

# 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!

# Meet the Cast!

**What traditions  
do you have  
in your family?**

**Caroline**

Every Thanksgiving we put out a tablecloth and we all trace our hands and say what we're thankful for that year.

**Garrett**

I make fried dough with my dad on Sunday mornings.

**Matt**

Every year I go on vacation for a week to the beach with my cousins.

**Estuardo**

On Christmas, everyone in my family eats tamales with lemon juice.



**What about You!**  
We want to hear about  
**your family traditions!**  
Send us a Zmail at  
[pbskids.org/zoom/sendit](http://pbskids.org/zoom/sendit)

Cafe



# Peanut

## Rachel

When it's my birthday, I wake up and when I walk in the dining room, there are gifts and breakfast served along with singing.

Makes about 15 bees!

## What You Need

- medium-sized mixing bowl
- wooden spoon
- plate covered with waxed paper
- microwave-safe bowl
- spoon
- small zipper-lock plastic bag
- scissors
- ¼ cup creamy peanut butter
- 1 tablespoon butter (at room temperature)
- ¼ cup confectioners' sugar
- 2 ½ graham crackers
- ¼ cup semi-sweet chocolate chips
- small handful of sliced almonds



Visit the **ZOOMers™!**

Find out more about the cast at  
[pbskids.org/zoom](http://pbskids.org/zoom)

Sent in by Hannah R. of Mesa, AZ

# Butter Bees

First, **wash** your hands. **Put** the peanut butter, butter, and confectioners' sugar in the mixing bowl. **Cream** them together with the wooden spoon. It will take some time, but don't give up. **Crumble** the graham crackers into the mixing bowl. Make sure the crumbs are **small**. Then **mix** the crumbs with the other ingredients. **Shape** the dough into 1-inch ovals and **put** them on the plate.

**Put** the chocolate chips in a microwave-safe bowl and ask an adult to help you **microwave** them.

**Stir them** every 15 seconds until they are melted. It will take about **1 minute**. Use the spoon to **put** the melted chocolate in the **corner** of the zipper-lock plastic bag. **Cut** a **teeny** hole in the corner of the bag. Gently **squeeze** the bag to put **chocolate stripes** on each bee. **Add** two chocolate chips for **eyes** and two almond slices for **wings**. Keep your bees in the **refrigerator** until you are ready to eat them. **Yum!**

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Find more insect treats, such as **Butterfly Bites** and **Edible Spiders**, at [pbskids.org/zoom/cafe](http://pbskids.org/zoom/cafe)



Samantha M. of Fresno, California, is a member of the ZOOMteam because she started a **penny drive** with her friends. They **collected 300 dollars**

in pennies to buy teddy bears for children who lost their homes in fires. Samantha **donated 61 teddy bears** to her local fire department. Way to go, Samantha!

