record what happens during the test or experiment.



# Conclusions

Analyze or review  
your data to see if  
your hypothesis  
was correct!



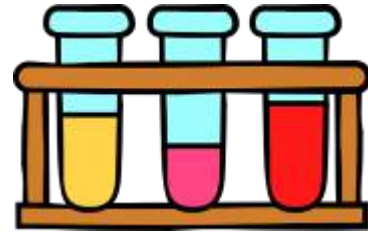
# SCIENTIFIC METHOD



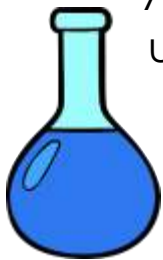
A method or procedure that uses an organized approach to solving a problem or answering a question through the use of a hypothesis, experimentation, observation, and data analysis.

# HYPOTHESIS

An educated guess or simple explanation made as a starting point for further investigation or experimentation.



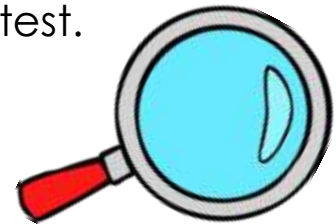
# EXPERIMENT



A scientific procedure set up to test a hypothesis or make a discovery. It usually involves a dependent variable, independent variable, and a control. The outcome is not necessarily known.

# INDEPENDENT VARIABLE

The independent variable is the part of your experiment that you want to test.



# DEPENDENT VARIABLE

The dependent variable is the outcome that occurs in your experiment and a response to the changing independent variable.



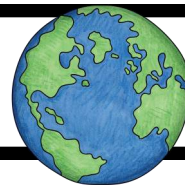
# CONTROL

The control is the neither the independent nor the



dependent variable. The control is what you will compare the results in your experiment.

# My Science Investigation



## My Question

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## My Hypothesis

## Research Notes



## Supplies



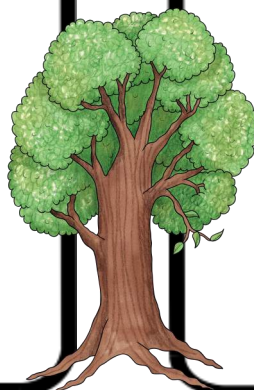
## Experiment



## Observations

draw or write

## Conclusions



# My Science Investigation



My Question

Hypothesis

What is the Control?

Supplies Needed

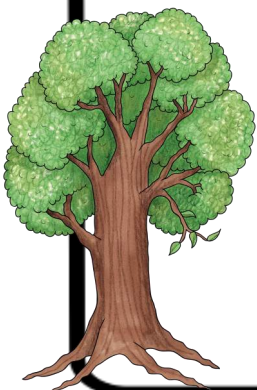
What is the Dependent Variable?

Experiment

What is the Independent Variable?

Observations

Conclusions

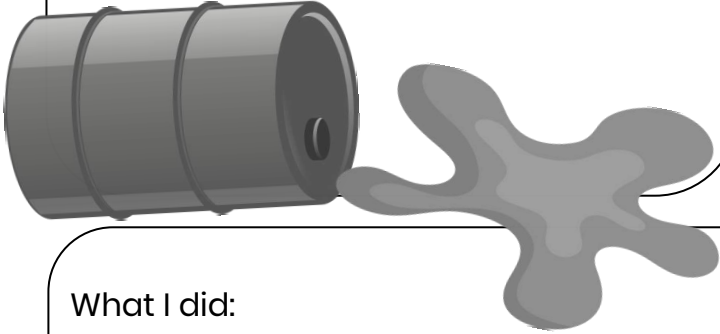


Graphics provided by  
[LittleRedsTreehouse.com](http://LittleRedsTreehouse.com)  
and  
[katehadfielddesigns.com](http://katehadfielddesigns.com)

# Oil Spill Clean Up

Materials I Used:

What I think will happen:



What I did:

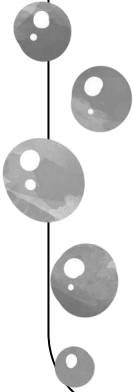
What I Saw:

Draw it:

What Happened:

# Water Pollution

Materials I



What I think will happen:

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What I did:

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What I Saw:

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What Happened:

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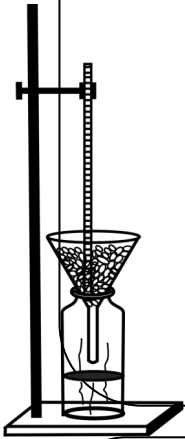
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Draw it:

A large, empty rounded rectangle intended for a drawing, occupying the right side of the lower half of the page.

# Water Filtration



Materials I Used:

What I think will happen:

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What I did:

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What I Saw:

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What Happened:

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Draw it:

# Grow a Seed

Materials I Used:



What I think will happen:

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What I did:

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What I Saw:

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What Happened:

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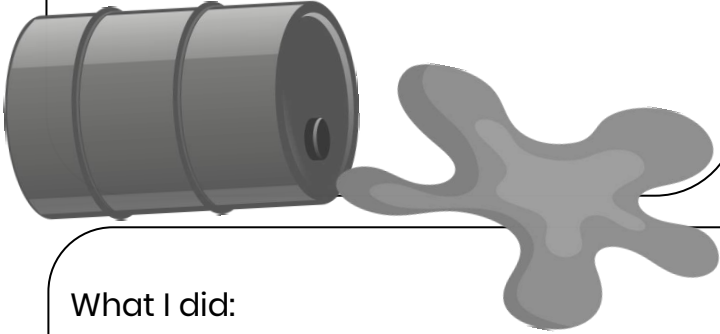
Draw it:

A large, empty rounded rectangular box intended for a child to draw their seedling.

