

SPECIAL THANKS TO OUR MICHIGAN LEARNING CHANNEL PORTNERSHIPS:

Content Partners:

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826Michgian

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Signing Time

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Ann Arbor District Library

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Battle Creek Symphoy Orchestra

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Chris Anderson Science Around Cincy

Story Pirates

Storycorps

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Detroit Zoo

WORLD Channel

WDCQ - Saginaw

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INPACT at Home

Kinetic Affect

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Little Kids Rock

Lucky Cat Productions

MAISA Literacy Essentials

Michigan Architectural Foundation

Michigan DNR

Michigan EGLE

Michigan Humanities Council

Midland Center for the Arts

Mindful Practices

Mr. E in the D

MSU Extension

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TPT (Twin Cities PBS)

PBSNC

PBS

PBS Books

PBS Kids

PBS SoCal

WCMU North Carolina

Department of Public Instruction

WHRO

Positive Impact for Life

WIMAGE

SchoolKit

WNET (New York Public Media)

Roadtrip Nation

WQED

WUCF

WATCH on the Michigan Learning Channel

or stream the channel at MichiganLearning.org







Visit 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-any-where 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.

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.

Michigan Learning Channel Team 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.



Learn more about the Michigan Learning Channel at Facebook Live at fb.me/michlearning www.michiganlearning.org/summer

On TV. Online. Statewide.





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

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 Mights, 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

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 for details



Learn more about the Michigan Learning Channel at Facebook Live at fb.me/michlearning www.michiganlearning.org/summer

On TV. Online. Statewide.



f Follow @MichLearning on social media to find out more.



Serving Schools Statewide Through Your Local PBS Stations

Watch On-Demand at MichiganLearning.org

f 💆 🔟 @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



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
Channel 23.5
Summer Godette, M.Ed,
summer@wkar.org
(517) 884-4700



WNMU-TV Channel 13.4 Ellen Doan WNMU Public Media edoan@nmu.edu (906) 227-6765



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

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		Let's Learn
6АМ		PBS Kids shows
6:30AM	Preschool -	Wimee's Words, Simple Gifts Series
7 AM	Kindergarten	Let's Learn
8AM		Read, Write, ROAR! (Kindergarten)
8:30AM		Math Mights (Kindergarten)
9ам		Read, Write, ROAR! (1st Grade)
9:30AM		Math Mights (1st Grade)
10 AM	4 . 4 .	Read, Write, ROAR! (2nd Grade)
10:30AM	1st - 3rd Grade	Math Mights (2nd Grade)
11AM	Grade	Read, Write, ROAR! (3rd Grade)
11:30AM		Math Mights (3rd Grade)
12PM		Live From the City Opera House: It's Storytime
12:30РМ		PBS Kids shows
1 _{PM}		Extra Credit
1:30рм]	Math & Movement
2РМ	4th - 6th Grade	Story Pirates
2:30РМ	Grade	DIY Science Time, SciGirls
ЗРМ		Curious Crew
3:30PM	1st - 3rd	Cyberchase, Into the Outdoors
4РМ	Grade	Read, Write, ROAR! (2nd & 3rd Grade)
4:30PM		Math Mights (2nd & 3rd Grade)
5PM	Preschool -	Read, Write, ROAR! (Kindergarten & 1st Grade)
5:30рм	Kindergarten	Math Mights (Kindergarten & 1st Grade)
6РМ	3	Let's Learn
7РМ		Extra Credit
7:30РМ	4th - 6th	Math & Movement
8РМ	Grade	Story Pirates
8:30PM		DIY Science Time, SciGirls
9рм 5ам	6th - 12th Grade	Nature, NOVA, American Experience, Ken Burns and other PBS programming

Details at 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

Visit 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



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.

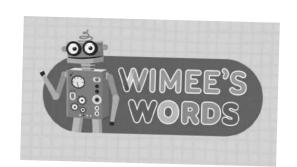
Live virtual events will be hosted on the Michigan Learning Channel Facebook page.

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 Aguarium 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.

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 www.michiganlearning.org/summer





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 Mights

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 apprach 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

Follow @michlearning to find out more.





Learn at Home with PBS KIDS

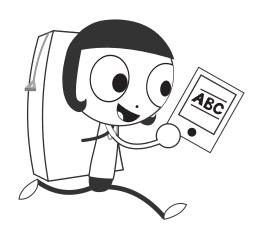
Play and learn anytime and anywhere with free apps from PBS KIDS! Use the chart below to find the app that aligns to your child's grade, learning goal, and favorite PBS KIDS show - then download it on your on your mobile or tablet device to play online, offline, or anytime.

