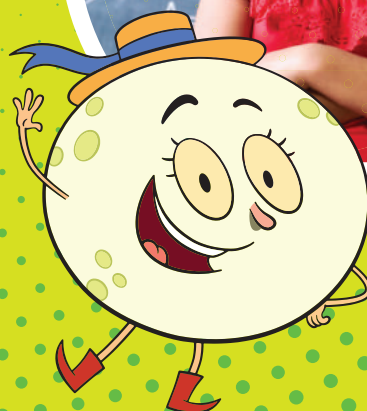




# SUMMER!

## FUN ACTIVITY BOOK



**ELEMENTARY**



On TV. Online. Statewide. VISIT [MichiganLearning.org](http://MichiganLearning.org)

# SPECIAL THANKS TO OUR MICHIGAN LEARNING CHANNEL PARTNERSHIPS:

## **Content Partners:**

826Michigan  
American Chemical Society  
Ann Arbor District Library  
Battle Creek Symphony Orchestra  
Career Girls  
Chris Anderson Science Around Cincy  
City Opera House  
CODE.org  
Colorado Springs Conservatory  
Detroit Institute of Arts  
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Positive Impact for Life  
SchoolKit  
Roadtrip Nation

SciGirls  
Signing Time  
SIS4Teachers  
Speak It Forward  
Square One Education Network  
STEM Greenhouse  
Story Pirates  
Storycorps  
The Diatribe  
Traverse City Area Public Schools  
United States Air Force  
WORLD Channel  
YouCubed

## **Local PBS Stations**

WKAR - East Lansing  
Detroit Public Television  
WCMU - Mount Pleasant  
WDCQ - Saginaw  
WGVU - Grand Rapids  
WNIT - South Bend  
WNMU - Marquette

## **Partner PBS Stations**

PBS  
PBS Books  
PBS Kids  
APT (Alabama Public Television)  
LPB (Louisiana Public Broadcasting)  
PBS SoCal  
PBSNC  
TPT (Twin Cities PBS)  
WCMU  
WHRO  
WIMAGE  
WNET (New York Public Media)  
WQED  
WUCF

**WATCH on the Michigan Learning Channel  
or stream the channel at [MichiganLearning.org](https://MichiganLearning.org)**



Visit [MichiganLearning.org](https://MichiganLearning.org) and follow  
@MichLearning on social media to find out more.



### DEAR GROWN-UPS,

Summer is full of opportunities to play and learn and we want to make it easy to find inspiring, kid-friendly activities! That's why we've worked with PBS stations and content creators from across the country to bundle up some of our favorite activities into one, easy-to-carry-anywhere book. We hope you and your kids will use this to inspire learning all summer long!

Here are a few quick tips to keep your kids excited about learning this summer:

- **ASK LOTS OF QUESTIONS.** Encourage your kids to participate in conversations by asking them questions like: Why do you think that happened? What will happen next?
- **ENCOURAGE KIDS TO SEARCH FOR ANSWERS.** When your children ask you "why?" see if you can work together to figure out what they need to know or do to find the answer.
- **TRY SOMETHING NEW.** Summer is a great time to try new things like reading a new kind of book, tasting a new food or exploring a new park.
- **JUST HAVE FUN.** Summertime only comes along once a year, so be sure to take the time to relax and have fun while you're learning.
- **BUILD LASTING, POSITIVE MEMORIES THAT WILL LAST A LIFETIME!**

### HOW TO USE THIS BOOK

- Keep in mind that this book spans multiple grade levels. Your child won't be using every single page, but choosing a few lessons each week. The goal is to keep kids' brains engaged with a taste of reading, writing, math, art, science, and physical activity every week.
- The grade levels are merely guides to get you started. We recommend starting with the grade that your child just completed and adjusting as needed. Don't be shy about using a different grade level or just picking and choosing lessons that look interesting. This has been a tough year for our children and we want your child to feel proud and confident.
- This book aligns with the content on the Michigan Learning Channel, which can be used on live tv or on demand. There are about 2-3 hours a week of video lessons, plus lots of activities in this book that don't use a screen. We recommend getting outside everyday, reading everyday and having enjoyable moments together as a family!
- This book is designed to use for 8 weeks of summer. We suggest spreading it out over a few days each week and finding a time that works for your family. If you have older children they may do better in the evenings.
- As you go through the weeks, you will find each week has a theme and a link to videos that go with the activities. You can find all the video lessons, plus interactive virtual events and more at [www.michiganlearning.org/summer](http://www.michiganlearning.org/summer).

How do the students in your life use the Michigan Learning Channel? We would love your feedback! Feel free to contact us at [mlc@dptv.org](mailto:mlc@dptv.org).

**Michigan Learning Channel Team**  
[MichiganLearning.org](http://MichiganLearning.org)



# Dates and Themes

**The summer program runs from June 20 to August 14, 2022.**

Each week has a set of lessons, plus additional programs, activities, and field trips based on the weekly theme.

## **Take Flight (June 20-26):**

From planes and kites to butterflies and birds, discover the fables and physics of things that fly.

## **Under Water (June 27-July 3):**

Dive deep into oceans, rivers, and our own Great Lakes to discover what it takes to live beneath the waves.

## **Heroes (July 4-10):**

Celebrate our nation's birthday and the people we call heroes, whether they are veterans, everyday helpers, or the kind who wear capes.

## **Creatures (July 11-17):**

From the prehistoric to the present, learn about the fascinating features of creatures near and far.

## **Engineering (July 18-24):**

Meet the people who design bridges, cars, and video games and learn how to think like an engineer.

## **Great Outdoors (July 25-31):**

Explore the world outside your door and the incredible parks and waters that belong to us all.

## **When I Grow Up (August 1-7):**

All summer we'll learn about different careers—this week, think about all the exciting possibilities in your future!

## **Shoot for the Stars (August 8-14):**

Look up at the night sky and into outer space and meet people who risked everything to follow their dreams.



On TV. Online.  
Statewide.

Learn more about the Michigan Learning Channel at  
**Facebook Live at [fb.me/michlearning](https://fb.me/michlearning)**  
**[www.michiganlearning.org/summer](http://www.michiganlearning.org/summer)**

   Follow @MichLearning on social media to find out more.

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# Where to Find the Michigan Learning Channel

Find your favorite shows anywhere you go!

## Scan the QR Code:

Scan any of the QR codes in this book to see the accompanying video right on your device.

### On Demand:

Video lessons and activities at [MichiganLearning.org](https://MichiganLearning.org)

Click your grade level for this week's selected lessons

Or, use "Find a Lesson" to search by grade, subject, and educational standard

### On the App:

Find shows on the free PBS app

The PBS App is available for mobile devices, Roku, Apple TV, and on many Smart TVs.

Search for Read Write Roar, Math Might's, Extra Credit, DIY Science Time, Wimee's Words, InPACT at Home, Simple Gift Series, and more great programs.

### On the Livestream:

Watch the 24/7 livestream at [MichiganLearning.org/live-tv](https://MichiganLearning.org/live-tv)

### On TV:

Find us on broadcast television with an antenna

### Coming soon to:

Charter Cable services in Northern Michigan and the Upper Peninsula.  
Visit [MichiganLearning.org/Schedule](https://MichiganLearning.org/Schedule) for details



On TV. Online.  
Statewide.

Learn more about the Michigan Learning Channel at  
**Facebook Live at [fb.me/michlearning](https://fb.me/michlearning)**  
**[www.michiganlearning.org/summer](https://www.michiganlearning.org/summer)**



Follow @MichLearning on social media to find out more.

The Michigan Learning Channel is funded through a grant awarded by the Michigan Department of Education and the U.S. Department of Education.

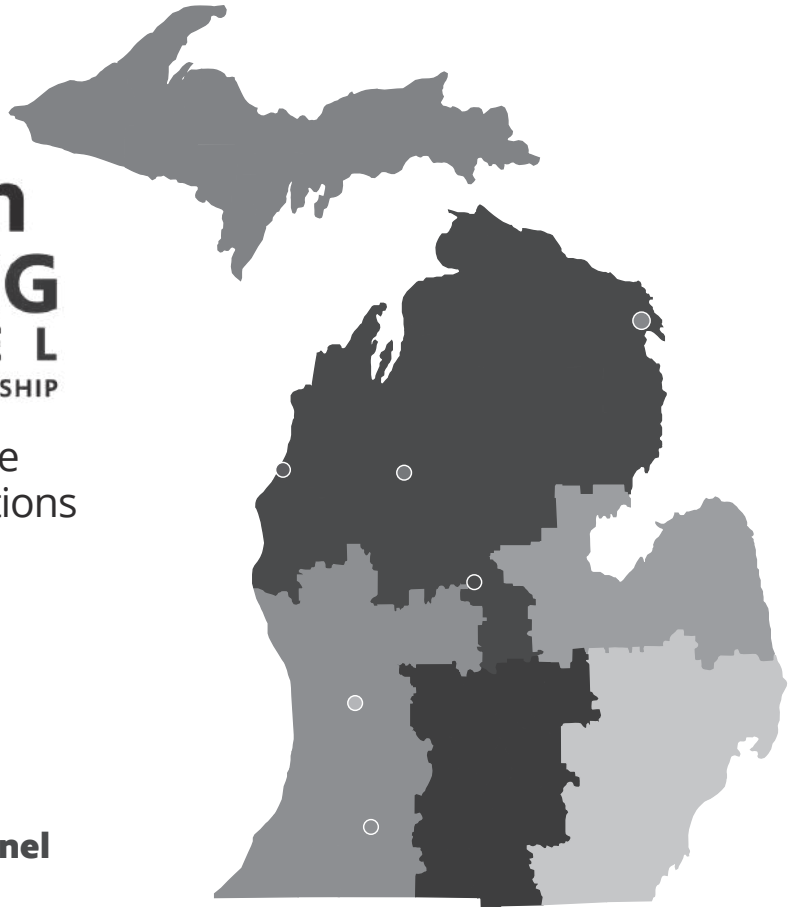


Serving Schools Statewide  
Through Your Local PBS Stations

**Watch On-Demand at  
MichiganLearning.org**

**f t i @MichLearning**

**The Michigan Learning Channel  
is Available On:**



**WCMU**  
**Alpena** Channel 6.4

**Cadillac**  
Channel 27.4

**Manistee**  
Channel 21.4

**Mt. Pleasant**  
Channel 14.4

**Shelby Shawl**  
Shelby.shawl@cmich.edu

**WDCQ**  
**Delta College Public Media**  
Channel 19.5

**Lauren Saj**  
laurensaj@delta.edu  
(989) 686-9346

**WGVU**  
**Grand Rapids**  
Channel 35.6

**Kalamazoo**  
Channel 52.6  
**Rachel Cain**  
cainra@gvsu.edu

**WKAR**  
**WKAR Public Media**  
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**WNMU**  
**WNMU-TV**  
Channel 13.4  
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**WTVS**  
**Detroit Public TV**  
Channel 56.5  
**Olivia Misterovich**  
omisterovich@dptv.org

**WNIT**  
**Michiana PBS**  
Channel 34.5  
**Sheri Robertson**  
srobertson@wnit.org  
Cass and Berrien  
counties

**COMING SOON**  
**to Charter Cable in**  
Northern and Mid-Michigan  
and the Upper Peninsula

## Rescan Your TV to watch on Broadcast

Your remote control and TV menus may vary, but the steps are the same. Your TV will scan for all available channels.

TV sets connected to cable, satellite or other pay TV providers do not need to scan.

### How to Scan

1. Press menu on your remote control.
2. Select setup.
3. Choose antenna then channel scan or auto tune.

# WEEKDAY SUMMER SCHEDULE

TIME	GRADE	WHAT'S ON
5AM	<b>Preschool - Kindergarten</b>	Let's Learn
6AM		PBS Kids shows
6:30AM		Wimee's Words, Simple Gifts Series
7AM		Let's Learn
8AM		Read, Write, ROAR! (Kindergarten)
8:30AM		Math Might's (Kindergarten)
9AM	<b>1st - 3rd Grade</b>	Read, Write, ROAR! (1st Grade)
9:30AM		Math Might's (1st Grade)
10AM		Read, Write, ROAR! (2nd Grade)
10:30AM		Math Might's (2nd Grade)
11AM		Read, Write, ROAR! (3rd Grade)
11:30AM		Math Might's (3rd Grade)
12PM		Live From the City Opera House: It's Storytime
12:30PM		PBS Kids shows
1PM	<b>4th - 6th Grade</b>	Extra Credit
1:30PM		Math & Movement
2PM		Story Pirates
2:30PM		DIY Science Time, SciGirls
3PM		Curious Crew
3:30PM	<b>1st - 3rd Grade</b>	Cyberchase, Into the Outdoors
4PM		Read, Write, ROAR! (2nd & 3rd Grade)
4:30PM		Math Might's (2nd & 3rd Grade)
5PM	<b>Preschool - Kindergarten</b>	Read, Write, ROAR! (Kindergarten & 1st Grade)
5:30PM		Math Might's (Kindergarten & 1st Grade)
6PM		Let's Learn
7PM	<b>4th - 6th Grade</b>	Extra Credit
7:30PM		Math & Movement
8PM		Story Pirates
8:30PM		DIY Science Time, SciGirls
9PM 5AM	<b>6th - 12th Grade</b>	Nature, NOVA, American Experience, Ken Burns and other PBS programming

**Details at [MichiganLearning.org/schedule](https://MichiganLearning.org/schedule)**

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**WATCH on the Michigan Learning Channel.**

Episodes are available on-demand or stream the channel at [MichiganLearning.org/summer](https://MichiganLearning.org/summer)

Visit [MichiganLearning.org](https://MichiganLearning.org) and follow @MichLearning on social media to find out more.





# Learn at Home with PBS KIDS

**Schedule Begins October 4, 2021**

Explore reading, math, science, life lessons, and more on the PBS KIDS 24/7 channel and live stream!  
The TV schedule below offers you and your child a chance to learn anytime alongside your friends from PBS KIDS.

TIME (M-F)	SHOW	GRADE	LEARNING GOALS
6/5c am	The Cat in the Hat Knows a Lot About That!	PK-1	Science & Engineering
6:30/5:30c am	Ready Jet Go!	K-2	Science & Engineering
7/6c am	Peg + Cat	PK-K	Math
7:30/6:30c am	Super WHY!	PK-K	Literacy
8/7c am	Daniel Tiger's Neighborhood	PK-K	Social & Emotional Learning
8:30/7:30c am	Daniel Tiger's Neighborhood	PK-K	Social & Emotional Learning
9/8c am	Sesame Street	PK-K	Literacy, Math, Social & Emotional Learning
9:30/8:30c am	Elinor Wonders Why	PK-K	Science & Engineering
10/9c am	Clifford the Big Red Dog	PK-K	Social & Emotional Learning, Literacy
10:30/9:30c am	Dinosaur Train	PK-K	Science
11/10c am	Let's Go Luna!	K-2	Social Studies
11:30/10:30c am	Curious George	PK-K	Math, Science & Engineering
12 pm/11c am	Nature Cat	K-3	Science
12:30 pm/11:30c am	Xavier Riddle and the Secret Museum	K-2	Social & Emotional Learning
1/12c pm	Molly of Denali	K-2	Literacy
1:30/12:30c pm	Hero Elementary	K-2	Science & Engineering
2/1c pm	Cyberchase	1-5	Math & Science
2:30/1:30c pm	Pinkalicious & Peterrific	PK-1	The Arts
3/2c pm	Pinkalicious & Peterrific	PK-1	The Arts
3:30/2:30c pm	Elinor Wonders Why	PK-K	Science & Engineering
4/3c pm	Donkey Hodie	PK-K	Social & Emotional Learning
4:30/3:30c pm	Curious George	PK-K	Math, Science & Engineering
5/4c pm	Alma's Way	K-1	Social & Emotional Learning
5:30/4:30c pm	Xavier Riddle and the Secret Museum	K-2	Social & Emotional Learning
6/5c pm	Molly of Denali	K-2	Literacy
6:30/5:30c pm	Hero Elementary	K-2	Science & Engineering

**Access FREE, at-home learning activities, tips, and more on [pbskidsforparents.org](https://pbskidsforparents.org)**

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# LIVE Virtual Events

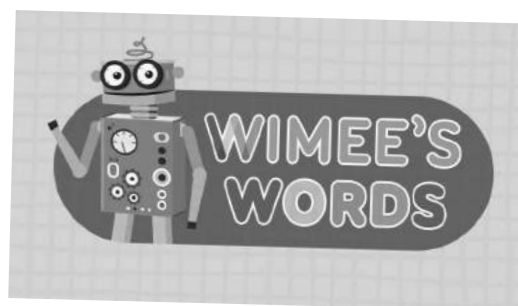
As part of the Summer Program, students can participate in live virtual events via Facebook Live. Events are interactive and presenters will take student suggestions and questions in real time. Recorded versions of these events will also be available online.

Live virtual events will be hosted on the Michigan Learning Channel Facebook page.

## Wimee's Words Live!

Recommended for ages 4-8

Join the loveable robot puppet Wimee and his friends as they discover more about the weekly theme. Wimee needs your help to write stories! Give Wimee your favorite words and ideas in the comments and watch as he incorporates them into stories and songs in real time. Your ideas may even be featured in future episodes of "Wimee's Words" on PBS!



**Wimee's Words Live! with the Michigan Learning Channel**  
**Every Wednesday, June 21-August 9, 4pm**  
**Live on the Michigan Learning Channel Facebook page**

## Great Lakes Now Watch Party with the Belle Isle Aquarium

Recommended for ages 8 and up

The monthly PBS show *Great Lakes Now* explores the water, people, and environmental issues that tie together the whole Great Lakes basin. Once a month, they team up with the Belle Isle Aquarium to take a deep dive into the themes of the show. Students will have the chance to ask questions of the guest scientists and meet fantastic fish and other creatures.



**GREATLAKESNOW**

**Great Lakes Now Watch Party**  
**Friday, July 1, 1pm**  
**Friday, August 5, 1pm**  
**Live on the Michigan Learning Channel Facebook page**



On TV. Online.  
 Statewide.

Learn more about the Michigan Learning Channel at  
**Facebook Live at [fb.me/michlearning](https://fb.me/michlearning)**  
**[www.michiganlearning.org/summer](http://www.michiganlearning.org/summer)**

   Follow @MichLearning on social media to find out more.



# Learn Anywhere!

## On Air. Online. On Demand.

**Serving students statewide through your local PBS station, the Michigan Learning Channel has everything kids need to build their brains and engage in learning key concepts to succeed in school!**



### **Preschool**

Read, sing, and play with your little one.

#### **Wimee's Words**

*Join Wimee, the fun, lovable robot that inspires kids to learn through creativity.*

#### **Simple Gift Series**

*Make music, find something new, and read with Betty the Bookworm.*

#### **POP Check**

*Mindful practice tools to Pause, Own what we are feeling, and Practice relaxing.*

### **Kindergarten to 3rd Grade**

Keep kids learning with fun lessons taught by Michigan teachers.

#### **Read, Write, Roar**

*Kids build literacy skills with engaging ELA lessons.*

#### **Math Might**

*Build number sense and learn strategies for solving math problems.*

#### **InPACT**

*Get moving with this home-based physical activity program.*

### **4th to 6th Grade**

Short, engaging videos and hands-on lessons keep tweens engaged.

#### **Extra Credit**

*Creative writing, math, fitness, career exploration, and more!*

#### **Curious Crew**

*Dr. Rob Stephensen and inquisitive kids take a hands-on approach to scientific exploration.*

#### **Story Pirates**

*Bite-sized literary lessons with comedians, authors, and teachers.*



**VISIT us online to view all shows, learn about events,  
and download activities!**

**[www.michiganlearning.org](http://www.michiganlearning.org)**

Follow @michlearning to find out more.



# Learn at Home with PBS KIDS

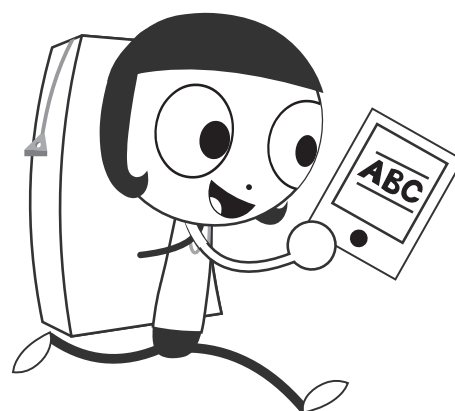
Play and learn anytime and anywhere with free apps from PBS KIDS! Use the chart below to find the app that aligns to your child's grade, learning goal, and favorite PBS KIDS show - then download it on your on your mobile or tablet device to play online, offline, or anytime.

## Apps for Social & Emotional Learning

Daniel Tiger for Parents	PK-K	Social & Emotional Learning
PBS KIDS Games app	K-2	Multiple Learning Goals
PBS KIDS Video app	K-2	Multiple Learning Goals

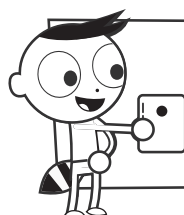
## Apps for Literacy Learning

Dinosaur Train A to Z	PK-K	Literacy, Science
Molly of Denali	K-2	Literacy
PBS KIDS Games app	K-2	Multiple Learning Goals
PBS KIDS Video app	K-2	Multiple Learning Goals



## Apps for STEM Learning (Science, Technology, Engineering & Math)

PBS Parents Play & Learn	PK-K	Literacy, Math	Photo Stuff with Ruff	K-2	Science
Play & Learn Engineering	PK-K	Science and Engineering	Ready Jet Go! Space Explorer	K-2	Science
PBS KIDS Measure Up!	PK-K	Math	Ready Jet Go! Space Scouts	K-2	Science and Engineering
Play & Learn Science	PK-K	Science	Nature Cat's Great Outdoors	K-3	Science
Splash and Bubbles for Parents	PK-K	Science	PBS KIDS ScratchJr	1-2	Coding
Splash and Bubbles Ocean Adventure	PK-K	Science	Outdoor Family Fun with Plum	1-3	Science and Engineering
The Cat in the Hat Builds That!	PK-K	Science and Engineering	Cyberchase Shape Quest	1-5	Math
The Cat in the Hat Invent's	PK-K	Science and Engineering	PBS KIDS Games app	K-2	Multiple Learning Goals
Jet's Bot Builder: Robot Games	K-2	Science and Engineering	PBS KIDS Video app	K-2	Multiple Learning Goals



[pbskids.org/apps](https://pbskids.org/apps)



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# Week 1: Take Flight














June 20-26

From planes and kites to butterflies and birds, discover the fables and physics of things that fly.

Use the sheet below to mark off this week's activities as you complete them. See if you can get a BINGO!

**Playlists this week:** [www.michiganlearning.org/takeflight](http://www.michiganlearning.org/takeflight)



Be a pollinator with Cyberchase	 60 mins. of activity	 Read 20 minutes	Make paper airplanes with Ready, Jet, GO!	Watch Read, Write, ROAR!
 Read 20 minutes	 Watch Math Might	 Look for birds	Spot a plane in the sky	 60 mins. of activity
 60 mins. of activity	Try an InPACT at Home activity Card	 HAVE FUN! (Free Space)	 Fly a kite	 Read 20 minutes
Watch Read, Write, ROAR!	Spot a helicopter in the sky	 Watch Math Might	Watch InPACT at Home	Watch Live from the Opera House
Watch InPACT at Home	 Read 20 minutes	Try Amelia Earhart's word find (pg. 12)	 60 mins. of activity	Travel with Let's Go Luna (pg. 11)



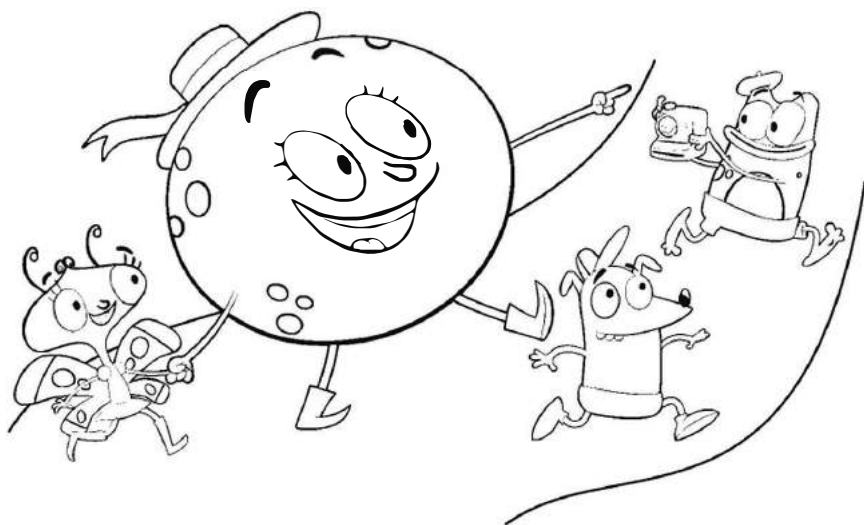




# Let's Go Luna!

## Where Would You Go?

If you could travel anywhere with Luna, Carmen, Andy and Leo, where would you choose to go and why?