# Oil Spill Clean Up

Materials I Used:

What I think will happen:



What I did:

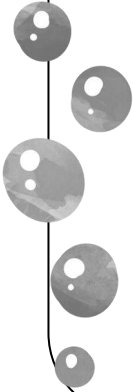
What I Saw:

Draw it:

What Happened:

# Water Pollution

Materials I



What I think will happen:


What I did:


What I Saw:

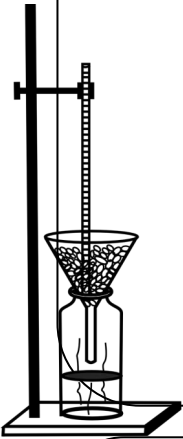

What Happened:


Draw it:

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# Water Filtration

Materials I Used:



What I think will happen:

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What I did:

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What I Saw:

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What Happened:

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Draw it:

# Grow a Seed

Materials I Used:



What I think will happen:

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What I did:

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What I Saw:

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What Happened:

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Draw it:

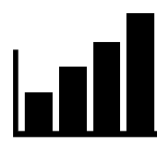
A large, empty rounded rectangular box intended for a child to draw their seedling.

# Earth Day



# STEM

## Challenges & Engineer's Notebook



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You can use this notebook for all the Sprint time STEM activities found in the pack.

LITTLE <sup>and</sup> BINS FOR LITTLE  HANDS

# Earth Day STEM Challenge Supply List

Acrylic paint	Glue	Seeds
Aluminum foil	Golf tees	Scissors
Baking soda	Hammer	Shells
Baggies	Hinges	Shredded paper
Bamboo sticks	Leaves	Skewers
Cardboard	LEGO® bricks	Soil
Clothes pins	Lollipop sticks	Sponges
Coffee filters	Magnets	Springs
Coins	Marbles	Stapler
Cookie cutters	Measuring cups	Straws
Cornstarch	Nails	String
Cotton balls	Needle and thread	Styrofoam balls
Cotton swabs	Paint	Sugar cubes
Craft paper	Paper	Tape
Craft sticks	Paper cups	Tape measure
Dryer hose	Paper clips	Tea lights
Duct tape	Peeps	Tin can
Easter grass	Pencil	Toilet paper rolls
Faux plants	Pipe cleaners	Toothpicks
Feathers	Plastic containers	Twine
Felt	Plastic cups	Twist ties
Flat marbles	Plastic pipes	Washi Tape
Food coloring	Plastic spoons	Water
Funnel	Plastic wrap	Whirly gig
Gears	Pom-poms	Wire
Glitter (gold)	Raffia	Wooden planks
Glitter glue	Ribbon	Yarn
Glow stars	Rubber Bands	Zip ties

## Design and Build a Simple Compost Bin

**Challenge:** Composting is easier than most people think!  
Design a simple compost bin. Include instructions showing just how easy it can be.

**Possible Supplies:**  
container, paper, leaves, food scraps, water, note paper, pencil



## Design and Build a Simple Bird Feeder

**Challenge:** The birds are hungry and waiting for food! Design and build a feeder.  
Bonus: Think of a clever way to make it squirrel proof.

**Possible Supplies:** toothpicks, craft sticks, skewers, fabric, string  
LEGO bricks, wooden planks, twist ties, zip ties, twine  
craft paper, glue, paint, stickers, seeds, flowers, ribbon, glue



## Design & Build a Bee Habitat

**Challenge:** Bees are an endangered species but they are vital to the pollination of plants process. Design and build a bee habitat where bees can thrive.

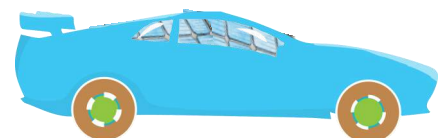
**Possible Supplies:** twine, string, wood planks, twist ties, hammer, nails  
cardboard, craft sticks, craft paper, zip ties, bamboo sticks,  
chicken wire, paper tubes, seeds, flowers, soil



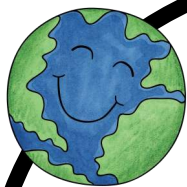
## Build a Solar Powered Vehicle

**Challenge:** The Easter Bunny is tired and can not hop any longer,  
can you build him new vehicle that will hold at least  
one egg without falling off?

**Possible Supplies:** K'nex gears, LEGO bricks, pipe cleaners,  
twist ties, zip ties, duct tape, foil, toothpicks, craft paper,  
tape, glue, cardboard tube, foil, plastic wrap, baggies



## My STEM Challenge:



### ? ASK

What is the problem?

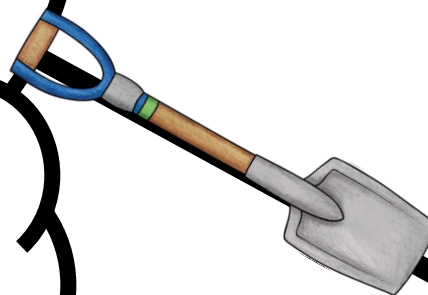


### Collect Information

What information & resources will I need?

### Imagine

How can I solve the problem?



### Plan



What materials do I have/need?  
What steps do I take?



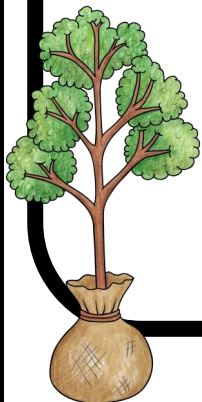
### Create

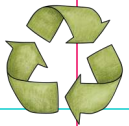
I will test my solution,  
and take or draw notes.



### Improve

What changes can I make  
to improve my plan?





