

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!

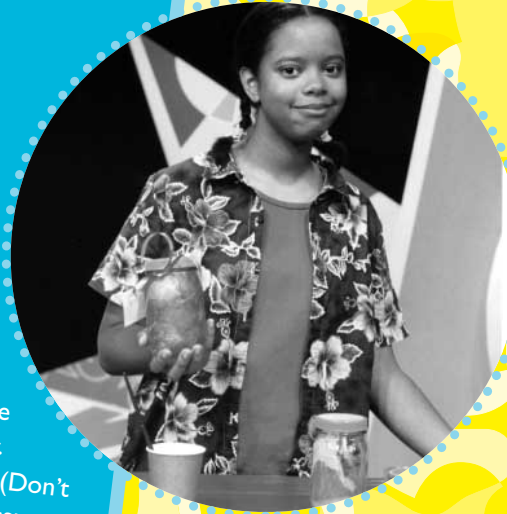
Gift Jar and Cocoa Mix

Gift Jar

What You Need

- colored tissue paper
- nontoxic glue
- water
- paper cup
- clean paintbrush
- clean, empty glass jar with lid

Rip different colored tissue paper into small pieces. **Squirt** some glue into a cup, and **mix** in a little water. **Brush** the glue mixture on the jar. (Don't get glue inside the jar.) **Press** the tissue paper pieces onto the jar. You can **overlap** them to make different colors. Then **brush** the glue mixture over the whole jar again. Let the jar **dry** for at least an hour. Now you can **fill** it with cocoa mix.



Sent in by Killian C. of Portland, OR & The Zeller Family of La Porte, IN

Cocoa Mix

What You Need

- 1/4 cup of unsweetened powdered cocoa
- 1/2 cup of sugar
- 1 cup of powdered milk
- bowl

Mix all of the ingredients together in a bowl. **Pour** the mixture into your colorful jar. Then use some ribbon to **tie a recipe tag** to the jar.

Now, your gift is ready to **give away!**

There are lots of other things besides cocoa that you can put in the jar, like coins or shells. What would you put in your jar? Send your ideas to ZOOM, Box 350, Boston, MA 02134 or pbskids.org/zoom

What do you call a
computer superhero?

A screen saver!
Sent by Patrick R.
of Miami, FL

Recipe Tag

Make a tag that says:

To make hot cocoa, put
3 tablespoons of cocoa mix in
a mug and add 1 cup of hot water.
You can add marshmallows, too!

ZOOM™
poem™



I planted a seed
down below,
and now I want
to help it grow.
It grows from bottom to
middle and top,
and now I don't want
to let it stop.
It's growing and growing so
now it's real big,
but now it's not like
before.....
It's the size of a
DINOSAUR!!!!!!!!!!!!

Sent in by Andie B. of Princeton, NJ

How to Speak **Ubbi Dubbi**™

Just add "ub" before each vowel sound. Accent the "ub" each time it comes up. Plubannubing uba slubeepubovuber? Chubeck about ZubOOMgubames ubon thube ZubOOM Wubeb subite.

Use the Ubbi Dubbi translator on ZOOM's Web site to turn Ubbi Dubbi into English, uband UbEnglubbish ubintubo Ububbubi Dububbubi.



TM© 2003 WGBH Educational Foundation. All rights reserved. ZOOM and the ZOOM words and related indicia are trademarks of the WGBH Educational Foundation. Used with permission.

ZOOM is produced by WGBH Boston. Funding for ZOOM is provided by the National Science Foundation, the Corporation for Public Broadcasting, the Arthur Vining Davis Foundations, and public television viewers.

Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

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!

Illustrations: Stephen Schudlich
Photos: Mark Ostow



307 0309067

What You Need

- plastic drinking straw
- soda bottle filled with water

Put one end of a straw in a bottle of water.

Hold the straw against your bottom lip, and

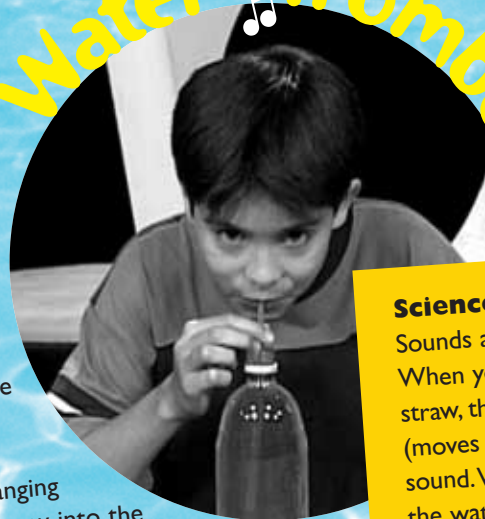
blow across the top. What do you **hear**?

Now **move the straw** deeper into the water and blow again.