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



**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 videos and pictures, to ZOOM.

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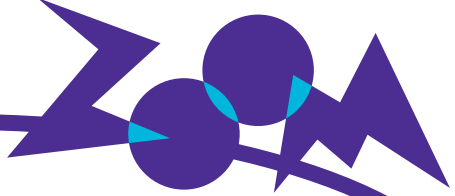
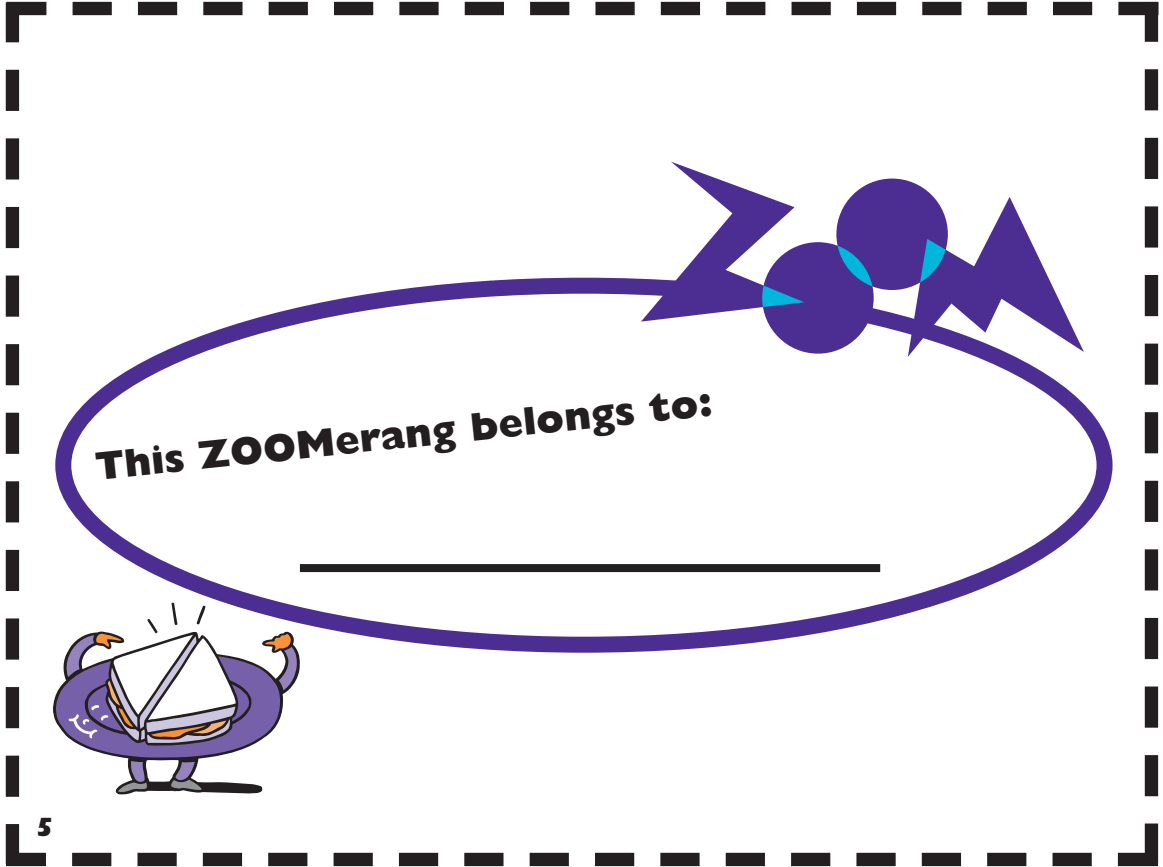
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Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

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!

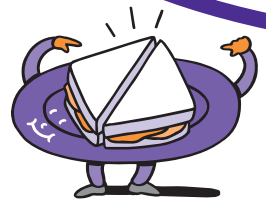
Illustrations: Stephen Schudlich  
Photos: Mark Ostow





**This ZOOMerang belongs to:**

\_\_\_\_\_





Thanks for writing to ZOOM!

ZOOMerang™

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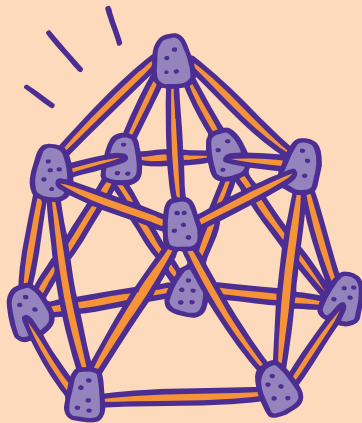
The Arthur  
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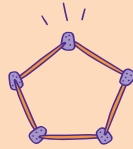
# Gumdrop Dome

## What You Need

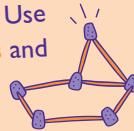
- 25 toothpicks
- 11 gumdrops



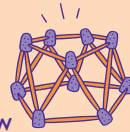
Use gumdrops to **connect five toothpicks** in a ring.



This is your **base**. Use **two toothpicks** and a **gumdrop** to make a **triangle**



on one side of the base. Repeat all the way around the base until you have **five triangles**. Use toothpicks to **connect** the gumdrops at the **tops** of the triangles. Now how many triangles do you have?



**Push** one toothpick into each of the **top gumdrops**. Use one last gumdrop to **connect** these toothpicks at the **top**.

Now it's time for you to experiment. What happens if you make a base with **six sides** instead of five sides? Or, what happens if you build **squares** rather than triangles on top of the base? Choose **one thing** to change (that's the variable), and **predict** what you think will happen. Then **build it** and **send** your results to ZOOM at [pbskids.org](http://pbskids.org)

A

Sent in by Tunisia I. of Kansas City, MO





### Science Scoop

Did you notice that your dome is made up of lots of **triangles**? That's because triangles are **stable shapes**. That means they **don't change shape easily** when you push on them. A square is not as stable as a triangle. Test it out. Make a **square** and a **triangle** out of toothpicks and gumdrops. **Press** down on **one corner** of each shape. How do the two shapes **compare**? Does one bend, twist, or collapse more easily than the other?



