

# 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!

This data comes from \_\_\_\_\_ (your name)  
 \_\_\_\_\_ (town) \_\_\_\_\_ (state)

types of bugs you found (names or pictures are good)	number of legs	wings: yes or no
		
		

**Help Us Fill in Our Chart**

# What's Bugging You?

**ZOOM** is counting bug species all over the country. You have been chosen to represent the bugs of your town.

**Look:**  
 under rocks  
 in basements  
 in tree bark  
 in grass  
 after rain

Send your results to  
**ZOOM**, Box 350  
 Boston, MA 02134 or  
[www.pbs.org/zoom](http://www.pbs.org/zoom)  
 Watch **ZOOM** for the results of all this data collection!

Thanks to Indren F. of Kirksville, MO



## What You Need

- old tie
- scissors
- glue
- two googlie eyes
- fabric scrap for tongue
- pencil

- needle and thread
- stuffing  
(from fabric store)

**1** Open the skinny end of the tie. Use a pencil to shove some stuffing in there, all the way up to the middle of the tie.

**2** Stuff in more stuffing.

**3** Keep on stuffing.

**4** Once this end is full, use your needle and thread to sew it closed.

**5** Move to the wide end of the tie and start filling up that end.

**6** Stuff more stuffing until full.

**7** Sew up this end. Perform surgery on any leaks that may have developed in your serpent.

**8** Cut a forked tongue out of fabric and sew it to the head (the large end) of your creature. Glue on the googlie eyes.



*Alisa suggests experimenting with eye placement: "It really changes the personality depending on where you put them!"*

### What can you add to . . .

- create a rattle?
- make the snake wrap around things?
- make a scented snake?

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## Financial Support

Frank S. of Gravel Ridge, AR sent us this challenge: "Make a tower as high as you can using 50 straws and some clay. Can you make it strong enough to hold a cup of 100 pennies?"

David and Keiko's tower held 210 pennies and stood 11 1/2 centimeters tall. Alisa and Jared's was 20 centimeters tall and held 178 pennies. Can you make a tower that is even taller and holds more pennies?

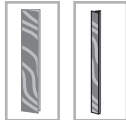
Dear ZOOM,

We tried to make a tower as high as we could using 50 straws and some clay. But it was too high. It was like 18 inches high and it was tipping. If we could do it again, we would have made it wider. On the bottom, we would have put a lot of clay and less on top because the clay made it heavy. Also, there were four straws at the bottom which wasn't a good enough base. Next time we would use more.

Alison K. and Bess K.  
Later Gators After-school Program  
East Providence, RI

# Gum Wrapper Bracelet

Save gum wrappers until you have a nice collection. They need to be the long thin kind.



**Open** the printed wrapper and cut it in half the long way.

Fold one piece in half the long way so the colorful part shows.

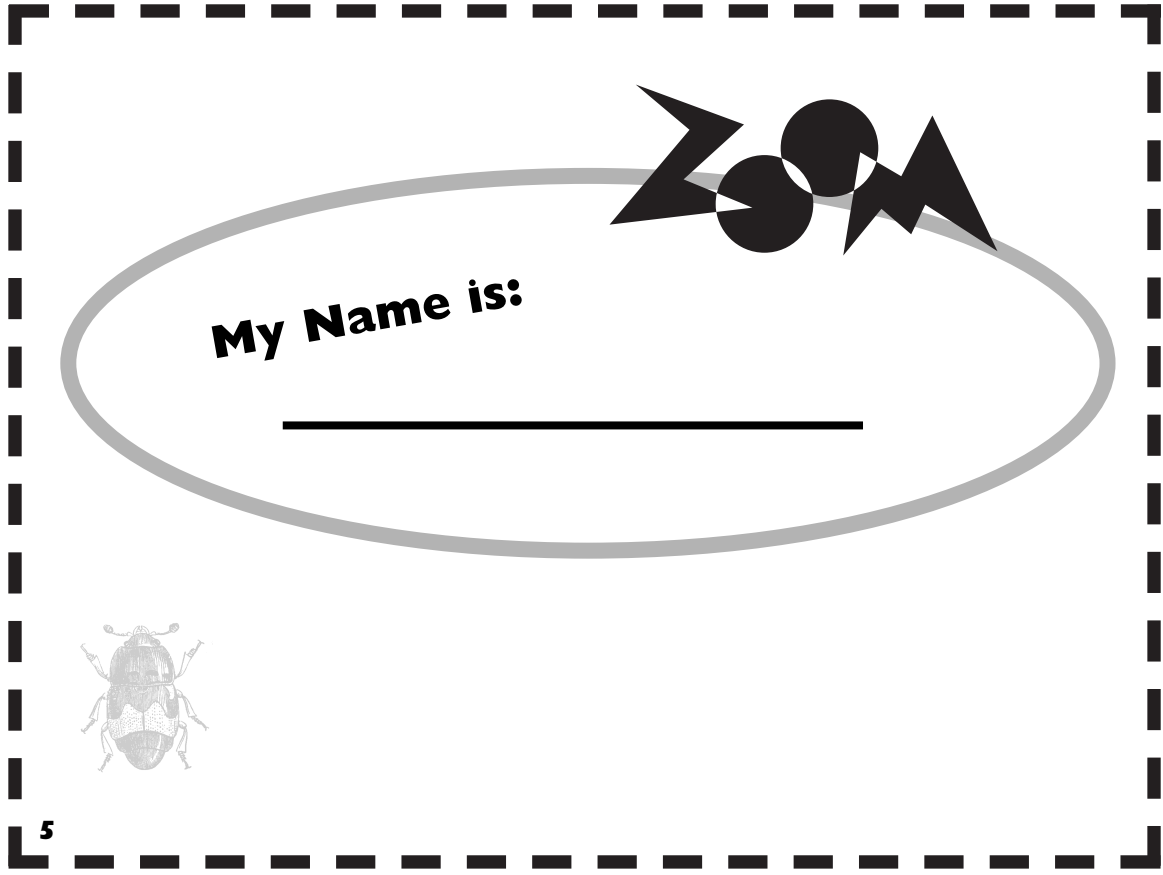
Fold it in half the long way again.