## My Research Notes



## Draw It

earth day

## Draw It

think green

## My Next Plan



# Earth Day STEM Challenge Supply List

Acrylic paint

Aluminum foil

Baking soda

Baggies

Beads

Cardboard

Clothes pins

Coffee filters

Coins

Cookie cutters

Cornstarch

Cotton balls

Cotton swabs

Craft paper

Craft sticks

Dryer hose

Duct tape

Easter grass

Faux plants

Feathers

Felt

Flat marbles

Food coloring

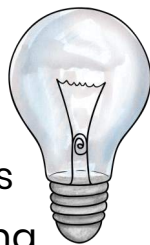
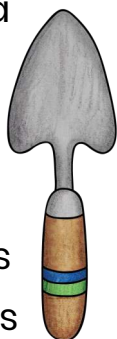
Funnel

Gears

Glitter (gold)

Glitter glue

Glow stars



Glue

Golf tees

Hammer

Hinges

Leaves

LEGO® bricks

Lollipop sticks

Magnets

Marbles

Measuring cups

Nails

Needle and thread

Paint

Paper

Paper cups

Paper clips

Peeps

Pencil

Pipe cleaners

Plastic containers

Plastic cups

Plastic pipes

Plastic spoons

Plastic wrap

Pom-poms

Raffia

Ribbon

Rubber Bands



Seeds

Scissors

Shells

Shredded paper

Skewers

Soil

Sponges

Springs

Stapler

Straws

String

Styrofoam balls

Sugar cubes

Tape

Tape measure

Tea lights

Tin can

Toilet paper rolls

Toothpicks

Twine

Twist ties

Washi Tape

Water

Whirly gig

Wire

Wooden planks

Yarn

Zip ties



# Design & Build a Trash Grabber

Trash is everywhere, and it's not being picked up! Design and build a trash grabber to make picking up trash easier for everyone!



## Possible Supplies:

Wooden planks, LEGO bricks, K'nex, toothpicks, balloons, skewers, glue, twist ties, zip ties, cardboard, twine, craft paper, foil, rubber bands, cotton swabs, fabric, paper rolls, craft sticks, dryer hose, plastic pipes, duct tape

# Design & Build a Birdhouse



The birds are hungry and waiting for food! Design and build a birdhouse out of recycled items only?

Bonus: Think of a clever way to make it squirrel proof.

## Possible Supplies:

Wooden planks, LEGO bricks, K'nex, toothpicks, skewers, glue, twist ties, zip ties, stapler, cardboard, twine, nails, hammer, craft paper, rubber bands, cotton swabs, fabric, paper rolls, craft sticks, dryer hose, plastic pipes, duct tape

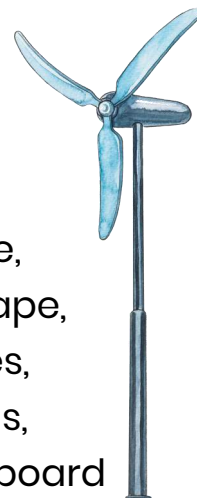
# Design a Wind Powered Vehicle

Find new ways for a car to move! Design and build a vehicle that is powered by the wind!



## Possible Supplies:

straws, skewers, wood blocks, glue, aluminum foil, Washi tape, duct tape, toothpicks, rubber bands, twist ties, zip ties, plastic wrap, rubber bands, whirly gig, craft paper, tape, cardboard



# Design & Build a Recycling Bin

Not enough people recycle! Design and build a recycling bin that will encourage people to recycle more.



## Possible Supplies:

Containers, cardboard, craft paper, springs, hinges, LEGO bricks, K'Nex, gears, pipes, duct tape, screws, screwdriver, foil, wooden planks

# Design & Build a Shopping Bag

No more plastic shopping bags allowed! Design and build a better shopping bag!

## Possible Supplies:

Craft paper, cardboard, fabric, needle & thread, craft sticks, foil, yarn, balloons, rubber bands, raffia, ribbons, twine



# Design & Build a Mini Greenhouse

You need to grow plants but it's too cold outside! Design and build a mini greenhouse. Test it by planting a seed and see what happens!



## Possible Supplies:

skewers, wood blocks, duct tape, glue, toothpicks, rubber bands, twist ties, zip ties, plastic wrap, rubber bands, craft paper, plastic cups, plastic containers, tape, cardboard, plastic baggies, soil, seeds,

# I Can Recycle

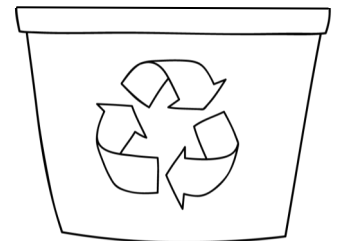
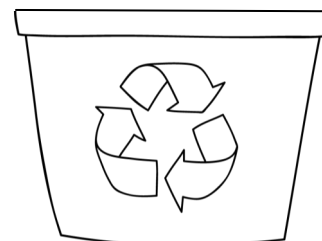
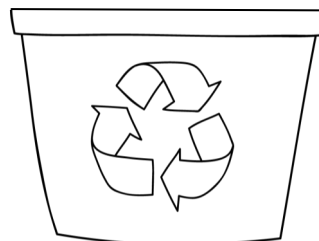
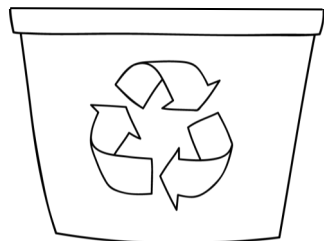
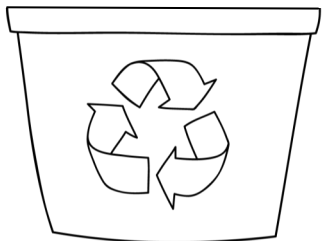
Paper

