

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.

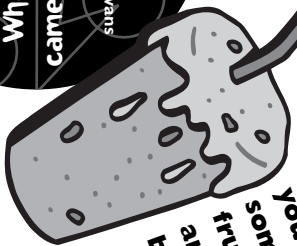


What You Need

- scissors
- tape
- glue

Voilà!

What do you call a camel with no humps?
Humphrey
(from David J. Sullivans Island, SC)



To make a smoothie all you need to do is gather some yummy stuff like fruit, sherbet, and juice, and mix it all up in a blender. Be sure to ask an adult for help or permission to use a blender.

Smoothies

Cafe



Banana Orange Frost

- 1 large, sliced banana
 - 1/2 cup milk
 - 1/2 cup orange juice
 - 2 large scoops of orange sherbet
- Blend at high speed.

sent in by Siobhan M. of Hingham, MA



Frozen Fruit Smoothie

- 2 cups of your favorite frozen fruit
 - 1-2 cups of your favorite juice
- Blend until it's "icy smooth."

sent in by Ally R., Lakeville, IL



Peanut Butter Surprise

- 1 large banana, sliced
 - 1 teaspoon honey
 - 1 cup milk
 - 1/2 cup peanut butter
 - 1 teaspoon vanilla
- Blend on medium to high speed.

sent in by Nicolas G.,
Hinesville, GA

What **delicious drinks** do you know how to make?
Send your CafeZOOM recipes to:
ZOOM, Box 350, Boston, MA 02134 or www.pbs.org/zoom.

3 Paper Tower

Jen W. of Maple Springs, NY challenged ZOOM to build a tall tower—using only two sheets of newspaper.

Pablo, Alisa, Lynese, and Jared tried a few different ways of building, like weaving strips of newspaper; folding squares of newspaper into fan shapes and stacking them; and making triangles out of newspaper.



Penny Pinch

Balance a penny on your elbow and try to catch it with the same hand.

sent in by Rachel E. of TX



In the end, Lynese and Jared figured out a good strategy and built a tower that was 115 centimeters tall. How tall can you make a Paper Tower? What's the best way to build it? Will people ever make skyscrapers out of paper? Send your ideas to ZOOM at www.pbs.org/zoom.



What's the silliest thing you've had to do on ZOOM?

I had to dress up like Miss America. I don't know if I'll ever recover.

What's your favorite band?

Aerosmith.

If you had something named after you, what would it be? A soda brand.

What's your favorite ZOOM activity?

I like it when we go into the studio and all seven of us play a game we've never played before.

What animal most resembles you? A dolphin.

Got any pets? A dog (bichon frise) named Nemo.

What kind of food do you and your family like to make? Potato latkes, matzo balls, knishes, kugel, Irish soda bread. My favorite food is pizza, though.

What do you want to be when you grow up? An actor and a director.



Jared



This ZOOMerang belongs to:





The Arthur Vining Davis Foundations



Zoo

erang



KIDS

Zoom do™ Tie Dye T-

Back in the 1960s and 70s, all the hippest kids wore tie-dye. Now you can too.

What You Need

rubber gloves
different colors of fabric dye
t-shirt soaked in cold water
1 disposable pie tin
paper or plastic cups



A

This is kind of **messy**, so you may want to do it outside or with lots of newspaper to protect the floor. **Put** your rubber gloves on. **Make** each dye according to the directions on the box. You'll need to use boiling water; so ask an adult to help you. Use **disposable containers** since the dye may **stain** the containers.

Lay your shirt on a flat surface. **Pinch** the middle of the shirt with your thumb and forefinger. Slowly start **twirling**. The shirt should wind around your fingers. Try to keep it flat.



Shirt

Keep on twirling until the shirt is in a circle shape.

Pat the edges in and **put** the shirt in the pie tin. Make sure it's **flat**.



Fill each cup with a different color of dye. **Pour** the dyes onto sections of the shirt as if filling slices of pie.

After pouring each color, **drain** the leftover dye from the pie tin. Then **flip** the t-shirt over and do the other side.

Squeeze the shirt out (don't twist it!) and **hang** it up to dry. You've just made a spiral tie-dye—**far out!**

Can you make other kinds of designs? Send **pictures** of your tie-dyes to ZOOM, Box 350, Boston, MA 02134 and tell us how to make other **groovy** ZOOMdos too.

B sent in by Randall G. of Dorchester, MA

We want your poems and illustrated stories, so if you've got the write stuff, send it to ZOOM!

sent in by Luke L. of Sandwich, MA
That maybe, maybe you can spy

Yellow is an owl's eye

Yellow is a very bright dream

Yellow is a panther's scream

a song that you can sing

Yellow is a song, a song

Yellow is a ring

Yellow is a fire

Yellow is the color of a rainbow

Yellow is a flower

Yellow is a raincoat

Yellow is the color of sunrise

Yellow is the taste of a lemon

Yellow

If you build it, they will come. The birds, that is. But what kinds of birds? And when?