How do the sounds **compare**? Keep changing how far you put the straw into the water. **Predict** whether the sound will be higher or lower each time. Then **test it** and send your results to ZOOM at pbskids.org/zoom

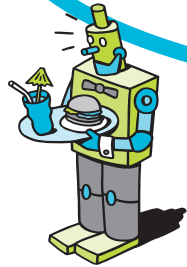
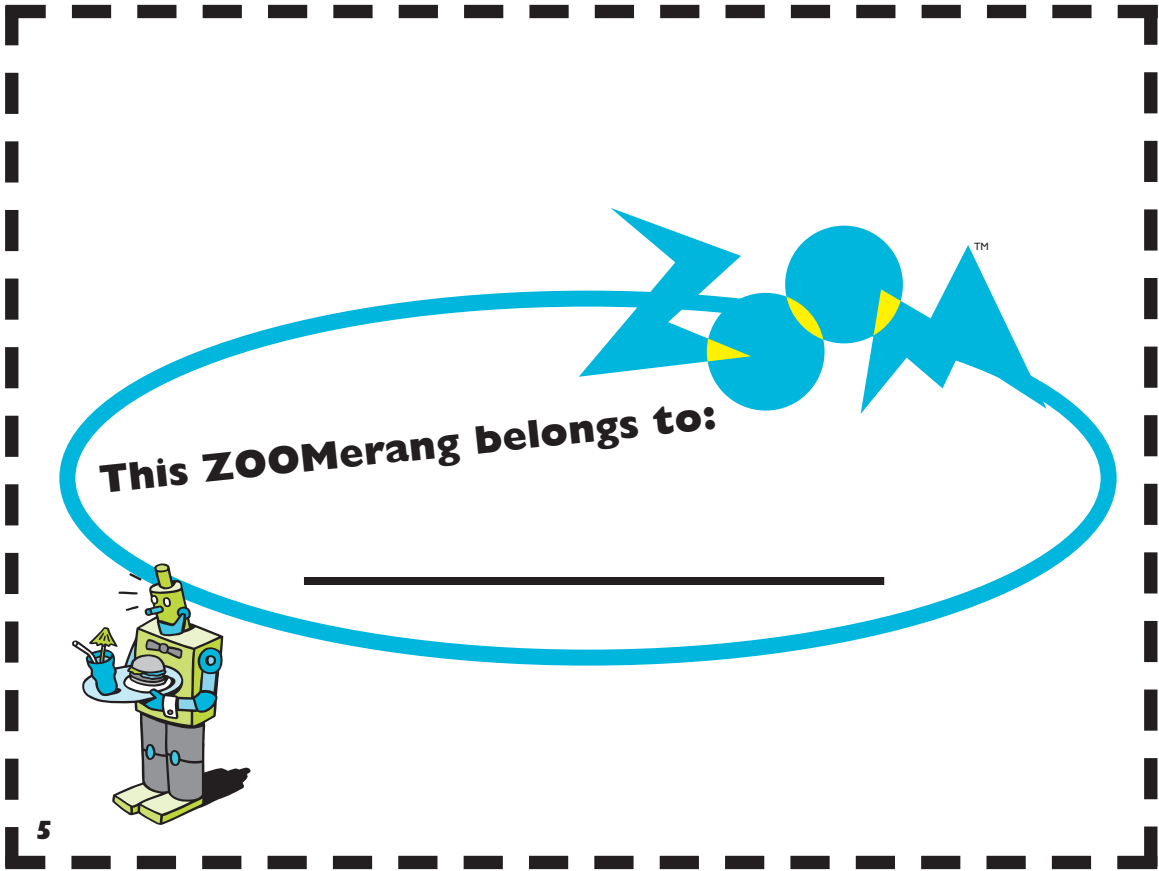
Sent in by Krystle Z. of Niles, MI

Water Trombone



Science Scoop

Sounds are made by **vibrations**. When you blow across the top of a straw, the air inside the straw vibrates (moves back and forth), and you hear a sound. When you move the straw into the water, the amount of air inside the straw gets smaller. When you move the straw out of the water, the amount of air inside the straw gets larger. You hear different sounds because **smaller and larger amounts of air vibrate differently**.



Thanks for
writing
to ZOOM!

Zoomerang™



The Arthur
Vining Davis
Foundations



A Sent in by Courtney and Andrew S. of Hamel, IL

Candy Cane Cooler

What You Need

- orange
- candy cane
- vegetable peeler or apple corer

Press on the orange as you roll it around on a table. This **softens** the orange. Using a vegetable peeler, carefully poke a **hole** in the orange. (**Check** with an adult before you make the hole.) **Break** off the ends of a candy cane. Then **push** the candy cane into the orange. Use it like a straw, and take a **sip**! (It might take time for the juice to get through the candy cane.) For another tasty treat, try this with a **lemon**!



