

# NYPL After School Activity Guide


Kindergarten–3rd Grade

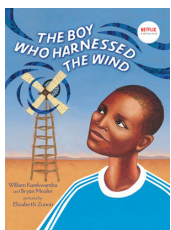


## INVESTIGATE

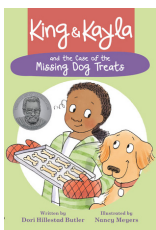
In this packet you'll find tips, books we love, and activities all about investigating. Investigating means looking closely at something in order to learn something new, solve a problem, or answer a question. If you create something you love, submit a picture of your work to our virtual gallery at [nypl.org/afterschool](https://nypl.org/afterschool).

## BOOKS WE LOVE

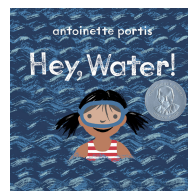
These books are some of our favorites about investigations and investigating. To check them out, place a hold online at [nypl.org](https://nypl.org) or call Ask NYPL (917-275-6975). If you are at a branch, ask a librarian how to place a hold. Books marked with a  are available as e-books.



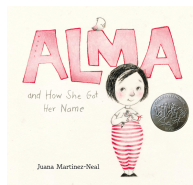
**The Boy Who Harnessed the Wind**  
William Kamkwamba  
& Bryan Mealer



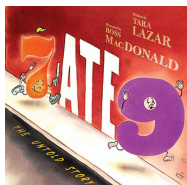
**King & Kayla and the Case of the Missing Dog Treats**  
Dori Hillestad Butler



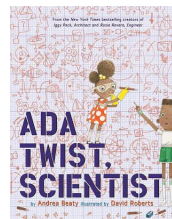
**Hey, Water!**  
Antoinette Portis



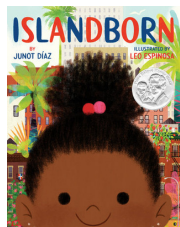
**Alma and How She Got Her Name**  
Juana Martinez-Neal



**7 Ate 9: The Untold Story**  
Tara Lazar



**Ada Twist, Scientist**  
Andrea Beaty



**Islandborn**  
Junot Díaz



**Over and Under the Pond**  
Kate Messner



**InvestiGATORS**  
John Patrick Green



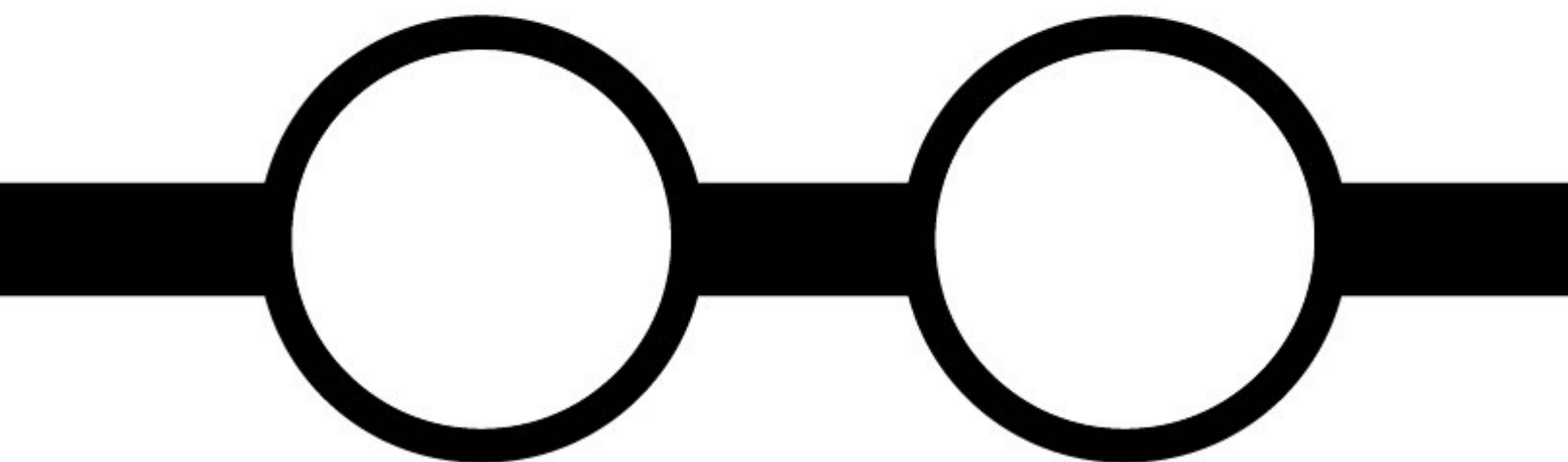
## QUICK TIPS

- Caregivers: Help your child investigate by prompting them to observe the world around them. Ask questions such as “What do you notice?” and “What are you wondering?”
- Use materials around you to conduct simple experiments. Here are two ideas: 1) How long does it take a banana to ripen? What if it's in the refrigerator? 2) Test out different household objects in your sink to see if they sink or float.

