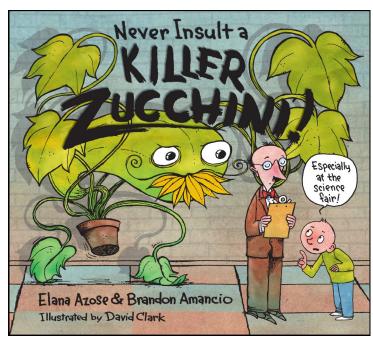


Elana Azose & Brandon Amancio Illustrated by David Clark



978-1-58089-618-4 HC \$16.95 Ages 7-10 • 32 pages



- **Activity Guide:**
- Host an imaginary Science Fair
- **Giant Ant Maze**
- Perform some "mad science"
- Mr. Farnsworth's zucchini recipes





## Science Fair Word Search

Turn to the back of the book to learn more about these words!



ANTIMATTER PROTOPLASM NUCLEAR
BIONIC RADIOACTIVE ZUCCHINI
CLONING TELEPORTER LASER

**VORTEX** 



**GRAVITY** 



**HYBRID** 

# Host An Imaginary Science Fair

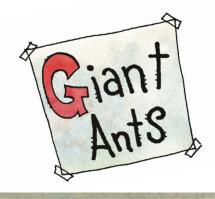




Place each letter of the alphabet on a scrap piece of paper, enough for the number of students in the classroom. Place these in a container and have each student choose a letter. Each student must then create a science fair project beginning with the letter of the alphabet that he or she has chosen.

These will all be "imaginary" projects, so students are encouraged to use their imaginations. Students will each come up with the following:

- Name of project
- Task(s) performed by the project
- Material needed to build the project
- Was the project created to solve a particular problem?
- Has the project had any malfunctions in the prototype or final phases?
- A sketch of the final project

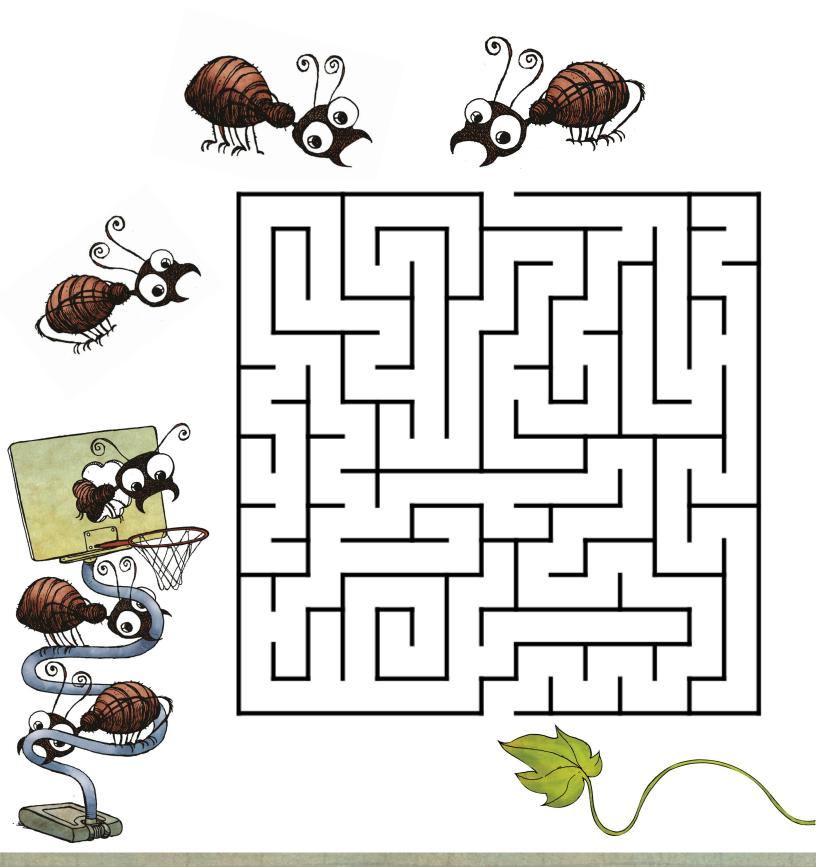








# Help the Giant Ants through the maze!





## Perform Some "Mad Science"

## **Give My Magnet Life!**

The trick: Turn an ordinary nail—presto!—into a magnet that can be turned on and off.

## **Props**

New D cell battery
Large iron nail (at least 3 inches long)
Insulated copper wire (2 to 3 feet)
Pliers to cut wire
Electrical tape
Pile of paper clips
Adult Sidekick



### What to Do

- 1. Touch the end of the large nail to the pile of paper clips, then lift up the nail. Not surprisingly, the clips just sit there.
- 2. With the help of your Adult Sidekick, remove about an inch of plastic coating from each end of the wire. Wrap the insulated copper wire tightly around most of the nail, leaving 8 inches of loose wire on both ends. Don't let the wire overlap itself as you wrap it.
- 3. Use tape to attach the ends of the wire to the positive and negative ends of the battery. Touch the nail to the pile of paper clips again. Now you have an electromagnet that lifts them up! WARNING: If you leave the wires connected to the battery for a long time, they can become hot.
- 4. Have fun experimenting. Find out how strong your magnet is by seeing how many paper clips you can lift at once. Does your homemade electromagnet work if you only have one of the ends of the wire attached to the battery? See what happens if you repeat this experiment using only the coiled wire (without the nail inside it). How do these changes affect the electromagnet's power?
- 5. When you're done, remove the wires from the battery.