Bird Feeder

What You Need

birdseed • empty 1/2-gallon milk or juice carton • ruler • scissors • string

Punch a hole in the top of the carton and then cut out the top half of one of the panels. **Fill** the carton with birdseed and hang it outside with string. **Check** your feeder once in the morning and once in the evening for a few days. **Write** down how many different kinds of birds you see each time, and the types of birds or a description. Send your data to ZOOM and tell us if you notice any patterns.

type of bird	how many	morning	evening

e-mailed by Samantha D.

Color Symphony

What You Need: milk • a paper cup • 3 different bottles of food coloring • dishwashing detergent

thanks to
Ms. Rauchendecker's class
in Arrada, CO

Can you prove that something is happening even if you can't see it?

Put the milk in a cup and let it warm up a bit. Add drops of food coloring in a square or triangle pattern. Put a drop of detergent in the middle of the food coloring pattern and watch the colors move. Cool, huh?

Now what's the point?

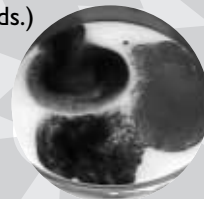
D

The detergent keeps the **fat** and **protein** in the milk from sticking together by breaking up the **bonds** between them. The food coloring shows the **twists** and **bends** in the **structure** of the milk where the bonds were. (It's easier to do this with warm milk because **heat** adds **energy**, which the detergent can use to break the bonds.)



You can't see the bonds, but you don't have to know they exist, because the food coloring shows where the bonds were.

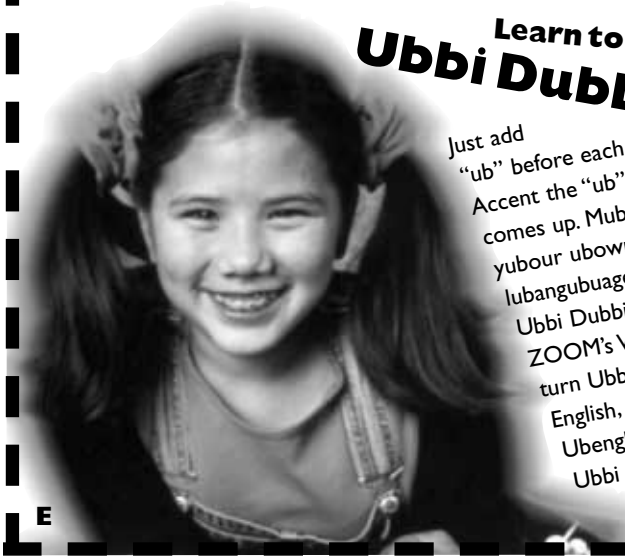
Are there any other things around you that you know are there even though you can't see them? Tell ZOOM your discoveries and how you might be able to prove them.



The Web

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

Check out **www.pbs.org/zoom** to find more CafeZOOMs, ZOOMscis, ZOOMdos, and lots more. Oh, and if you don't have access to the Web at home, you should be able to find it at your school, public library, or the community centers in your neighborhood.



Learn to Speak Ubbi Dubbi™

Just add
“ub” before each vowel sound.
Accent the “ub” each time it
comes up. Mubake ubit
yubour ubown subecrubet
lubangubuage. Use the
Ubbi Dubbi translator on
ZOOM's Web site to
turn Ubbi Dubbi into
English, uband
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Ubbi Dubbi.

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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!

Illustrations: Stephen Schudlich
Photos: Mark Ostow

WGBH #105 99 05.014

Submarine Race

Dear ZOOM,

Can you build a submarine that will sink and come back to the surface? You can use a small soda bottle, marbles, toilet paper, baking soda and vinegar, and a pail or tub of water. You can't touch the sub once you put it in the water, but you can leave part of the sub at the bottom of the water.
Laura G., Andover, MA

Getting the sub to come back up really **stumped** the ZOOM cast. Here are a couple of **tips** from Keiko:

- Before you start, **think** about what the materials will do—the marbles, the baking soda, and all the rest. Each one of them has a function.
- If you **smush** the bottle before you put the materials in it, you can get most of the air out. This will help it **rise** to the surface of the water when a chemical reaction between the baking soda and vinegar **creates** carbon dioxide.

Write to ZOOM Box 350, Boston, MA 02134 and tell us how your sub worked.

F

ZOOM Needs You



Lights, camera, action!
Make your own
2-minute video and
send it to ZOOM!



Give us a mind-bending
mental challenge or a
knee-bending physical
challenge!



Send us a video
telling us your most
embarrassing moment!

Send your ideas to
ZOOM
Box 350
Boston, MA 02134
www.pbs.org/zoom