Now fold in the two ends till they meet.

Fold in half inward to make a **V**.

Each side of your **V** is a slot. Make another **V** with the other half of your wrapper. Slide the top ends of your new **V** all the way through the slots of your old **V**. Make a bracelet or necklace or a really really really long chain.





**My Name is:**

\_\_\_\_\_





Zoomerang™

6



The Arthur  
Vining Davis  
Foundations

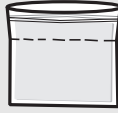


# The Germinator

Hey ZOOMers, here's a cool way to grow plants without soil.



**Fold**  
your paper towel so it just fits inside the plastic bag.



**Staple**  
a line across the bag 8 centimeters from the top.



**Pour** in 1/2 cup of water so the paper towel gets damp.



**Sprinkle**  
the seeds along your staple row. Make sure you can see them.



**Zip**  
up the bag.

## What You Need:

seeds  
paper towel  
stapler  
plastic bag with zipper top  
ruler

**Tape** your bag on a window or hang it in a closet.

Check the seeds every day. When you can see roots and stems, your seeds have germinated.

**Write** to ZOOM and tell us how it went. What kind of seeds did you use? Where did they germinate? How long did it take? Give us the details!

**Plant** the seeds in soil. Do they grow?

A

Sent in by Amanda H of Sherwood, AR





Cafe

## make yourself some Dirt Pudding



### What You Need

- chocolate pudding (instant or not)
- chocolate wafer cookies
- bowl/cup/clean flowerpot
- foil (for the flower pot)

**Make** the pudding like the directions say.

Put the pudding in bowls. Or, use foil to cover the hole in the bottom of a clean flowerpot and pour the pudding in.

Crush the cookies into small bits (the back of a spoon works for this). Sprinkle onto your pudding. Top it with fake flowers and gummy worms for the full effect.

Send your recipes or snack ideas to ZOOM, Box 350, Boston, MA 02134

and thanks to Kevin W. of Charleston, SC

## Cotton Ball Catapult

Cullen W. of Orchard Park, NY, challenged us to figure out how to propel cotton balls using a plastic spoon, a ruler, masking tape, and rubber bands.

How far can you send a cotton ball? What tricks can you try? What else can you catapult? Try designing another kind of catapult. Send your ideas to ZOOM!

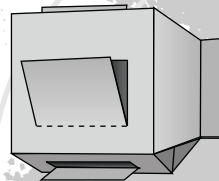
What did the alien say to the gardener?

"Take me to your weeder!"  
(from Britney C. of Chicago, IL)

# Make a Water Wheel

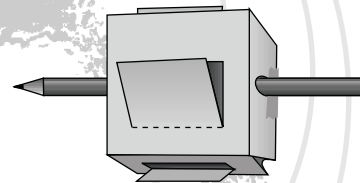
## What You Need:

- 1 pint milk carton
- 2 quart milk cartons
- string
- scissors
- ruler
- new pencil
- duct tape (or other tape that can get wet and still stick)
- watering can or small bucket



## The Wheel

Cut a door into each side of the small carton. Open the doors.