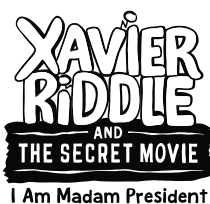


**Find more game and activities at [pbskidsforparents.org](http://pbskidsforparents.org)**

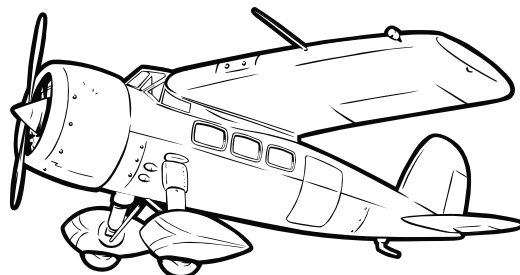
Funded by:



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## Amelia Earhart's Travelling Word Find



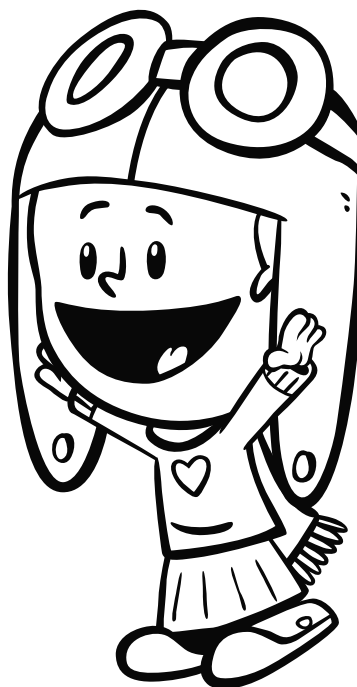
Help Amelia find  
all the words related  
to her travels!

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

**PLANE**  
**SKY**

**FLYING**  
**PACK**

**PILOT**  
**FUN**



Find more games and activities at [pbskids.org/xavier](https://pbskids.org/xavier)

Produced by:



Sponsored by:



Based on Brad Meltzer and  
Christopher Eliopoulos'  
best-selling kids book series



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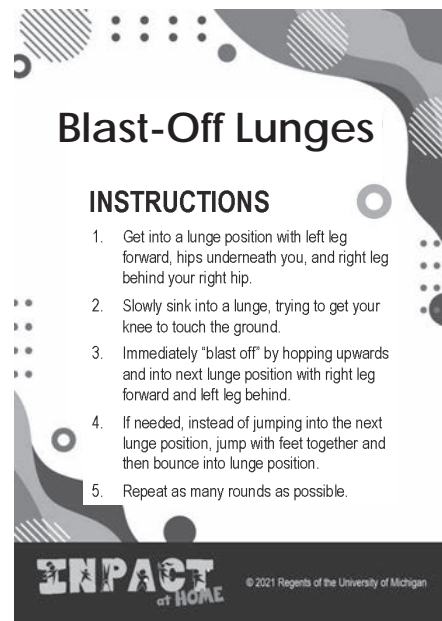


# INACT

at HOME

## Activity Cards

Cut out the cards. When you're feeling antsy, try following the directions for one of the exercises!



## Blast-Off Lunges

### INSTRUCTIONS

1. Get into a lunge position with left leg forward, hips underneath you, and right leg behind your right hip.
2. Slowly sink into a lunge, trying to get your knee to touch the ground.
3. Immediately "blast off" by hopping upwards and into next lunge position with right leg forward and left leg behind.
4. If needed, instead of jumping into the next lunge position, jump with feet together and then bounce into lunge position.
5. Repeat as many rounds as possible.

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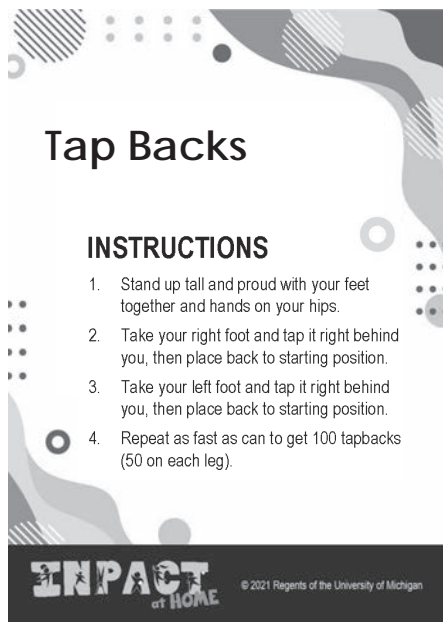


## Side Leg Lifts

### INSTRUCTIONS

1. Start by laying on your side with your legs stacked on top of each other.
2. Slowly raise your top leg up towards the sky and then back down.
3. Complete 10 repetitions and then switch legs.
4. Complete 3 sets per leg.
5. For added challenge, tape a bag of water to the top leg for some added weight!

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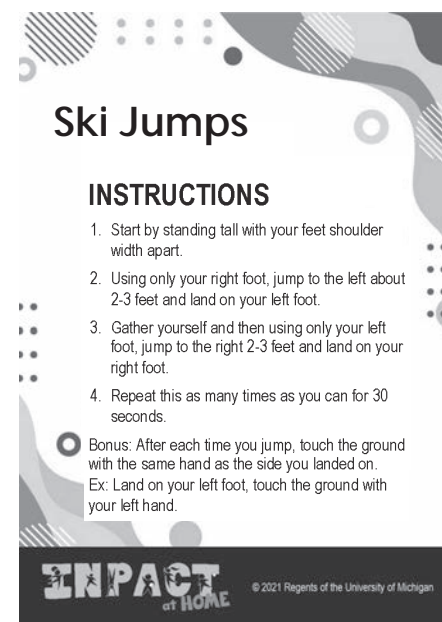


## Tap Backs

### INSTRUCTIONS

1. Stand up tall and proud with your feet together and hands on your hips.
2. Take your right foot and tap it right behind you, then place back to starting position.
3. Take your left foot and tap it right behind you, then place back to starting position.
4. Repeat as fast as can to get 100 tapbacks (50 on each leg).

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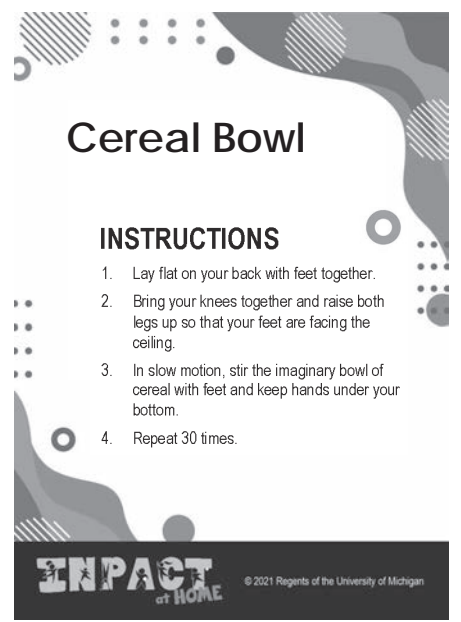
## Ski Jumps

### INSTRUCTIONS

1. Start by standing tall with your feet shoulder width apart.
2. Using only your right foot, jump to the left about 2-3 feet and land on your left foot.
3. Gather yourself and then using only your left foot, jump to the right 2-3 feet and land on your right foot.
4. Repeat this as many times as you can for 30 seconds.

Bonus: After each time you jump, touch the ground with the same hand as the side you landed on.  
Ex: Land on your left foot, touch the ground with your left hand.

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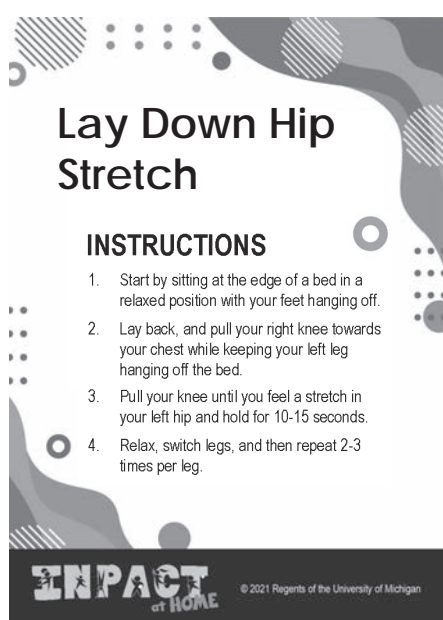


## Cereal Bowl

### INSTRUCTIONS

1. Lay flat on your back with feet together.
2. Bring your knees together and raise both legs up so that your feet are facing the ceiling.
3. In slow motion, stir the imaginary bowl of cereal with feet and keep hands under your bottom.
4. Repeat 30 times.

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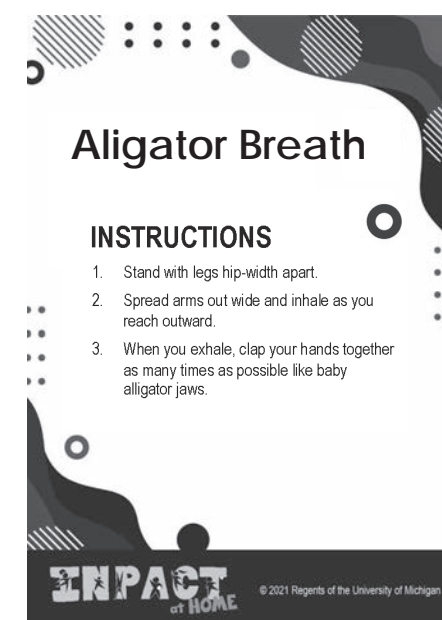


## Lay Down Hip Stretch

### INSTRUCTIONS

1. Start by sitting at the edge of a bed in a relaxed position with your feet hanging off.
2. Lay back, and pull your right knee towards your chest while keeping your left leg hanging off the bed.
3. Pull your knee until you feel a stretch in your left hip and hold for 10-15 seconds.
4. Relax, switch legs, and then repeat 2-3 times per leg.

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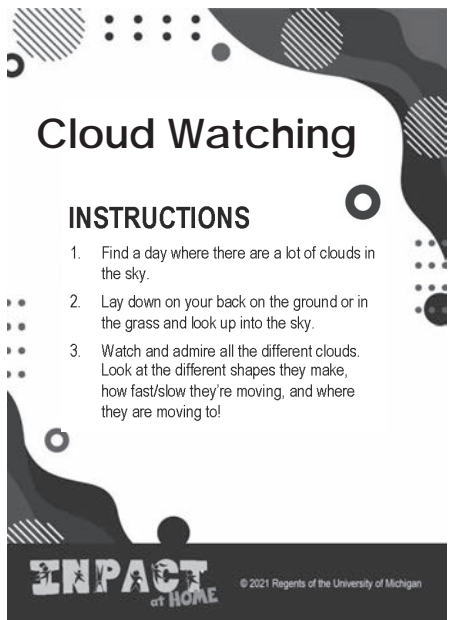


## Alligator Breath

### INSTRUCTIONS

1. Stand with legs hip-width apart.
2. Spread arms out wide and inhale as you reach outward.
3. When you exhale, clap your hands together as many times as possible like baby alligator jaws.

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## Cloud Watching

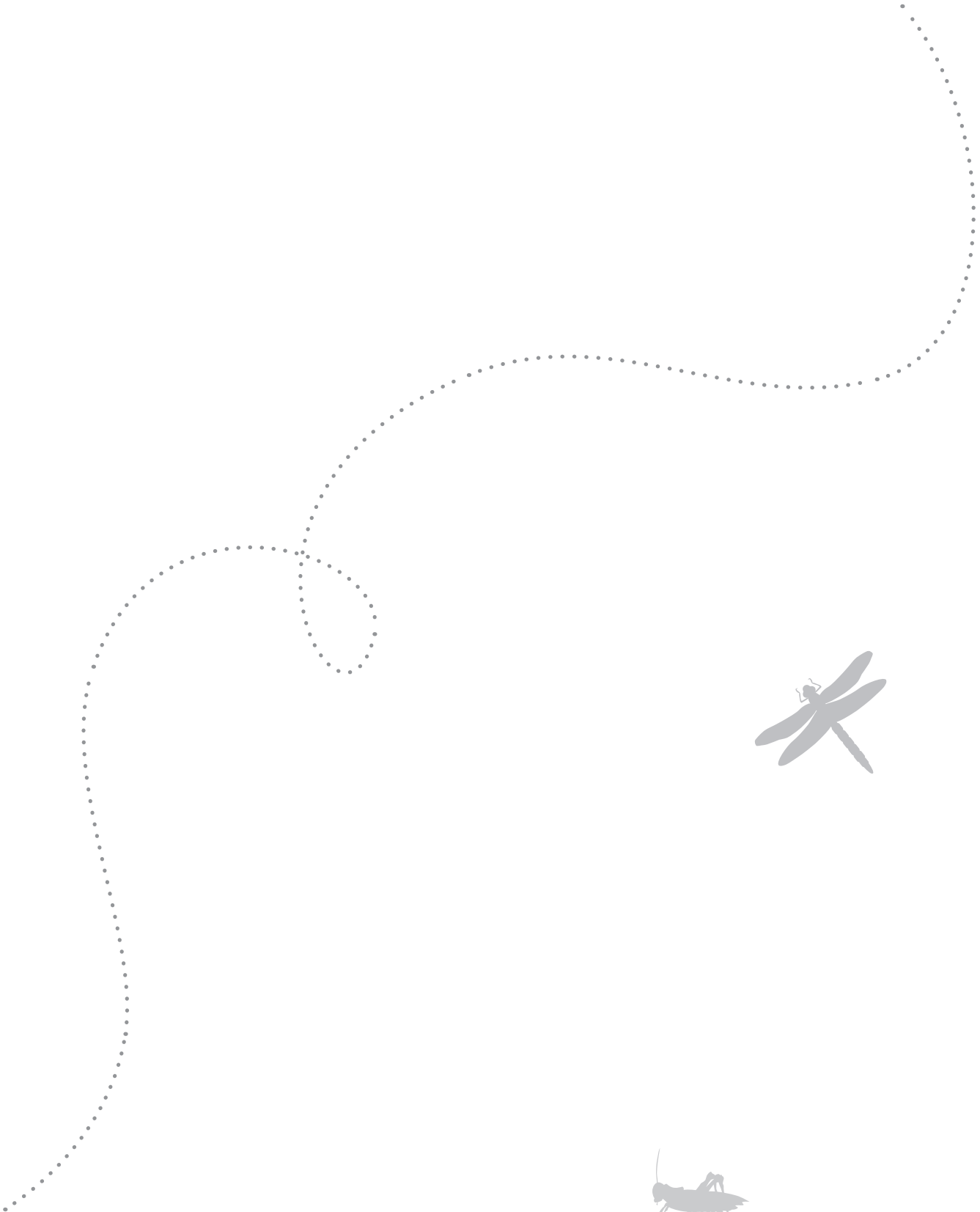
### INSTRUCTIONS

1. Find a day where there are a lot of clouds in the sky.
2. Lay down on your back on the ground or in the grass and look up into the sky.
3. Watch and admire all the different clouds. Look at the different shapes they make, how fast/slow they're moving, and where they are moving to!

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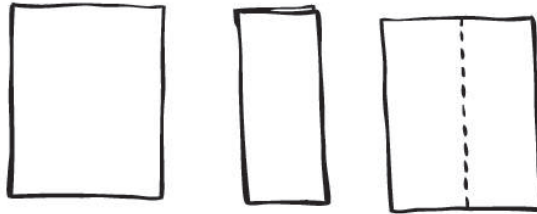




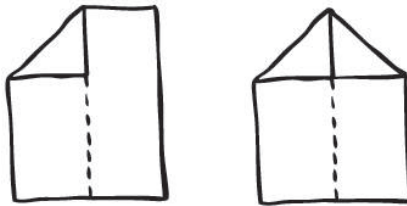


# Paper Airplane

1. Fold paper in half the long way and reopen.



2. Fold the top two corners into the center spine of the paper.



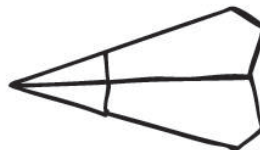
3. Refold lengthwise and rotate the paper to lay on the table like this:



4. Fold the top left corner down to lay parallel to the bottom spine. Repeat this step on the other side.



5. Turn the paper over and repeat the last two steps. Your airplane should look like this!



6. Now, try to fly it to the moon! How far can you make the airplane fly?

For more games and activities, visit [pbskidsforparents.org](http://pbskidsforparents.org)

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# Pollinators

## EXPLORE: Be a Bat!

Students model how bats and other pollinators help plants by spreading pollen from flower to flower.

### Materials:

- **Cups**
- **Pompoms or cotton balls**
- **Colored sugar or confetti**  
Add food coloring to sugar or make confetti with a hole punch and tissue paper.
- **Kid-friendly tweezers**
- **60 second timer**



**"FLOWERS"**

### Instructions:

1. Coat the inside of several cups, each with a different color of sugar. These are your flowers.
2. Fill the cups halfway with small pompoms (nectar) that match the color of the sugar in that cup and place around the room.
3. Give each student a pair of kid-friendly tweezers to be their pollinator "nose" and their own cup where they can collect pompoms.
4. Start a timer for 60 seconds. Students need to collect as many different colored pompoms as they can by visiting all the cups around the room. Have each "pollinator" pick up the pompoms one at a time with their tweezers, lift them out of the flowers, and drop them in their own cups.
5. After 60 seconds, check the flower cups to see if any pollen (sugar) traveled from one flower to another. If the colors got mixed together, that means the flowers were pollinated.

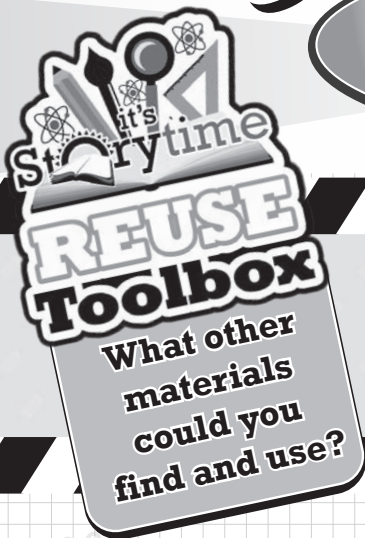


**TWEEZER  
"NOSE"**



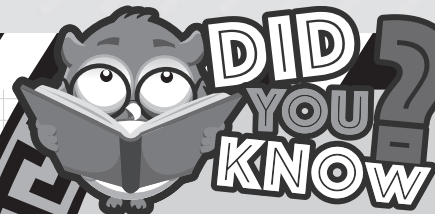
# it's Storytime CHALLENGE

## Bernoulli's Pressure Challenge



- Strip of Paper
- Round Cheese Puff
- String
- Ping Pong Ball
- Thin Garbage Bag
- Clean Funnel
- Bendable Straw
- Aluminum Cans
- Hair Dryer

*My Design Ideas:*



Bernoulli's principle explains the reason why airplanes are able to fly.

Between 1725 and 1749 alone, Daniel Bernoulli received 10 prizes from the Paris Academy of Sciences.

## POWER UP WORDS

- Aviation
- Flight Path
- Cargo

## CAREER LIFTOFF

- Pilot
- Air Traffic Controller
- Aerospace Engineer
- Avionics Technicians

*How could I improve on my design for next time?*

### Learning Standards: 3rd grade; Engineering Design

3-5-ETS1-1 Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

3-5-ETS1-2 Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

3-5-ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

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# ACTIVITY GUIDE

**Episode 201:** Earth's Landforms and -tch words

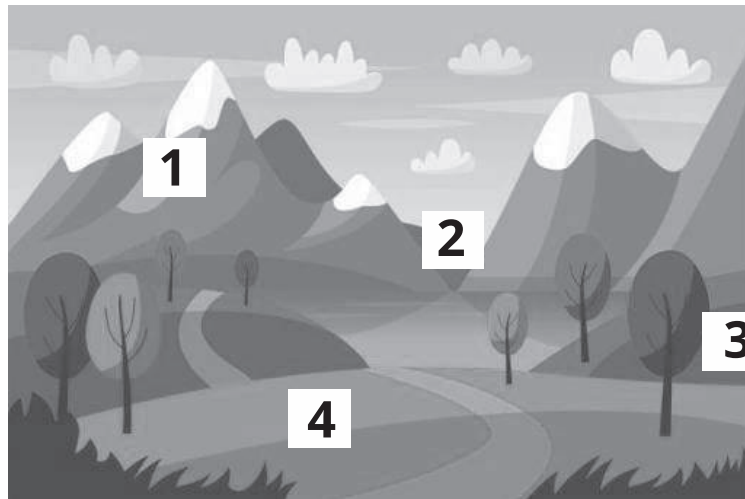
**Book:** *Earth's Landforms and Bodies of Water* by Natalie Hyde

Scan below to watch lesson



## Phonics Skills

Landforms are natural features on the Earth's surface. Look at the numbers on the picture below. Write a word from the *Words to Know* box to label each number with the correct landform.



1. \_\_\_\_\_ 2. \_\_\_\_\_  
3. \_\_\_\_\_ 4. \_\_\_\_\_

🔍 What types of landforms do you have where you live?

## Words to Know

- **mountain** - a high raised landform that has sloping sides that form a peak.
- **hill** - a high raised landform that is smaller than a mountain with a rounded top.
- **valley** - an area found between raised landforms such as mountains or hills.
- **plains** - large, flat areas of land usually covered in grasses.





# 5 Way Challenge

Write the number 5 ways.

356	Only Tens and Ones
A Base Ten Diagram	Word Form
Compose a Different Way	Expanded Form

# Week 2: Under Water














# June 27 – July 3

Dive deep into oceans, rivers, and our own Great Lakes to discover what it takes to live beneath the waves.

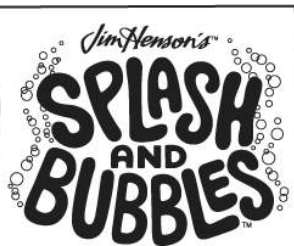
Use the sheet below to mark off this week's activities as you complete them. See if you can get a BINGO!

