

How to Make Your ZOOMerang

You can print out your ZOOMerang and make it into a little booklet.

Here's how:

- Print all the ZOOMerang pages.
- Cut out each page along the dotted lines.
- Tape pages 1–6 together from end to end so that you have a long row.
- Tape pages A–F together to make a second long row.
- Lay one row face down on a table and put some glue on the back of the pages.
- Place the second row on top of the first row. The printed part of the second row should face you.
- Smooth out the glue with your hand.
- Let it dry and then fold your ZOOMerang where the pages join together.



What You Need

- scissors
- tape
- glue

Voilà!

Blindfolded Quick Pics

Draw with your eyes shut!

What You Need

- index cards
- pen
- 3 or more friends
- 2 blindfolds
- paper
- markers

First **write** down five things that are easy to draw on index cards (for example, a smiley face, a house, or an ice cream cone). Then **divide** your friends into two teams.

Have each team **choose** someone to be the artist. **Show** both of the artists one of the cards, but don't show it to any of the other players. **Give** them paper and a marker. **Tie** blindfolds on the artists. On the count of three, have both artists **start drawing**. The first team to **guess** what their artist is drawing wins! Play until you have used all the cards.

Try Blindfolded Self-Portrait at
pbskids.org/zoom



Sent in by Wes and Catherine S. of Yorktown, PA

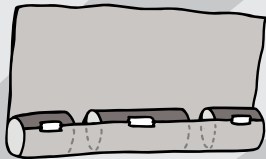
English Crackers

What You Need

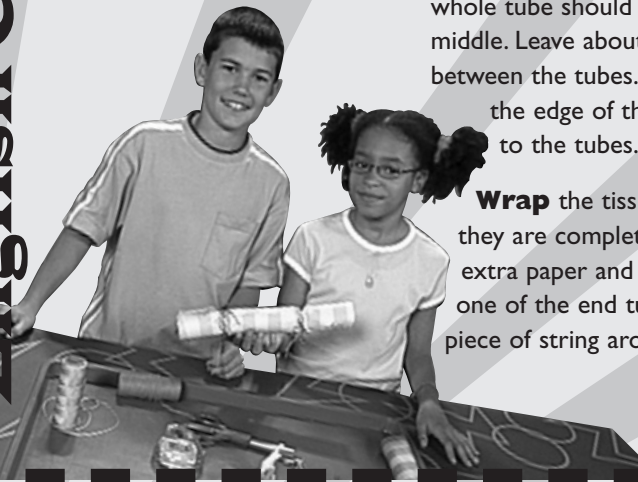
- 2 toilet paper tubes
- scissors
- tissue or wrapping paper
- tape
- string or ribbon
- paper
- pen
- small toy
- friends

These crackers are not the ones you eat. They're like piñatas. Only you pull, not hit, them to break open. In England, crackers are traditionally used at Christmas and have paper crowns inside.

Cut one toilet paper tube in half. **Line up** the whole toilet paper tube and the half tubes on the edge of the tissue paper. The whole tube should be in the middle. Leave about 2 inches between the tubes. **Tape** the edge of the paper to the tubes.



Wrap the tissue paper around the tubes so they are completely covered. Cut away the extra paper and **tape** the edges down. **Hold** one of the end tubes and gently twist it. **Tie** a piece of string around the twisted paper.



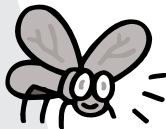
The Frog

Sent in by Audrey of Seattle, WA

Write a joke on a small piece of paper and stick it in the cracker. Also **add** a small toy. **Twist** the other half tube and tie a piece of string around the twisted paper.

Now **stand** in a circle with a group of friends. Have everyone **cross** their arms and **grab** onto the end of the cracker belonging to the person next to them. Say, "One, two, three..." and have everyone **yank** the ends of the crackers. **Surprise!**

What other kinds of party favors can you make? Write to ZOOM at pbskids.org/zoom and tell us.



An ugly frog smells of the marsh
It hops along, leaving a muddy path
Watching an unsuspecting fly
Very still, very quiet
Goodbye fly.



Sent in by Carly H. of Pittsburgh, PA

ZOOMpoem

Zoom Into Action

Students at the Sutton Middle School in Georgia are members of the ZOOMteam. They are **testing the water** in their neighborhood creeks to make sure it is **safe for bog turtles**. There are only about a hundred bog turtles left in Georgia. The middle schoolers are helping to **save this endangered species**. Way to go, Sutton Middle School!

You can volunteer and become a member of the ZOOMteam, too. Visit pbskids.org/zoom/action to get ideas for volunteering.

Share Your Story!

Tell us about your volunteer project. Visit the ZOOM Web site to print the **Share Your Story** form. Fill it in and mail it along with any videos and pictures to ZOOM.

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All submissions become the property of ZOOM and will be eligible for inclusion in all ZOOMmedia. This means that we can share your ideas with other ZOOMers on TV, the Web, in print materials, and in other media. So, send it to ZOOM. Thanks!

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ZOOM erang™



If you could have
another job at ZOOM,
what would it be?

