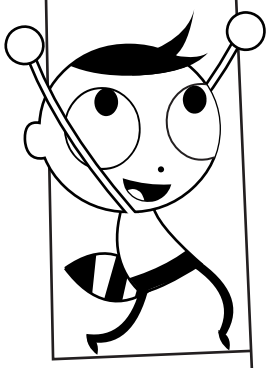
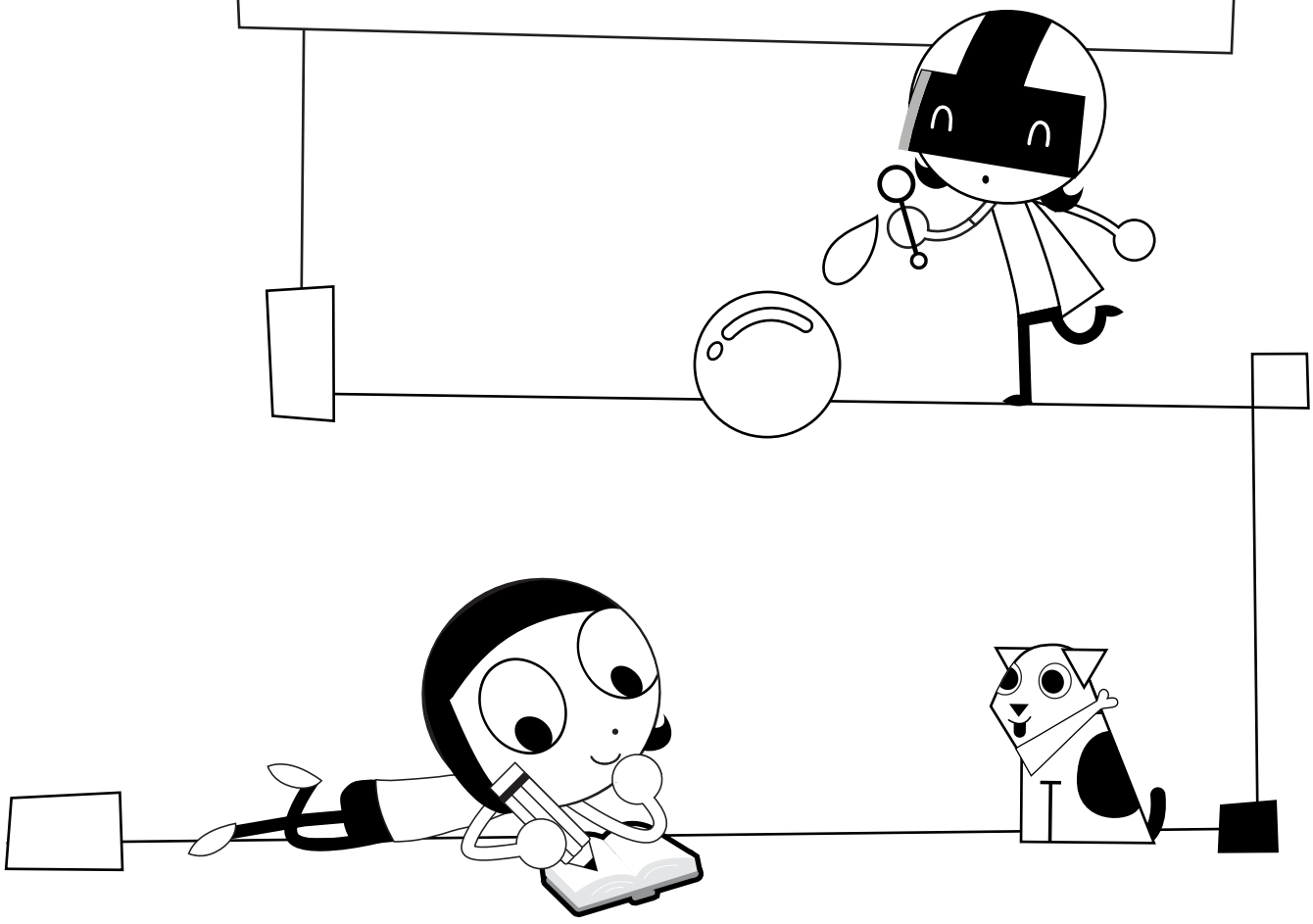
Learn at Home with PBS KIDS

Things That Go BINGO





Learn at Home with PBS KIDS

Week of November 30th

Hello, Families!

Welcome to **Learn Along Bingo**! We're happy to share PBS KIDS activities with you and to work with PBS member stations and community partners across the country to help support learning at home. With Learn Along Bingo, children can view, explore, and play as they learn alongside their PBS KIDS friends on the PBS KIDS 24/7 channel. We hope your family will use it to inspire learning each and every day.

It's Things That Go Week!

In this packet, there are printable activities and everyday learning ideas for you and your child to choose from. As you complete each square, mark it off to celebrate the learning.