**Playlists this week: [www.michiganlearning.org/underwater](http://www.michiganlearning.org/underwater)**



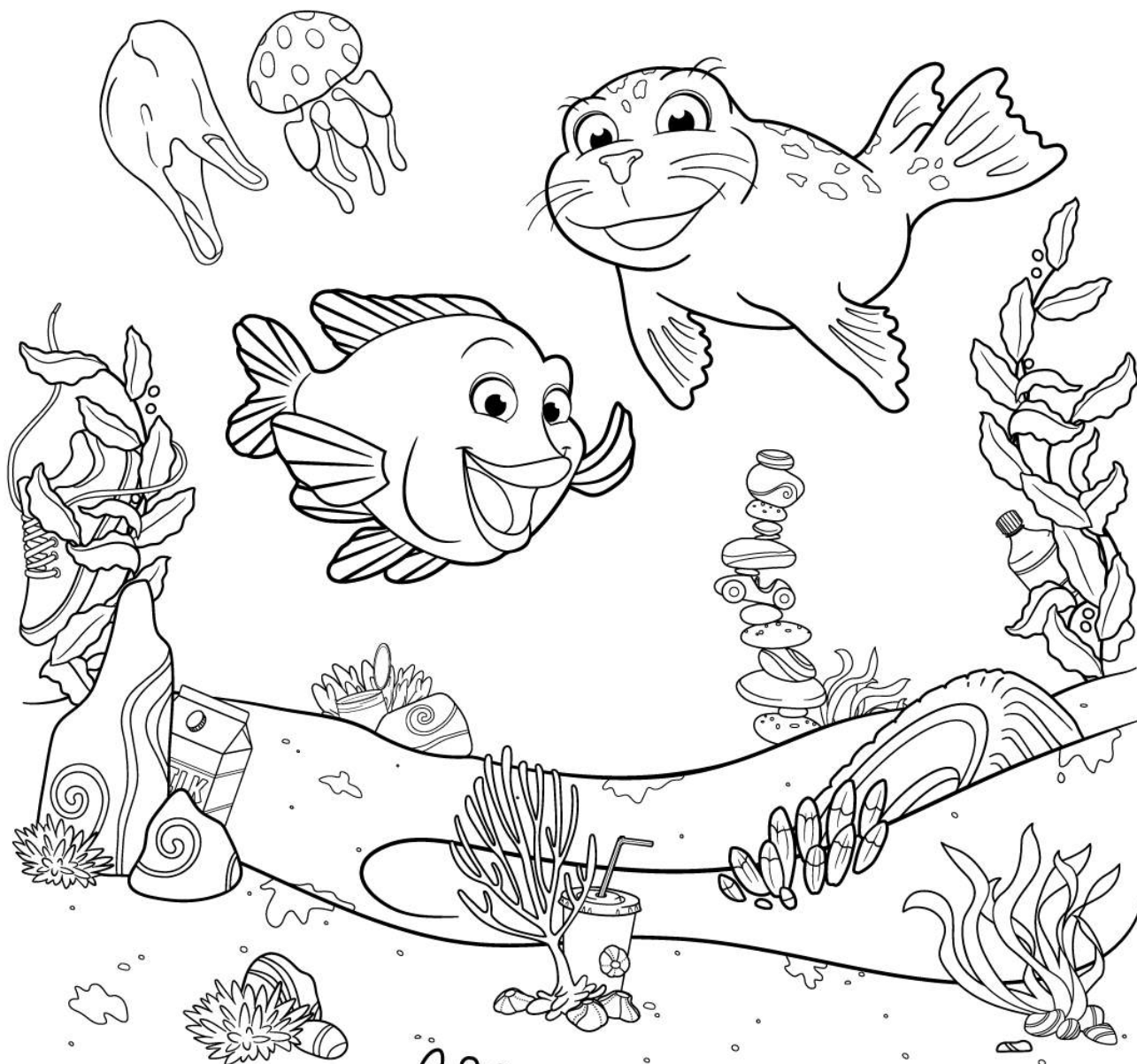
Make a pond viewer (pg. 29)	 60 mins. of activity	 Read 20 minutes	Draw a deep sea fish (pg. 28)	Watch Read, Write, ROAR!
 Read 20 minutes	 Watch Math Might	 Go fishing	Watch Live from the Opera House	 60 mins. of activity
 60 mins. of activity	Try the Glorious Great Lakes Challenge	 HAVE FUN! (Free Space)	 Go swimming	 Read 20 minutes
Watch Read, Write, ROAR!	Watch an ice cube change over time (pg. 31)	 Watch Math Might	Watch InPACT at Home	Watch Wimee's Words
Watch InPACT at Home	 Read 20 minutes	Start a paper tracker (pg. 32)	 60 mins. of activity	Tidy up the kelp forest! (pg. 27)





## Tidy up the Kelp Forest!

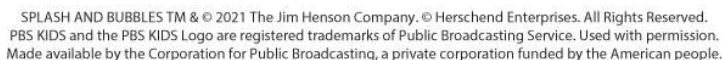
**Instructions:** Tyke the Pacific Harbor Seal has hidden items that don't belong in the ocean. Can you help Tidy the Garibaldi Fish clean up? Circle the eight items that don't belong.



### Reeftown Ranger Tip:

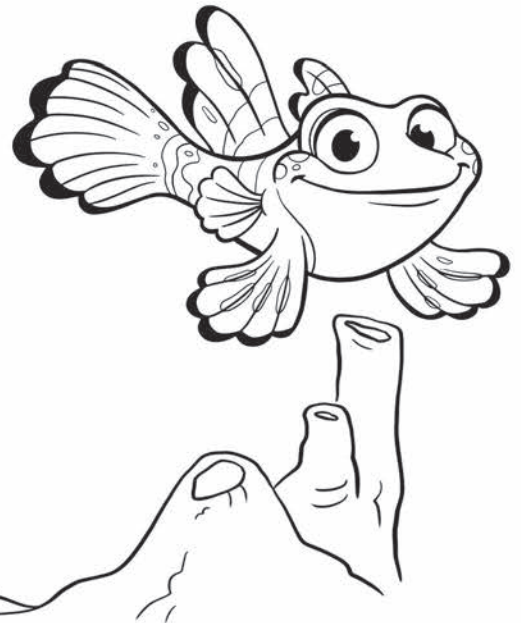
Never throw trash in the street. Rain can wash it down the storm drain and into rivers and streams. All rivers lead to the ocean!

Find more games and activities at [pbskidsforparents.org](http://pbskidsforparents.org)





**Can you draw a deep sea fish  
with BIG EYES, a BIG MOUTH,  
and LONG TEETH?**



## **Fin Fact!**

Creatures that live in the deep typically have large mouths, long teeth and hinged jaws to eat large quantities of scarce food. Many deep sea creatures also have very large eyes to capture scarce light.

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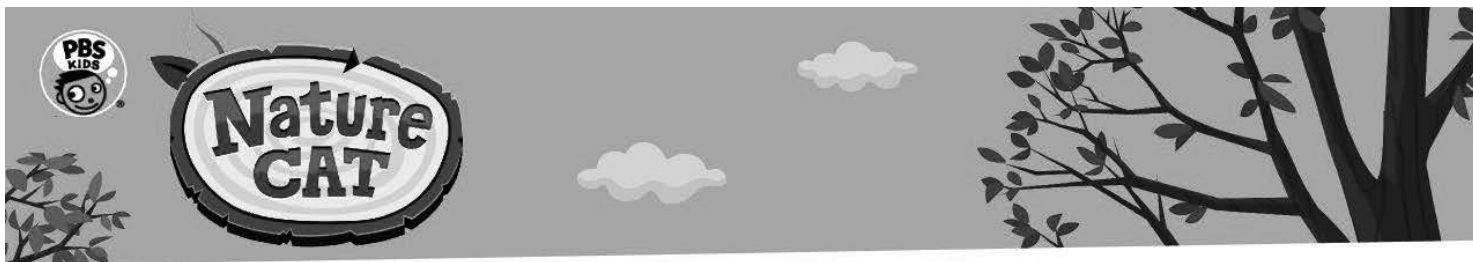
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# A POND WITH A VIEW

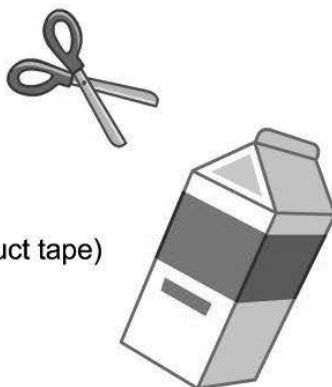
## DIFFICULTY: EASY

While there is action all around a pond, what do you think is happening *in* the water? Ponds are filled with animal and plant life that have special qualities that help them spend all or most of their lives underwater. Make this pond viewer to bring on your next pond exploration!



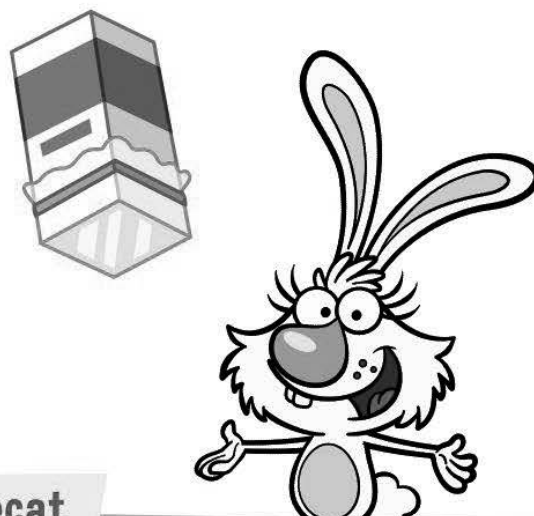
## MATERIALS

- One-half gallon milk carton
- Scissors
- Waterproof, strong tape (e.g. duct tape) or a sturdy rubber band
- Heavy, clear plastic wrap



## LET'S MAKE A POND VIEWER!

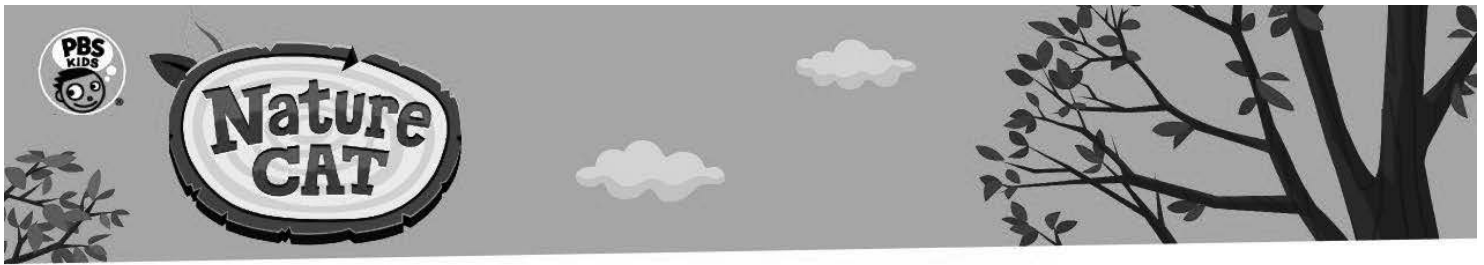
- 1 Have an adult cut off the very top of the milk carton and the very bottom to create a rectangular tube.
- 2 Tear off a sheet of plastic wrap and place it over one of the open ends. Fold down the plastic wrap... make sure wrap is smooth and tight for clear viewing.
- 3 Using the tape or the rubber band, secure the plastic wrap in place. Keep the plastic wrap as tight as possible so you have a flat viewing surface.



[pbskids.org/naturecat](http://pbskids.org/naturecat)

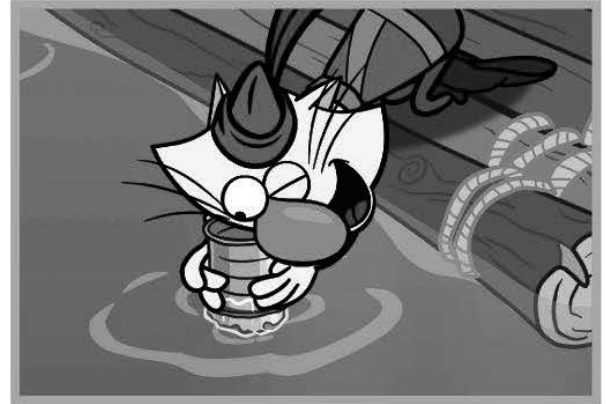
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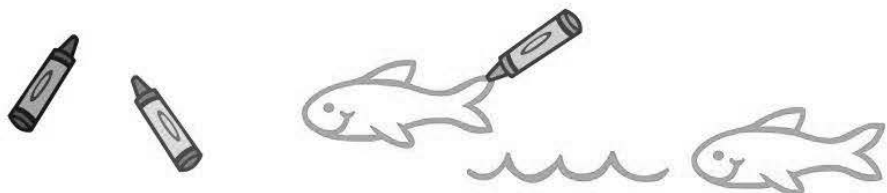
## POND VIEWING TIPS

- 1 Splashing and stirring up mud will make it difficult to see into the pond. Be as still as possible when using your viewer.
- 2 Despite what NatureCat says, it is noble and fun to get wet! If the shoreline is murky, slowly wade out to your knees before using your viewer where it may be less murky.
- 3 Other ways to view: on a dock, over the side of a canoe, or in a stream, lake or tide pool!



## LET'S TAKE A CLOSER LOOK

Describe a plant or animal that you see. Draw a picture of it, and ask an adult to help you identify and label your picture.



[pbskids.org/naturecat](http://pbskids.org/naturecat)

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# Ice Cubes and Water: Now and Later

Name \_\_\_\_\_

## Instructions:

1. Fill one plastic, clear cup with water and a second plastic, clear cup with ice.
2. Find a piece of chalk, a pencil, and take the two cups and this paper and go outside.
3. Pour a small amount of water on the ground. Outline the water puddle with chalk. In the first column, draw what you notice about the water.
4. Next, place one of your ice cubes on the ground and outline it with chalk. Leave one ice cube in a clear cup. After 30-minutes, in the second column, draw what you observe about the ice.
5. When another 30-minutes pass, write or draw a question you are interested in.

## During my investigation I noticed this about the water...

When I first poured the water on the ground, the water looked like this...

After 30-minutes, the water I poured looked like this...

## I observed this about the ice...

When I first placed the ice on the ground, the ice looked like this...

After 30-minutes, the ice looked like this..

**What do you notice about how liquid water changed?** \_\_\_\_\_

**What do you notice about how solid water (ice) changed?** \_\_\_\_\_

**A question I still wonder about is...** \_\_\_\_\_

**I made the connection in my mind when I observed the water and ice that...** \_\_\_\_\_

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# PAPER TRACKER



# RASTREADOR DE PAPEL

The paper you use at home comes from trees. Find out how much paper you use in a month.

1. Every time you go to throw away or recycle a piece of paper or cardboard, put it aside in a bag or box instead.
2. Then recycle any clean paper and compost or throw away any food-stained paper
3. Repeat this every week for a month.
4. At the end of the month, add up the number of pounds of paper you threw away each week. Put the total in the box in the chart below.

El papel que usas en casa viene de los árboles. Averigua cuánto papel utilizas en un mes.

1. Cada vez que vayas a tirar o reciclar un trozo de papel o cartón, guárdalo en una bolsa o caja.
2. Luego recicla el papel limpio y desecha el papel manchado de comida.
3. Repite esto cada semana durante un mes.
4. Al final del mes, suma la cantidad de libras de papel que desechaste cada semana. Pon el total en el cuadro de la tabla a continuación.

	pounds of paper libras de papel
Week 1 Semana 1	
Week 2 Semana 2	
Week 3 Semana 3	
Week 4 Semana 4	
TOTAL	
	pounds of paper libras de papel

If 100 people all used this much paper each month, how much paper would they use all together?

Si 100 personas usaran esta cantidad de papel cada mes, ¿cuánto papel usarían todos juntos?

100 people  
100 personas

total pounds of paper per person  
total de libras de papel por persona

pounds of paper  
libras de papel

To find out how many trees it takes to make that much paper, use a calculator to multiply the total by .012.

Para saber cuántos árboles se necesitan para hacer esa cantidad de papel, utiliza una calculadora para multiplicar el total por 0.012.

pounds of paper  
libras de papel

x .012

trees per pound  
árboles por libra

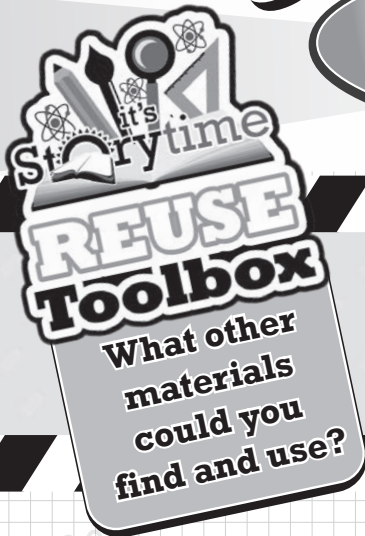
trees  
árboles

Write down one thing you can do at home to use less paper  
Escribe una cosa que puedas hacer en casa para utilizar menos papel



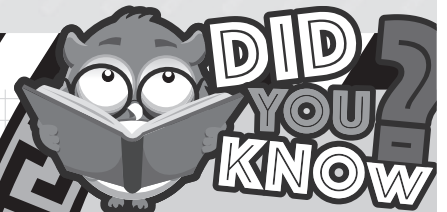

# it's Storytime CHALLENGE

**Glorious  
Great Lakes**



- Cardboard
- Glue
- Scissors
- Colored Paper
- Paper Towels
- Shaving Cream
- Beach Rocks

*My Design Ideas:*



The five Great Lakes - Superior, Huron, Michigan, Erie and Ontario - span a total surface area of 94,600 square miles, making them the largest freshwater system in the world. More than 20% of the world's freshwater is in the Great Lakes!



- Peninsula
- Lake
- Fresh Water



- › Coast Guard
- › Environmental Engineer
- › Conservationist
- › National Park Service

*How could I improve on my design for next time?*

**Learning Standards: 2nd grade**

Develop a model to represent the shapes and kinds of land and bodies of water in an area.

2-ESS2-2 MI Develop a model to represent the state of Michigan and the Great Lakes, or a more local land area and water body.

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# ACTIVITY GUIDE

**Episode 204:** Earthquakes, Eruptions and "thr" words

**Book:** *Earthquakes, Eruptions, and Other Events that Change Earth* by Natalie Hyde

Scan below to watch lesson



## Write It

**Thr-** is a blend that usually comes at the beginning of a word. It makes the /thr/ sound like in **throb**. Use a **thr-** word from the word box to complete each sentence.

through throw throat thrill three thread throne

1. To pitch a ball, you \_\_\_\_\_ it.
2. This is the number that comes next in this sequence. one, two ,\_\_\_\_\_.
3. A king has a special chair that he sits in. It's called a \_\_\_\_\_.
4. An airplane can fly \_\_\_\_\_ a cloud.
5. Someone who is sewing is most likely going to use a needle and \_\_\_\_\_ to stitch the sweater up.
6. It was such a \_\_\_\_\_ to ride on that big roller coaster.
7. I was nervous and had to clear my \_\_\_\_\_, before I began my speech.

## Draw It

**Alliteration** is when two or more words close together in a group of words all start with the same letter or sound. Read the following sentence out loud. Draw a picture to go with the sentence.

Shelly shows sheep how to shine shoes.





# Plot and Compare

**Directions:** Plot the numbers given on the number line and use  $<$ ,  $>$ , or  $=$  to compare the two numbers (example:  $3 < 13$ ).

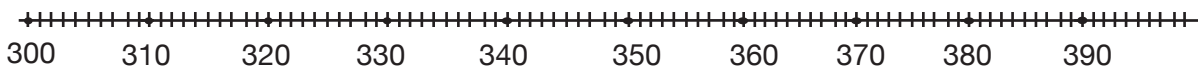
1.



Plot: **681, 618**

Compare (use  $<$ ,  $>$ , or  $=$ ) : \_\_\_\_\_

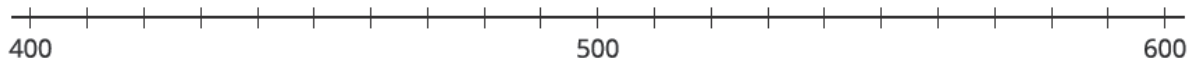
2.



Plot: **315, 366**

Compare (use  $<$ ,  $>$ , or  $=$ ) : \_\_\_\_\_

3.



Plot: **560, 460**

Compare (use  $<$ ,  $>$ , or  $=$ ) : \_\_\_\_\_

# Week 3: Heroes













## July 4-10

Celebrate our nation's birthday and the people we call heroes, whether they are veterans, everyday helpers, or the kind who wear capes.

Use the sheet below to mark off this week's activities as you complete them. See if you can get a BINGO!

**Playlists this week:** [www.michiganlearning.org/heroes](http://www.michiganlearning.org/heroes)



Design a gadget (pg. 43)	 60 mins. of activity	 Read 20 minutes	Make bubble mix (pg. 44)	Watch Read, Write, ROAR!
 Read 20 minutes	 Watch Math Might	Spot a mail truck outside	 Do a good deed	 60 mins. of activity
 60 mins. of activity	Try the Cyberchase planting puzzle	 HAVE FUN! (Free Space)	Watch Meet the Helpers	 Read 20 minutes
Watch Read, Write, ROAR!	 Do a good deed	 Watch Math Might	Watch InPACT at Home	Make superhero wrist cuffs (pg. 41)
Watch InPACT at Home	 Read 20 minutes	Try a new food	 60 mins. of activity	Spot a fire truck outside



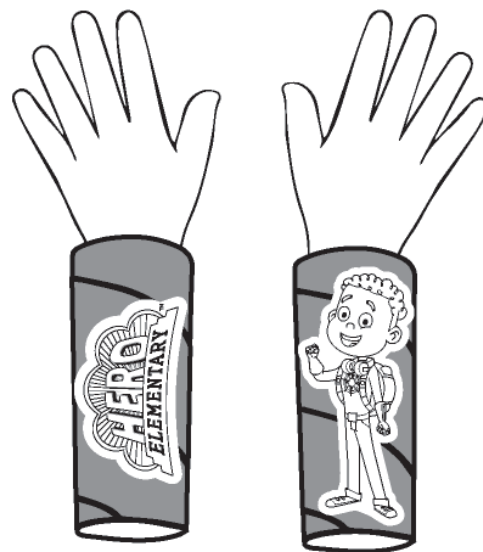
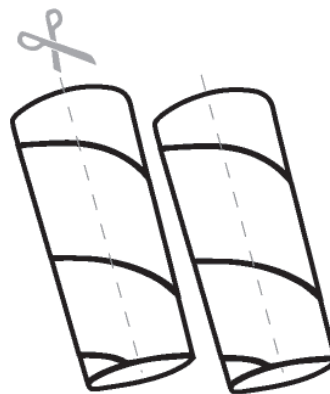


# Recycled Superhero Wrist Cuffs

AJ Gadgets uses his Superpowers of Science to engineer cool new gadgets from recycled materials. Join Sparks' Crew by making your own HERO ELEMENTARY superhero wrist cuffs from empty toilet paper rolls.

## Directions:

1. Find two empty toilet paper rolls and make a cut down the length of each one so that you can slip one over each wrist.
2. Decorate your superhero wrist cuffs! You can use paint, markers, glitter, yarn, fabric or your favorite art supplies.
3. Color and cut out the images below and affix one to each wrist cuff. Can you find other recycled materials from around your house to add to your cuff?
4. Wear your wrist cuffs and remember you can be a superhero by being kind and helping others!



**AJ Gadgets**

For more games and activities, visit [pbskidsforparents.org](http://pbskidsforparents.org)

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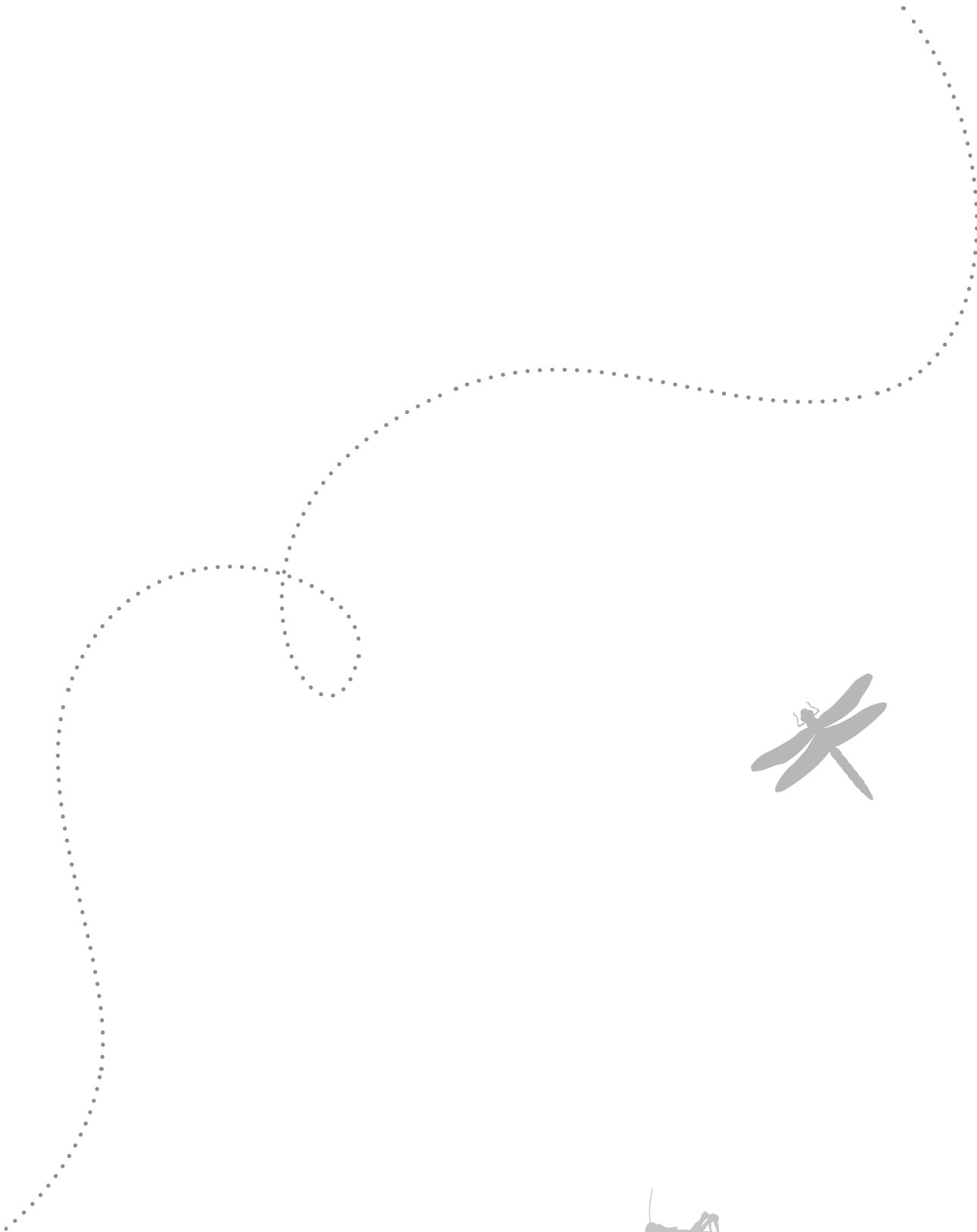
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# Gadget Gurus

**Create a gadget!** AJ Gadgets makes super tools from everyday items. You can too! Create a gadget from recyclables. Think about AJ's greatest gadgets: Arm-O-Matic, Rope Launcher, Twigcam, Dragonfly Drone, Launcher, Lacer Racer, Tooth Brushing Gadget, Night Vision Goggles. Next, take some time to think about what you would like to build. Draw your ideas below. Then, gather objects to complete your design! Be sure to ask a grownup for help if you need it.

