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

Voila!

DECORATE AND ORGANIZE YOUR ROOM AT THE SAME TIME!

Room Decorator

-Sent in by Erynn F. of Coventry, RI

What You Need

- wooden yardstick
- wooden, hinged clothespins
- paint
- paintbrush
- white glue
- decorations (like glitter or stickers)
- push pins

Paint the yardstick and the clothespins any colors you want. When the paint is dry, **glue** the clothespins to the yardstick. Put them a **few inches** apart. **Decorate** your yardstick with things like glitter and stickers. Then ask an adult to help you **hang** it.

If your yardstick has **holes** on the ends, you can attach it to the wall with **push pins**. Use your room decorator to **hold** school papers, pictures, or ZOOMerangs!

How did you **decorate** your Room Decorator? Send a note or a picture of it to ZOOM, Box 350, Boston, MA 02134 or **pbskids.org/zoom**

ZOOMdo™

ZOOMify your house with more crafts, like Windchimes and Dream Catchers, at **pbskids.org/zoom/do**

Hot and Cold Water

What You Need

- 2 clear, plastic, 20-ounce soda bottles
- very warm water
- red food coloring
- cold water
- index card

Fill one of the bottles with **very warm water**. Add 20 drops of **food coloring**. **Fill** the other bottle with **cold water**. Don't add food coloring to this bottle.

Put the warm water bottle in the sink. **Hold** the **index card** on top of the cold water bottle. Have an adult help you **turn** the cold water bottle upside down and **place** it on top of the warm water bottle. Slowly **pull** out the index card. **What happens**?

Now design your own **experiment**. What happens if you repeat the experiment with **two bottles** of cold water? Or, what happens if you put the **warm water** bottle **on top** of the cold water bottle? Choose **one thing to change** (that's the **variable**) and make a **prediction**. Then **test it** and send your results to ZOOM at **pbskids.org/zoom**

ZOOM phenom™

Sent in by Brandi M.
of Mansfield, TX

Science Scoop

If you **weigh** the bottles of warm water and cold water, you'll find that even though each bottle has the **same amount** of water, the warm water weighs a **very tiny bit less** than the cold water. That means warm water is **less dense** than cold water. Did you see the warm water rise and float on the cold water? That's because things that are **less dense float** on top of things that are more dense.

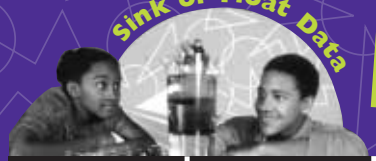
What's More Dense?

What You Need

- 4 clear, plastic, 10-ounce cups
- water with food coloring in it
- light corn syrup
- cooking oil (vegetable oil or corn oil)
- 3 grapes
- 3 nickels or metal nuts
- 3 foam packing peanuts

Pour colored water in one cup, corn syrup in another, and oil in a third. Each cup should be about a **quarter full**. **Predict** if a grape will **float** in these liquids. Then **drop a grape** in each liquid and **record** your results on the chart. Now **predict** what will happen when you drop a nickel and a foam peanut in each liquid. Then **test** each object and **record** your results.

Remove the **objects** from the cups. Then **pour** all three liquids into the remaining cup. What happens? **Look** at your data chart and **predict** what will happen if you add a grape, a nickel, and a foam peanut. Then **test** it. How do your results **compare** to the chart? Now design your own **experiment**. Try using **other objects and liquids** and send your results to ZOOM at **pbskids.org/zoom**



	WATER	CORN SYRUP	COOKING OIL
GRAPE			
NICKEL			
FOAM PEANUT			

Write in the word **sinks** or **floats**.