Learning Spotlight: Investigating Force and Motion

This week, we're learning about how force and motion helps us to see how different conditions affect the speed of objects.

Show What You Know: Ups and Downs Activity

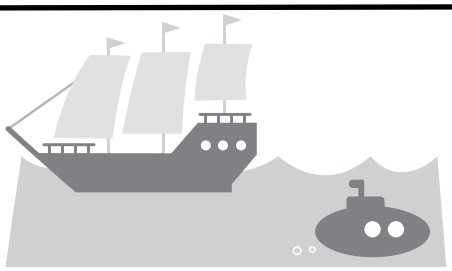
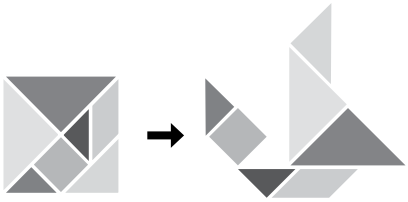
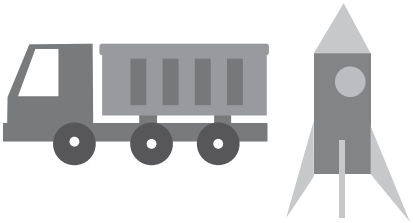
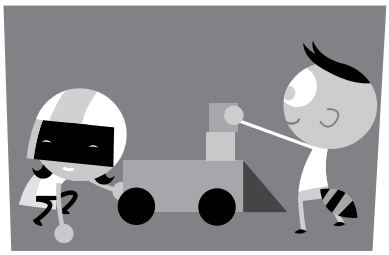
The last activity in this packet is a perfect way for children to test force and motion.

Tune in: Watch READY JET GO! at 12:30pm ET on Tuesday, December 1st on the PBS KIDS 24/7 channel.

Ready for more? Watch your favorite PBS KIDS shows on the 24/7 channel and live stream at pbskids.org/video/livetv or on your local PBS station.

Happy learning!
PBS KIDS

Things That Go BINGO

 Puppets	 Make a list of as many vehicles that travel in the water as you can.	 Paper Airplane
 Cut shapes out from paper. What vehicles can you make with them?	 Ups and Downs	 If you could be any vehicle, what would you be? Why?
 Make a Sailboat	 Build a vehicle from recyclable materials. How fast does it go?	 Rocket Launcher

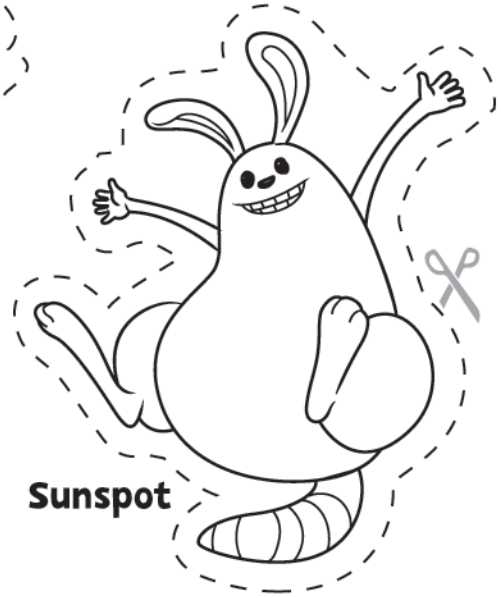
Grades 1-2

Find more games and activities at pbs.org/parents/learn-at-home

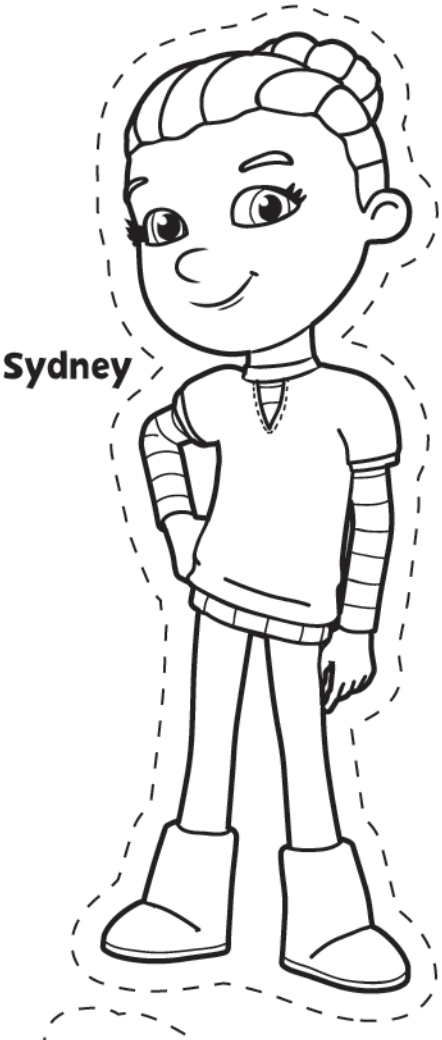
Storytelling Puppets

Directions: Color and then cut out the character puppets. Glue each puppet onto a popcicle stick. Use the puppets to retell the sequence of events from the PBS KIDS episode you watched. Talk about the characters, the problem, what the characters did, the solution and what they learned. You can even create an original storyline!