## What you need:

- **Pencil and eraser Recyclables:**
  - cardboard boxes, plastic bottles, tin cans, newspapers/magazines, old toys, or other old objects (don't use if there are sharp edges)
- **Joiners:** tape, glue, string, wire, pipe cleaners
- **Decorators:** paint, crayons, markers, stickers, and other craft supplies
- **Cutters:** scissors, hole punchers, etc. Be sure to use a grownup helper!



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# Bubble Up!

## Make a bubble mix at home for some outdoor fun!

### What you need:

- 1/2 cup liquid dish soap
- 1/4 cup glycerin (from a pharmacy) or corn syrup (from a grocery)
- 2 cups water
- Bowl (or bucket)
- Spoon or chopstick

### What to do:

Pour water, dish soap, and glycerin (or corn syrup) into the bowl or bucket. Stir slowly to mix the liquids, but to keep bubbles from forming. Dip the wand you created (see below) into the mixture and blow bubbles!

## Create a Wand!

### What you need:

- Pipe cleaners
- Your choice of the following:
  - wire coat hanger
  - cookie cutters
  - old sandbox or beach toys
  - kitchen utensils (ask a parent first!)
  - fly swatter

### What to do:

AJ Gadgets makes tools from everyday things and you can too! Create a bubble wand – small or supersized. The larger the bubble wand, the larger the bubbles!

### A bubble wand has two parts:

1. A shape (circle or square) with a hole in the middle
2. A handle

Use pipe cleaners or wire to attach the two parts of the bubble wand.

Dip the wand into the bubble mixture you created (see above) and blow bubbles!

Find more games and activities at [pbskids.org/heroelementary](https://pbskids.org/heroelementary)



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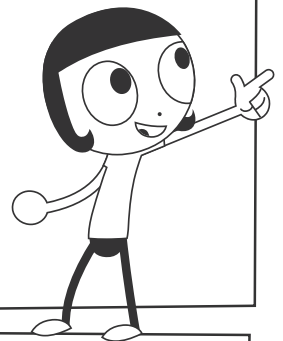
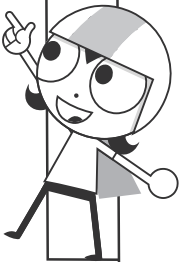
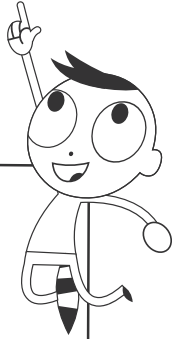
ABCMouse.com

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# My Summer Adventure

Dot, Dee and Dell love to explore and learn together. Write down or draw the places or things you'd like to explore this summer.



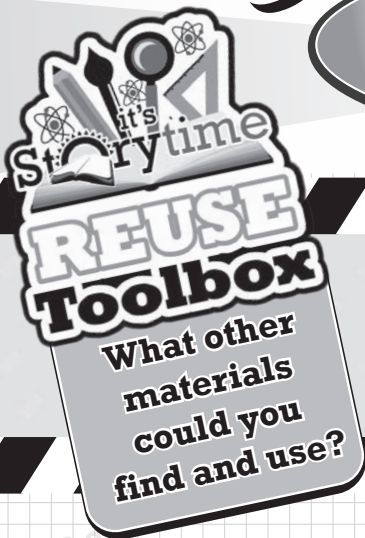
Find more games and activities at

**[pbskids.org](https://pbskids.org)**

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# it's Storytime CHALLENGE

## Make Your Own Stethoscope



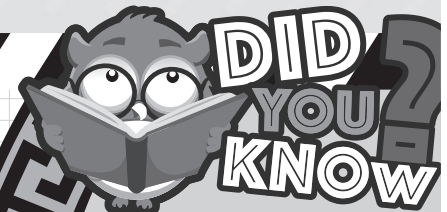
- Duct tape
- Plastic Funnel
- Stopwatch or Clock
- Scissors
- Cardboard Tube

*My Design Ideas:*

CREATE

IMPROVE

*How could I improve on my design for next time?*



Heroes are definitely in the medical field, but there are heroes everywhere! Police officers, teachers, scientists, firefighters, and soldiers are all heroes. And that's not all! Who in your community is a hero?

### POWER UP WORDS

- Oxygen
- Exercise
- Heart Rate

### CAREER LIFTOFF

- › Physician
- › Biomedical Engineer
- › Nurse
- › Physical Therapist
- › Veterinarian

**Learning Standards: 3rd grade**

3-5-ETS1-3 Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

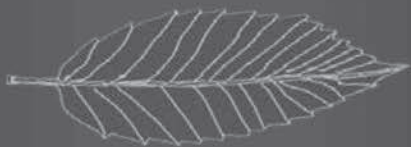
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**LIVE from the OPERA HOUSE**  
it's Storytime

# PLANTING PUZZLE



## EL ROMPECABEZAS DE LA SIEMBRA



Flowers, like trees, help clean our air and make cities more beautiful. Help the CyberSquad plan out a community garden for a new Cyber Site, using these rules:

- Every **green flower** must be directly above, below, or to the side of a **yellow flower**
- Every **green flower** must also be directly above, below, or to the side of a **pink flower**
- **Pink flowers** can't be directly above, below, or to the side of another **pink flower**

Cut out the flowers on the last page. Use a crayon or marker to color in:

- 5 green flowers
- 8 yellow flowers
- 5 pink flowers
- 7 blue flowers

Use the grid on the next page to make your plan. Move the flowers around until you find a plan that follows all three rules above. Once you have them in place, glue them down to plant your garden.

Las flores, como los árboles, ayudan a limpiar nuestro aire y a embellecer las ciudades. Ayuda al CyberSquad a diseñar un jardín comunitario para un nuevo Cyber Site siguiendo estas reglas:

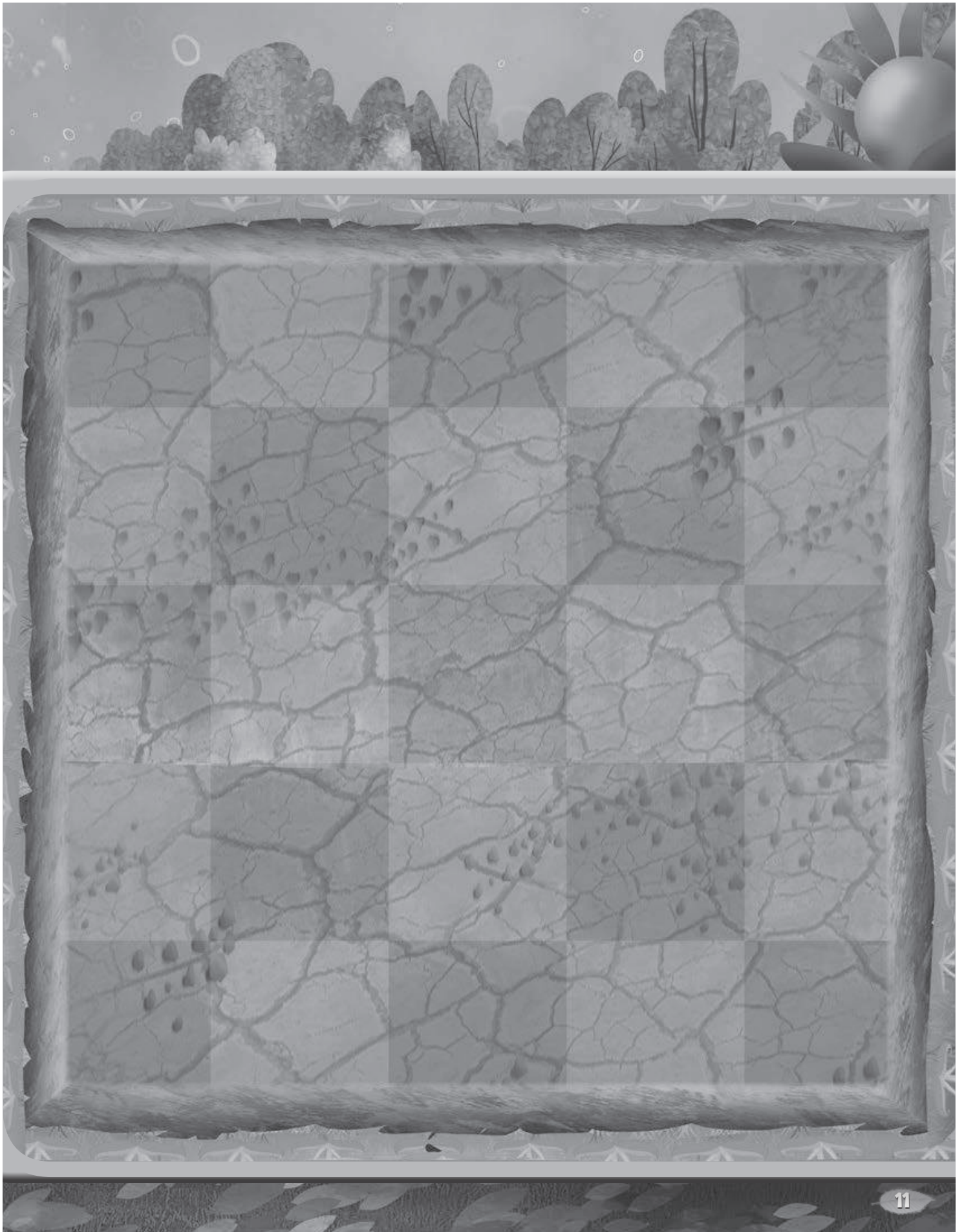
- Cada **flor verde** debe estar justo arriba, abajo o al lado de una **flor amarilla**
- Cada **flor verde** también debe estar justo arriba, abajo o al lado de una **flor rosa**
- Las **flores rosas** no pueden estar justo arriba, abajo o al lado de otra **flor rosa**

Recorta las flores que aparecen en la última página. Usa un crayón o marcador para colorear:

- 5 flores verdes
- 8 flores amarillas
- 5 flores rosas
- 7 flores azules

Usa la cuadrícula de la página siguiente para hacer tu plano. Cambia las flores de lugar hasta que encuentres un plano que siga las tres reglas anteriores. Una vez que las tengas en su lugar, pégalas para plantar tu jardín.







Use a crayon or marker to color in:  
 Utiliza un crayón o marcador para colorear:

5

GREEN



VERDE

8

YELLOW



AMARILLO

5

PINK



ROSA

7

BLUE



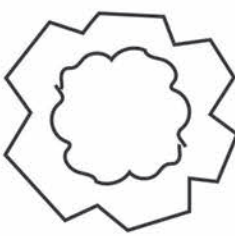
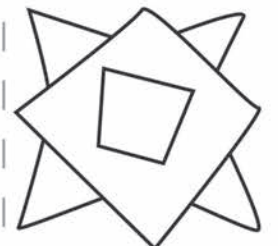
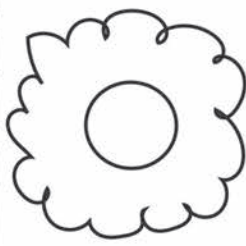
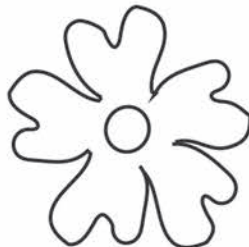
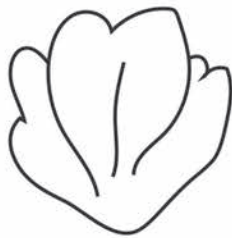
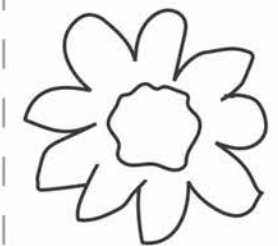
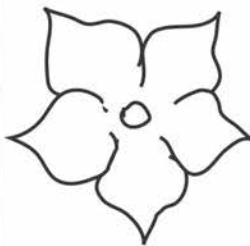
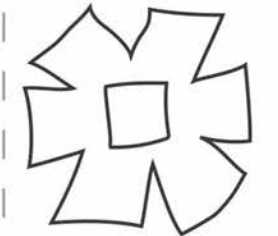
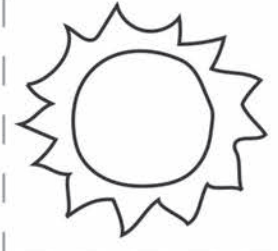
AZUL



PLANTING PUZZLE

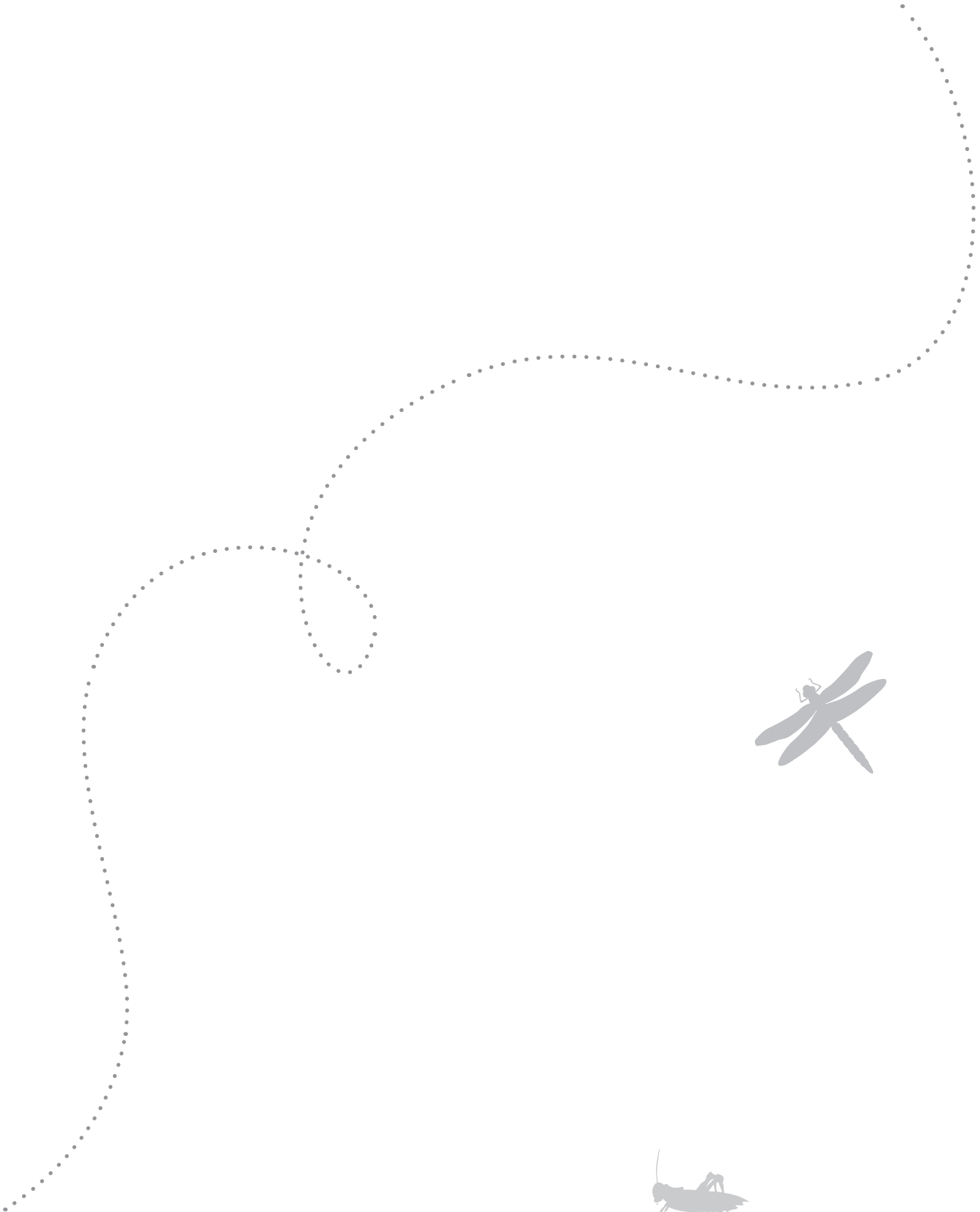


EL ROMPECABEZAS  
DE LA SIEMBRA





This page was left blank to cut out the activity on the other side.





# GROW YOUR OWN GARDEN



# CULTIVA TU PROPIA HUERTA

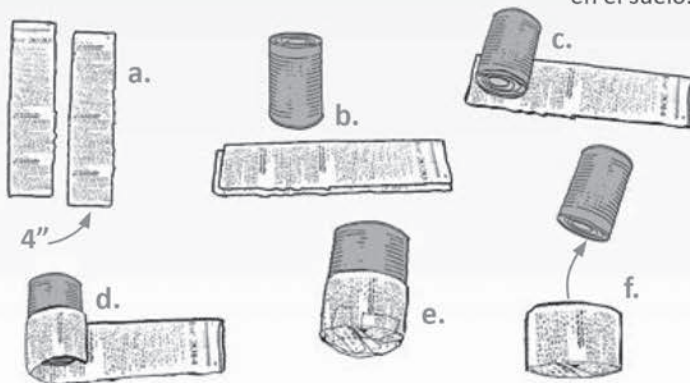
Delicious, healthy vegetables don't just come from the store. You and your family can grow them from seeds at home! You don't need a big farm to grow vegetables. Even a small space can be home to a garden.

Use old newspapers to make a pot for planting seeds.

## Materials:

- masking tape
- newspaper
- seeds for vegetables or herbs
- potting soil
- a can or jar

1. To make a newspaper pot:
  - a. Tear two strips of newspaper the width of your hand (about 4" wide).
  - b. Lay the two strips on top of each other.
  - c. Place the can on its side at one end of the strip. Leave a little extra paper hanging off the bottom of the can.
  - d. Roll the newspaper strips tightly around the can.
  - e. When you get to the end, tape it down. Then fold up the extra newspaper over the bottom of the can and tape it down too.
  - f. Pull the can out of the pot.
2. Fill the pot ½ full of soil.
3. Sprinkle some seeds on the soil. Cover the seeds with another layer of soil. Check the seed packet to see how much soil to add on top.
4. Place your pots on a plate or dish and put them by a window where they will get some light.
5. After the plant grows a few leaves, plant the whole pot in the ground or in a bigger pot. Over time, the newspaper will biodegrade (break down) in the soil.



Las verduras deliciosas y saludables no solo vienen de la tienda. ¡Tú y tu familia pueden cultivarlas a partir de semillas en casa! No necesitas una gran granja para cultivar verduras. Incluso un espacio pequeño puede albergar una huerta.

Usa periódicos viejos para hacer una maceta para plantar semillas.

## Materiales:

- cinta de enmascarar
- periódico
- semillas para verduras o hierbas
- tierra de macetas
- una lata o un frasco

1. Para hacer una maceta de periódico, debes:
  - a. Cortar dos tiras de papel de periódico del ancho de tu mano (alrededor de 4 pulgadas de ancho).
  - b. Pon las dos tiras una encima de la otra.
  - c. Pon la lata de lado en un extremo de la tira. Deja un poco de papel extra colgando del fondo de la lata.
  - d. Enrolla las tiras de periódico con firmeza alrededor de la lata.
  - e. Cuando llegues al final, ponle la cinta. Luego dobla el periódico extra sobre el fondo de la lata y pégalo con cinta también.
  - f. Saca la lata de la maceta.
2. Llena la maceta hasta la mitad con tierra.
3. Esparce algunas semillas en la tierra. Cubre las semillas con otra capa de tierra. Revisa el paquete de semillas para ver cuánta tierra agregar en la parte superior.
4. Pon las macetas en un plato o una fuente y colócalas junto a una ventana donde reciban algo de luz.
5. Después de que crezcan algunas hojas, planta toda la maceta en la tierra o en una maceta más grande. Con el tiempo, el periódico se biodegradará (se descompondrá) en el suelo.







# ACTIVITY GUIDE

**Episode 205:** Earthquakes, Eruptions and Making Words

**Book:** *Earthquakes, Eruptions, and Other Events that Change Earth* by Natalie Hyde

Scan below to  
watch lesson



## Foundational Skills

Read the words in the Word Bank. These are all processes that change the Earth's surface. Write a word from the Word Bank on the line that matches each picture and key word in the same row.

earthquake

volcano

tsunami

landslide



wave

\_\_\_\_\_



slide

\_\_\_\_\_



erupt

\_\_\_\_\_



shake

\_\_\_\_\_



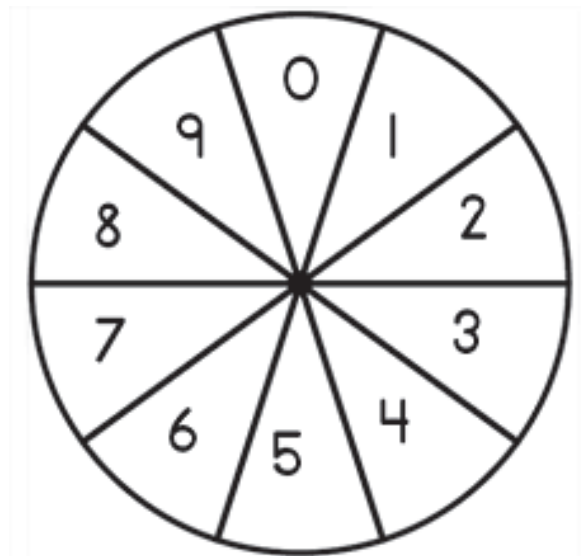
# Which is Greater?

## Materials:

- spinner (poke a paperclip through the template to the right)
- place value board (one for each partner)

## Directions:

1. Work with a partner to try to make the greatest 3-digit number you can.
2. Player 1 spins. Player 1 decides if the number should go in the ones, tens, or hundreds place to make the largest 3-digit number. (ex: I rolled a 2 and I think it should go in the ones place because it is a low number. In the hundreds place, it would only be 200.) Use the place value board to build your number.
3. Player 2 repeats step 2. Continue taking turns spinning until both players have built their 3-digit number. Record your numbers on the chart below.
4. Work with your partner to compare the 2 numbers and fill in  $<$ ,  $>$ ,  $=$ . The player with the greater number wins! Play 5 rounds and the best out of 5 wins!



Round	Player 1	Symbol < > =	Player 2	Winner
1				
2				
3				
4				
5				



# Place Value Boards

hundreds

tens

ones

hundreds

tens

ones

# Week 4: Creatures
















July 11-17

From the prehistoric to the present, learn about the fascinating features of creatures near and far.

Use the sheet below to mark off this week's activities as you complete them. See if you can get a BINGO!

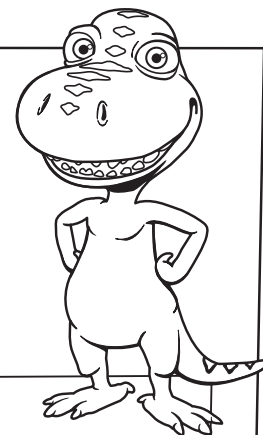
**Playlists this week:** [www.michiganlearning.org/creatures](http://www.michiganlearning.org/creatures)

Invent a creepy cool creature (62)	 60 mins. of activity	 Read 20 minutes	Catch a firefly	Watch Read, Write, ROAR!
 Read 20 minutes	 Watch Math Might	Make tracks with clay (pg. 63)	Make bird observations (pg. 64)	 60 mins. of activity
 60 mins. of activity	Make a Rube Goldberg Machine	 HAVE FUN! (Free Space)	 Track the weather	 Read 20 minutes
Watch Read, Write, ROAR!	 Go fishing	 Watch Math Might	Watch InPACT at Home	Make a leftover recipe (pg. 66)
Watch InPACT at Home	 Read 20 minutes	Write a creature adventure (pg. 61)	 60 mins. of activity	Move like a dinosaur (pg. 60)





# Move Like a Dinosaur



**Instructions:** Can you move like a dinosaur? Here's a list of movements to get you and your child started! To play, have your child stand at one end of the room and move towards you using one of the prompts below.