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
Play & Learn Engineering	PK-K	Science and Engineering
PBS KIDS Measure Up!	PK-K	Math
Play & Learn Science	PK-K	Science
Splash and Bubbles for Parents	PK-K	Science
Splash and Bubbles Ocean Adventure	PK-K	Science
The Cat in the Hat Builds That!	PK-K	Science and Engineering
The Cat in the Hat Invents	PK-K	Science and Engineering
Jet's Bot Builder: Robot Games	K-2	Science and Engineering

orogy, Engineering & Math			
Photo Stuff with Ruff	K-2	Science	
Ready Jet Go! Space Explorer	K-2	Science	
Ready Jet Go! Space Scouts	K-2	Science and Engineering	
Nature Cat's Great Outdoors	K-3	Science	
PBS KIDS ScratchJr	1-2	Coding	
Outdoor Family Fun with Plum	1-3	Science and Engineering	
Cyberchase Shape Quest	1-5	Math	
PBS KIDS Games app	K-2	Multiple Learning Goals	
PBS KIDS Video app	K-2	Multiple Learning Goals	



pbskids.org/apps









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

+- ×÷ Watch Math Park	60 mins. of activity	Read 20 minutes	Do a good deed	Spot a mail truck outside
Read 20 minutes	Watch Story Pirates	Build an inertia walker (pg. 29)	Watch DIY Science Time	60 mins. of activity
60 mins. of activity	Spot a fire truck outside	HAVE FUN! (Free Space)	Watch InPACT at Home	Read 20 minutes
Watch DIY Science Time	Do a good deed	+- ×÷ Watch Math Park	Watch Story Pirates	Draw a plant superhero (pg. 27)
Watch Extra Credit	Read 20 minutes	Watch Extra Credit	60 mins. of activity	+- ×÷ Watch Math Park







Design Your Own Plant Superhero

Big Idea: There are many different types of plants. Some types of plants are good at cleaning the air to make it better for us to breathe.

Explore: Below are three different types of plants. All of these plants are good at cleaning the air inside your house to get rid of pollutants. Pollutants are small, unhealthy things that can get into the air, sometimes from new rugs or cleaning supplies. These plants breathe in the pollutants when they take in air, making it healthier for us inside.









Peace Lily

Areca Palm

Snake Plant

Look at the three plants above. What do you notice that all of these plants have in common (What color are they? What parts of the plant do you see?) What do all plants need?

How are these plants different from each other?

(continued on page 2)

For more Cyberchase adventures with plants, watch "Plantasaurus" on pbskids.org/cyberchase.

Funding for *Cyberchase* is provided by The JPB Foundation, the Heising-Simons Foundation and Ernst & Young LLP. Additional funding is provided by Lynne and Marc Benioff, the Tiger Baron Foundation, Shailaja and Umesh Nagarkatte and Ellen Marcus.

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AT-HOME ACTIVITY

Design Your Own Plant Superhero DRAW PAGE

Take turns drawing your plant superhero on this page. Start with the top section and make sure to draw down just below the dotted line. Fold over the top section when you are done and pass on to the next person for the middle section.

old back here when top section is done.	
old back here when middle section is done.	

(continued on page 4)

Funding for *Cyberchase* is provided by The JPB Foundation, the Heising-Simons Foundation and Ernst & Young LLP. Additional funding is provided by Lynne and Marc Benioff, the Tiger Baron Foundation, Shailaja and Umesh Nagarkatte and Ellen Marcus.

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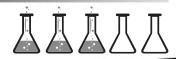




MATERIALS

- Inertia walker printout
- Scissors
- Tape
- Marble
- Ramp

DIFFICULTY





Why do dentists love riding roller coasters?

Answer on the next page

INERTIA

Newton's 1st law states an object at rest remains at rest, and an object in motion remains in motion unless acted on by an unbalanced force. In other words, we call the tendency of an object to do nothing or remain unchanged inertia.

We often experience inertia in our lives! Think about driving in a car and someone applies the brakes. Your body tries to keep moving forward, but the seatbelt holds you safely in place. Try looking at your chocolate milk while you are stirring it next time. Although you pull the spoon out, the milk keeps spinning and swirling in the cup.

FOR MORE SCIENCE FUNI





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"Science is wherever YOU are!"



*Joke Answer -They know how to BRACE themselves!

DAY SOLELIGE AND

DY Inertia Walker

EXPERIMENT

- **Step 1:** Print and cut out the walker on the dashed line.
- **Step 2:** Fold and crease the tabs on the solid lines.
- **Step 3:** Tape the walker together where the tabs overlap. Place a marble inside the walker before taping closed.
- **Step 4:** Build a ramp using books and a long flat surface such as a wood board or long box.
- Step 5: Place your walker at the top of the ramp and release it!