Jet Propulsion



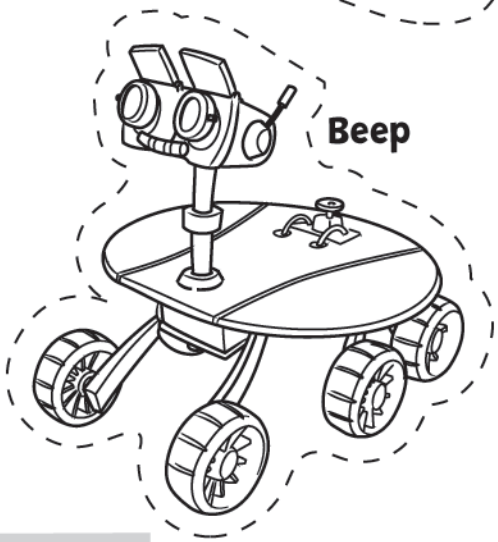
Sunspot



Sydney

Mindy

Sean



Beep

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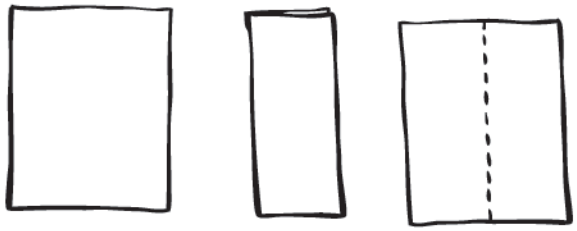
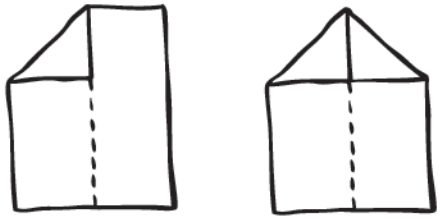
Paper Airplane

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



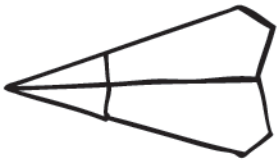
2. Fold the top two corners into the center spine of the paper.



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?

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Activity

Ups and Downs

Draw your ramp in the space provided, and list which materials you're going to use. What do you predict will happen when you test your ramp?

Materials:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

Prediction:

Find more games and activities at **pbskidsforparents.org**

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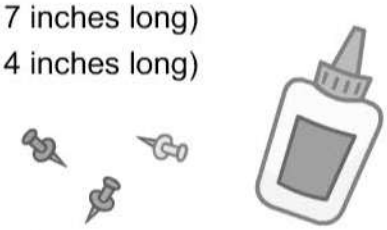
SAIL AWAY WITH THE NATURE CAT CREW!

DIFFICULTY: HARD

Let's catch the wind! Wind is air in motion. It can keep a kite high in the sky, and push a boat right across the water. Ready to make your own sailboat?

MATERIALS

- 11 sticks all about the same length and thickness (about 9 inches long)
- 1 thin, short stick (about 7 inches long)
- 1 thin, short stick (about 4 inches long)
- Rubber bands
- Twist ties
- Safety scissors
- Waterproof glue or three thumbtacks
- Large leaf or lightweight piece of fabric (such as a rag)
- Twine (optional)



LET'S MAKE A BOAT!

1. First let's build the mast. Make a lower case "t" shape with your two shorter sticks. Cross the 4 inch stick over the 7 inch stick about three inches from the top.

2. Lay the twist ties in an "X" underneath the crossed sticks. There should be an even amount of the twist tie on each side of the sticks. Now twist the ties together!

Find more games and activities at **pbskidsforparents.org**

3. You should now see an "X" made of the twist ties, crossed over your two sticks (see Step 3 photo). Tah dee! Repeat this step over the same sticks to keep them in place!

4. Let's make the sail. Find a large leaf outside, or cut some fabric into a square shape. It should be about the same width as the stick running across and a little more than half of the length of the longer stick.

5. Attach your sail with waterproof glue across the "t" or place a thumbtack near the top and on either side of the stick running across. Set aside.

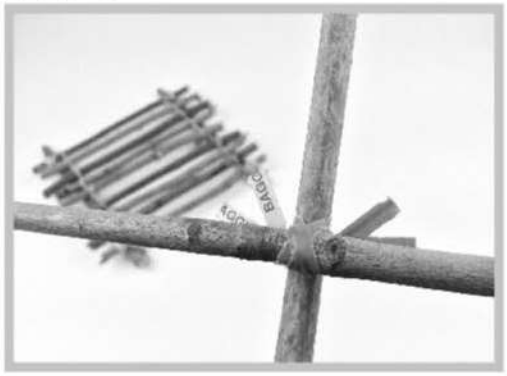
6. Time to make the base of your boat! Gather your rubber bands and sticks! We'll use the rubber bands to attach the sticks to each other.