## **WALK like a Theropod**

(a bipedal dinosaur that walked on two legs)



## **MOVE like a Brachiosaurus**

(a quadrupedal dinosaur that walked on all fours)



## **SPRINT like an Ornithomimus**

(a dinosaur with long thin legs for sprinting or running really fast)



## **GLIDE like a Microraptor**

(a small bird-like dinosaur that could move smoothly through the air)



## **SLITHER like a Sanajeh**

(a prehistoric snake that slithered or slid around on its belly)



## **STOMP like a T. rex!**

(a powerful dinosaur who walked around with loud, heavy steps)



## **DIVE like a Hesperonis**

(a dinosaur that was good at diving deep underwater for fish)



## **FLY like a Pteranodon**

(like Tiny, Shiny, and Don, Pteranodons could fly through the air very easily)



## **SWIM backwards like a Michelinoceras**

(a squid-like creature who lived in the ocean and swam backwards)



## **HOOT like a Corythosaurus**

(a dinosaur with a large crest on top of its head that made a hooting sound like a horn)

Funded by:



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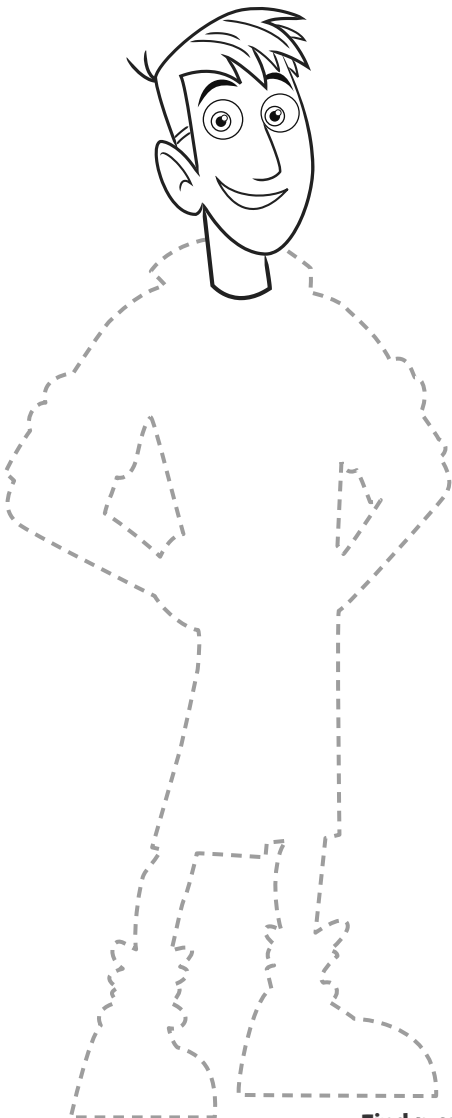
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Summer Fun Activity Book | Elementary | Michigan Learning Channel | 61



## Invent A Creepy Cool Creature

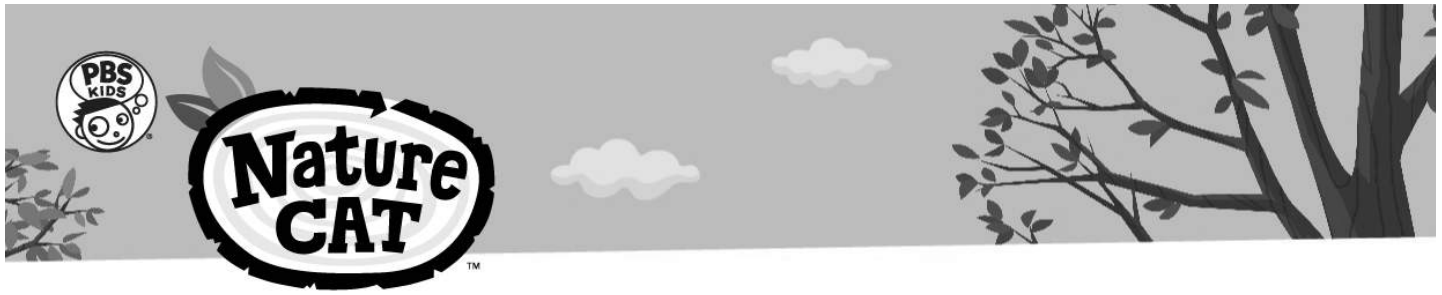
Think about what features make a creature creepy. Draw the creepiest creature you can invent, then make a cool Creature Power<sup>®</sup> suit for Martin to wear.



Find more games and activities at [pbskids.org/wildkratts](https://pbskids.org/wildkratts)

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# MAKIN' TRACKS WITH PLAY DOUGH!




## DIFFICULTY: EASY

When you walk in wet sand, snow or mud, you leave behind a footprint. Animals do, too! We call those prints, "tracks." Next time you're exploring, look for tracks on the ground!

You can also make your own tracks to compare with friends, your pet, or one of the Nature Cat gang! Using play dough, make YOUR nature tracks to create an artistic masterpiece!



## MATERIALS

-  Play dough
-  Rolling pin
-  Washable paint and paintbrush (optional)



## CAPTURE YOUR TRACKS

- 1 Make two balls with your dough.
- 2 Roll out each dough ball on a flat surface until it is a little bit bigger than your foot.
- 3 Ready? Press your hand into one piece of the dough.
- 4 Now repeat with a foot (or a patient pet.)
- 5 Let it dry and add some color with paint!



Find more games and activities at [pbskidsforparents.org](https://pbskidsforparents.org)



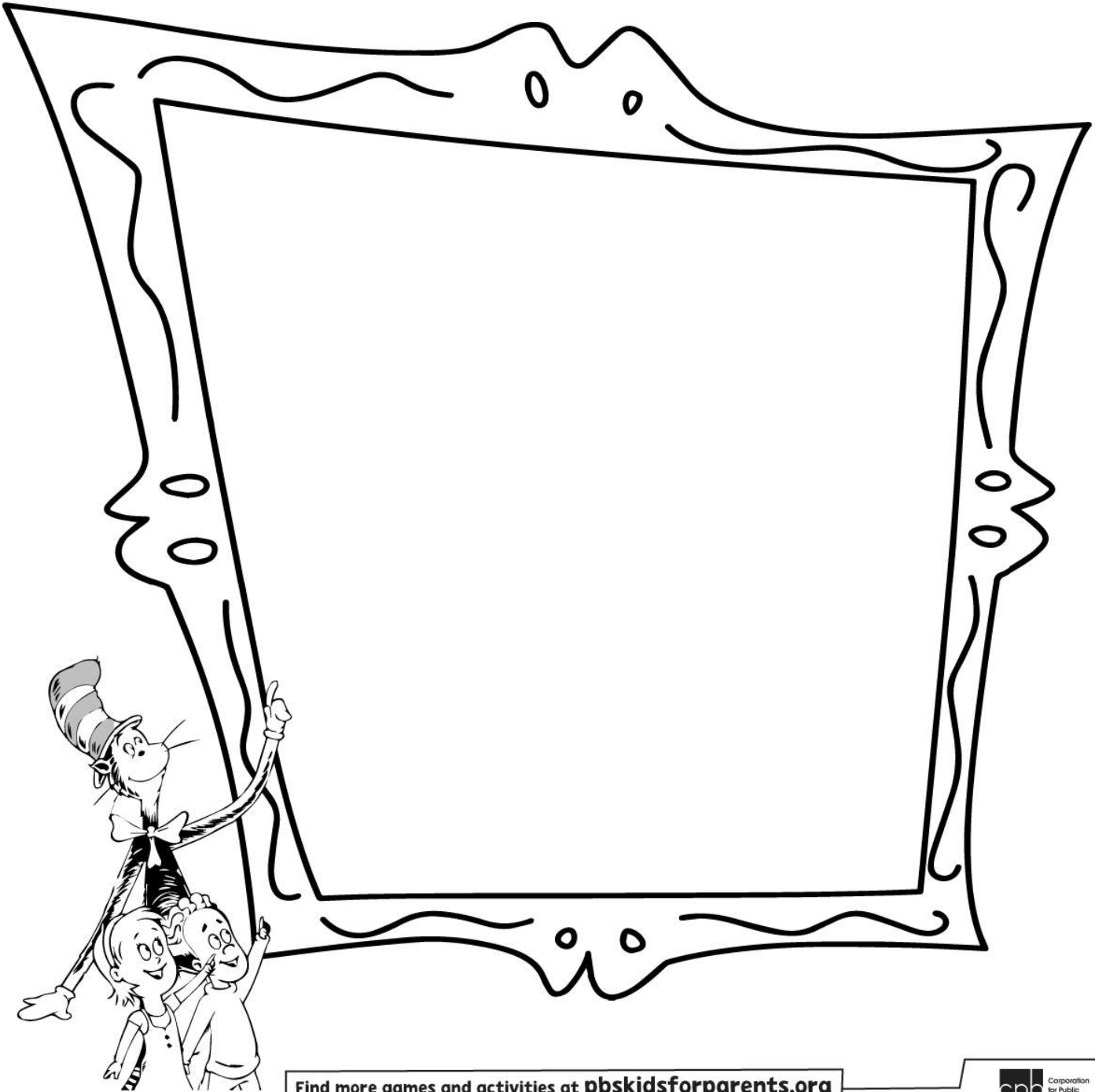
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Name \_\_\_\_\_

## My Bird Observations

**Look out a window and draw a bird that you see.  
Tell someone else about the bird. Share what you notice — for example,  
the colors of the feathers or the shape of its beak. What was it doing?**



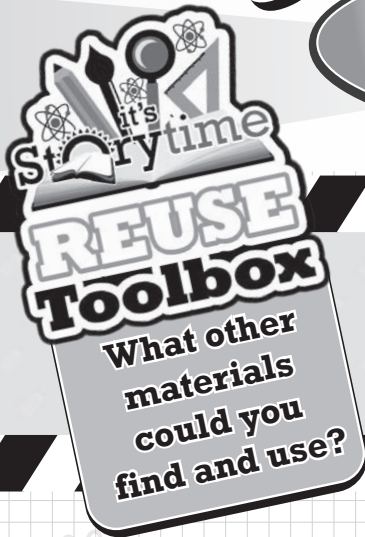
Find more games and activities at [pbskidsforparents.org](http://pbskidsforparents.org)



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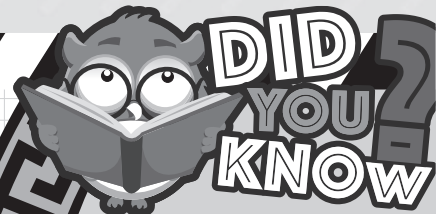
# it's Storytime CHALLENGE

## RUBE GOLDBERG MACHINE



- Dominos or Blocks
- Cardboard
- Balloon
- Duct Tape
- Push Pin
- Ball

*My Design Ideas:*



Engineers usually design or build things. Some engineers also use their skills to solve technical problems. There are different types of engineers that design everything from computers and buildings to watches and websites.

### POWER UP WORDS

- Slope
- Tension
- Gravity

### CAREER LIFTOFF

- › Civil Engineer
- › Mechanical Engineer
- › Roller Coaster Engineer

*How could I improve on my design for next time?*

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**LIVE from the OPERA HOUSE**  
it's Storytime

**Learning Standards: Kindergarten; Forces and Interactions: Pushes and Pulls**

K-PS2-1 Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.

K-PS2-2 Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.





## LEFTOVER RECIPE CHALLENGE

### DESAFÍO DE LA RECETA DE SOBRAS

Getting creative with leftovers helps waste less food! Can you help Jackie use her leftover foods to make an exciting new recipe? Pick three of the foods in Jackie's refrigerator below to combine into a new recipe. Draw your leftover creation on the recipe card on the next page. Be sure to add a name for your new dish!

¡Al usar las sobras de forma creativa, se desperdicia menos comida! ¿Puedes ayudar a Jackie a usar las sobras de comida para crear una receta nueva? Escoge tres alimentos del refrigerador de Jackie para combinarlos en una receta nueva. Dibuja lo que creaste en la tarjeta de recetas de la página siguiente. ¡No olvides escribir un nombre para tu plato nuevo!

### Jackie's Leftovers

### Las sobras de Jackie



Carrots / Zanahorias



Meatballs / Albóndigas



Pasta / Pasta



Chicken / Pollo



Salad Greens /  
Ensalada de hojas verdes



Apples / Manzanas



Peppers / Pimientos



Beans / Frijoles



Cheese / Queso



## LEFTOVER RECIPE CHALLENGE DESAFÍO DE LA RECETA DE SOBRAS

### MY NEW RECIPE MI RECETA NUEVA

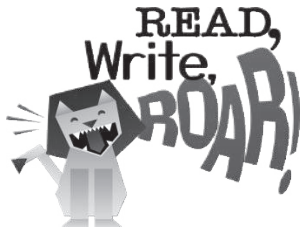
Try the same thing with leftovers at home! Make a list of the leftover food in your refrigerator, so that everyone in the family knows what you have. Challenge the whole family to use those leftovers to make new recipes. Don't forget to use "ugly" fruits and veggies too!"

¡Intenta hacer lo mismo con las sobras que tienes en casa! Haz una lista de las sobras de comida que tienes en tu refrigerador para que todos en tu familia sepan lo que hay. Desafía a toda la familia a usar esas sobras para crear recetas nuevas. "¡No olvides usar frutas y verduras que estén 'feas', también!"

Our Leftovers  
Nuestras sobras







# ACTIVITY GUIDE

**Episode 208:** Garbage vs. Recycling and Making Words

**Book:** *Garbage or Recycling?* by Deborah Chancellor and Diane Ewen

Scan below to watch lesson



## Think About It

Read the following statements,  
Which are true and which are false?

It's impossible to recycle a soda pop can. \_\_\_\_\_

Over half of the garbage we throw out can be recycled. \_\_\_\_\_

Plastic garbage often ends up in the sea. \_\_\_\_\_

## Words to Know

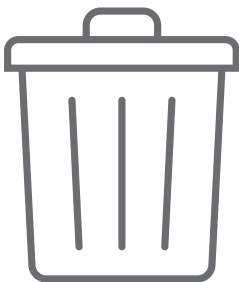
**Recycling** is when we take materials that we were going to throw away and put them through a process so they can be made into something else.

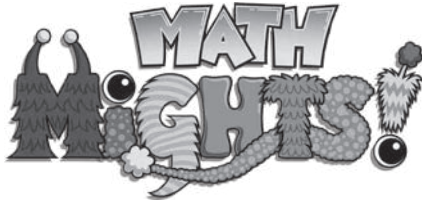
These symbols are found on **plastic** items that can be recycled.



## Draw It

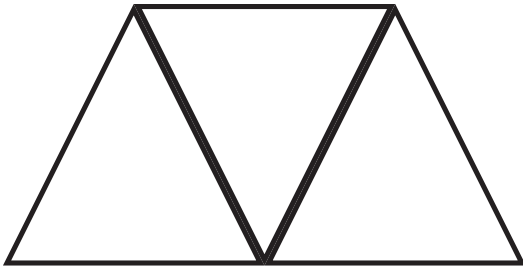
Look at each object. Decide if it can be recycled or if it should be thrown in the garbage. Draw a line from each object to where it belongs.



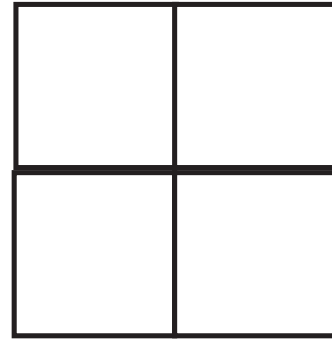


# Describe The Shape

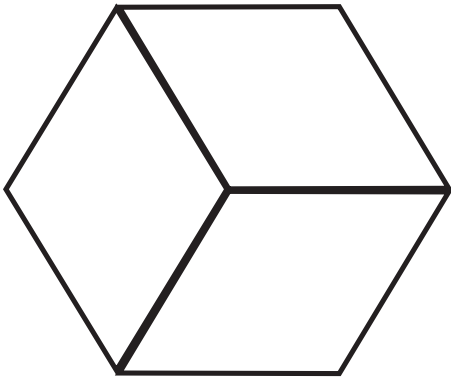
**Directions:** Fill in the blanks. (Example: The rectangle is made up of 3 squares.)



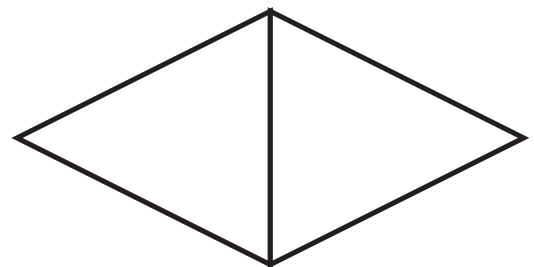
The \_\_\_\_\_ is made up  
of \_\_\_\_\_.



The \_\_\_\_\_ is made up  
of \_\_\_\_\_.



The \_\_\_\_\_ is made up  
of \_\_\_\_\_.



The \_\_\_\_\_ is made up  
of \_\_\_\_\_.

# Week 5: Engineering




## July 18-24

Meet the people who design bridges, cars, and video games and learn how to think like an engineer.

Use the sheet below to mark off this week's activities as you complete them. See if you can get a BINGO!

**Playlists this week:** [www.michiganlearning.org/engineering](http://www.michiganlearning.org/engineering)

Watch Live from the Opera House	 60 mins. of activity	 Read 20 minutes	Act out Structures (pg. 79)	Watch Read, Write, ROAR!
 Read 20 minutes	 Watch Math Might	Try the hexagon challenge! (pg. 75)	Travel the Food Miles Maze (pg. 80)	 60 mins. of activity
 60 mins. of activity	Watch Meet the Helpers	 HAVE FUN! (Free Space)	Build and balance an object (pg. 78)	 Read 20 minutes
Watch Read, Write, ROAR!	 Ride a bike	 Watch Math Might	Watch InPACT at Home	Draw a family member's car
Watch InPACT at Home	 Read 20 minutes	Try the Amazing Animals Challenge	 60 mins. of activity	Watch ArchiTreks



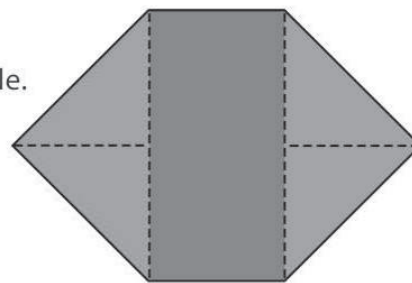


# The Hexagon Challenge

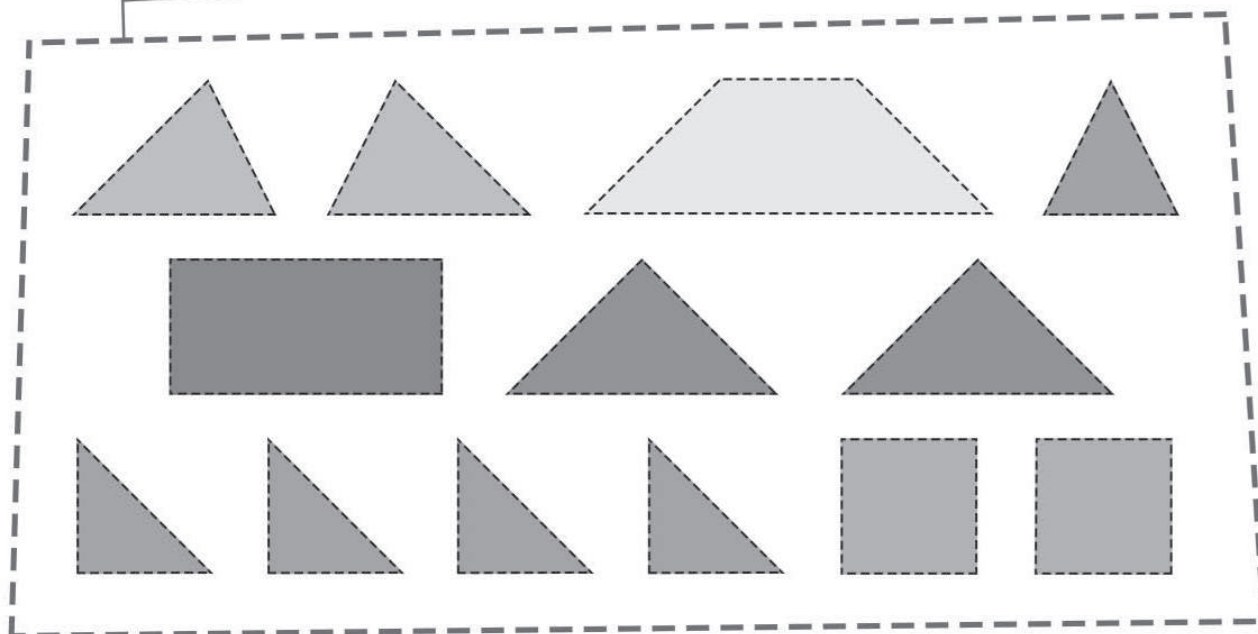
Use your Odd Squad agent skills to solve The Hexagon Challenge. Print out the two pages.

1. Cut out all the shapes from the Shape Box.
2. On the next page, mix and match your shapes to make a hexagon.
3. Record how you did it by drawing the lines of each shape you used like in the example at the top.
4. Reuse your shapes again and again to make more hexagon patterns. Try to find **8 different** ways to make a hexagon.

Here's a hexagon made with 4 triangles and a rectangle.