Sip this cool candy drink!



Find more funky food tricks, like Lemon Crab and Banana Slice, at pbskids.org/zoom/phenom

Alisa's Home

What's your favorite thing to do with your family?

Every winter during the first snowstorm we build a big snow fort with underground tunnels and windows.

Are you left- or right-handed?

Left, and I'm proud of it!

What's your favorite food?

Raspberries

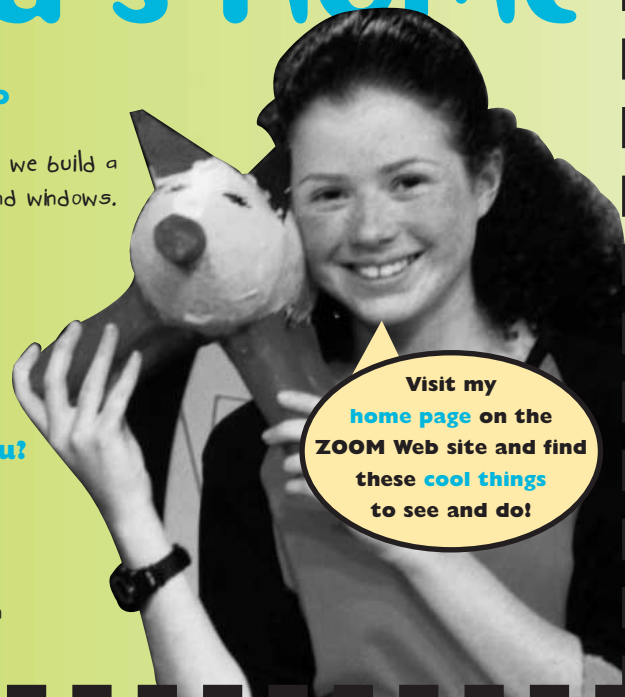
What animal most resembles you?

A lion! And I've got the mane to prove it!

What's the silliest thing you've done on ZOOM?

I dressed up as a monster with green skin and a furry outfit.

B



Visit my
[home page](#) on the
ZOOM Web site and find
these **cool things**
to see and do!

Page



If you don't have Web access at home, you can probably find it at your school, public library, or local community center.

at pbskids.org/zoom



Cafe ZOOM

Make and taste all of the recipes you've seen on ZOOM.

3000

ZOOM3000

Tell us what you think life will be like in the year 3000.



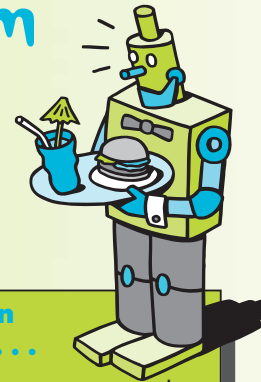
ZOOM party

Plan a ZOOM party with invitations, food, and games.



ZOOMnooz

Sign up for this free newsletter.



I predict that in the year 3000 ...

- Robots will act as servants to people. (Steff S. of Prattville, AL)
- The whole world will be chocolate! (Jake S. of Havertown, PA)

Send your predictions to **ZOOM3000**.

C

Words from a Word

Get some **friends** and pick a **word**.
(A really **long** word works best.)

Use the **letters** in the word to make as many
new words as you can in **one minute**.

For example, if the word is "monster," you
could make the words "on," "one," and "rest."

Whoever makes the **most words** wins!



Rules

- You can use a letter only as many times as it appears in the word. For example, since the word "monster" has one "e," you can use "e" only once in a new word.
- Proper nouns (like names of people or states) don't count.



Do you like **word games**?
You can find more, like **Alphabet
Conversation** and **Rhyme Time**, at
pbskids.org/zoom/games

D

Sent in by Olga B. of Spokane, WA

Afterimage

What You Need

- the submarine picture
- 2 sheets of white paper
- colored markers



Stare at **the submarine** and count to 30. Stare at only **one point** (like the center of the sub), and try not to blink. Then quickly **look** at a sheet of white paper. What do you **see**? The picture you see is called an **afterimage**.

Try it again! **Draw** a simple picture (like a ghost) on white paper. **Color** in the picture with one color marker. **Stare** at it and then **look** at a sheet of white paper. What color is the afterimage? What happens if you use a **different color**? What happens if you add **patterns**, like stripes or checkers? **Change** one thing (that's the variable), and **predict** what you think will happen. Then **test it**, and send your results to ZOOM at pbskids.org/zoom



E-mailed by Danny M.



Science Scoop

When you stare at the blue submarine, the parts of your eye that see **blue** get "tired." So when you look at white paper, the parts of your eye that see other colors take over. These colors combine to give you an **orange afterimage**. In a few moments, the orange afterimage fades as the parts of your eye that see **blue** begin working again. What color is the afterimage when you stare at the color **green** or **red**?