7. Place one of your long sticks through a rubber band. Twist the remaining piece of rubber band twice so the stick feels secure. (See Step 7 photo) Insert another long stick into the empty loop of the same rubber band and twist twice. Repeat with long sticks until you have at least 5 joined together and the rubber band feels tight around all of the sticks.

8. Repeat step 7 on the opposite end of the sticks. Make sure they are joined together and can lay flat!

9. Make another bundle with four sticks (see Step 9 photo) joining the sticks on both ends. This time, loop an extra rubber band around the last stick.

STEP 3



STEP 7

STEP 9

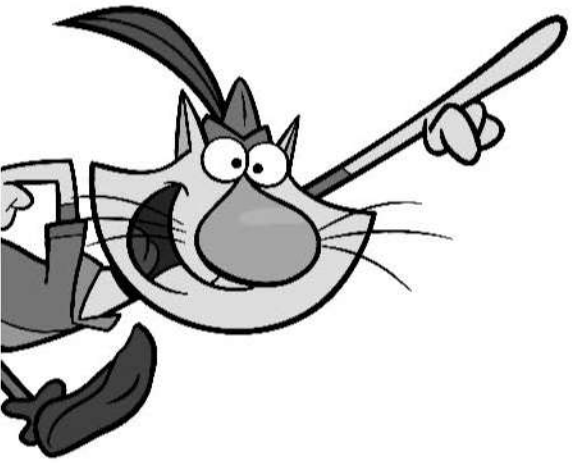
Nature CAT™

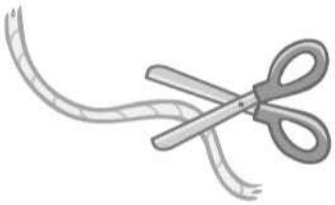
10. Lay the bundles next to each other use the extra rubber band you just looped to connect the two bundles together (see Step 10 photo).

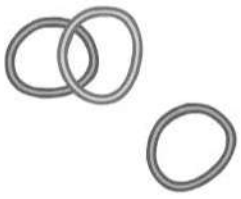
11. Time to finish the base of your boat! Take your two remaining long sticks and lay them vertically. Place the nine connected sticks horizontally over them. Using your rubber bands or twist ties, tie the corners of your boat base to the tops and bottoms of the two sticks beneath them (see Step 11 photo).

12. Tah dee! You have a boat! Use the twist ties and attach the mast to your first stick at the front of your raft. The tiller should be attached at the middle of the stick (see Step 12 photo).

13. Tie a long length of twine to the bottom of the tiller. This will help you steer it from the shore – and not lose your boat! And you are ready to set sail!







STEP 10

STEP 11

STEP 12

A CLOSER LOOK AT WIND

Try to use your boat to see which direction the wind is coming from. What happens when your boat is facing the wind? What happens when the wind is coming from behind your boat?

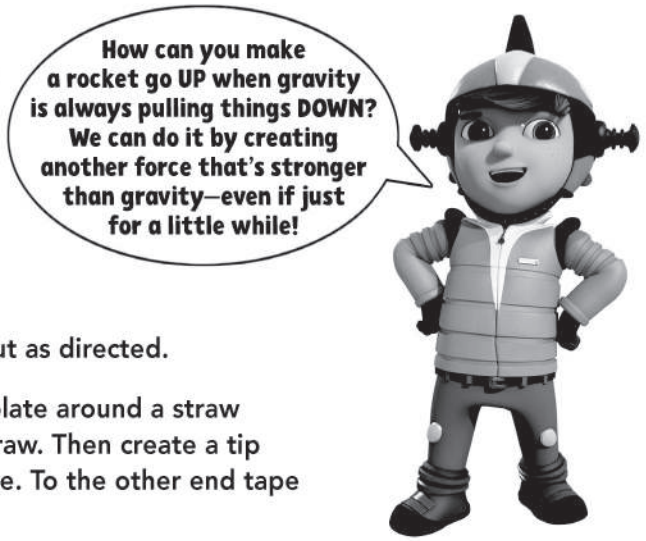
Ready Jet Go! Rocket Launcher

Three...two...one...blast off! Defy gravity with rocket engineering.

Ever wonder what it takes to send a rocket into space? Gravity—the force that pulls things down to the Earth—can make rocket launching tricky, but not impossible! Use engineering, household items and your own imagination to solve this challenge.

Materials

- Printable Rocket Template (next page)
- Empty plastic water bottle with lid
- Scissors or cross-head screwdriver
- Markers or crayons
- Straw
- Clear Tape
- Duct tape



Create Rocket and Launcher

1. Print the rocket template, color, and with an adult's help, cut out as directed.
2. To make your rocket, first form a tube by rolling the body template around a straw (a recycled straw is better for the environment). Remove the straw. Then create a tip by folding over one end of the tube and taping it with duct tape. To the other end tape the three fins to help stabilize the rocket.
3. To make the rocket launcher, have an adult cut a hole in the water bottle lid just big enough for the straw to fit through. (Try using the end of scissors or cross-head screwdriver on a cutting board.) Screw the lid back on the bottle and insert the straw, leaving only an inch inside the bottle. Wrap duct tape around the lid to seal the hole and secure the straw.