Plastic

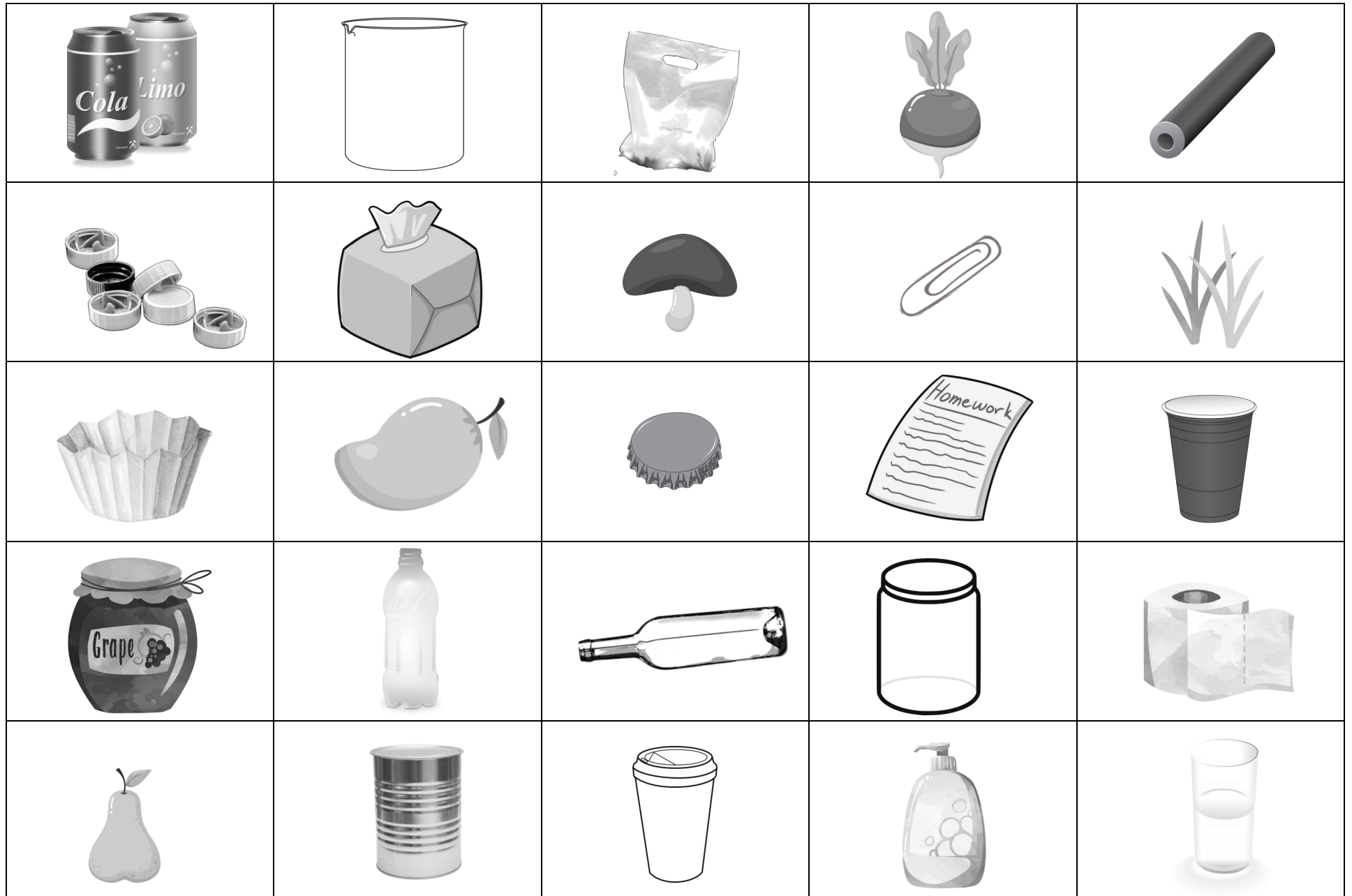
Glass

Metals

Compost



# Cut & Sort



9+3	3+10	9+4	2+10	1+11	9+3	1+11	9+3	2+11	13+0	1+11	2+11	13+0	4+8	3+10	0+12	9+4	6+7	13+0	3+3	1+5	7+1
5+7	4+8	6+6	1+12	1+9	5+6	2+9	5+6	3+10	9+3	2+10	6+7	6+6	3+10	9+3	6+6	1+11	2+10	4+4	4+2	6+2	8+0
9+4	5+7	5+8	0+11	5+5	7+1	1+2	4+7	0+11	2+11	5+7	4+8	10+0	5+5	3+8	3+6	4+8	3+10	5+8	6+1	3+5	4+4
4+8	0+12	2+8	4+0	8+1	7+3	2+8	8+1	7+3	2+10	6+7	5+7	5+6	0+0	0+11	4+7	0+11	6+6	2+5	4+3	4+3	2+5
9+3	10+0	5+5	4+5	1+9	0+3	0+11	2+3	10+0	5+5	1+11	7+3	2+8	4+5	1+9	2+0	5+5	7+1	6+6	2+5	2+11	6+1
5+7	4+5	1+9	5+5	7+1	2+9	2+9	5+6	7+3	2+8	6+7	3+8	1+1	6+4	1+9	5+6	10+0	5+5	0+12	6+6	3+10	0+12
1+11	0+9	8+1	5+0	3+6	10+1	7+3	2+8	1+3	7+3	1+11	4+7	0+11	4+7	5+5	7+1	4+5	1+9	5+6	13+0	4+8	2+11
5+7	6+4	2+8	3+6	10+1	0+5	3+8	3+6	0+11	4+7	9+4	8+1	7+3	8+1	1+0	2+8	0+9	8+1	7+1	1+12	9+3	4+8
6+6	4+8	4+7	6+4	2+8	3+8	3+6	1+4	10+0	5+5	6+7	1+9	5+6	2+9	0+9	8+1	1+1	7+3	10+1	9+4	3+10	9+3
13+0	3+10	4+7	0+11	2+3	0+11	4+7	4+5	1+9	6+6	1+12	9+3	4+7	0+2	3+6	3+6	10+1	5+6	6+6	6+7	4+8	4+8
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4+5	1+9	1+9	5+6	3+6	10+1	4+7	0+11	2+9	5+6	3+8	3+6	5+5	7+1	6+4	2+8	8+1	7+3	0+11	4+7	3+8	3+6