Cara

I would be the
choreographer because
I love to dance.

Kortney

The drama coach
because you can
rehearse plays.

Shing Ying

The person who shops
for clothes because
they get to spend
money!

Mike

Props.

Kyle

The floor director,
so I could boss
everyone around.

Maya

The kid wrangler
because I could
hang out with the
ZOOM kids.

Francesco

The editor, so I could let
my imagination run wild.

What **Z**up!™

Penny Cup Game

Two eyes are better than one!

What You Need

- a friend
- paper or plastic cup
- 8 pennies

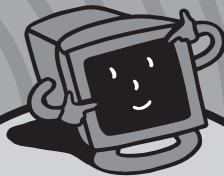
Sit across the table from a friend. **Put** a cup about three feet in front of your friend. **Move** your arm slowly toward the cup, while **holding** a penny about six inches above it. Tell your friend to say, "**Drop!**" when he or she thinks the penny is over the cup. Does it fall in the cup? **Repeat** with the other seven pennies.

Now ask your friend to **cover** one eye. Repeat the steps above and **see** how many pennies land in the cup. How many pennies fell in the cup when your friend had **both eyes** open? What happened when your friend had **one eye** open? Now **switch** roles and try it yourself.

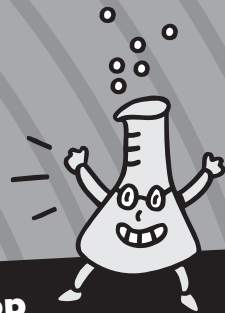
Sent in by Kim S. of Deltona, FL



Now it's time to **experiment**. What happens if you keep your **other eye** closed? What happens if you move the cup **farther** away from your friend? Choose **one thing** to change (that's the variable) and **predict** what you think will happen. Then **test it** and **send** your results to ZOOM at pbskids.org/zoom



If you have an idea for a science activity that tests your vision, send it to ZOOM at pbskids.org/zoom



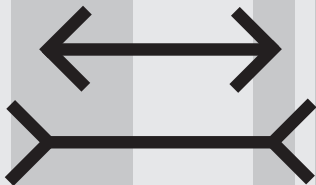
Science Scoop

You probably found that more pennies fell in the cup when you had **both eyes open**. This is because your brain uses information from both eyes to tell how far away something is. Also, the information your brain gets from each of your eyes is a little **different**. You can see this for yourself by **placing** one index finger in front of the other, about a foot apart, and looking at them with your right eye closed and then your left eye. What happens?

ARROWS

What You Need

- 4 pipe cleaners (same size and color)
- scissors
- a friend



Cut two pipe cleaners in half. These will be the ends of your arrows. **Wrap** the end of one of the long pipe cleaners around the middle of one of the short pipe cleaners. Then **bend** the short end in half so it looks like an arrow. **Repeat** with the other short pipe cleaner so you have a two-headed arrow.

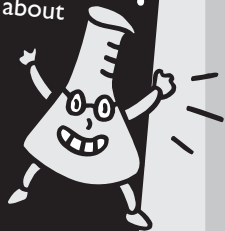
Now **make** another two-headed arrow with the other pipe cleaners. This time **bend** the arrows in the other direction, so they are pointing in rather than out. Now you've made two pipe cleaners of the **same length** look **different**. See if a friend can tell. **Put** both pipe cleaner arrows about a foot apart on a table. **Ask** your friend which **middle** pipe cleaner is longer.

Now it's time to **experiment**. Can you make two pipe cleaners that are **different sizes** look the **same**? Test it and send your results to ZOOM at pbskids.org/zoom

Sent in by Kelsey R. of Troy, NY

Science Scoop

Your **eyes** bring in information about the outside world and help your brain make sense of what you see. Sometimes you see things as you **expect** them to be, rather than as they are. In this activity, the pipe cleaners **look** like they are different sizes even though they're really the same length. This kind of surprise is called an "**optical illusion.**"



Zoomfunny™

Where do baby ghosts go when their parents are at work?



Day scare centers!

Keep experimenting with vision. Try out Phenakistascope and Peripheral Vision at pbskids.org/zoom

Sent in by Adam S. of Independence, KY

Ape Cookies

Sent in by Shanell G. of Chicago, IL

What You Need

- 1/2 cup chocolate chips
- microwave-safe bowl
- banana
- knife
- cutting board
- toothpicks
- plate
- waxed paper
- oven mitts
- wooden spoon

Ask an adult if you can use the microwave. First **melt** the chocolate chips in the microwave-safe bowl. The chips will take about a minute and a half to melt. **Check** them every 15 seconds. Use the oven mitts to **take** the bowl out of the microwave. **Stir** until smooth.

Place the banana on a cutting board and **slice** it into pieces about half an inch thick. **Put** the banana slices into the melted chocolate and **stir** until covered. Use the toothpicks to **take** the bananas out of the chocolate and put them on the plate covered with waxed paper.

Put the plate in the freezer for an hour, or until the Ape Cookies are frozen. After they're frozen, you can **dip** them in peanut butter if you want. **Enjoy!**



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