## Wood Block Baffler

The Trick: Build a sculpture that balances on one thin block and looks like it should topple over!

### **Props**

14 identical rectangular building blocks (*must* be identical) Smooth, flat surface

### What to Do

- 1. Balance two blocks vertically, and then place a third block horizontally across the top. Nudge this third block slightly to the left so one end hangs over the left vertical block.
- 2. Stand a fourth block vertically on the right edge of the third block to form a backward L shape.
- 3. Place a fifth block horizontally on top of the third block, up against the vertical fourth block. Its left end should hang out over the third block.
- 4. Repeat Steps 2 and 3 for the rest of the blocks.
- 5. Carefully remove the bottom vertical block on the right side. The tower should stand without toppling over. As you remove the bottom right block, you might need to gently adjust the blocks above it, to the left or right, to keep things in balance.

To see a video of this experiment in action, visit www.charlesbridge.com/products/science-stunts

Find more of these fun experiments in Science Stunts: Fun Feats of Physics © 2016 by Jordan D. Brown.







## Mr. Farnsworth's zucchini recipes

. . . Just don't tell the killer zucchini!

## **Chocolate and Yogurt Zucchini Bread**

## Ingredients

2 eggs

1 cup sugar

1/3 cup olive oil

½ cup yogurt

1 ½ cups flour

⅓ cup cocoa powder

1 ½ teaspoon baking powder

1/4 teaspoon salt

1 teaspoon vanilla powder or extract

3 cups grated and squeezed zucchini

1 cup chocolate chips, 1/4 of it for topping

#### Instructions

 Preheat oven to 350°F. Grease 2 loaf pans (8 ½ x 4 ½ in.) and set aside.

- In a large bowl, beat eggs and sugar. Add in olive oil and yogurt and mix well.
- Add in cocoa and mix with a spatula.
- Mix flour, salt, vanilla powder, and baking powder in a bowl and sift into the egg mixture. Stir until smooth, but don't overdo it
- Add in grated zucchini and stir just until it is coated with the batter.
- Put ¼ cup of chocolate chips aside. Sprinkle a little flour over the rest of it and fold in the batter. Don't overmix it.
- Share the batter into the pans. Top each with the chocolate chips and bake for 65 minutes.
- Let it cool completely before slicing and serving. www.giverecipe.com

## **Zucchini Pizza Boats**

#### Ingredients

6 small zucchini (2 1/2 lbs)

1 Tbsp olive oil

1 clove garlic, finely minced

Salt and freshly ground black pepper

1 cup marinara sauce

1 1/2 cups shredded mozzarella cheese (6 oz)

1/3 cup finely shredded parmesan cheese (1.4 oz)

1/2 cup mini pepperoni slices

2 Tbsp chopped fresh oregano

## Instructions

- ♦ Preheat oven to 400°F. Line a large rimmed baking sheet with parchment paper or a Silpat liner, set aside.
- Cut each zucchini into halves through the length (if they don't lie flat trim a thin portion from bottoms so that they will lie mostly flat). Pat insides dry with paper towels (cut portion). Align on prepared baking sheet.

- In a bowl, stir together olive oil and garlic then brush lightly over tops of zucchini. Sprinkle with salt and pepper to taste then brush a slightly heaping 1 Tbsp marinara sauce over each zucchini, leaving a small rim near edges uncoated.
- Sprinkle tops evenly with mozzarella cheese then with parmesan cheese. Top with pepperoni slices (placing them more near centers as the cheese will melt and spread).
- Bake in preheated oven 12-18 minutes (bake time will vary depending on how thick your zucchini are and how crisp/ tender you want them).
- Remove from oven and sprinkle with chopped fresh oregano.
   Serve warm.

www.cookingclassy.com

### **Baked Zucchini Fries**

## Ingredients

Cooking spray

½ cup bread crumbs

1/4 cup grated Parmesan cheese

2 eggs, beaten

3 zucchinis (ends trimmed, halved, and cut into 1/2-inch strips)

## Instructions

- Preheat oven to 425°F. Line a baking sheet with aluminum foil and spray with cooking spray.
- Stir bread crumbs and Parmesan cheese together in a shallow bowl. Whisk eggs in a separate shallow bowl.
- Working in batches, dip zucchini strips into egg mixture, shake to remove any excess, and roll strips in bread crumb mixture to coat. Transfer coated zucchini strips to the prepared baking sheet.
- Bake zucchini fries in the preheated oven, turning once, until golden and crisp, 20 to 24 minutes.
   www.allrecipes.com