red 0, 1, 2

orange 3, 4, 5

yellow 6, 7, 8

green 9, 10, 11

blue 12, 13

brown 14, 15

9+3	3+10	9+4	2+10	1+11	9+3	1+11	9+3	2+11	13+0	1+11	2+11	13+0	4+8	3+10	0+12	9+4	6+7	13+0	3+3	1+5	7+1
5+7	4+8	6+6	1+12	1+9	5+6	2+9	5+6	3+10	9+3	2+10	6+7	6+6	3+10	9+3	6+6	1+11	2+10	4+4	4+2	6+2	8+0
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4+8	0+12	2+8	4+0	8+1	7+3	2+8	8+1	7+3	2+10	6+7	5+7	5+6	0+0	0+11	4+7	0+11	6+6	2+5	4+3	4+3	2+5
9+3	10+0	5+5	4+5	1+9	0+3	0+11	2+3	10+0	5+5	1+11	7+3	2+8	4+5	1+9	2+0	5+5	7+1	6+6	2+5	2+11	6+1
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1+11	0+9	8+1	5+0	3+6	10+1	7+3	2+8	1+3	7+3	1+11	4+7	0+11	4+7	5+5	7+1	4+5	1+9	5+6	13+0	4+8	2+11
5+7	6+4	2+8	3+6	10+1	0+5	3+8	3+6	0+11	4+7	9+4	8+1	7+3	8+1	1+0	2+8	0+9	8+1	7+1	1+12	9+3	4+8
6+6	4+8	4+7	6+4	2+8	3+8	3+6	1+4	10+0	5+5	6+7	1+9	5+6	2+9	0+9	8+1	1+1	7+3	10+1	9+4	3+10	9+3
13+0	3+10	4+7	0+11	2+3	0+11	4+7	4+5	1+9	6+6	1+12	9+3	4+7	0+2	3+6	3+6	10+1	5+6	6+6	6+7	4+8	4+8
1+12	5+8	1+12	8+1	1+9	5+6	0+9	8+1	6+6	5+8	5+7	1+12	5+8	3+6	10+1	6+4	2+8	1+12	13+0	1+11	9+4	13+0
9+4	6+7	5+7	6+7	1+14	5+10	6+6	4+8	3+10	5+8	2+10	9+4	6+7	3+10	6+9	7+8	13+0	5+7	13+0	4+8	13+0	9+3
6+7	3+10	2+10	1+11	4+10	7+7	6+6	1+12	1+12	6+7	6+6	6+7	1+12	9+3	4+11	14+0	3+10	2+10	2+11	9+3	4+8	9+3
1+11	5+8	6+6	6+6	5+9	7+8	13+0	5+7	9+4	1+12	5+8	1+11	5+7	6+7	1+13	3+12	2+11	6+6	5+8	6+6	1+11	0+12
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10+0	5+5	0+9	8+1	5+5	7+1	6+4	2+8	8+1	7+3	7+3	2+8	1+9	5+6	3+6	10+1	4+7	0+11	2+9	5+6	7+3	2+8
4+5	1+9	1+9	5+6	3+6	10+1	4+7	0+11	2+9	5+6	3+8	3+6	5+5	7+1	6+4	2+8	8+1	7+3	0+11	4+7	3+8	3+6

red 0, 1, 2

orange 3, 4, 5

yellow 6, 7, 8

green 9, 10, 11

blue 12, 13

brown 14, 15

# Earth Day!

I love the earth because...

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Color it:



# Earth Day!

10 Ways I can do my part to help the EARTH.

1.

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2.

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3.

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4.

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5.

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6.

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7.

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8.

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9.

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10.

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# I Can Help the Earth

6 People I Can Tell About Earth Day Facts

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.

# STOP

Instead of throwing something away I can...

---

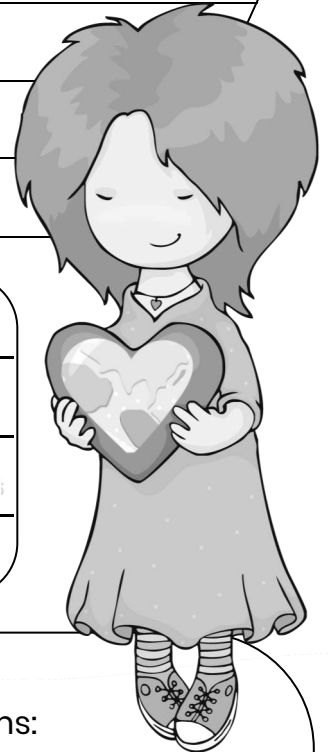
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I'm thankful for the earth because...

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**Ideas I can share with others about conservation.**

I can recycle these items:

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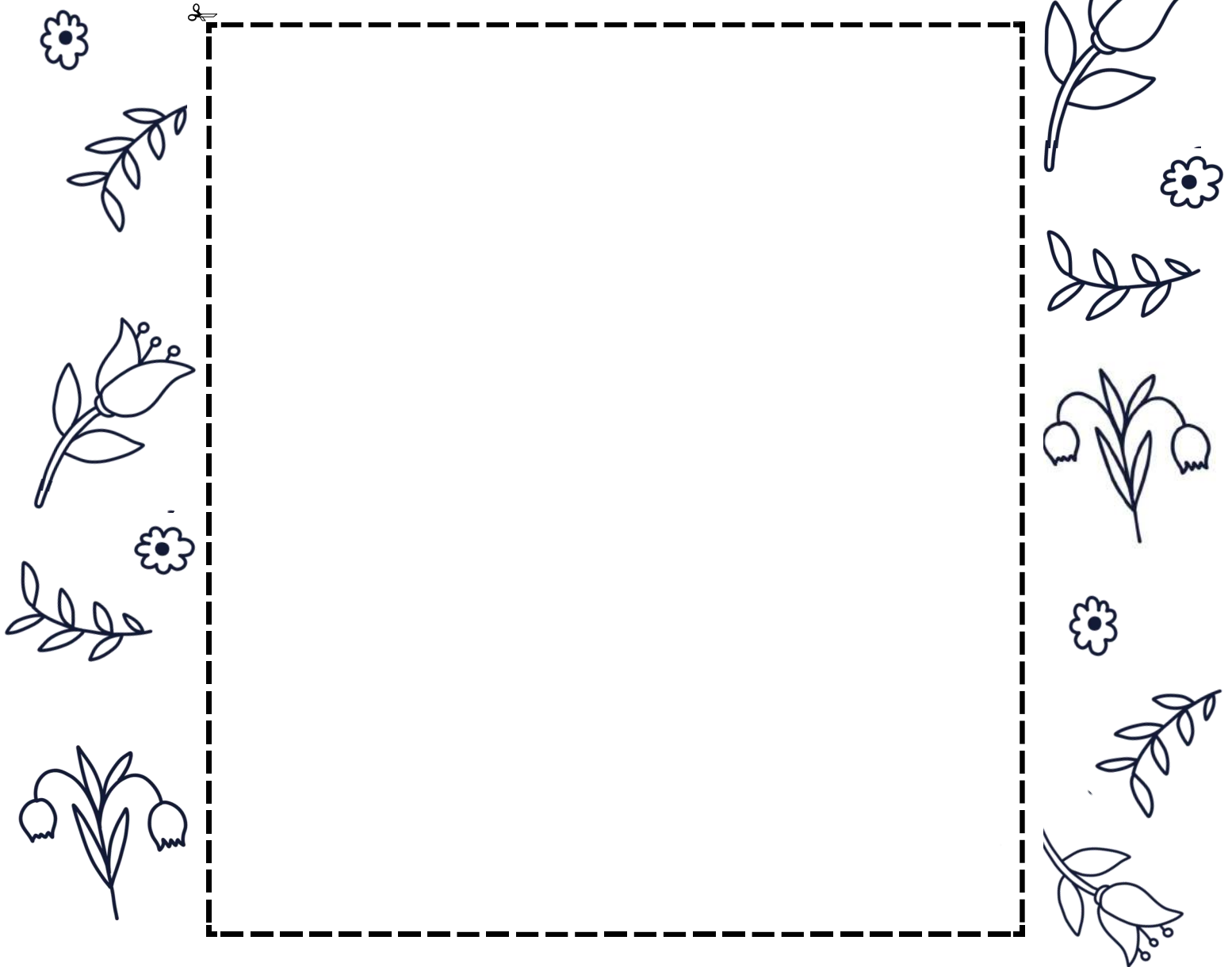
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A large, faint recycling symbol (three chasing arrows forming a triangle) is centered in the background of the recycling list section.

# Earth Day Greenhouse

Supplies needed: scissors, tape, seed, soil, water, plastic sandwich baggie with zipper.



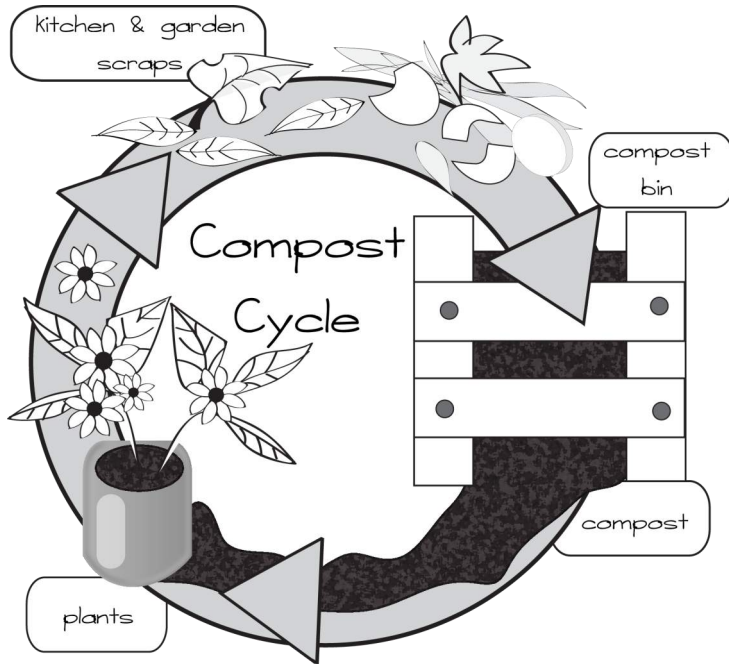
Name:

Type of Seed:

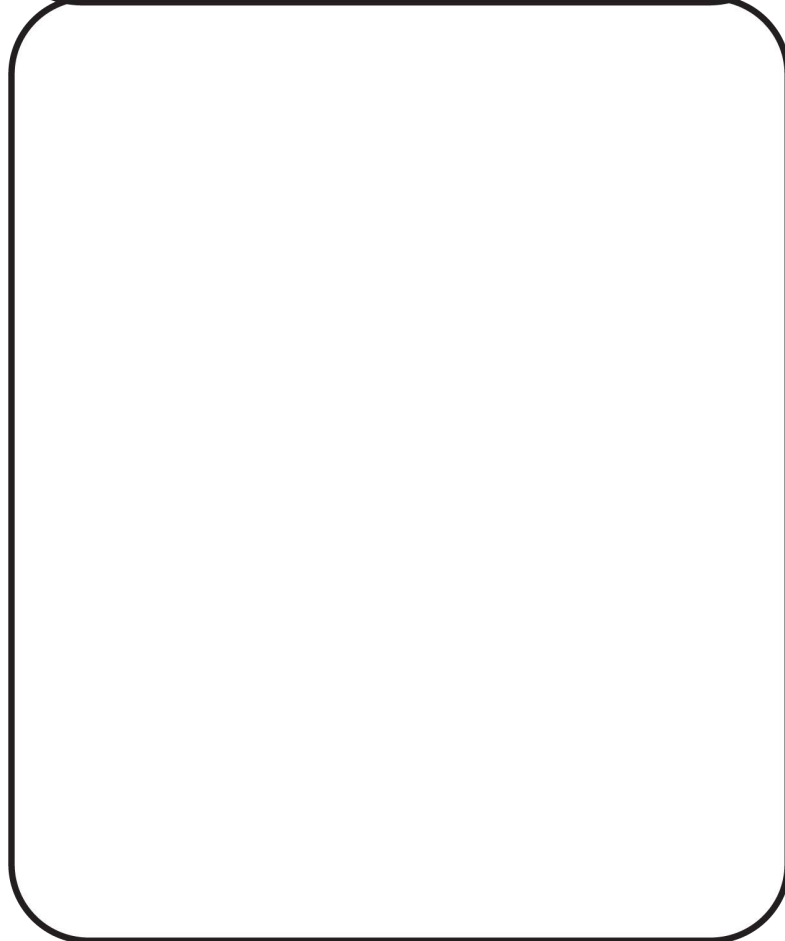
Date:

**Directions:** Cut out the square in the middle of the page. Using a sandwich zipper bag, plant a seed in a small amount of soil, add water to the soil. Zip closed. Tape the zip bag to the backside of the paper. Leaving the zipper portion available to open/close. Set in a sunny location. Be sure to water your seedling to keep the soil moist as you watch your seed grow into a plant.

# Build a Compost Bottle



## Draw it



## Supplies Needed:

- a large glass or clear plastic jar/container with lid
- Waste paper
- Fruit & vegetable scraps
- Egg shells
- Dried leaves
- Grass clippings
- Water in a spray bottle

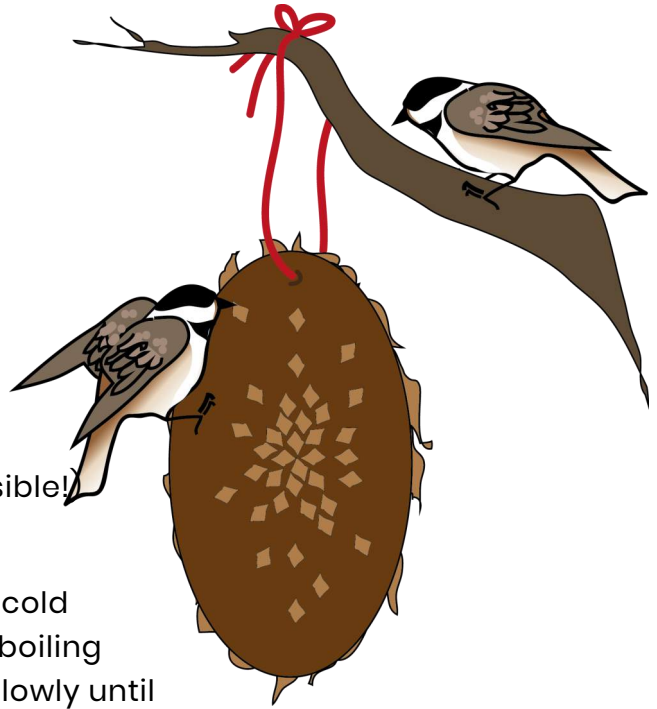
## Steps

1. Cut your paper into small pieces and place in the bottom of the container.
2. Place a layer of leaves and grass clippings on top of the paper.
3. Dampen the layers with the water from the spray bottle.
4. Cut your fruit and vegetable scraps into smaller pieces, crush egg shells.
5. Place food scraps on top and dampen with the spay bottle.
6. Repeat steps 1-5 until you've filled the bottle.
7. Place the lid on top but don't tighten. The compost needs air, but the lit will prevent insects.
8. Set in a sunny location.
9. Watch for 2-3 weeks as the food breaks down. Soon it will be fertilizer for your garden.

# Earth Day Bird Seed Feeder

## Needed Supplies:

- ½ cup cold water
- ½ cup boiling water
- 2 packets of gelatin
- 2 Tablespoons of corn syrup
- 2 ½ cups of bird seed, “Country Mix”
- Cookie Cutters
- Straws cut in 2” pieces
- Parchment paper
- Twine or other kind of string (biodegradable if possible!)



## Instructions:

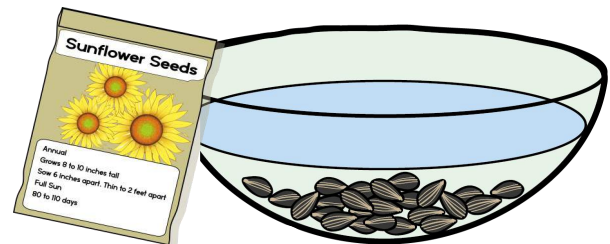
First, you want to mix the gelatin with a half cup of cold water until it’s all dissolved! Now add a half cup of boiling water (adult help required) to the bowl, and stir it slowly until it’s completely dissolved.

Next, add 2 tablespoons of corn syrup and again, stir until dissolved.

**Quick tip:** spray the tablespoon with a little non-stick spray and the corn syrup will slide right off!

Finally, it’s time for you to mix in the bird seed.

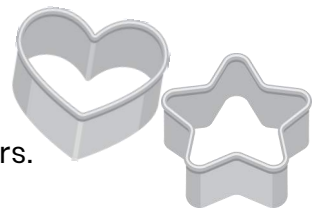
Keep mixing until the gelatin/ corn syrup mixture evenly coats each seed. Let this rest for a couple minutes if the mixture seems watery.



Now for the messy part, time to spoon the seed mixture into the cookie cutters. Fill the cookie cutters about half way and use a small piece of parchment paper to press the seeds firmly into the mold. Fill the cookie cutter to the top & press again. Pop the straws out & thread the twine.

Place the cookie cutters in the fridge to set overnight.