WHY IT WORKS

Objects in motion want to stay in motion, and the marble inside the walker wants to roll down the ramp. The marble has enough inertia to push and force the rounded end of the walker down the ramp. Without that extra force from the marble, the walker would not be able to overcome the friction between its long side and the ramp's surface. This allows the walker to tumble and turn all the way down the ramp!

EXTEND YOUR LEARNING

- Could you design your own walker using household materials available to you?
- What happens if you use a larger or smaller marble? Can a smaller marble keep the walker moving?
- What other types of ramps could you test your walker on? Would it work on a slide at the park?
- Could you create a differently-shaped three dimensional object to be a walker? Would a cube work?

WORKFORCE CONNECTION

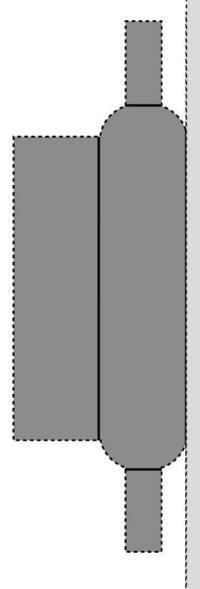
Biomedical engineers called kinesiologists are scientists who study how people move. Kinesiologists can help athletes improve how they perform in their sports by showing them how their motions can enhance their physical fitness and reduce chances for injuries. They must understand motion and forces, like inertia and gravity, and how they impact athletes' bodies.



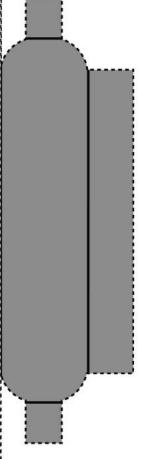


DI Inertia Walker





DAY SOLETION THAT



Directions:

Fold along solid lines. X Cut along dashed lines.

Step 1: Cut out the walker on the dashed line.

Step 2: Fold and crease the tabs on the solid lines. Place a marble inside the walker before taping it shut.

Step 3: Build a ramp using books and a long flat surface such as a wood board or long box.

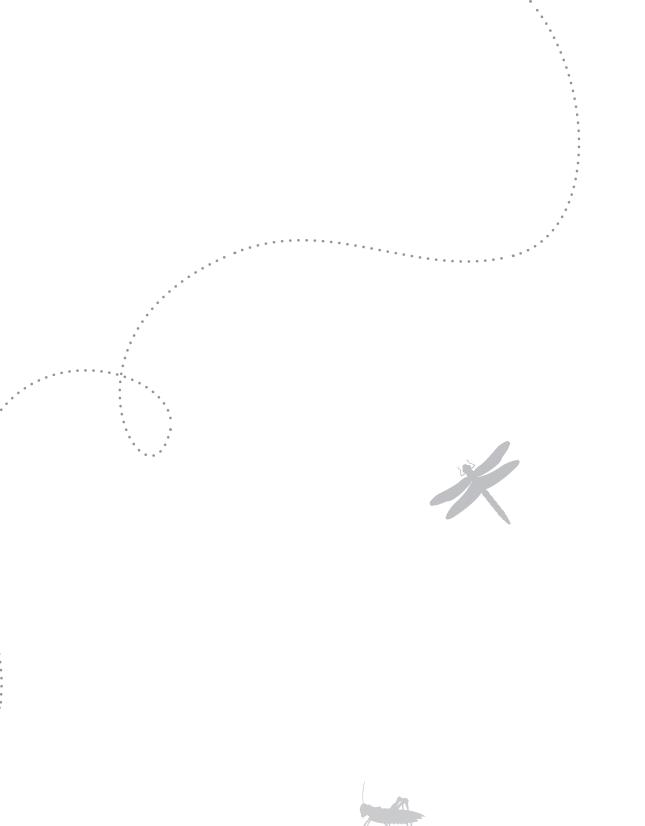
Step 4: Place your walker at the top of the ramp and release it!



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Time to Draw!

CREATE YOUR HERO

Draw and label your hero!	
Draw and laber your nero:	
Hero's name	

Fractions of a Set Directions: Scan the QR code to watch the video, and then write the fraction you see in the picture.

SPECIAL THANKS TO OUR MICHIGAN LEARNING CHANNEL FUNDERS:













The State of Michigan

Elaine and Leo Stern Foundation

The Donald and Mary Kosch Foundation



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?

No application or sign-up needed, just come and join us!

WHERE IS IT?

To find a location near you

Visit: www.michigan.gov/meetupeatup

Call: 211

Text: Food to 304-304

Mande por texto "Comida" al 304-304



On TV. Online. Statewide.

WATCH on the new Michigan Learning Channel or stream the channel at MichiganLearning.org







Visit MichiganLearning.org and follow @MichLearning on social media to find out more.