

# 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!

# Where would you like to visit?

whatZup™

**Rachel:** Africa, to see all the wild animals.

**Caroline:** Russia, because I speak the language.

**Estuardo:** The Nile in Egypt, because I know a lot about the ancient Egyptians.

**Garrett:** Finland, because that is my family heritage.

**Aline:** A jungle, because I love adventure and animals.

**Matt:** France, because there are a lot of landmarks there.

**Kaleigh:** A place with hunger and homelessness, so I could help out.



Tell us where  
**you** would like to go at:  
[pbskids.org/zoom/  
sendit/zmail.html](http://pbskids.org/zoom/sendit/zmail.html)

# Garden Cake

Cafe



## What You Need

- pound cake (homemade or store bought)
- large plate
- 1½ cup chocolate frosting
- rubber spatula
- 12 ladyfinger cookies
- 20 chocolate wafer cookies
- gallon-size, zipperlock plastic bag
- rolling pin
- 15 gumdrops (10 should be green)
- cutting board
- spoon
- knife
- 5 toothpicks
- 1 cup shredded coconut
- bowl
- green food coloring

First **put** the cake on a large plate. Then **plop** on some frosting and **spread** it with the spatula. **Make** a fence by pressing the ladyfingers around the sides of the cake.

Next **make** some dirt. **Put** the wafer cookies in the plastic bag, **squeeze** out the air, and **seal** it. Use the rolling pin to **crush** the cookies. **Sprinkle** the crumbs on the cake.

**Make a cake that looks like a garden!**



**Plant** some tulips in your garden. Make five tulips and **push** them into the top of the cake.

To make grass, **put** the coconut in a bowl and **add** two drops of green food coloring. **Mix** with a spoon. **Sprinkle** the coconut around the plate.

What else can you **add** to your garden? Maybe some **gummy worms** or some rows of **jellybean vegetables**? Send a picture of your garden cake to **ZOOM, Box 350, Boston, MA 02134.**

Sent in by Kara C.  
of Manchester, NH

## How to Make a Tulip

- Put a gumdrop on the cutting board. **Press** down on the gumdrop with the back of a spoon until it's flat.
- **Ask** an adult if you can use a knife. **Cut** two small v's in the gumdrop so it looks like a tulip.
- Next **flatten** some green gumdrops and **smoosh** them into oval shapes, so they look like leaves.
- **Slide** two leaves on a toothpick, and put a tulip-shaped gumdrop on top.



Find other creative cakes, like **Castle Cake** and **Butterfly Cake** at [pbskids.org/zoom/cafe](http://pbskids.org/zoom/cafe)

## Zoom Into Action!

Greg G. of Newton, Massachusetts, is a member of the ZOOMteam. He and his dad took part in a **bike-a-thon** to raise money for Bikes-Not-Bombs, an organization that collects old bikes, fixes them up, and gives them to people who can't afford them. Greg biked **25 miles** and raised **\$4,900**. Way to go, Greg!

You can volunteer and become a member of the ZOOMteam, too. Visit **[pbskids.org/zoom/action](http://pbskids.org/zoom/action)** to see what other kids are doing and to get ideas for how to volunteer.

### 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.



© 2002 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!

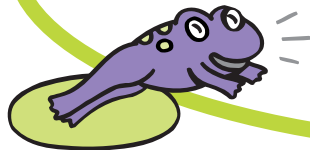
Illustrations: Stephen Schudlich  
Photos: Mark Ostow

**WGBH**

404 031 1010

ZOOM  
Box 350  
Boston, MA 02134

Presorted  
First-Class Mail  
U.S. Postage Paid  
Boston, MA  
Permit No. 55020



**By Kids,  
For Kids™**

Since **you** wrote to us,  
we're writing to you!



Corporation  
for Public  
Broadcasting

*The Arthur  
Vining Davis  
Foundations*



**PBS**



Thanks  
for writing  
to ZOOM™!

**ZOOM** erang™



# Biome in a Baggie

A biome is a  
place with certain kinds  
of weather and plants,  
like a rainforest.

## What You Need

- clear, 2-liter plastic soda bottle
- pebbles
- potting soil
- seeds (radish seeds grow quickly)
- gallon-size, zipperlock plastic bag



Have an adult **cut** the soda bottle in half for you. Pour **pebbles** into the bottom half of the soda bottle until they are half an inch deep. Pour **potting soil** over the pebbles until it is an inch deep. Make a half-inch **trench** and **sprinkle** in a pinch of seeds. **Cover** the seeds with potting soil.

**Water** the soil until the water collects at the bottom of the pebbles. **Put** the bottle in a plastic bag, **seal** it, and move it to a **sunny place**, like a windowsill.