Once set, remove the cookie cutters by gently pushing at the edges until it falls out, taking extra care with detailed cookie cutters.



To make a hole for your twine, push in the straw. Leave plenty of room between the straw and the edge. Press around the straw to ensure the seeds will hold shape around the hole.

Your bird feeder is ready to hang outside. You want to make sure you hang it near other branches so the birds have a place to rest while eating!

# Earth Day DIY Seed Bombs

## Needed Supplies:

- 3-4 Packages of Flower Seeds
- 3 Sheets of Construction Paper (we used blue, green, and white)
- Food Processor
- Scissors
- Water



## Instructions:

Start by cutting your construction paper into one inch squares. Place each color separately in a container.

Once you have cut up all your paper squares and each container is ready, add water. Cover the paper completely and allow to soak for 20 minutes.

When the 20 minutes is finished (the hardest part is always waiting), take one container and squeeze the excess water out of the paper. Place the paper in a food processor and pulse until the paper becomes pulp!

Place the pulp back into it's container. Go ahead and repeat with the next two colors until you have three containers of pulp!

Divide the packages of seeds between the three containers gently mixing them into the pulp.

Start by taking a bit of each color from each container and forming it into a ball! We wanted these to resemble the Earth for Earth Day! If you have chosen other colors that's great too! To make a seed bomb that resembles the Earth try not to mix up the colors too much.





# Earth Day BINGO



		<b>free</b>		



# Earth Day BINGO



		<b>free</b>		



# Earth Day BINGO



# Earth Day BINGO



Reuse



recycle



EARTH DAY

upcycle



reduce



free



upcycle



free



recycle



Reuse

EARTH DAY



reduce



# Earth Day BINGO



# Earth Day BINGO



reduce



reduce



recycle

free



upcycle

free



upcycle

EARTH DAY



Reuse



Reuse


















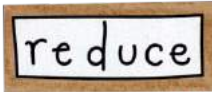








recycle



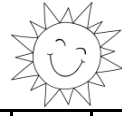
EARTH DAY





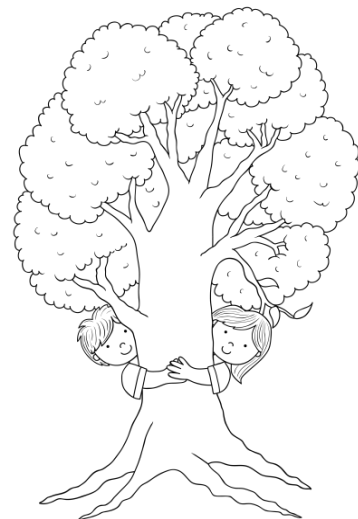
# Earth Day Word Search



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

EARTH  
GLASS  
OCEAN  
PAPER  
PLASTIC

RECYCLE  
REDUCE  
REUSE  
TRASH  
TREES





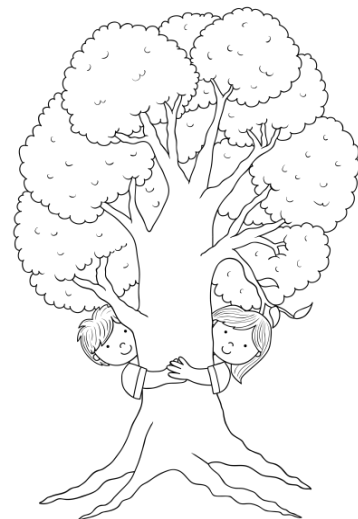
# Earth Day Word Search



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

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# Earth Day Word Search



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

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# Earth Day Word Search



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

EARTH  
GLASS  
OCEAN  
PAPER  
PLASTIC

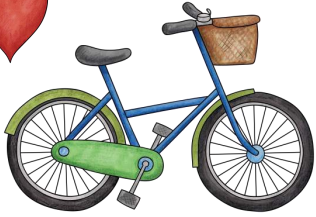
RECYCLE  
REDUCE  
REUSE  
TRASH  
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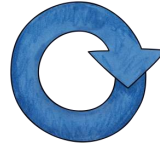
# Earth Day I Spy



REDUCE, REUSE, RECYCLE!



REDUCE, REUSE, RECYCLE!



REDUCE, REUSE, RECYCLE!

REDUCE, REUSE, RECYCLE!



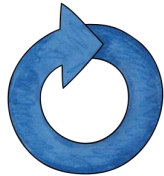
REDUCE, REUSE, RECYCLE!



REDUCE, REUSE, RECYCLE!



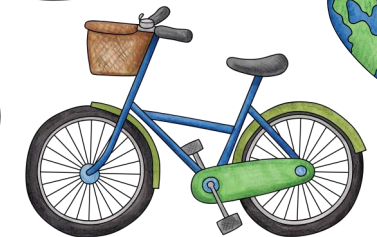
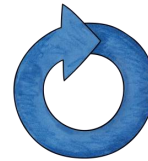
REDUCE, REUSE, RECYCLE!



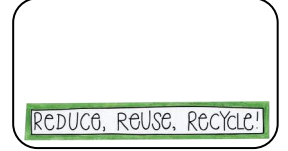
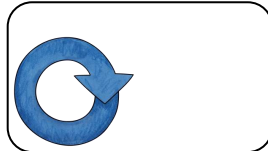
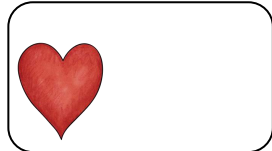
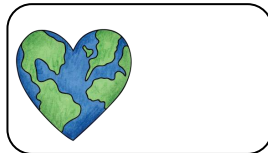
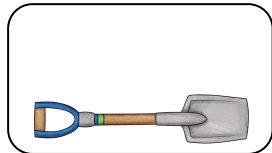
REDUCE, REUSE, RECYCLE!



REDUCE, REUSE, RECYCLE!



REDUCE, REUSE, RECYCLE!



# Earth Day I Spy