Use and Improve your Paper Rocket Launcher

1. Blow air into the launcher through the straw. Then place the rocket on the straw. To launch your rocket, push the air out of the bottle by squeezing it quickly and firmly with both hands. What if you didn't want the rocket to go so high? What could you do differently?
2. Can you find ways to improve your rocket or launcher design to make the rocket go higher? For example, what could a bigger bottle do? How might you change the rocket itself?
3. Add a payload—a passenger or cargo—to your rocket. Attach something small and light, like a small plastic toy or paper clip. What happens? Try changing the weight, size or location. How does this affect your rocket?
4. Sean learns from astronaut Ellen Ochoa that creative play is an important way to prepare for space exploration. Use your paper rocket launcher and create your own space adventure! Where will your rocket take you? Maybe a trip to discover a new solar system, a new star or even a visit to Bortron 7? Invite friends or siblings to join in your creative play.

For more games and activities visit pbskidsforparents.org

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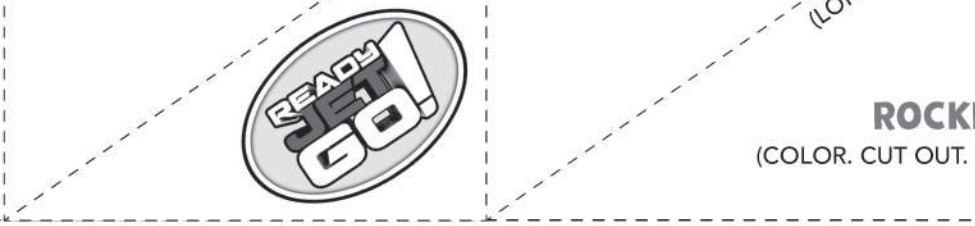
Rocket Template & Instructions

THREE ROCKET FINS

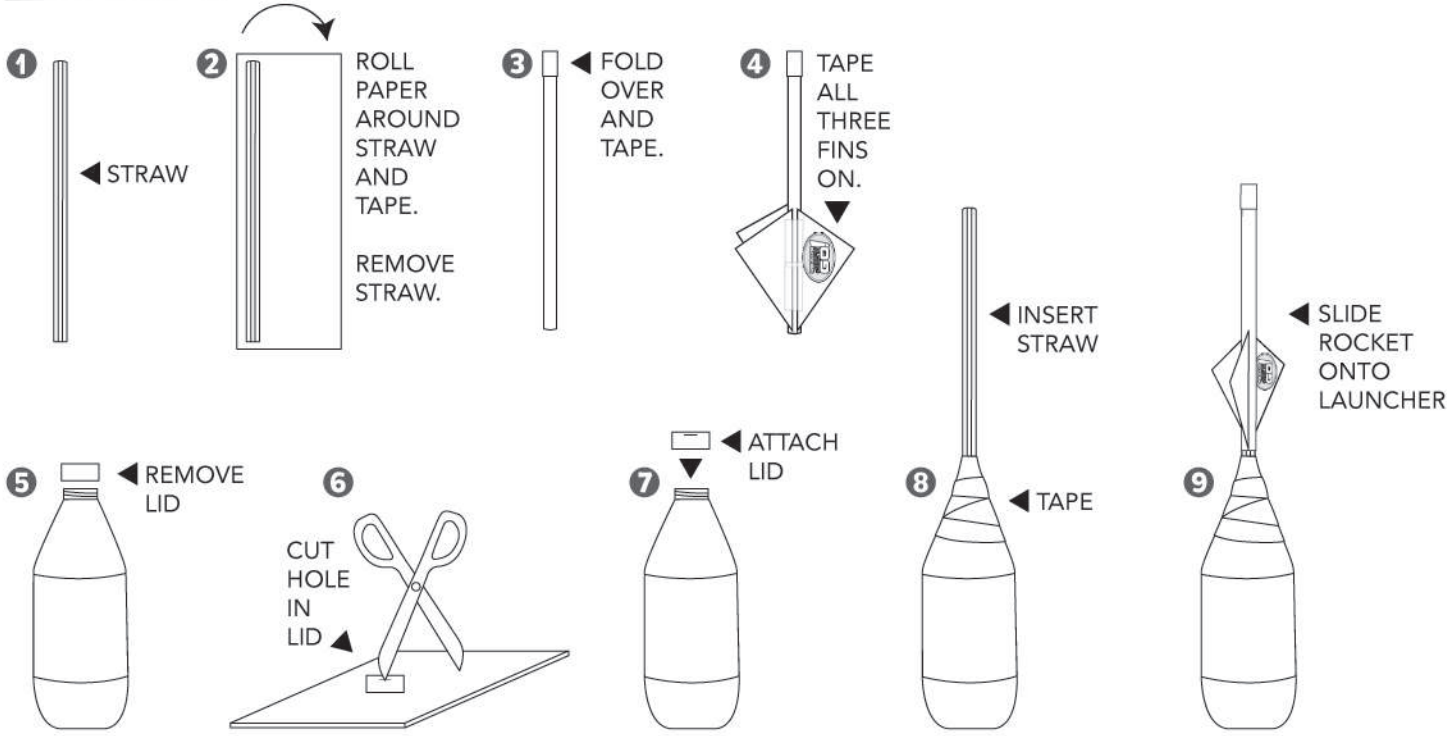
(COLOR. CUT OUT. TAPE LONG SIDE TO ROCKET BODY.)