## Shape Box



For more printables, go to [pbskidsforparents.org](http://pbskidsforparents.org)

Funded by:



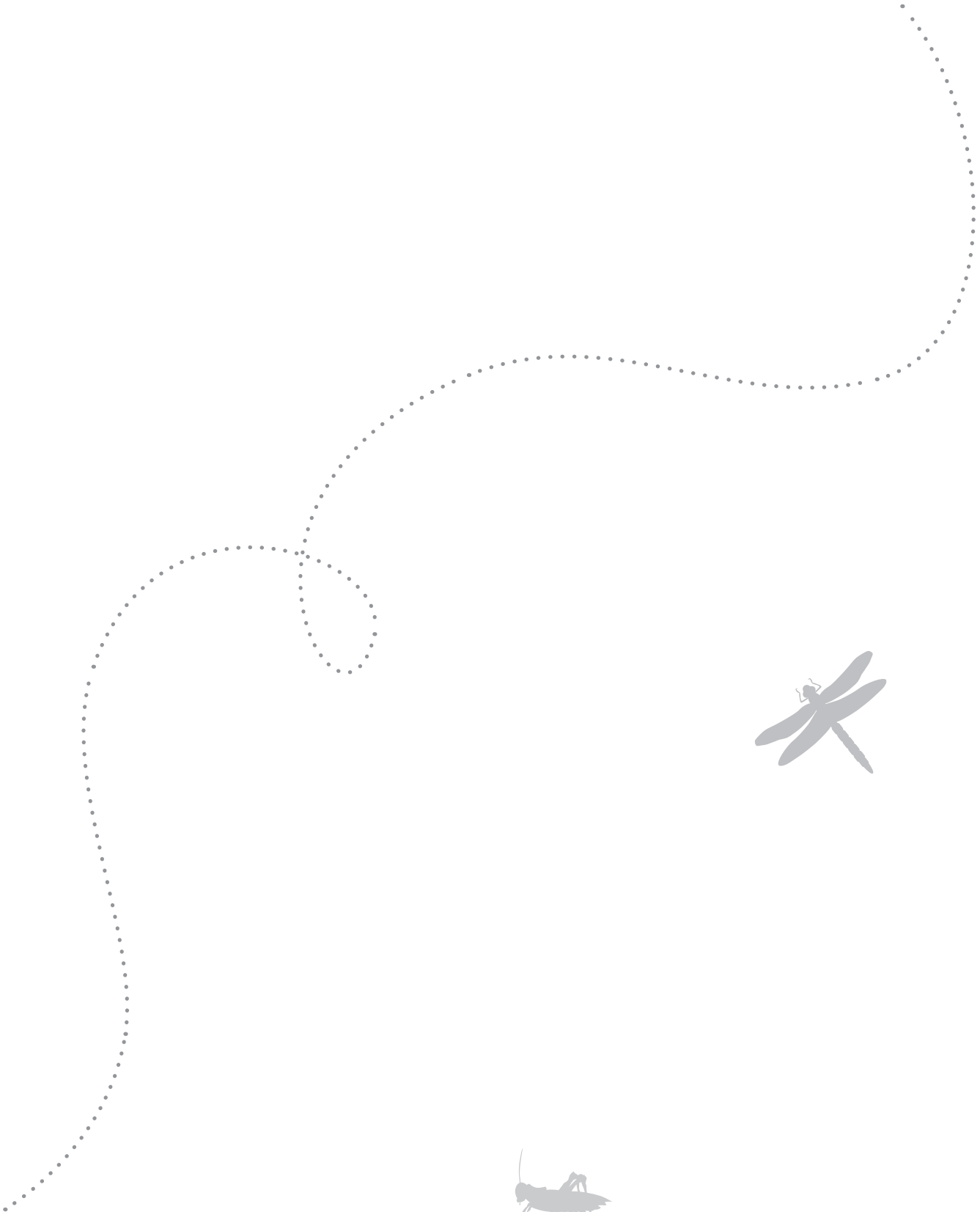
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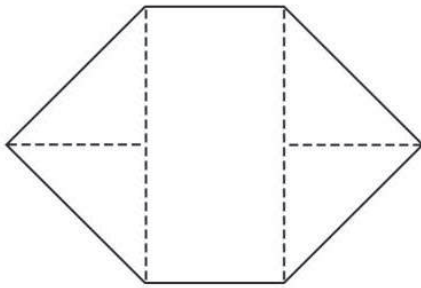


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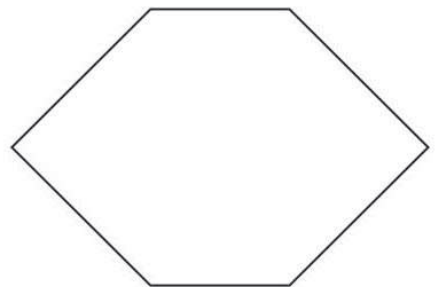
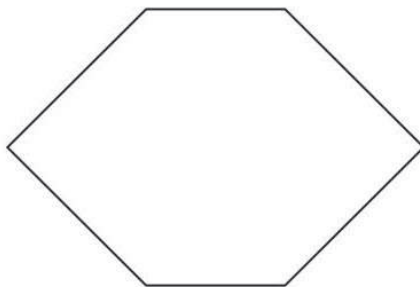
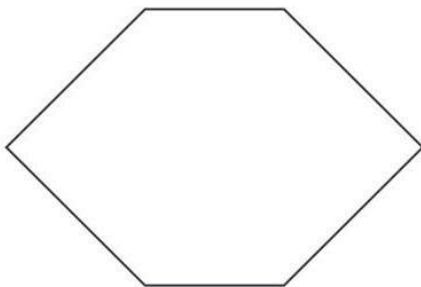
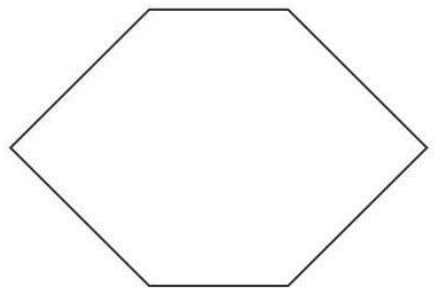
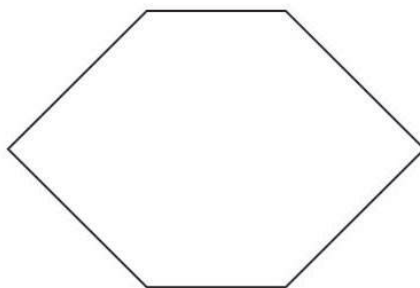
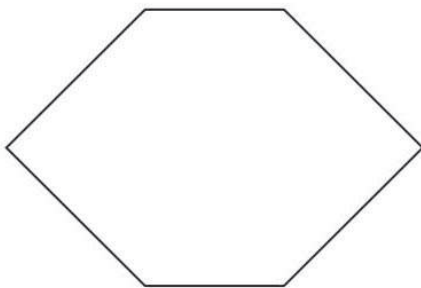
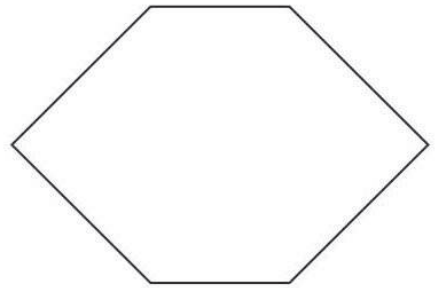
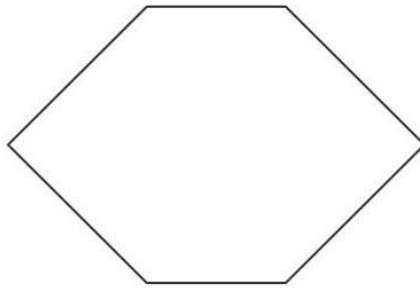




# The Hexagon Challenge



Example



When you are finished with the challenge, check out some possible solutions at [www.fredrogers.org/odd-squad-hexagon-solution/](http://www.fredrogers.org/odd-squad-hexagon-solution/)

For more printables, go to [pbskidsforparents.org](http://pbskidsforparents.org)



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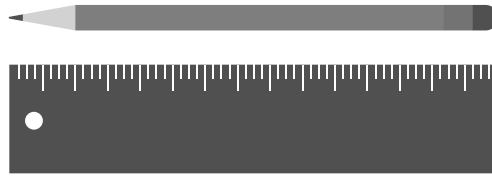


## Balance Build

Students will explore symmetry and the properties of balance in this open-ended STEM challenge.

**Materials:** You can use anything that sparks imagination! Here are some examples.

- Paper
- Scissors
- Craft Sticks
- Beads
- Straws
- Clear Tape
- Masking Tape



### Did you know?

Have you ever balanced a pencil or a ruler on your finger? If you have, you helped it reach a **state of equilibrium**. In order to balance an object, you have to find its **center of gravity**. In the case of your pencil, the center of gravity is the same as its midpoint. This is because pencils (and rulers) are **symmetrical** and have equal mass along its length.

### Procedure:

1. First, select your materials to create a balancing object. We suggested a few above, but use what you have around your home and challenge your family members to engineer their own design!
2. Creating a symmetrical object, or something that is equal on both sides, will help you in your design process.
3. Once you are satisfied with your design, test it out! See if you can find your new inventions center of gravity to balance it on your finger.
4. What part of your design worked really well in order to achieve balance? Did you experience any failures during your build? What improvements could you make?



### Keep Exploring:

Try creating an asymmetrical object that can balance on your finger, or try to create a build to balance on your nose!

1801 W. Saint Andrews Rd.  
Midland, MI 48640

800.523.7649  
[midlandcenter.org](http://midlandcenter.org)



## Acting Out Structures



COLUMN



ARCH



COLUMN AND BEAM



DOME



TENSION



CANTILEVER



LOAD AND SUPPORT



VAULT / TUNNEL



COMPRESSION



FLYING BUTTRESSES

How does your house stay standing? Architects use structures like columns, beams, and arches to make buildings strong and be sure they last for many years. Grab a grown-up or a friend and try to make columns, beams, and arches with your body!



# FOOD MILES MAZE



## EL LABERINTO DE LAS MILLAS DE COMIDA

Sometimes food travels a long way to get from the farm to our table.

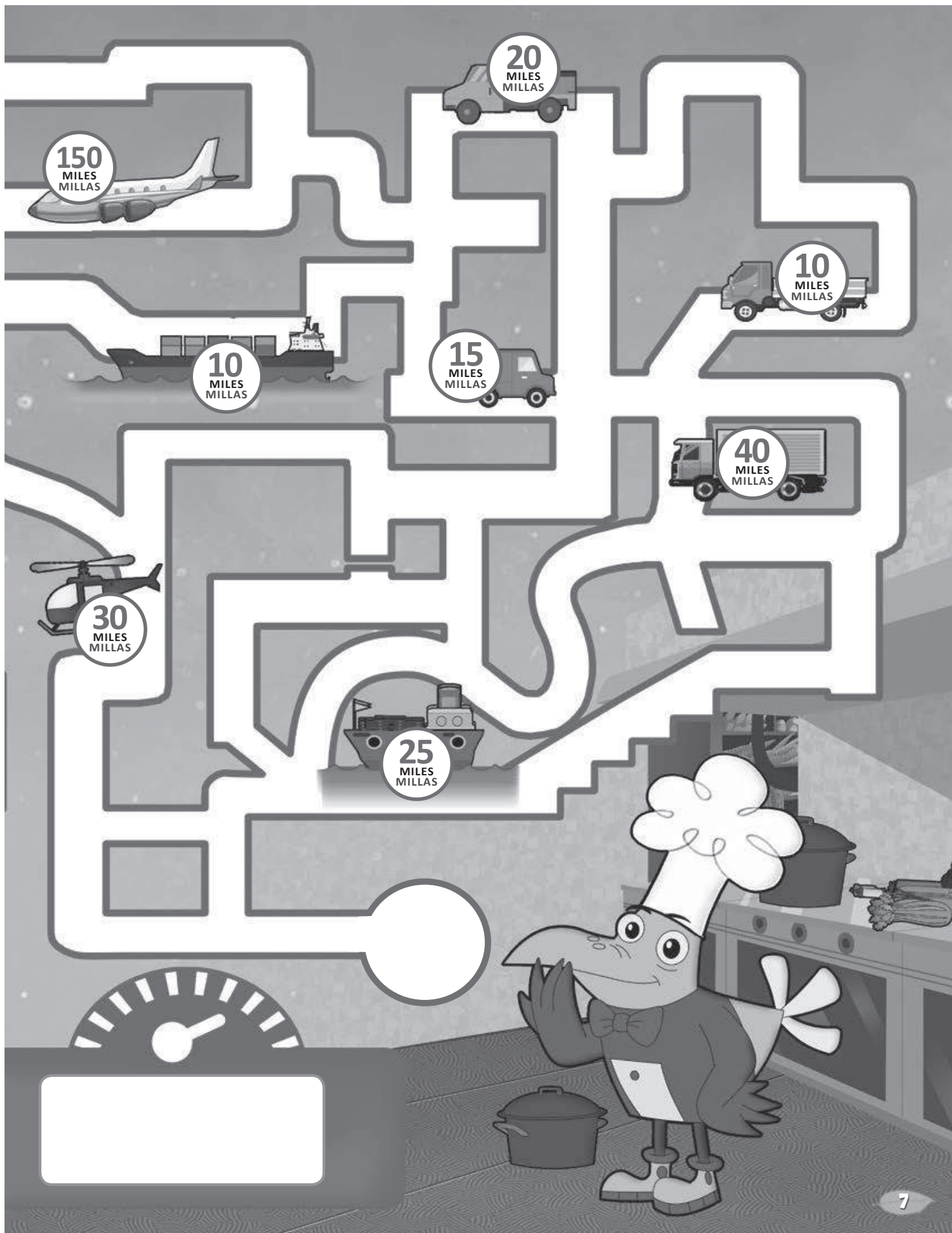
Draw a line to get the cherries from the farm to chef Digit in the maze below. Notice all the different types of transportation you use along the way. Add up the numbers from each type of transportation to see how many miles the cherries had to travel to get to Digit. Do it again and take a different path. Try to find the path with the lowest number of miles!

A veces la comida hace un gran recorrido para ir de la granja a nuestra mesa.

Dibuja una línea para llevar las cerezas desde la granja hasta el chef Digit a través del laberinto. Presta atención a los distintos tipos de transporte que usas en el camino. Suma los números de cada tipo de transporte para ver cuántas millas tuvieron que recorrer las cerezas para llegar a Digit. Luego, hazlo de nuevo, pero toma un camino diferente. ¡Intenta encontrar el camino que tenga menos millas!

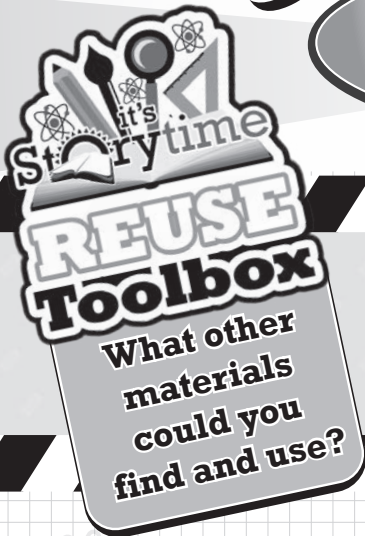


**Total Miles Travelled:**  
**Total de millas**  
**recorridas:**



# it's Storytime CHALLENGE

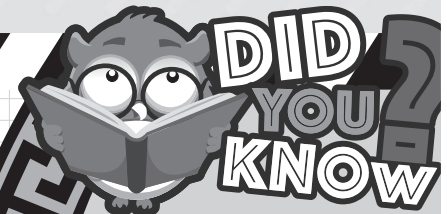
## Amazing Animals



- Various Boxes
- Fun Fabrics
- Pipe Cleaners
- Foam Blocks, Cubes & Balls
- Masking Tape
- Wiggly Eyes
- Form Board
- Small Bag of Bird Seeds

*My Design Ideas:*

*How could I improve on my design for next time?*



Animals are truly amazing. Did you know that to hover, hummingbirds may beat their wings up to 200 times per second? Or that a jaguar can see in the dark six times better than a human?

### POWER UP WORDS

- Adaptation
- Coexist
- Ecosystem

### CAREER LIFTOFF

- › Zoologist
- › Wildlife Biologist
- › Marine Rescue Officer
- › Animal Shelter Technician

**Learning Standards: 2nd Grade**

2-LS2-2 Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants.

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it's Storytime





# ACTIVITY GUIDE

**Episode 210:** Repurposing Plastic and -ough- Words

**Book:** *Plastic Eco Activities* by Louise Nelson

Scan below to watch lesson



## Phonics Skills

Spelling Pattern **o-u-g-h**

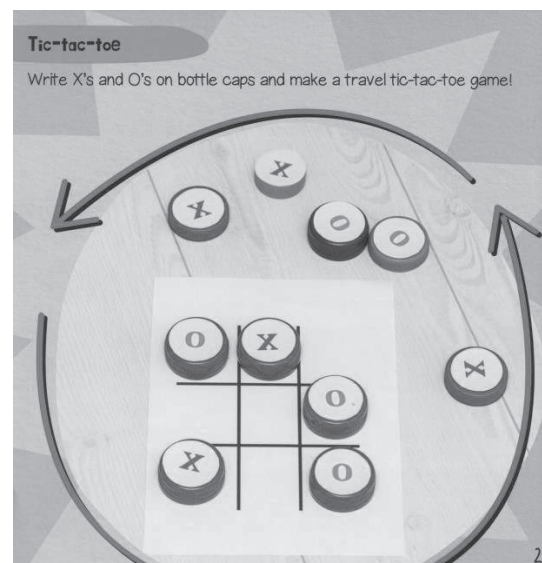
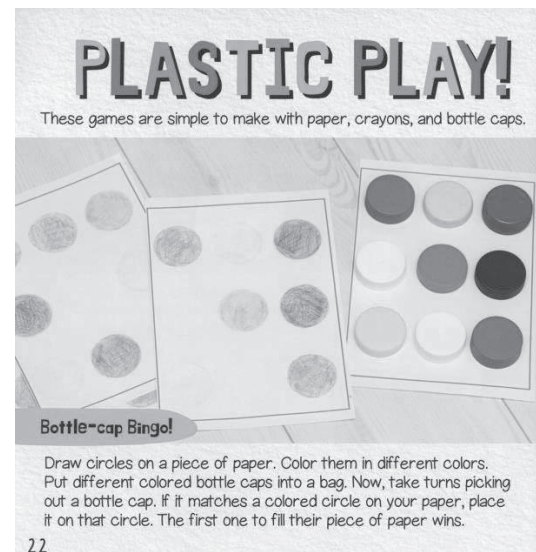
When a word contains the spelling pattern **o-u-g-h**, those letters put together can represent seven different sounds. The chart on the right has words with four of the most common sounds.

Read the word on the left side of the chart. Listen to the ending sound. Read the word on the right side of the chart using the same ending sound from the first column for the o-u-g-h spelling pattern in the word.

<u>Matching sounds</u>	<u>Words with o-u-g-h</u>
no	although dough though
you	through
off	cough trough
stuff	enough rough tough

## Reuse It

The book, *Plastic Eco Activities*, by Louise Nelson, shows us a couple of ideas for making games out of recycled materials.







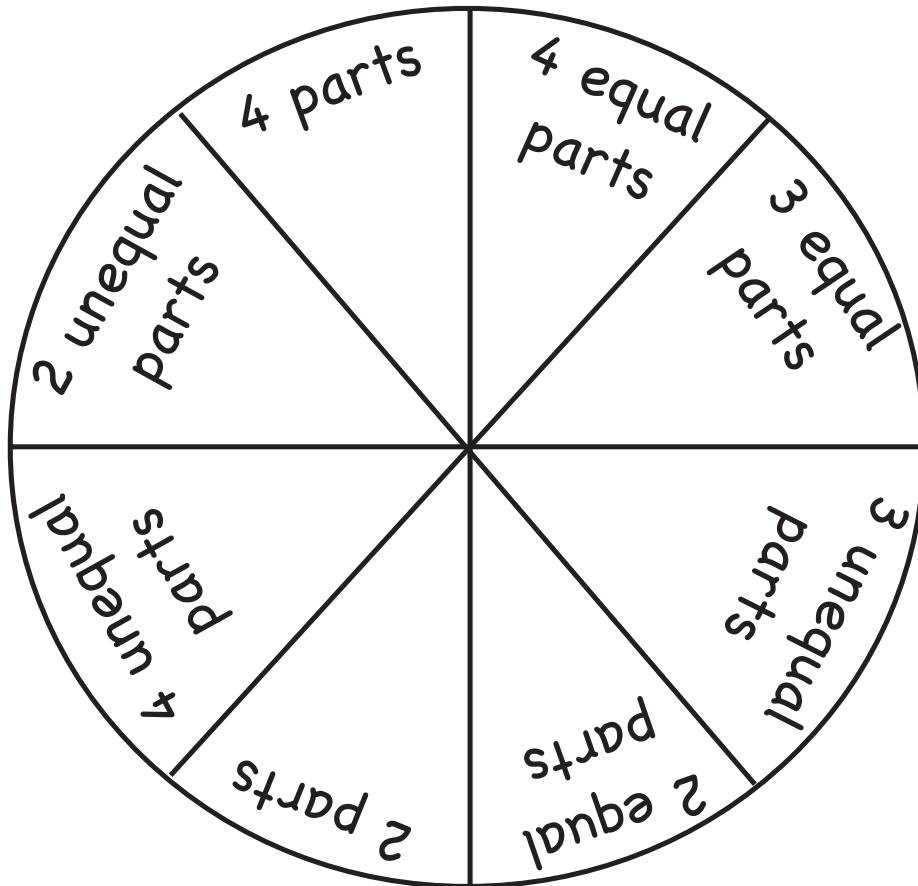
# Split The Shape

## Materials:

1. spinner (you will need a pencil and paperclip to create the spinner)
2. recording sheet
3. 2 players

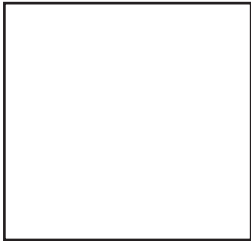



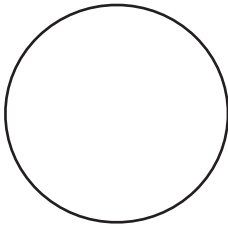
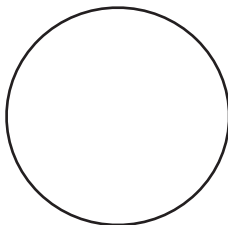
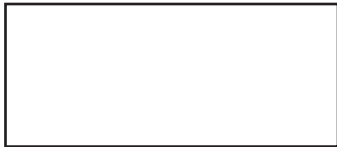
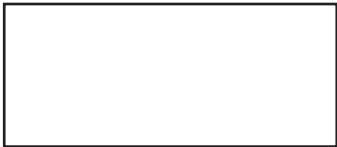
## Directions:

1. Player 1 spins and splits their shape.
2. Compare the shapes.
3. If you made equal parts, name the parts using halves, thirds, or fourths on the recording sheet.
4. Player 2 repeats steps 1-3. Continue taking turns until the recording sheet is filled in.





# Recording Sheet

Player 1	Player 2
 _____	 _____
 _____	 _____
 _____	 _____
 _____	 _____

# Week 6: Great Outdoors

















July 25-31

Explore the world outside your door and the incredible parks and waters that belong to us all.

Use the sheet below to mark off this week's activities as you complete them. See if you can get a BINGO!

**Playlists this week:** [www.michiganlearning.org/greatoutdoors](http://www.michiganlearning.org/greatoutdoors)

Make a bird feeder (pg. 93)	 60 mins. of activity	 Read 20 minutes	 Watch the sunset	Watch Read, Write, ROAR!
 Read 20 minutes	 Watch Math Might	Search for Textured Treasures (pg. 91)	Visit a new place	 60 mins. of activity
 60 mins. of activity	Draw a pollinator (pg. 95)	 HAVE FUN! (Free Space)	Try a new food	 Read 20 minutes
Watch Read, Write, ROAR!	 Go swimming	 Watch Math Might	Watch InPACT at Home	Make leaf rubbings (pg. 94)
Watch InPACT at Home	 Read 20 minutes	 Watch the sunrise	 60 mins. of activity	Watch Live from the Opera House





# Search for Textured Treasures!

From a prickly pinecone to a soft sweater, everything we touch has texture. How many textures can you find inside or outside of your house? Race the clock or race a friend with this printable scavenger hunt!

## Instructions:

- 1) Look at the scavenger hunt table on the following page.
- 2) Begin hunting for textures on your list.
- 3) When you find something, draw a picture or write the object's name next to its matching texture.

**TEXTURE** describes the feel or appearance of an object or the material an object is made of.



## More Ways to Play:

- Instead of drawing or writing, snap photos with a digital camera or camera phone.
- In the spaces on your sheet, make crayon rubbings of the textures you find.
- Target your scavenger hunt. Look for objects in nature, in your kitchen, or a specific room.
- Explore other senses. Find things with different colors, smells, or even tastes. (Tastes found in the kitchen, of course.)

Find more games and activities at [pbskidsforparents.org](http://pbskidsforparents.org)

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Name \_\_\_\_\_

I'm looking for something...	I found a...
<b>smooth</b>	
<b>rough</b>	
<b>bumpy</b>	
<b>prickly</b>	
<b>sticky</b>	
<b>fluffy</b>	
<b>glossy</b>	

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# Make a Bird Feeder



## What You Need:

- Pinecone, paper towel holder or piece of bread
- Peanut butter or honey
- Your choice of the following:
  - Raisins
  - Cranberries
  - Plain popped popcorn
  - Sunflower seeds
  - Shelled plain peanuts
  - Mixed birdseed
- Safety scissors
- Wire, dental floss or cotton string

## What to Do:

- 1. Select a bird feeder base:** Pinecones are a popular foundation for a bird feeder, but you may also use an empty paper towel roll or a stale piece of bread.
- 2. String it up:** Run a wire, dental floss or cotton string through your bird feeder. Secure the two ends together to make a loop.
- 3. Make it sticky:** Coat the base with peanut butter. If you know someone who has peanut allergies, use honey instead.
- 4. Add some goodies:** Roll the feeder in raisins, cranberries, unsalted and unbuttered popcorn, sunflower seeds, shelled plain peanuts or mixed birdseed.
- 5. Hang it up:** Place your bird feeder on a hook or on a tree branch outside your window. Discover which birds are popular in your neighborhood, research what they like to eat, and make a bird feeder for them.
- 6. Keep a wildlife journal:** Record what kind of birds and other animals come to visit your feeder!



Find more games and activities at [pbskidsforparents.org](https://pbskidsforparents.org)

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Name \_\_\_\_\_

# Make Leaf and Bark Rubbings

## Instructions

1. You'll need one or more crayons with the labels removed, some cardboard or a clip board and some masking tape to help hold leaves or bark in place.
2. When you're walking outside, collect a few fallen leaves, some bark or other natural materials. It's best if you find leaves or bark where you can feel bumps or ridges.
3. Once you've found your leaves, bark or other items, use tape to secure the edges of the leaves, bark or other materials to the clipboard or cardboard so that they will stay in place while you make your rubbing.
4. Place this paper over the leaves and bark and lightly rub the side of the crayon over the surface of the paper, just hard enough so that the texture shows.
5. Write a list of words to describe how the leaf or bark feels or looks like.

## What You'll Need:

- **Trees**
- **Plain white paper**
- **Crayons with label removed**
- **Masking tape (optional)**
- **Cardboard or clipboard**
- **Paper bag for collecting leaves**



Find more games and activities at **[pbskidsforparents.org](http://pbskidsforparents.org)**

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# FRIENDLY NEIGHBORHOOD POLLINATORS



# POLINIZADORES AMISTOSOS DEL VECINDARIO

Pollinators help plants with flowers to grow. Go on a pollinator scavenger hunt! Take a walk around your neighborhood or in a local park. Look for the pollinators below. Draw a circle around each one that you see.