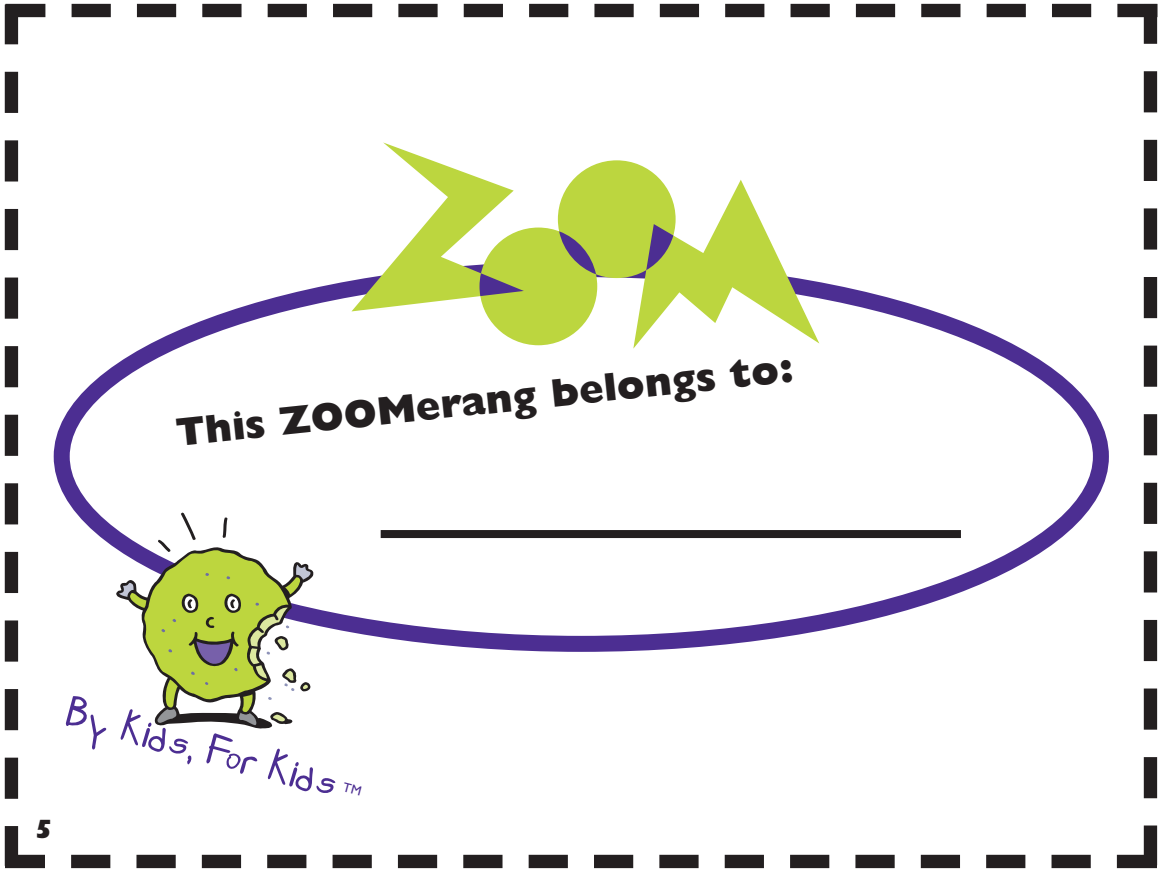
Science Scoop

In the Hot and Cold Water activity, you discovered that things that are **less dense** **float** on top of things that are more dense. So, if you put a **grape** in **syrup**, it **floats** because the grape is less dense than syrup. If you put a **grape** in **water**, it **sinks** because the grape is more dense than water.

When you mixed the three liquids, they **floated** on top of one another because they have **different densities**. Look at the **layers** of liquids. Which liquid do you think is the **most dense**? Why?

ZOOM sci™

Sent in by Paul H. of Eagan, MN


ZOOM
This ZOOMerang belongs to:
By Kids, For Kids ™


Thanks for writing to ZOOM!
cpb
The Arthur Vining Davis Foundations
PBS
erang™
PBS KIDS

Buzz's Home

Is "Buzz" a nickname?
Kevin is my real name. I'm called Buzz because I used to have a buzz cut.

How would other cast members describe you?
They would say I am funny, observant, and caring.

Whom do you most admire?
I most admire my mom because she's so nice and caring.