ROCKET BODY

(COLOR. CUT OUT. ROLL AROUND STRAW.)

Instructions



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Ups and Downs

Time:
60 minutes

Explore:
forces and motion, engineering design process (**define a problem,** imagine and plan, create, test, and improve)

Materials:
In addition to a ball (ping-pong, tennis, golf, or bouncy ball), you'll need a bunch of household items that have different structural elements: wide bases, thin bases, tubes, surfaces, fasteners, heavy things, and light things. If this is a competition, you'll want to have one set of the same materials for each team.

Here are some suggested materials, but feel free to use your own!

- ☐ **Large Objects:** cardboard tubes, cereal boxes, plastic bottles, paper plates, card stock, paper/plastic cups
- ☐ **Fasteners:** pipe cleaners, rubber bands, paper clips, tape
- ☐ **Long Objects:** straws, popsicle sticks/tongue depressors, toothpicks
- ☐ **Wildcard Ideas:** tinfoil, plastic wrap, sandwich bags

Kid Description: Grab a grown-up and some friends for this building activity. Can you make a ramp that will roll a ball right to the target?

This activity is for two or more players to collaborate (or compete!) to build a ramp. It can be played indoors or outdoors.

Wonder

★ Sit in a circle and pass around the materials. Ask kids to use their senses to explore them.

- **Ask:** What is this material?
- **Ask:** How does each material look?
- **Ask:** How does each material feel?
- **Ask:** How does each material sound?

Define a Problem

★ Explain the rules for the activity

- **Explain:** Each team will work together to build a ramp that will send the ball as close as possible to the target. You'll get 15 minutes to build, test, and improve, and then it's time to share your ramps!

  Note: If you'd like to create your own ramp challenge, or if kids want to define their own goals, go for it! You could try changing the time, distance, or other rules of the game.

Find more games and activities at **pbskidsforparents.org**

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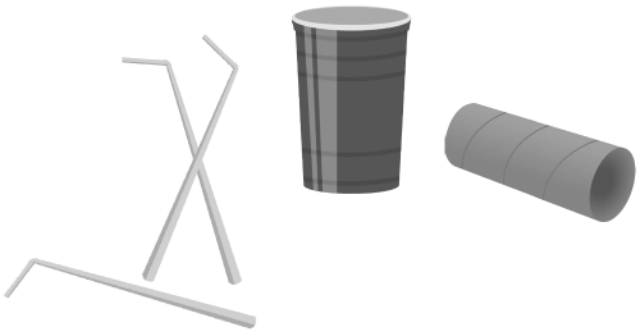


Imagine and Plan

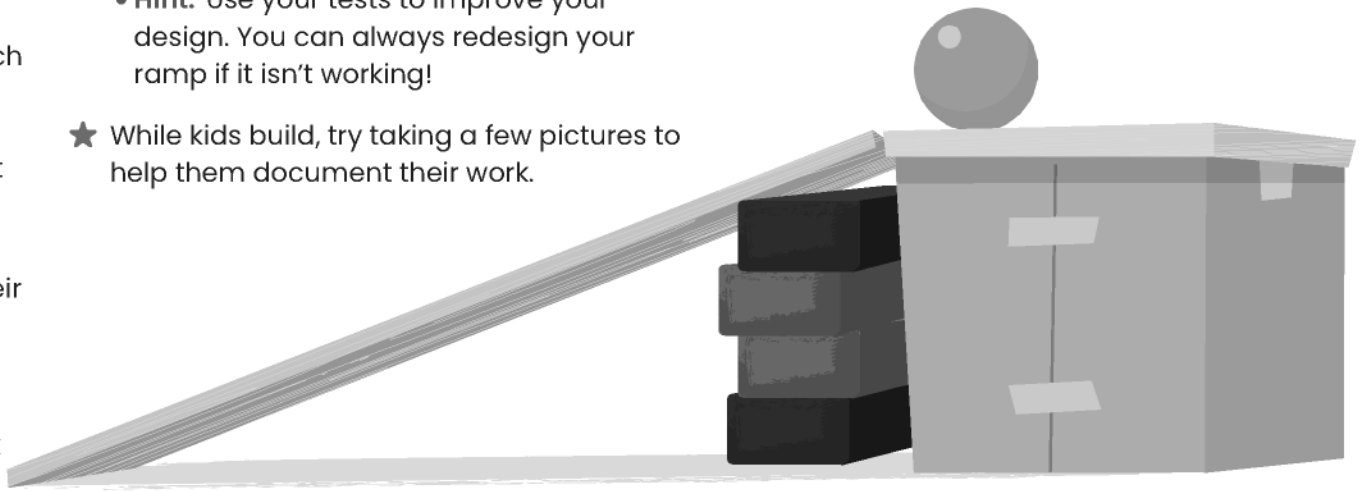
- Set out the target six feet from the starting line where the kids will build their ramps.
- Ask kids to choose the materials they think will be best for building their ramps.
  - **Show:** Here's the target; it's six feet away from where your ramps will be.
  - **Ask:** Based on your investigations, which materials do you predict would make the best ramp for the ball to reach this target? Pick out the materials you want to build with. You can always get more materials later!
- Have the kids use the printout to plan their ramp design, sketching it out and listing the materials they're going to use.
  - **Ask:** Let's make a plan for your ramp. Can you draw what your ramp will look like on the printout?
  - **Ask:** What materials will you use to make your ramp? List them out here.