Los polinizadores ayudan a las plantas con flores a crecer. ¡Ve a una búsqueda de polinizadores! Da un paseo por tu vecindario o en un parque local. Busca los polinizadores de abajo. Dibuja un círculo alrededor de cada uno que veas.



Bats / Murciélagos



Bees / Abejas



Butterflies / Mariposas



Hummingbirds / Colibríes



Moths / Polillas



Beetles / Escarabajos

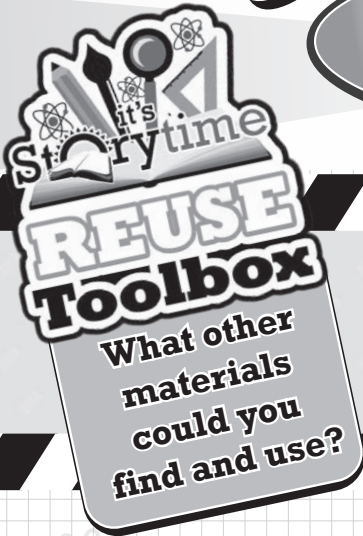
In the box below, draw a picture of one of the pollinators you saw. If there were plants nearby, put them in your drawing too! What kinds of plants do pollinators seem to like?

En el recuadro de abajo, dibuja uno de los polinizadores que viste. Si había plantas cerca, ¡dibújalas también! ¿Qué tipo de plantas parecen gustar a los polinizadores?



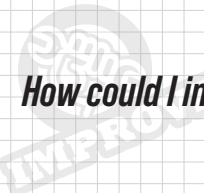
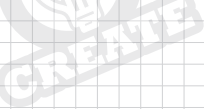
# it's Storytime CHALLENGE

## Growing Seeds

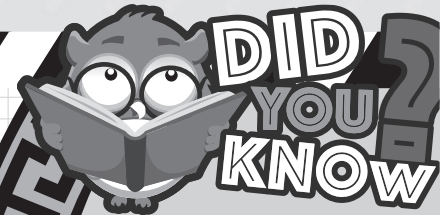


- Cardboard Egg Carton
- Scissors
- Potting Soil
- Used Coffee Grounds
- Seeds
- A Waterproof Plate or Tray

*My Design Ideas:*

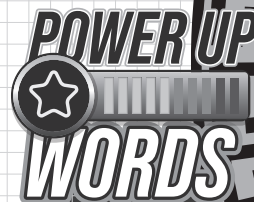


*How could I improve on my design for next time?*



Humans use more than 2000 different types of plants to create various delicious food items in our meals!

Seeds can be as tiny as a grain of sand or bigger than a fingernail.



- Seed
- Root
- Stem
- Flower



- › Gardener
- › Farmer
- › Florist
- › Agricultural Engineer
- › Forester

### Learning Standards: Kindergarten

K-LS1-1 Use observations to describe patterns of what plants and animals (including humans) need to survive.

K-ESS3-3: Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.

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**LIVE from the OPERA HOUSE**  
it's Storytime



# ACTIVITY GUIDE

**Episode 211:** Repurposing Metal and Simple Compound Words

**Book:** *Metal Eco Activities* by Louise Nelson

Scan below to watch lesson



## Read It

A compound word is two smaller words that are joined together to make a new word.

**out + side = outside**

Pick two of the words from this word bank in order to create the compound word that matches the picture.

butter bath rain  
coat tub fly



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_

## Think About It

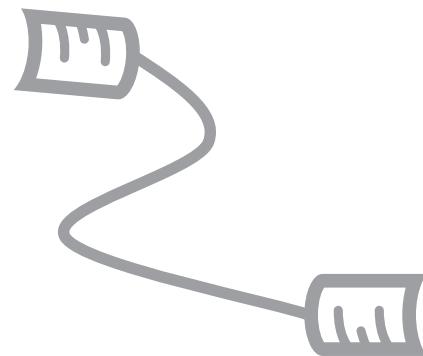
Properties of Metal:

- Can be thick or thin
- Made by people from a natural material
- Hard and strong
- Waterproof
- Opaque /NOT see-through
- Can be made into many shapes and colors

Take a look around you to see what materials made of metal you can find. Collect these materials and share them with someone in your home.

## Try It

Create your own tin can telephone.

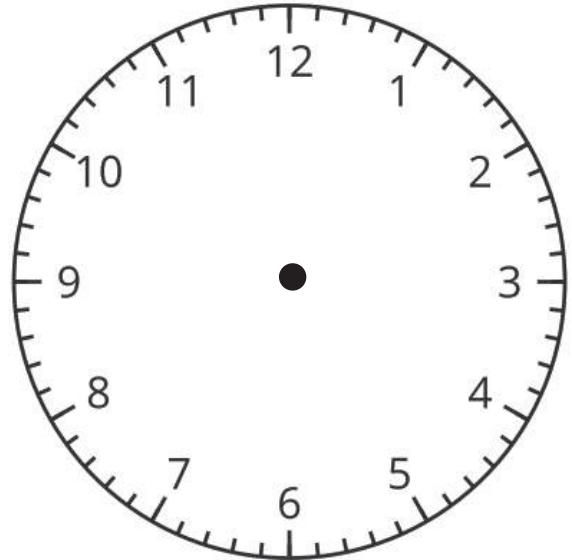




# Clocks and Time

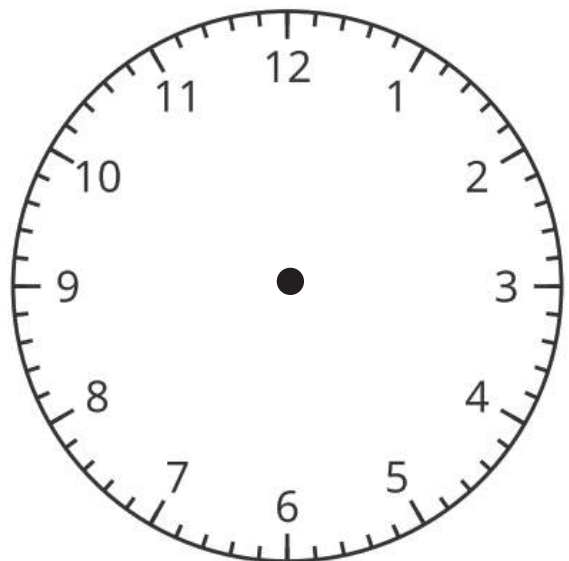
1. Sierra wakes up in the morning at 7:15. Show this time on the clock face below. Circle a.m. or p.m.

a.m. or p.m.



2. Sierra goes to bed at 8:45. Show this time on the clock face below. Circle a.m. or p.m.

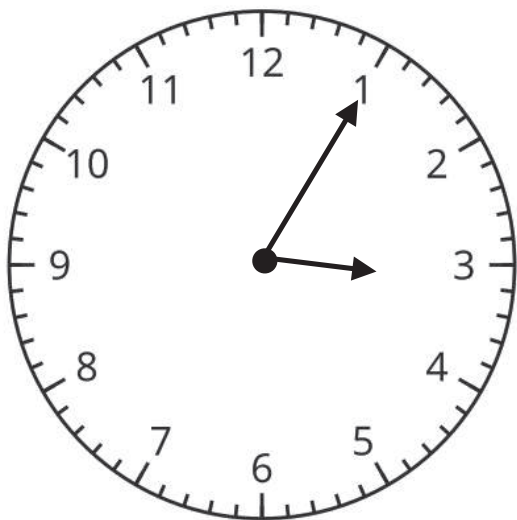
a.m. or p.m.



Write the time for each clock face.

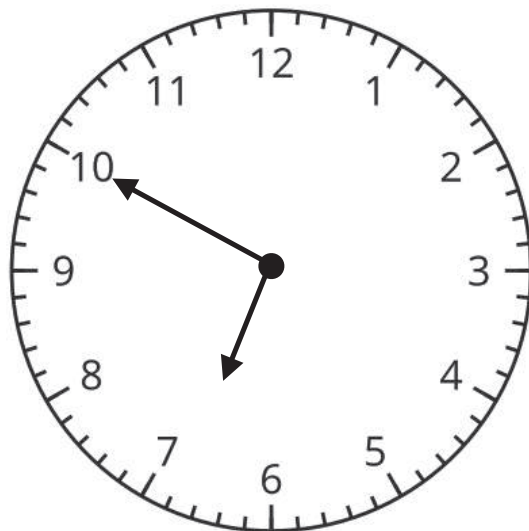
3.

\_\_\_\_ : \_\_\_\_



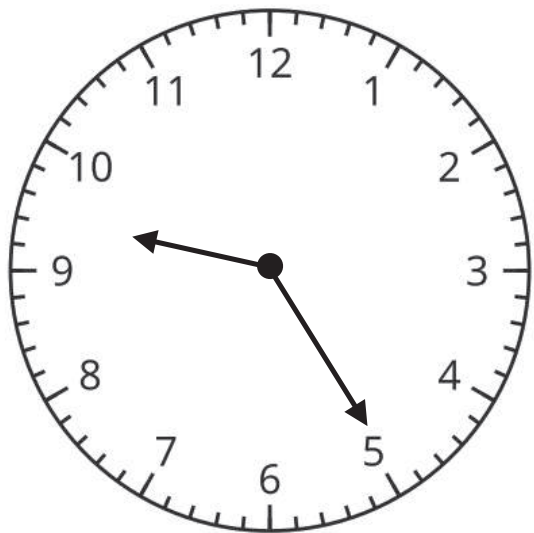
4.

\_\_\_\_ : \_\_\_\_



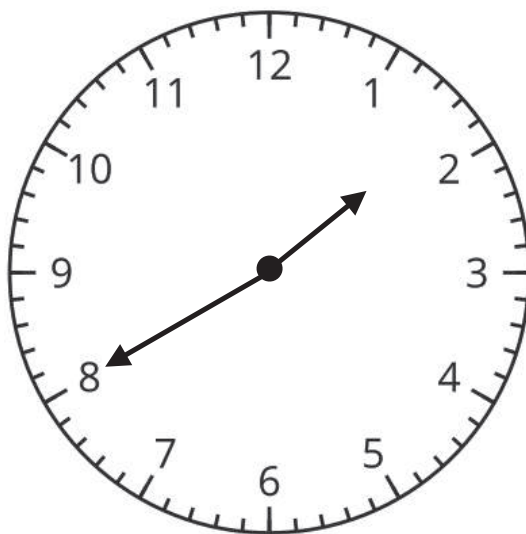
5.

\_\_\_\_ : \_\_\_\_



6.

\_\_\_\_ : \_\_\_\_





# Week 7: When I Grow Up












August 1-7

All summer we'll learn about different careers—this week, think about all the exciting possibilities in your future!

Use the sheet below to mark off this week's activities as you complete them. See if you can get a BINGO!

**Playlists this week: [www.michiganlearning.org/growup](http://www.michiganlearning.org/growup)**



Learn about a family member's job	 60 mins. of activity	 Read 20 minutes	Try Bianca's body math (pg. 107)	Watch Read, Write, ROAR!
 Read 20 minutes	 Watch Math Might	Watch Live from the Opera House	Practice ballet positions (pg. 106)	 60 mins. of activity
 60 mins. of activity	Draw a self portrait	 HAVE FUN! (Free Space)	Learn about a family member's job	 Read 20 minutes
Watch Read, Write, ROAR!	Watch Meet the Helpers	 Watch Math Might	Watch InPACT at Home	Fill in the compost fractions (pg. 110)
Watch InPACT at Home	 Read 20 minutes	Practice Fact Families (pg. 109)	 60 mins. of activity	Invent an instrument (pg. 108)



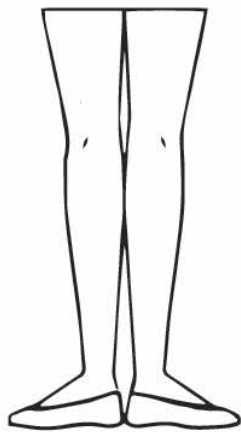


peg + cat

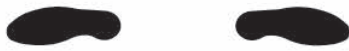
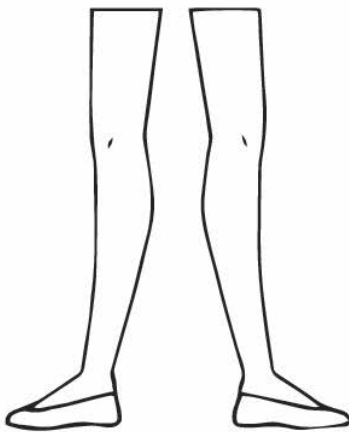
In 2015, Misty Copeland became the first Black principal ballerina with the American Ballet Theater. Learn the five basic foot positions used in ballet. Create a dance using the positions and add leaping and twirling to your moves just like Misty!



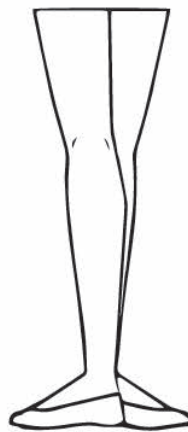
## The Five Ballet Positions



1



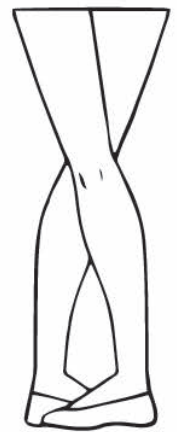
2



3



4



5



Find more games and activities at [pbskidsforparents.org](http://pbskidsforparents.org)

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# Bianca's Body Math

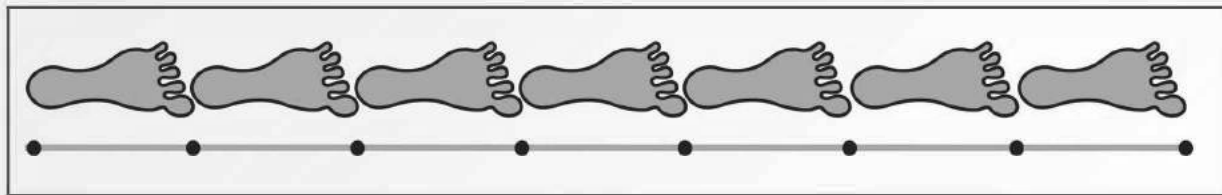
Did you know that for a lot of people, their foot is the same length as their forearm? Find out if it's true for you!

## YOU NEED

piece of string (a little longer than your height)  
black marker

## DIRECTIONS

First, start at the end of your string and mark off seven of your foot-lengths.



Now use the string to measure the body parts listed below. Have a friend help. Be sure to measure from one black mark on the string to the next.



### Measure

### About how many foot lengths?

From wrist to elbow (forearm)

\_\_\_\_\_

Around widest part of your fist

\_\_\_\_\_

Around your forehead

\_\_\_\_\_

From head to toe

\_\_\_\_\_

## Who Knew?

A person's height is often the same as his or her arm span (arms out to side, middle fingertip to middle fingertip). Is yours?



## Music to Our Ears!

Help! Hacker stole all the musical instruments from the borgs in R-Fair City on the day of their big parade! Can you invent a musical instrument to save the parade?

### Materials

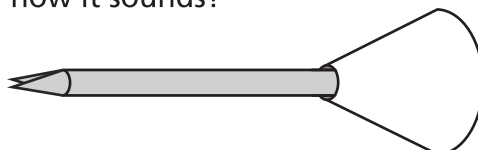
For your Music Maker:

- ☐ plastic and paper cups, paper plates, beans, beads, jingle bells, paper towel rolls, pipe cleaners, paper straws, waxed paper, combs, rubber bands, balloons, craft sticks, plastic salad bar containers, aluminum foil, and other found objects

- ☐ Masking tape
- ☐ Stapler
- ☐ "My Invention Design" handout
- ☐ Pencil

### Make Your Instrument

- 1 Play with the materials. Find sounds that you like by shaking, striking, or spinning objects.
- 2 Use the "My Invention Design" handout to plan your Music Maker. Make a sketch to show what it looks like.
- 3 Make your instrument and try it out. Does it work the way you planned?
- 4 What changes can you make to your instrument to improve how it sounds?



### How Am I Inventing?

Inventors take time to plan an invention before they start building. They start with an idea of what they want their invention to do and make a plan. When they stick to that plan, they can build an invention that works the way they want. This is called *designing for function*. When you design your instrument to make a particular sound, you're designing for function, too.



**Get inventive with CYBERCHASE on PBS KIDS GO!**  
**Check local listings or visit [www.pbskidsgo.org/cyberchase](http://www.pbskidsgo.org/cyberchase).**

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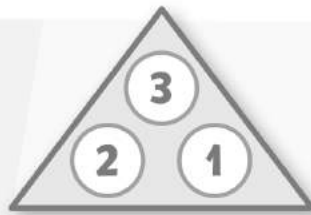
Page  
1



# Agents, Villains, and Fact Families

The Odd Squad Mobile Unit must stop a group of villains from causing oddness! Help the agents solve the **fact family** problems shown in the triangles below and on the next page. A fact family is a group of numbers related to one another. Use addition and subtraction to find the answers and help end the oddness that is taking over the city!

Here's a fact family using the numbers **1, 2, and 3**.



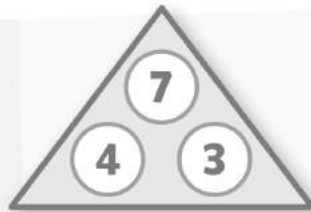
$2 + 1 = 3$

$1 + 2 = 3$

$3 - 2 = 1$

$3 - 1 = 2$

This example shows the fact family for the numbers **3, 4, and 7**.



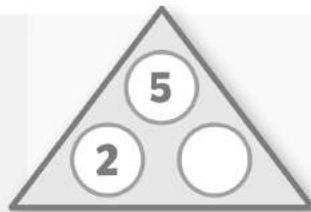
$4 + 3 = 7$

$3 + 4 = 7$

$7 - 3 = 4$

$7 - 4 = 3$

Can you finish this fact family?



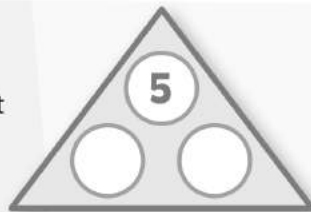
$2 + \square = 5$

$\square + 2 = 5$

$5 - 2 = \square$

$5 - \square = 2$

Create another fact family with the number **5**, but don't use the numbers **0, 2, or 3** in the triangle.



$\square + \square = 5$

$\square + \square = 5$

$5 - \square = \square$

$5 - \square = \square$

Funded by:



Find Odd Squad games, videos, and OddTube at [pbskids.org/oddsquad](http://pbskids.org/oddsquad)

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# COMPOST FRACTIONS



# FRACCIONES DE COMPOSTAJE

Composting is the process of changing food waste (and grass and leaves) into new soil. To compost, you need to use  $\frac{1}{3}$  "green" material (fruit and vegetable scraps) and  $\frac{2}{3}$  "brown" material (dried leaves and recycled paper).

1. Count the squares below. Each one is  $\frac{1}{3}$  of the total rectangle.
2. Color  $\frac{1}{3}$  of the rectangle below (or 1 square) with a green crayon or marker.
3. Color  $\frac{2}{3}$  of the rectangle below (or 2 squares) with a brown crayon or marker.

El compostaje es el proceso por el cual los residuos de alimentos (el césped y las hojas, también) se transforman en un tipo especial de tierra. Para hacer compost, se necesita  $\frac{1}{3}$  de material "verde" (restos de frutas y verduras) y  $\frac{2}{3}$  de material "marrón" (hojas secas y papel reciclado).

1. Cuenta los cuadrados de abajo. Cada uno es  $\frac{1}{3}$  de todo el rectángulo.
2. Colorea  $\frac{1}{3}$  del rectángulo de abajo (o 1 cuadrado) con un crayón o marcador verde.
3. Colorea  $\frac{2}{3}$  del rectángulo de abajo (o 2 cuadrados) con un crayón o marcador marrón.



Let's find more ways to show this rule. If you had three balls, how many green balls and how many brown balls would you need?

Veamos más formas de mostrar esta regla. Si tuvieras tres pelotas, ¿cuántas pelotas verdes y cuántas pelotas marrones tendrías?



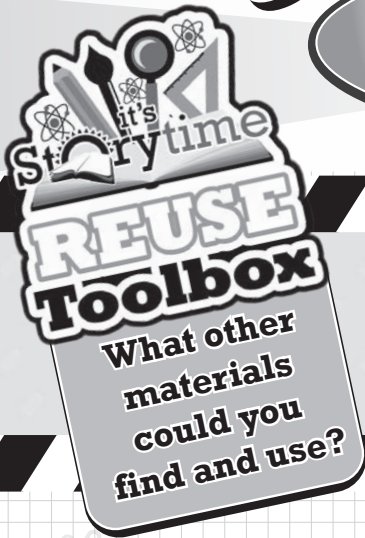
What if you had six balls?

¿Y si tuvieras seis pelotas?



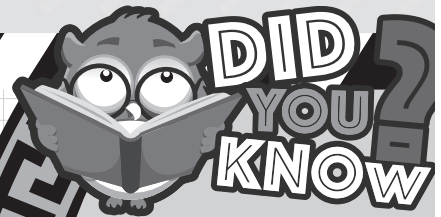
# it's Storytime CHALLENGE

## Protect Your Egg



- A Raw Egg
- Masking tape
- Colored Pencils
- Foam
- White paper
- Crayons
- Duct tape

*My Design Ideas:*



A sports engineer focuses on preventing injury while enhancing the performance of the athletes. That includes what the athlete wears and uses, but also the sporting environment and the tools for analyzing the athlete's performance!

### POWER UP WORDS

Iteration  
Kinetic energy  
Potential energy

### CAREER LIFT-OFF

- › Industrial Designer
- › Physical Therapist
- › Sports Technologist
- › Simulation Engineer

*How could I improve on my design for next time?*

**Learning Standards: 3rd-5th Grade**

3-5-ETS1-1. Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

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Traverse City Area Public Schools  
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from the  
**OPERA  
HOUSE**  
it's  
Storytime



# ACTIVITY GUIDE

**Episode 214:** Comparing Texts and Making Words

**Book:** *The Water Walker* by Joanne Robinson

Scan below to watch lesson



## Compare It

Choose two fiction books to read and then fill in the chart below.

Comparing Literature		
Title of Book 1	Story Elements	Title of Book 2
	Setting	
	Characters	
	Problem	
	Solution	

## Phonics Skills

Let's make and read words as we move up the word ladder. Start at the bottom. Read the word **sister**. Remember that we can split words with more than one syllable between consonants (**sis/ter**) to make them easier to read. Follow the directions to see how to change the first syllable in each word as you move up the ladder. Each time you make a new word, practice reading and writing it before moving further up the ladder.



Change **crit** to **chap**

Change **af** to **crit**

Change **win** to **af**

Change **sis** to **win**

## Think About It

Using the information you filled out in the chart above, answer the following questions.

How are the two books alike?  
How are the two books different?





# Coin Compare

**Materials:** money cards (cut out)

**Directions:**

1. Put all the cards in one pile face down.
2. Player 1 and Player 2 each turn over a card from the top of the pile.
3. Each player finds the value of the collection of coins shown on their card.
4. Both players compare their cards. The player with the greatest coin value takes both cards.
5. Continue to play until all the cards have been taken from the pile.
6. The player with the most cards wins!

