



Michigan
LEARNING
 CHANNEL
 A PUBLIC MEDIA PARTNERSHIP

SUMMER!

FUN ACTIVITY BOOK



**UPPER
 ELEMENTARY**

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Week 8: Space

August 7-13

Meet astronauts and virtually visit the planets and stars. Our featured careers this week are astronaut, astronomer, and computer scientist. Scan the QR code or visit MichiganLearning.org/Summer/Space to explore all of our videos this week.

Use the sheet below to mark off this week's activities as you complete them. See if you can get a BINGO! Some of them are in this book, and some ask you to use your imagination or go outside.



 Stargaze	 60 mins. of activity	 Read for 20 minutes	Draw a space creature	Watch Career Girls
 Read for 20 minutes	Try the Odd Squad Robot Coder	Create your own constellation	Research a featured career	 60 mins. of activity
 60 mins. of activity	Draw your hero story with Story Pirates	 HAVE FUN! (Free Space)	Look at the clouds	 Read for 20 minutes
Name all the planets in the solar system	Watch NASA at Home	Watch Live From the Opera House	Watch InPACT at Home	Visit a new place
Watch InPACT at Home	 Read for 20 minutes	Design a rocket ship	 60 mins. of activity	 Stargaze



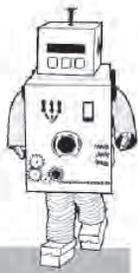
Robot Coder

Name _____

Follow the code! Agent Oswald needs YOUR help to move the ODD-some robot through the warehouse to retrieve his gadgets. Use the key on the side of the page and follow the codes to guide the robot.

		Start 		

Key



-  Forward
-  Left
-  Right
- 3** Number of Spaces

Code 1  **2**  **2** **Where did you end?**

Code 2  **1**  **3** **Where did you end?**

Code 1 = 2 on the grid, Code 2 = X on the grid

Find more games and activities at pbskidsforparents.org



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Robot Coder

Name _____

Write your own code! Mark a box on the grid as the start. Select a shape (● ◆ ▲ ●) as the ending point. On a separate piece of paper write the name of this shape. This is the answer to Code 1.

Fill in the blank spaces below for Code 1. You don't have to fill in all the boxes, but you can. Use arrows (e.g., ↑ ↓ ← →) and numbers to create your code. Remember, the robot must move around objects.

To create Code 2, do the same thing only choose a different shape for the ending point. Write the name of this shape on a separate piece of paper. Fill in the blank spaces below for Code 2.

Challenge a family member or friend to follow your codes and tell you where they ended. You can then reveal your answers!

Code 1

<input type="checkbox"/>					
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

Where did you end? _____

Code 2

<input type="checkbox"/>							
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

Where did you end? _____

Find more games and activities at pbskidsforparents.org



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MATH PARK

Introducing Decimals: Hundredths

Directions: Scan the QR code to watch the video, and then write each fraction as a decimal.