If you have an idea for a science activity, send it to ZOOM at [pbskids.org/zoom/sendit](http://pbskids.org/zoom/sendit)

B

# Straw Tower

Can you build a tower that will support the weight of 100 pennies?

### What You Need

- nonbendable straws
- scissors
- masking tape
- shoe box
- 100 pennies



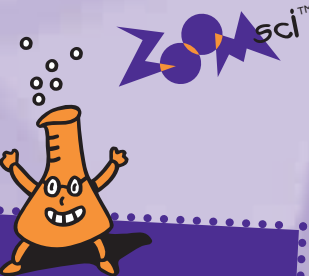
Sent in by Brett C. of Maple

Think about what kinds of **shapes** might work best. **Build** a tower with straws and tape and **put** the shoe box on top. **How many** pennies can you put in the shoe box before the tower falls down? How can you **change** your tower to make it **stronger**?

Find more things you can build, such as **Cup Tower** and **Cantilever**, at [pbskids.org/zoom/sci](http://pbskids.org/zoom/sci)





Ridge, British Columbia, Canada




### Science Scoop

The **weight** of the pennies and shoe box **pushes down** on your tower. If your tower is not strong enough, it may **bend, twist,** and **collapse** under the weight. How can you make your tower stronger? First, **think about why** the tower collapsed. What part fell first? Then **use what you know** to change the tower. If you already did the **Gumdrop Dome** activity, you know that a triangle is a **stable shape**. Find ways to **build triangles** into your tower. Another good idea is to **make the base wider** than the top. Then the tower will be less likely to tip over.



# Skillful Toes



**What You Need**

- a friend
- 4 paper plates
- several handfuls of coins
- watch with a second hand

**Sit** on the floor facing your friend and **take off** your shoes and socks.

Place **two paper plates** in front of you and two in front of your friend. **Put** half the coins on one of your plates and half on one of your friend's plates. The challenge is to see who can **move the most money** from their coin pile to their empty plate in **60 seconds**. Here's the catch—you can **only use your toes!** At the end of the game, **count** your change and see who is richer.

What other kinds of things can you move with your toes? Try the game again using **rice** or **ice cubes**.

Sent in by Theodora V. of Natick, MA

# Jean Pocket Bag

## What You Need

- old pair of jeans
- scissors
- fabric glue
- fabric paint
- ribbon
- markers



Sent in by Felicia K. of Ogilvie, MN

E

**Ask** an adult if you can cut up a pair of old jeans. **Cut** around one of the **back pockets** of your jeans. Now you have a little **pouch**.

Make a **strap** by cutting along **each side** of one seam. Decide how **long** you want your strap to be, and **cut** the seam to that length. **Squeeze** some of the fabric glue on the **ends** of the seam and **tuck them inside** your pocket. Now you have a **bag with a handle**.

Use paint, markers, or ribbon to **decorate** your bag. Let the glue and paint **dry** before you wear it.

What other things can you make out of your old jeans? Send your favorite jean craft idea to ZOOM at [pbskids.org/zoom/sendit](http://pbskids.org/zoom/sendit)

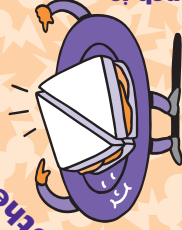
F



Go to [pbskids.org/zoom/do](http://pbskids.org/zoom/do) to find out how to make a **Pocket Pouch** to keep in your Jean Pocket Bag.



What did one plate say to the other plate?  
Lunch is on me!



Sent in by Courtney M. of Louisville, KY

## How to Speak Ubbi Dubbi™

Just add "ub" before each vowel sound. Accent the "ub" each time it comes up. Chubeck about Kubennuby uband Rubay's Ububbubi Dububbubi Rubap ubat [pbskids.org/zoom/music](http://pbskids.org/zoom/music). Wrubite yubour ubown rubap uband subend ubit tubo ZUBOOM!



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