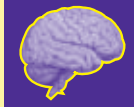
What do you want to be when you grow up?
I want to be an actor or a director.

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 log on at your school, public library, or local community center.

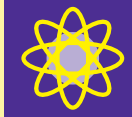
at pbskids.org/zoom



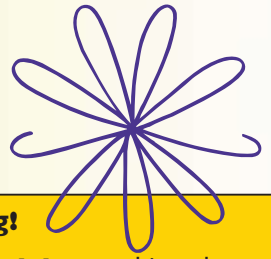
ZOOMzingers
Wrap your brain around these tricky teasers!

ZOOM Pendulum
Check out this virtual salt pendulum.

WhatZup
Share your thoughts with other ZOOMers.



ZOOMphenom
Impress your friends with these cool tricks!



Let's Swing!

Swing the **pendulum**, and it makes a **pattern**. Change the length of the pendulum **string**, and you'll change the pattern. The pattern above was made with a string that's **15 meters** long. What happens if you use a **longer string**?

Try it out at **ZOOM Pendulum**!

Cafe ZOOM™

Gelatin Fish Bowls

What You Need

- packet of sugar-free, sparkling white grape gelatin
- saucepan
- measuring cup
- water
- spoon
- blue food coloring
- canned fruit cocktail (or blueberries)
- can opener
- 3 clear, plastic, 10-ounce cups
- 3 apple slices
- knife

First **pour** the gelatin in a saucepan. Have an adult help you **add** one cup of **boiling water**. Then **stir** in one cup of **cold water**. Add two **drops** of blue food coloring. Next **open** the can of fruit cocktail and **put** a few pieces in each cup. These are the **rocks** in your fish bowl.

Slowly **pour** the gelatin into each cup until it is almost full. If any fruit **floats** to the top, take it out. **Put** the cups in the **refrigerator** until the gelatin is **almost firm** (about $1\frac{1}{2}$ hours).

C

EAT THE WHOLE AQUARIUM

Take the cups out. Have an adult help you **cut** out three apple slices so that they look like **fish**.
Push an apple fish into each cup. Don't worry if the gelatin looks messy; it should smooth out in the refrigerator. **Refrigerate** your fish bowls again for **four hours**. Then take them out and **enjoy**!

What else can you add to your fish bowl? Send your ideas to ZOOM at **pbskids.org/zoom**

Sent in by Roger S. of Chestnut Hill, MA

Find more incredible edible treats, like Dirt Pudding and Edible Spiders, at **pbskids.org/zoom/cafe**

D

How to Speak Ubbi Dubbi™

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

Just add "**ub**" before each vowel sound. Accent the "**ub**" each time it comes up. Plubannubing uba slubeepubovuber? Mubake ubup uba subong ubin Ububbubi Dububbubi uband subend ubit tubo ZubOOM!

Jump the CREEK

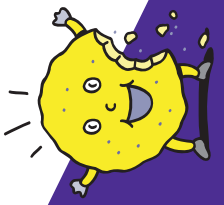
Sent in by Kristy L.
of Sheffield, PA

What You Need

- 2 jump ropes
- at least 2 players

Make a **creek** by placing the **jump ropes** on the ground about **one foot apart**. Then take turns **jumping** across the creek. When everyone has jumped, **move** the ropes farther apart and try again. Players who **land in the creek** are out. The one who jumps the farthest **wins**!

ZOOgame™



Why did the cookie go to the hospital?

Because he felt crumby!
Sent in by Erica G. of Mt. Ephrain, NJ

E

ZOOM Into Action™

Chris O. of Jacksonville, Florida, is a member of the ZOOMteam. He volunteered with Habitat for Humanity, an organization that **builds houses for families** in need. Chris helped set up supplies and built a bench. Thanks to Chris and other volunteers like him, a family got a home.

Join the ZOOMteam!

Volunteer and become a member of the ZOOMteam. Then tell us about your project at **pbskids.org/zoom/action**

We might share your story with other ZOOMers on the show or Web site.

F

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