$$\frac{1}{100} = 0.01$$

$$\frac{3}{100} =$$

$$\frac{8}{100} =$$

$$\frac{2}{100} =$$

$$\frac{5}{100} =$$

$$\frac{9}{100} =$$

$$\frac{10}{100} =$$

$$\frac{7}{100} =$$

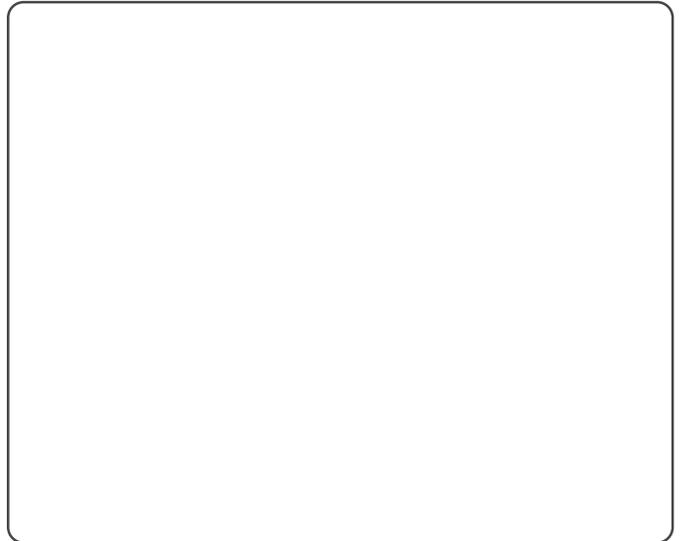
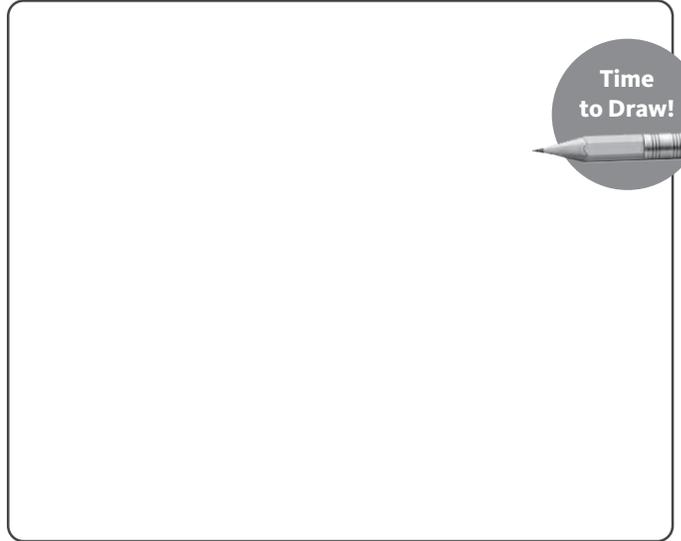
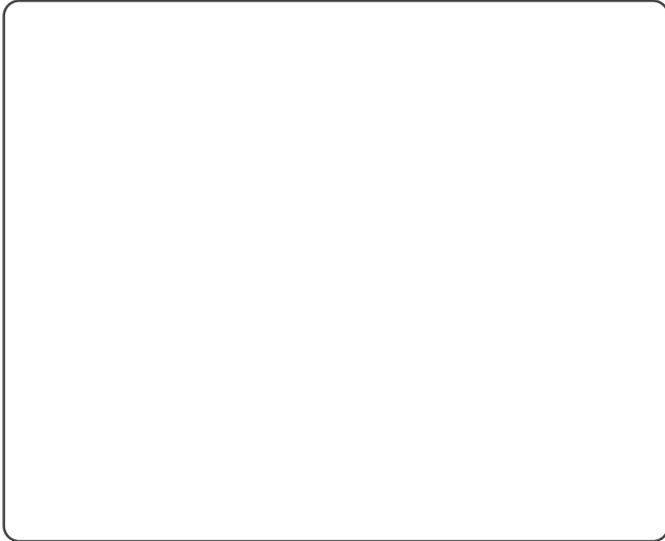
$$\frac{6}{100} =$$