Sent in by Anastasia H. of San Antonio, TX



**Wait** three or four days and **check** on your plants. **Where** do you notice water collecting in the bag?

Try an **experiment**. Set up two biomes. Give one a lot of water, like a **rainforest**. Give the other one very little water, like a **desert**. **Predict** what you think will happen. Then **test it** and **send** your results to ZOOM at **[pbskids.org/zoom](http://pbskids.org/zoom)**

### Science Scoop

You only need to add **water** to your biome once because the water **recycles** itself. Here's how it works. The roots of the plant **absorb** the water, and the water **travels** up the stem. When the water gets to the leaves, some of the water **evaporates**. (This means it **changes** from a liquid to a gas.) The evaporated water forms **drops** on the bag. When the water drops become heavy enough, they fall back to the soil like **rain**. This is an example of a **water cycle**.



## What You Need

- red food coloring
- glass of water
- spoon
- white carnation
- scissors

Make a  
flower change  
color overnight!

**Add** 15 drops of red food coloring to the glass of water. **Stir.** **Cut** off the bottom of the stem. **Put** the carnation in the colored water. Place it in a **sunny place** and wait until the next day. **What happens?**

Now it's time for you to **experiment.** What happens if you **split** the stem in half the long way and put the left side in **red** water and the right side in **blue** water?

Or what happens if you use **celery** instead of a carnation? 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/sci](http://pbskids.org/zoom/sci)**

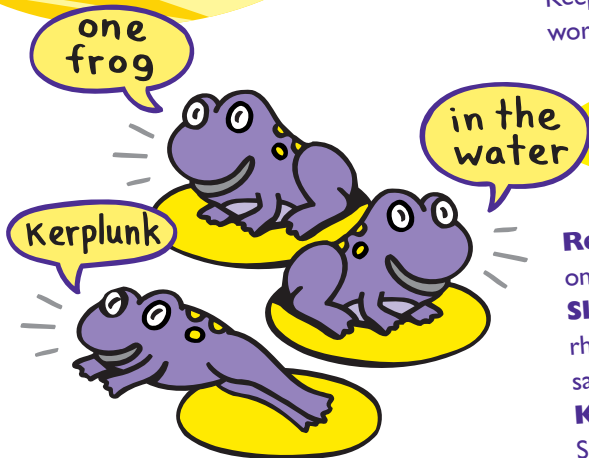


## Science Scoop

Why do the petals **turn red** when you put the carnation in red water? Water is constantly lost, or **evaporates**, from the leaves and petals. (This means it **changes** from a liquid to a gas.) When the carnation loses water, it **takes in** more water through its stem to replace it. This water **travels** up the stem in tiny tubes to the petals. Since you **added** food coloring to the water, you can tell when the liquid reaches the petals because the petals **change** color.



# One Frog



Have your friends **sit** in a circle. You **start** the game by saying, "**One frog.**" Then the person on your left says, "**In the water,**" and the next person says, "**Kerplunk!**" Keep going around the circle saying the words in this way:

**One frog**, in the water, kerplunk!  
**Two frogs**, in the water, in the water, kerplunk, kerplunk!  
**Three frogs...**

**Repeat** "in the water" and "kerplunk" one more time whenever you add a frog. **Slap** your knees and **clap** to keep the rhythm. If someone is off a beat, hesitates, or says the wrong thing, that person is out. **Keep going** until only one person is left! See **how many** frogs you and your friends can get up to before someone messes up.

Sent in by Emilee B. of Rock Island, IL

# Climbing Toy

Make a toy that can climb string!

## What You Need

- large paper plate
- markers or crayons
- scissors
- plastic drinking straw
- tape
- stapler
- string
- paper towel tube
- 2 beads (large enough holes for string to go through)



**Draw** an animal or person with long arms on the front of a paper plate. **Cut** out the drawing. Next **cut** two pieces of straw that are one inch long. **Tape** each piece across the middle of each arm. Then **fold** the arms over the straw pieces and **staple** them in place.



Make a string ladder for your **toy** to climb. **Cut** two five-foot pieces of string. **Tie** them to the ends of a paper towel tube. **Thread** the ends of these strings through the straw pieces and **tie** a bead onto each end.



Sent in by Susanna L. of Downers Grove, IL

Now you need a way to **hang** up your toy. **Cut** a two-foot piece of string and **tie** it to the middle of the paper towel tube. **Tie** the middle string to something stable and fairly tall, like the handle on your refrigerator. Now you're ready to **test** it out! **Slide** your toy to the bottom of the strings so it rests on the beads. **Pull** the strings gently, first one and then the other, and your toy will **climb** up the string. Make two toys and **have a race** with a friend!

Go to  
**[pbskids.org/zoom/do](http://pbskids.org/zoom/do)**  
to find out how to make other toys, like **Ping Pong Paddles** or **Shadow Puppets**.



What other toys can you make with **paper** and **string**? Send your directions to ZOOM at **[pbskids.org/zoom](http://pbskids.org/zoom)**

## How to Speak Ubbi Dubbi™

Just add **“ub”** before each vowel sound. Accent the **“ub”** each time it comes up. Chubek about Cubafube  
ZubOOM ubat

**[pbskids.org/zoom/cafe](http://pbskids.org/zoom/cafe)**  
fubor lubots ubof tubastuby trubeats.



Try out  
the Ubbi Dubbi translator at  
**[pbskids.org/zoom/ubbidubbi](http://pbskids.org/zoom/ubbidubbi)**