Create

- Set up the kids with their building materials at the starting line.
- Set the timer for 15 minutes and tell the kids to start building!
- If kids get stuck, try giving them a hint about how to build. For example:
  - **Hint:** You'll need to make sure your ramp is tall enough so the ball can get speed from gravity!
  - **Hint:** You'll need a way to guide the ball in the right direction!
  - **Hint:** Try rolling the ball while you're building to see what happens. That's called a "test". Don't wait until the end to start testing your ramps.
  - **Hint:** Use your tests to improve your design. You can always redesign your ramp if it isn't working!
- While kids build, try taking a few pictures to help them document their work.

Test

- When time is up, ask players to roll the ball down their ramp towards the target.
- If you can, try taking a video to document the test.
  - **Ask:** It's time to test out what you've built! Roll your ball down the ramp, and see how close it lands to the target.
  - **Ask:** Whose ball is closest to the target? That's a well-designed ramp!



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Reflect

★ Have everyone sit in a circle near the starting line.

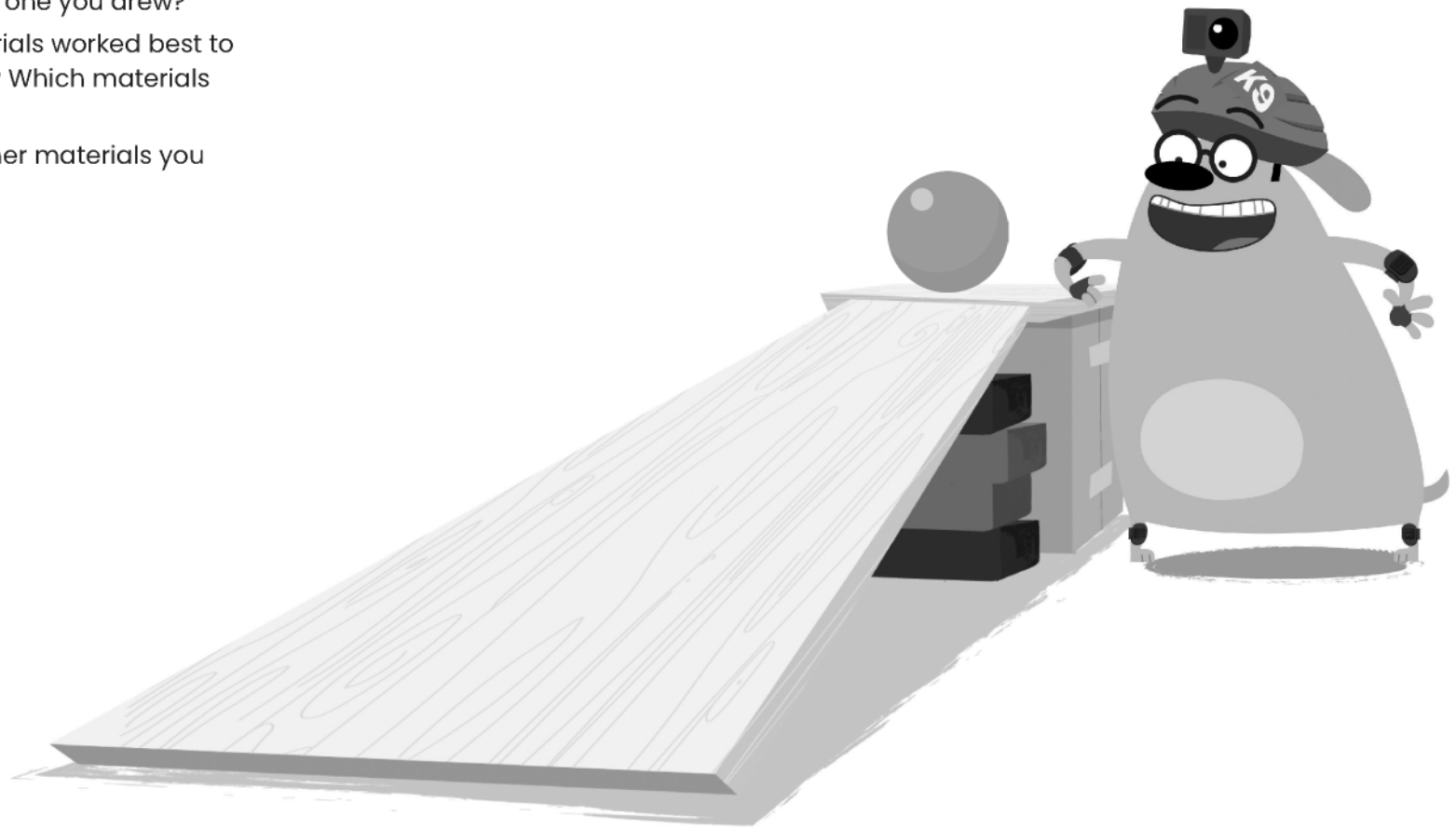
★ Ask kids to look at their drawing of their ramp, and compare it to the ramp they built.