$$\frac{4}{100} =$$

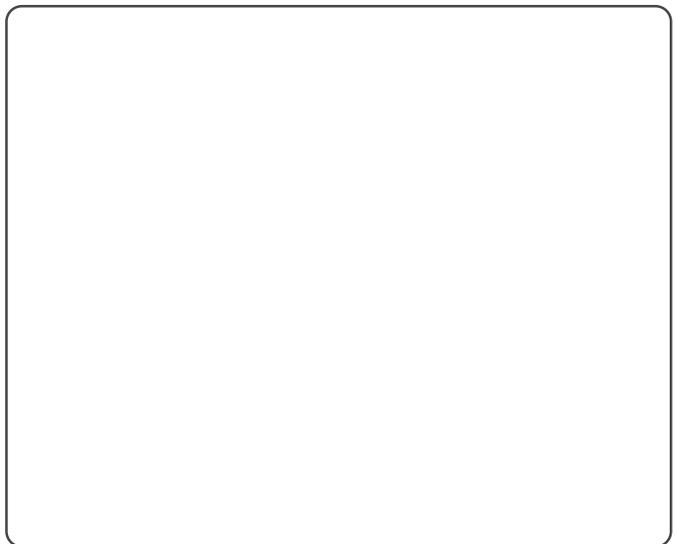
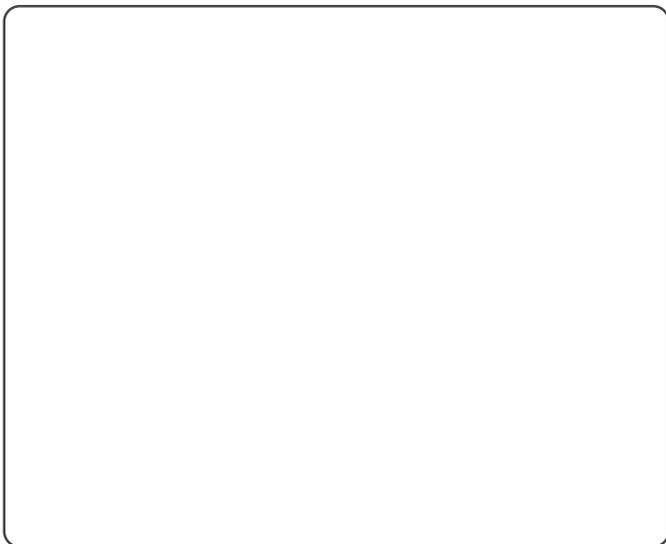
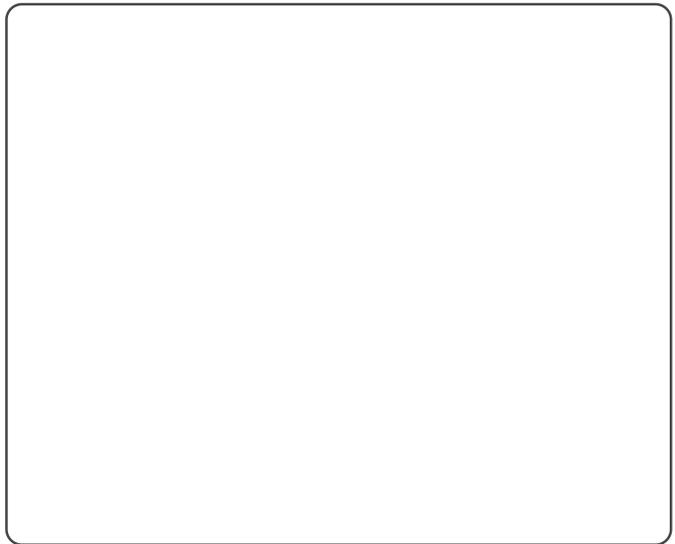
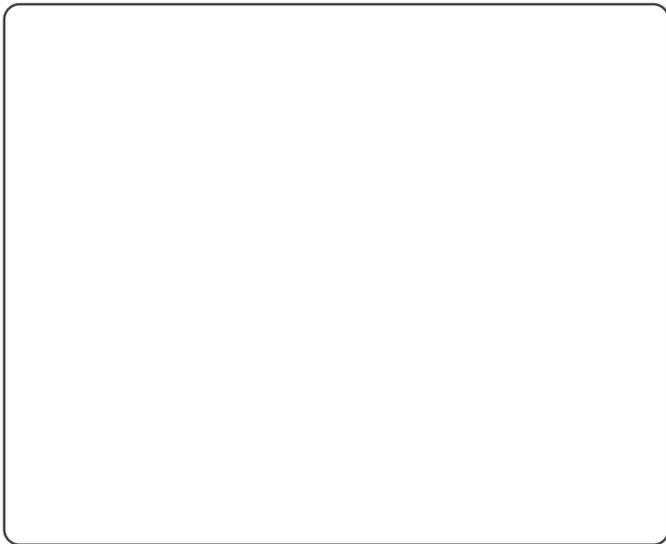
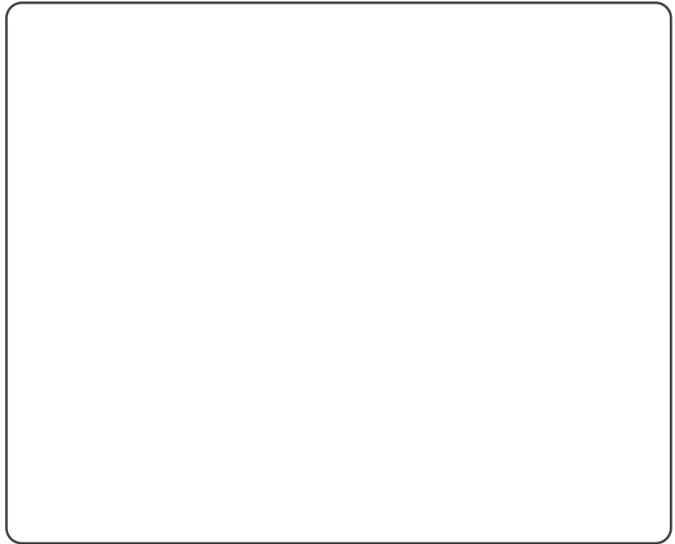
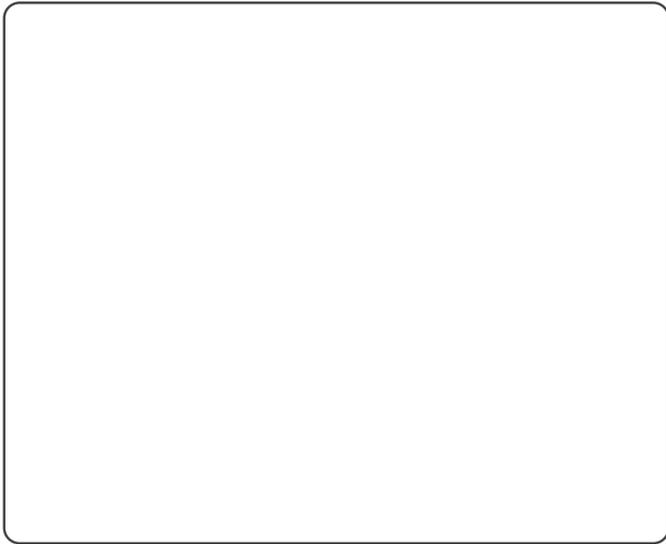
DRAW YOUR STORY!