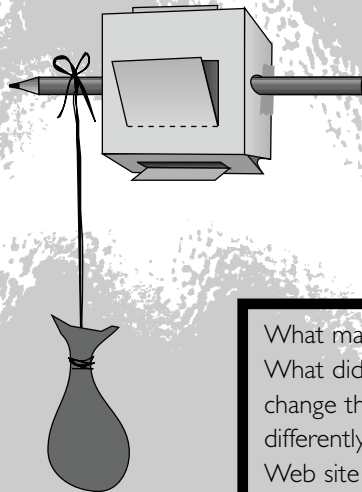
Fold the top of the carton down so it doesn't stick up anymore. Tape it down. Use scissors to poke a pencil-sized hole in the top and bottom of your carton. Slide the pencil through the holes.

**C**

Sent in by Joan L. of Glassboro, NJ

## The Load

Find a bag of marbles or something else for your water wheel to lift. Tie it to the end of a 61 centimeter (2 foot) long piece of string. Tie and tape the string to the pencil.



**D**



## The Stand

The larger cartons will hold your wheel. Poke a pencil-sized hole in one side of each carton 15 centimeters from the bottom. Put the pencil ends into these two holes.

## Pour Away

Fill the larger cartons with water or sand to make them sturdy, or have someone hold on to them. Bring your water wheel outside or to the tub. Pour water over the flaps on the wheel and watch your water wheel do some work.

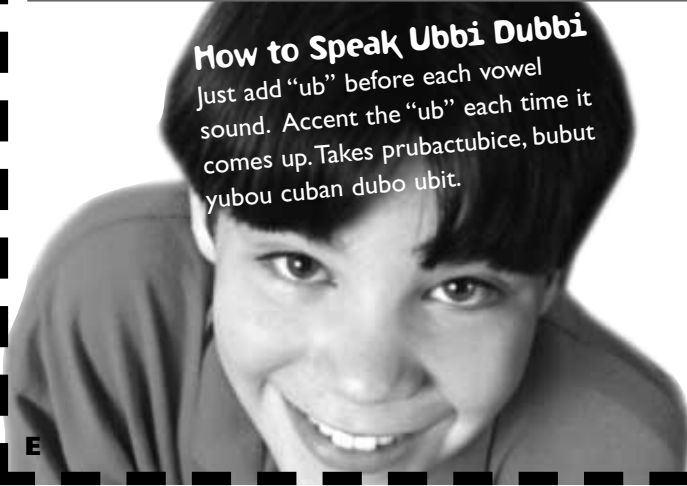
What made your water wheel work?  
What did your wheel lift? Can you change this design to make it work differently? Send your results to ZOOM's Web site at [www.pbs.org/zoom](http://www.pbs.org/zoom).

# The Web

Metafile: <http://www.pbs.org/zoom>

You'll find more cool activities on the ZOOM Web site. The address is **www.pbs.org/zoom**. If you don't have access to the Web at home, you can probably find it at your school or public library, or the community centers in your neighborhood. You could also ask a friend or teacher to help you.

**How to Speak Ubbi Dubbi**  
Just add "ub" before each vowel sound. Accent the "ub" each time it comes up. Takes prubactubice, bubut yubou cuban dubo ubit.



What is a pastry-eating snake?

a pie-thon (from Leah C. of West Allis, WI)



Don't forget to give your name and address when you mail us something!

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## Egg Drop

Andrew C. of Salem, OR, challenged us to design a container that would keep an egg from breaking when dropped 3½ yards. We could only use 15 straws, 10 popsicle sticks, and one meter of tape (39 inches). One quarter-sized part of the egg had to be showing.

Design your own egg drop challenge! Use different kinds of things, like cotton balls, cups, or bungee cords. Or, try a naked egg drop and design a container that sits on the ground and safely catches a falling egg. Send your designs to ZOOM and tell us why the container worked!

## Mushubeetlayhunnypoo

Mushubeetlayhunnypoo  
Is what I always mutter,  
When my mouth is really full  
Of lotsa peanut butter.

When I eat bananas I yell  
Mushyallago  
And I say  
Yommysuga  
When I'm munching honeydew.

When I crunch sugar cookies,  
I say  
Icudeeahday.  
And when I chew  
Marshmallows,  
It's Loddafloff  
I say.

But Mushubeetlayhunnypoo  
Is what I always mutter  
When my mouth is full  
Of lots of gooey  
Peanut butter!

Sent in by Mark B., Acton, MA