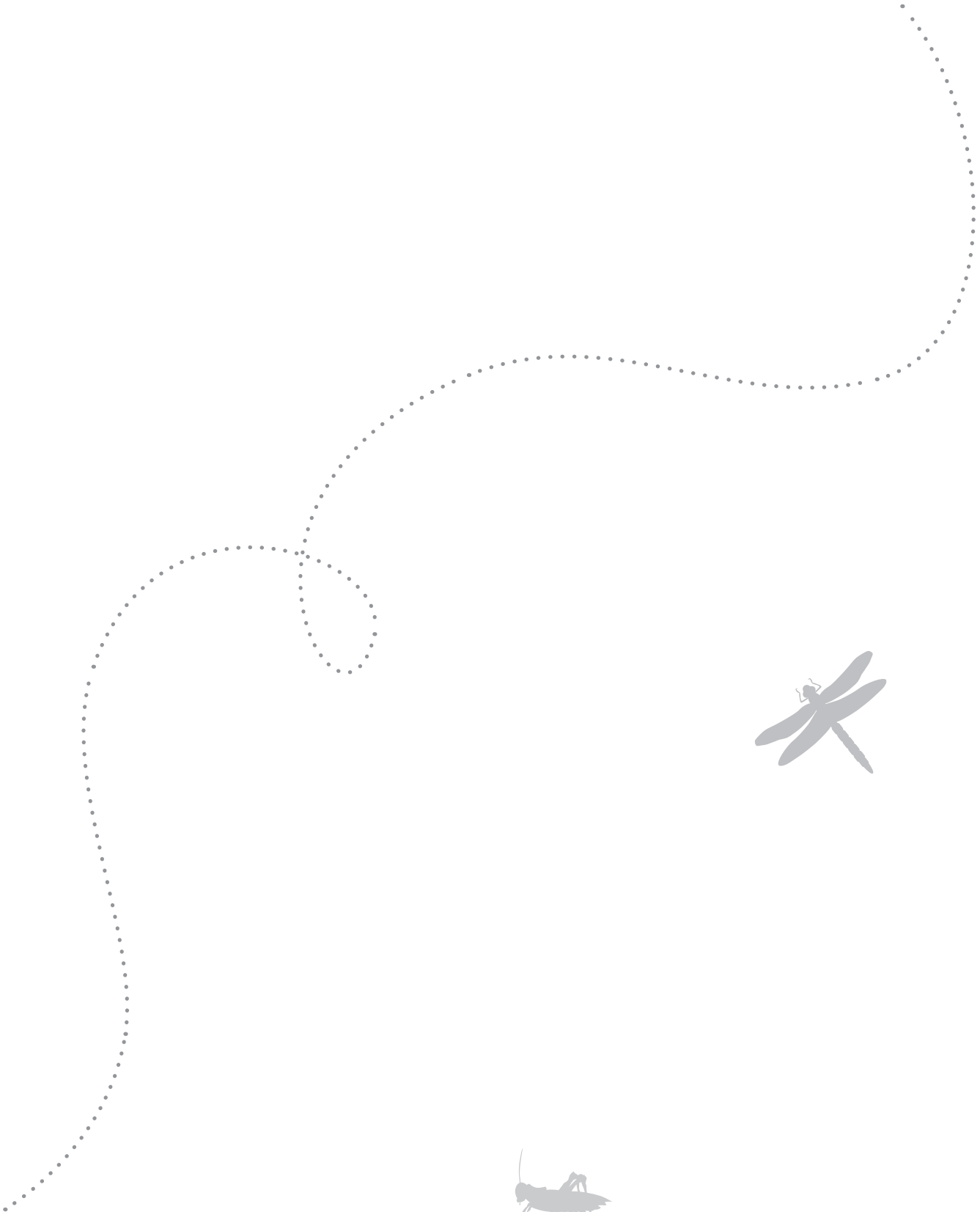
	Player 1	Player 2	Which player has the greatest value?
1	_____ ¢	_____ ¢	
2	_____ ¢	_____ ¢	
3	_____ ¢	_____ ¢	
4	_____ ¢	_____ ¢	
5	_____ ¢	_____ ¢	
6	_____ ¢	_____ ¢	
7	_____ ¢	_____ ¢	
8	_____ ¢	_____ ¢	
9	_____ ¢	_____ ¢	
10	_____ ¢	_____ ¢	







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# Week 8: Shoot for the Stars















# August 8-14

Look up at the night sky and into outer space and meet people who risked everything to follow their dreams.

Use the sheet below to mark off this week's activities as you complete them. See if you can get a BINGO!

**Playlists this week:** [www.michiganlearning.org/stars](http://www.michiganlearning.org/stars)



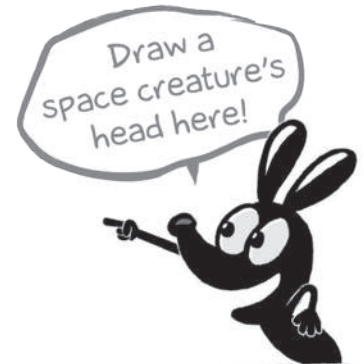
 Stargaze	 60 mins. of activity	 Read 20 minutes	Watch Live from the Opera House	Watch Read, Write, ROAR!
 Read 20 minutes	 Watch Math Might	 Watch the sunset	Try Luna's word find (pg. 128)	 60 mins. of activity
 60 mins. of activity	Make a poster (pg. 129)	 HAVE FUN! (Free Space)	Look at the clouds	 Read 20 minutes
Watch Read, Write, ROAR!	Draw a space creature (pg. 124)	 Watch Math Might	Watch InPACT at Home	Visit a new place
Watch InPACT at Home	 Read 20 minutes	 Stargaze	 60 mins. of activity	Make flashlight constellations



# SPACE CREATURE



Scribbles  
and  
Ink



[pbskids.org](http://pbskids.org)



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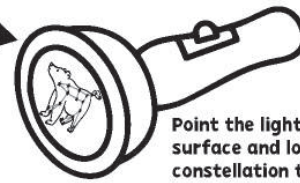
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# Flashlight Constellations

A constellation is a series of stars that form a picture in the sky. Astronomers use it today to help pinpoint the locations of other stars. Ask an adult to help cut out the four constellations and punch small holes on each star. These points are the locations of the stars in each constellation.

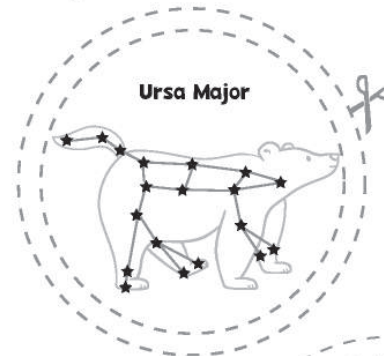
Choose the size circle that fits on your flashlight lens, cutting along the inner or outer dashed circle. Flip the picture so it's facing the flashlight.



Point the light to a dark surface and look at the constellation that shines through. One at a time, identify each constellation and talk about how you identified them.

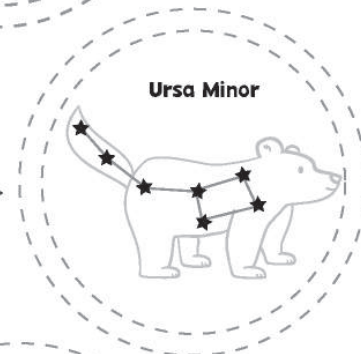
## URSA MAJOR

Ursa Major is also known as The Great Bear. Ancient Greeks tell the story about a beautiful girl named Callisto who was turned into a bear by a mean goddess. A tracker tried to catch the bear, but the Greek God Zeus saved Callisto by placing her up in the night sky where she was safe.



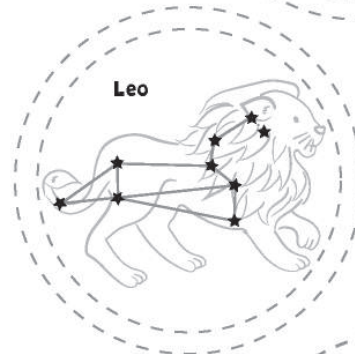
## URSA MINOR

The story of Ursa Minor, or The Little Bear, comes from the Ancient Greeks. Arcas was a great hunter. One day while hunting in the woods, he came across a great bear. Little did he know that was actually his mother, Callisto, who was under a spell. Arcas was about to catch the great bear, but the Greek god Zeus, stopped him just in time and turned Arcas into a little bear so he could be with his mom. Zeus placed the two bears into the sky to keep them safe and protected.



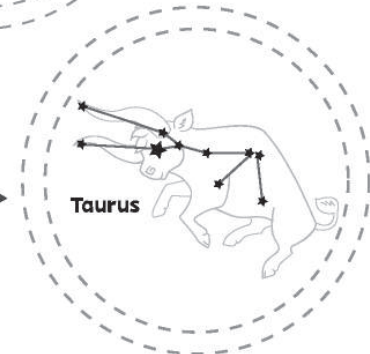
## LEO THE LION

In Greek myths, Leo the Lion lived outside an ancient city called Nemea. For many years, Leo would scoop up people from Nemea and no one would stop him. One day, Hercules went to stop the lion and won. Everyone who the lion had caught was set free. Zeus made Leo a constellation in the night sky to remind people of the story of Hercules and Leo.



## TAURUS THE BULL

The Ancient Greeks tell the story of a wild bull named Taurus who had a bad temper. One day he trampled a field of wild flowers and Persephone, the Goddess of Spring, got very sad. Taurus apologized and they soon became good friends. From then on, every spring, Persephone would ride on Taurus' back and the two of them would make the flowers bloom as they walked by.



WIND DANCER  
FILMS

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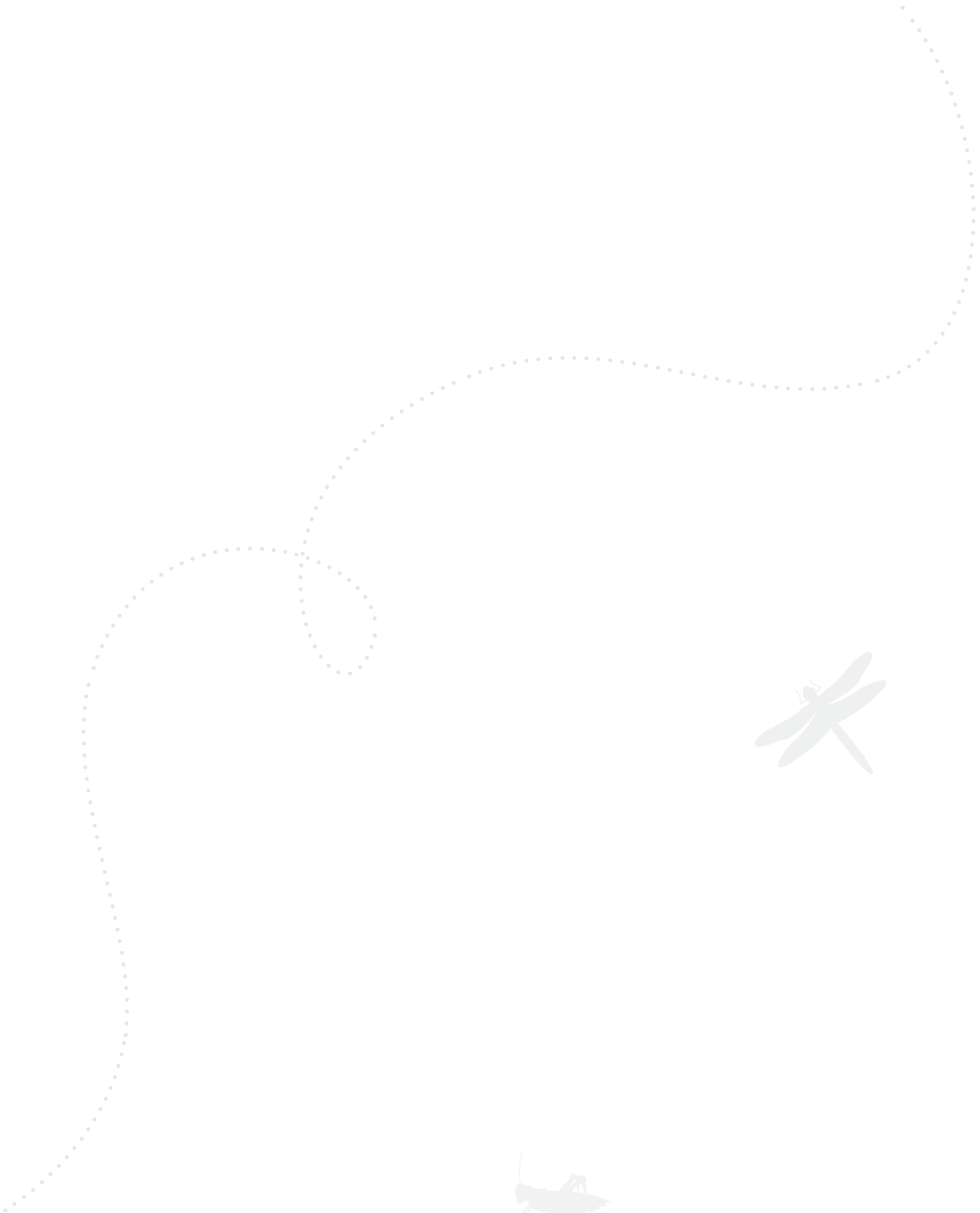


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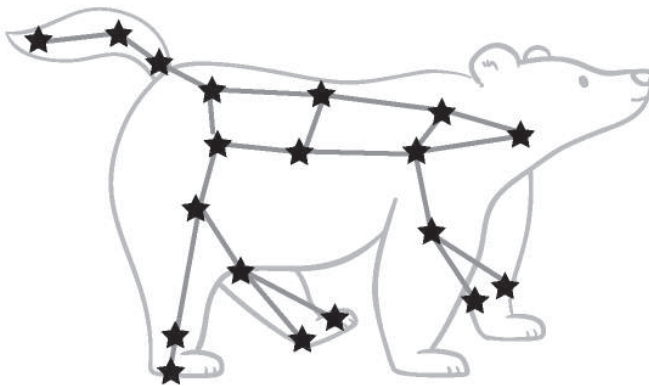


# Flashlight Constellations

## Constellation Key

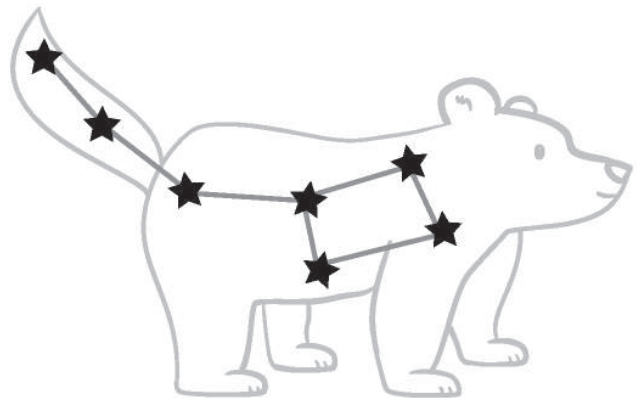
### URSA MAJOR

#### The Great Bear



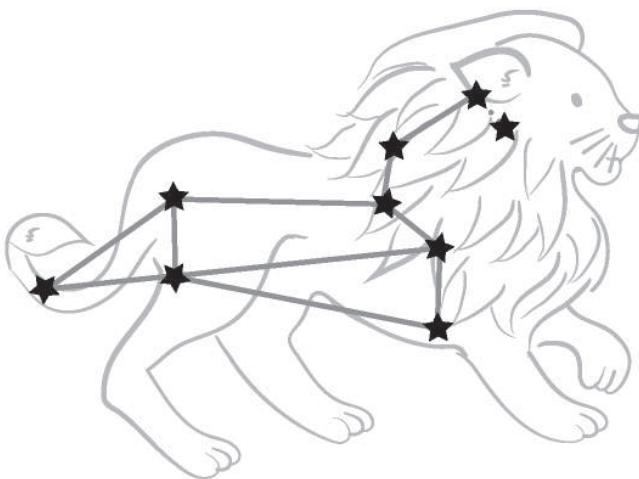
### URSA MINOR

#### The Little Bear



### LEO

#### The Lion



### TAURUS

#### The Bull



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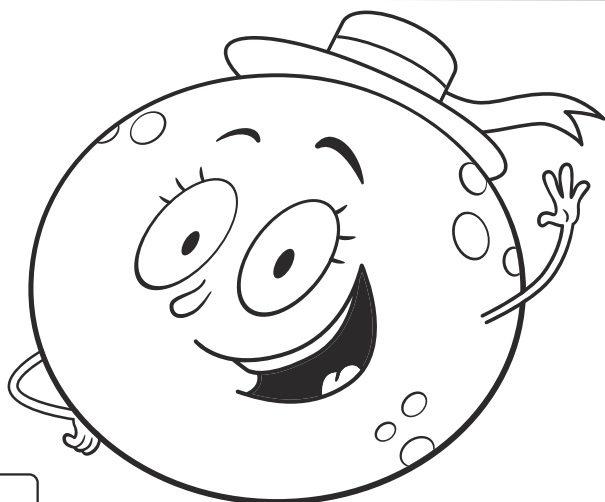


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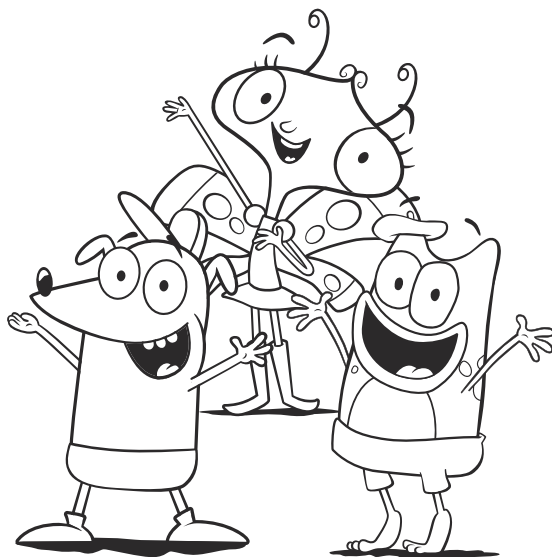


## Word Find

Andy, Carmen, and Leo are traveling the world! Can you find all of these words?



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



WORLD LUNA FRIENDS  
TRAVEL MOON GLOBE

Find more games and activities at [pbskids.org/luna](https://pbskids.org/luna)

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# Big Finale

## BIG IDEA

There is a lot that we can do to impact the environment. What issues are important to you? Think about what you have learned and take the time to share things you can do to support and protect nature in our communities.

## WATCH

Watch the clip from *Space Waste Odyssey* where the CyberSquad and Motherboard share what they've learned about creating less trash with the citizens of Cyberspace.

- Remember that the CyberSquad noticed a lot of trash was building up in “trash patches” in Cyberspace. They examined the trash to find out what was causing the problem.
- After watching, think about what environmental issue was important to the CyberSquad and what they did about it:
  - What was the problem that the CyberSquad saw?
  - What was one way that they thought people in Cyber-space could fix that problem?
  - How did they spread the word about making less trash to other people?
  - Why is it important for the CyberSquad to share what they've learned with other people?

## EXPLORE: Use Your Voice

### Materials:

- **Research materials to learn more about a topic**
- **Art materials for posters or digital materials** (like a cell phone camera or a blog post)

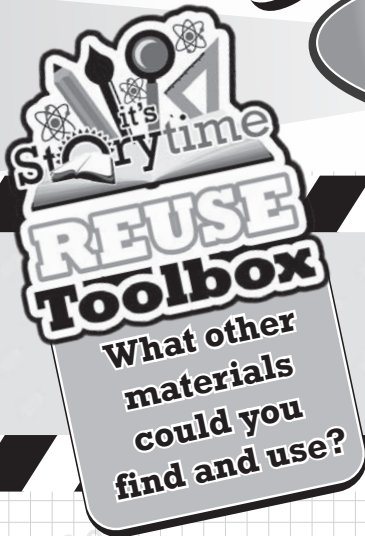
### Instructions:

1. What is an environmental problem that exists in your school, neighborhood, or at home? Which issues are less well-known by your family, friends, or neighbors?
2. Decide on one (or a few) key issues for your community.
3. Brainstorm ways to share the information you've learned with as many people as possible. Examples include short video Public Service Announcements (you can use a cell phone camera), a page for the school website, articles for a school newspaper or blog, or posters for public spaces.
4. Create! Focus on including information about *why the issue matters* and *what people can do to help*. Then show off what you made!



# it's Storytime CHALLENGE

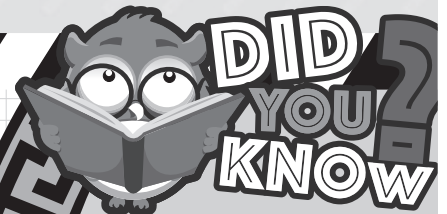
## Balloon Bagpipe



- Large Balloon
- Plastic Bottle Top
- Tape
- Plastic Tube
- Scissors

*My Design Ideas:*

*How could I improve on my design for next time?*



All musical instruments create sound through vibrations! Those vibrations create sound waves. Slower sound waves make a lower pitch, faster waves make a higher pitch!

### POWER UP WORDS

- Vibration
- Pitch
- Waves

### CAREER LIFTOFF

- › Musician
- › Sound Engineer
- › Music Director
- › Teacher
- › DJ

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**LIVE from the OPERA HOUSE**  
it's Storytime

#### Learning Standards: 1st Grade

1-PS4-1 Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate.

K-2-ETS1-2 Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.

K-2-ETS1-1 Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.



# ACTIVITY GUIDE

Episode 215: Protecting Our Planet

Scan below to  
watch lesson



## Read It

Read the following passage out loud. Underline the compound words.

Yesterday, in art class, we were making posters out of cardboard. We used markers, magazines, and watercolor paints. Our posters were all about reducing, reusing, and recycling. We brainstormed ideas on the whiteboard and on notebook paper. When we finished, we posted our classwork in the hallways, the lunchroom, and on the playground.

## Words to Know

**Compound Word** - a word that is made up of two or more smaller words

Types of Compound Words:

A **simple compound word** has two syllables

**sun + shine = sunshine**

A **complex compound word** has *more* than two syllables.

**after + noon = afternoon**

## Read It

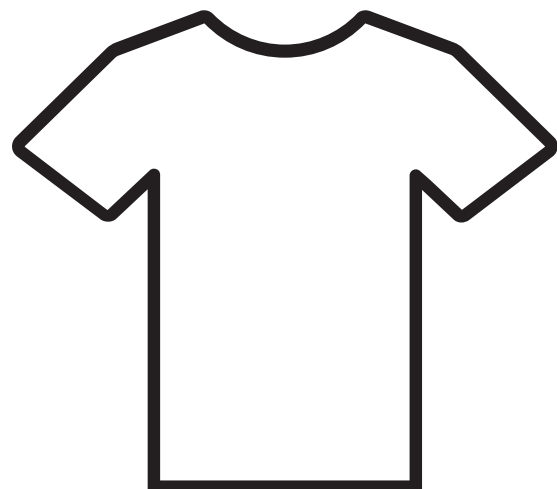
Choose one compound word that you underlined above. Write each word that makes up the compound word on a blank below. Rewrite the word from the paragraph on the next line..

\_\_\_\_\_ + \_\_\_\_\_  
word word

\_\_\_\_\_  
Is this word a simple or complex compound word?

## Try It

Design your own tee shirt to promote reducing, reusing, and recycling.



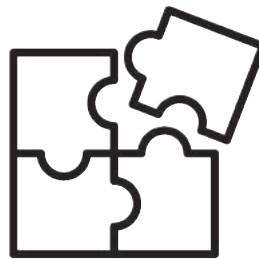


# The Toy Store

Look at the prices of the toys, then answer the questions on the following page.



soccer ball  
\$1.00



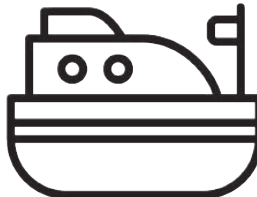
puzzle  
15¢



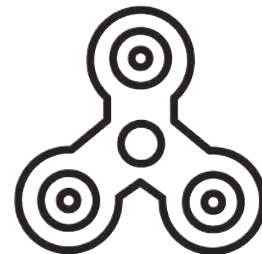
airplane  
25¢



castle  
99¢

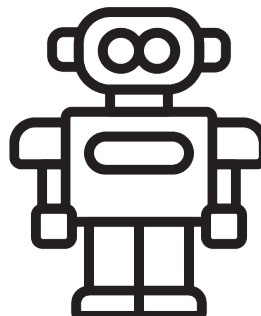
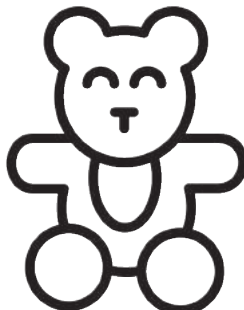


boat  
20¢



fidget spinner  
30¢

bear  
39¢



robot  
75¢

I bought three robots and a soccer ball. How much did I spend?

I bought two toys and spent 40¢. What might I have bought?

I bought a castle and a fidget spinner and gave the shopkeeper 6 quarters. How much change did I receive?

You buy a boat and four airplanes. How much do you spend?

Ben buys 2 robots and a puzzle. How much change will he get from a 5 dollar bill?

I buy one bear and two castles. How much do I spend?

Choose any one item from the store. Show what coins you could use to pay the exact cost.

Choose any two items from the store. Show what coins you could use to pay the exact cost.

You buy five puzzles. How much change do you get from a one dollar bill?

I spent \$1.19 at The Toy Store. What might I have bought?



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## **WHAT IS MEET UP AND EAT UP?**

Meet Up and Eat Up provides FREE nutritious meals for children and teens 18 years and younger.

## **HOW DO I SIGN UP?**

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## **WHERE IS IT?**

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**Visit: [www.michigan.gov/meetupeatup](http://www.michigan.gov/meetupeatup)**

**Call: 211**

**Text: Food to 304-304**

**Mande por texto "Comida" al 304-304**



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**ELEMENTARY**



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