Use the story you wrote earlier in this book to draw a comic!



DRAW YOUR STORY!



it's Storytime CHALLENGE

Design a lever contraption to launch a ping-pong ball high enough in the air to catch it!



What other materials could you find and use?

- Duct Tape
 - Paint Stirrers
 - 1 Ping-Pong Ball
 - 1 Wooden Block or Spool
 - 3-oz Paper Cups
- What else can you launch?
(hint: stuffed animals are fun to launch!)

- ASK** >>> What is the problem?
- IMAGINE** >>> Brainstorm possible solutions.
- PLAN** >>> Pick an idea and plan out how you are going to do it.
- CREATE** >>> Build it!
- IMPROVE** >>> What worked? What didn't? How can you make it better?
- SHARE** >>> Share your idea!



DIY Thermometer



FUN FACT

Before there were thermometers there was an instrument called a thermoscope. Thermoscopes are devices that show changes in temperatures. Unlike a modern thermometer, thermoscopes don't have standard scales for measuring temperature.

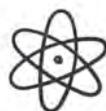
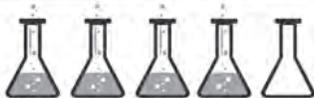
THERMAL ENERGY

Thermal energy is the energy contained within a system that is responsible for its temperature. Heat is the flow of thermal energy. The total kinetic energy of moving particles of matter is called thermal energy. All matter has thermal energy, even matter that feels cold. That's because the particles that make up matter are always in motion and have kinetic energy.

MATERIALS

- Ice
- Water
- Small bowl
- Food coloring
- Modeling clay
- Bottle with small neck
- Clear plastic drinking straw

DIFFICULTY



Why are thermometers so smart?

*Answer on the next page

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DIYSCIENTIME.ORG
FOR MORE SCIENCE FUN!



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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?

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



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