- **Ask:** How was the ramp you built different from the one you drew?
- **Ask:** Which materials worked best to make your ramp? Which materials didn't work?
- **Ask:** Are there other materials you would like to try?

Improve

★ Ask kids to improve their ramp designs based on the results of their test.

- **Ask:** How would you improve, or make your ramp better, so the ball can go farther? Spend a few minutes changing your design, then run the test again and see if you get a different result!



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Learn at Home with PBS KIDS

Schedule Begins October 5, 2020

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 favorite PBS KIDS characters.

TIME (M-F)	SHOW	GRADE	LEARNING GOAL
6/5c am	Splash and Bubbles	PK-K	Science
6:30/5:30c am	WordWorld	PK-K	Literacy
7/6c am	Peg + Cat	PK-K	Math
7:30/6:30c am	Peep and the Big Wide World	PK-K	Science
8/7c am	Sid the Science Kid	PK-K	Science
8:30/7:30c am	Super WHY!	PK-K	Literacy
9/8c am	Pinkalicious & Peterrific	PK-1	The Arts
9:30/8:30c am	Clifford the Big Red Dog	PK-K	Social & Emotional Learning, Literacy
10/9c am	Let's Go Luna!	K-2	Social Studies
10:30/9:30c am	Dinosaur Train	PK-K	Science
11/10c am	The Cat in the Hat Knows a Lot About That!	PK-1	Science & Engineering
11:30/10:30c am	Martha Speaks	K-2	Literacy
12 pm/11c am	Nature Cat	K-3	Science
12:30 pm/11:30c am	Ready Jet Go!	K-2	Science & Engineering
1/12c pm	Arthur	K-2	Social & Emotional Learning
1:30/12:30c pm	Odd Squad	K-2	Math
2/1c pm	Cyberchase	1-5	Math
2:30/1:30c pm	Molly of Denali	K-2	Literacy
3/2c pm	Pinkalicious & Peterrific	PK-1	The Arts
3:30/2:30c pm	Elinor Wonders Why	PK-K	Science & Engineering
4/3c pm	Sesame Street	PK-K	Literacy, Math, Social & Emotional Learning
4:30/3:30c pm	Daniel Tiger's Neighborhood	PK-K	Social & Emotional Learning
5/4c pm	Curious George	PK-K	Math, Science & Engineering
5:30/4:30c pm	Curious George	PK-K	Math, Science & Engineering
6/5c pm	Wild Kratts	K-2	Science
6:30/5:30c pm	Wild Kratts	K-2	Science

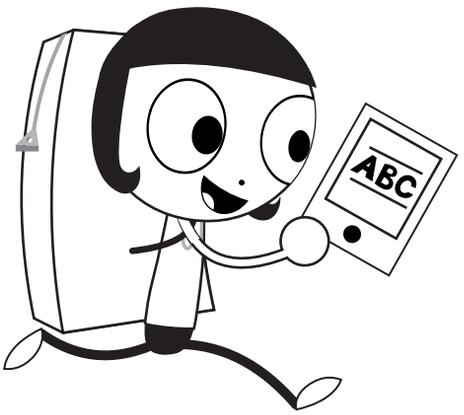
Access FREE, at-home learning activities, tips, and more on pbskidsforparents.org

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



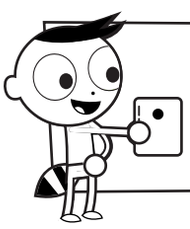
Apps for Literacy Learning

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
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
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, Science
PBS KIDS Games app	K-2	Multiple Learning Goals
PBS KIDS Video app	K-2	Multiple Learning Goals



pbskids.org/apps

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