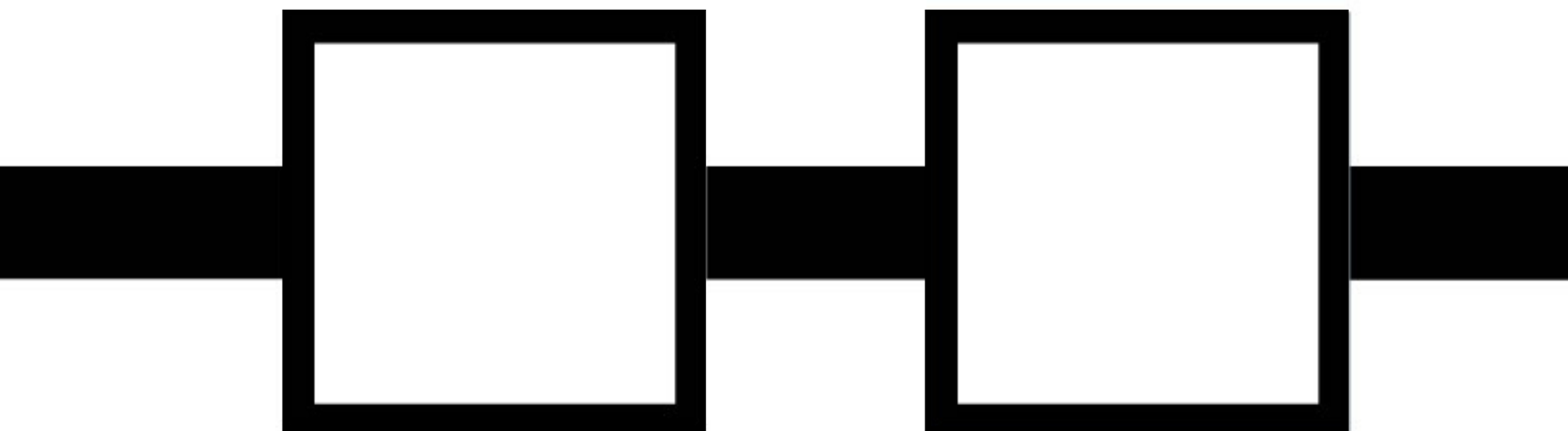
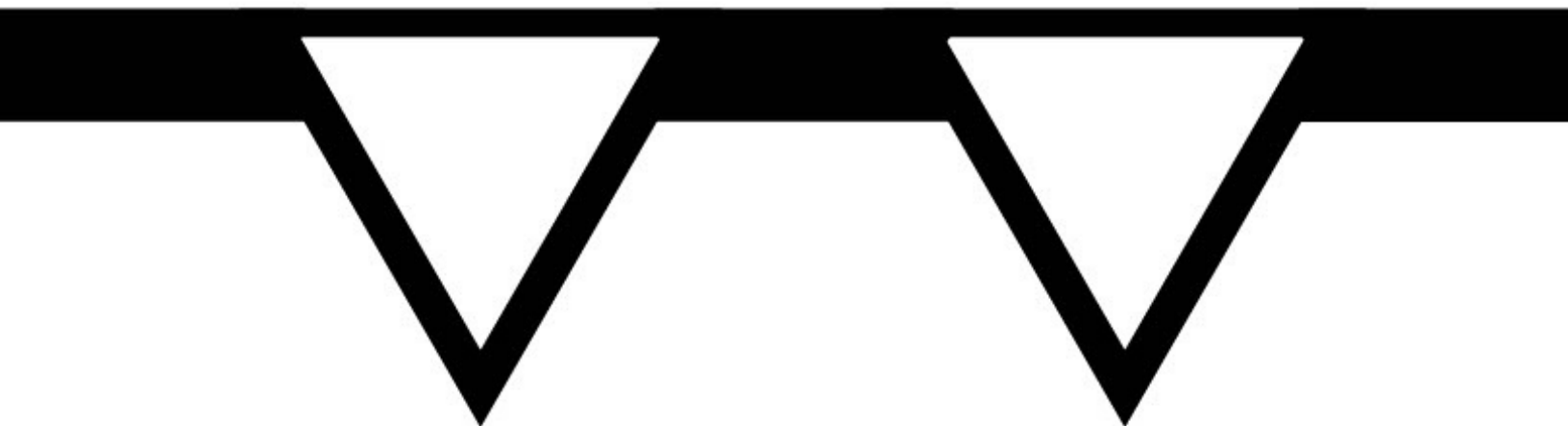
## INVESTIGATE SHAPES AS A SHAPE DETECTIVE

Everything around us is made of shapes! Sometimes shapes are easy to see and sometimes they aren't—good thing NYPL has provided you with your very own investigator glasses!

Cut out the investigator glasses and the arms on the next page. Glue the arms to the frames and then fold the glasses' arms so that they sit on your ears. (Note: glue or tape popsicle sticks or unsharpened pencils to the arms for a sturdier frame.)



Cut out each of the frames following the black lines. Remember to cut the inside of the frames out. You may need an adult to help you!





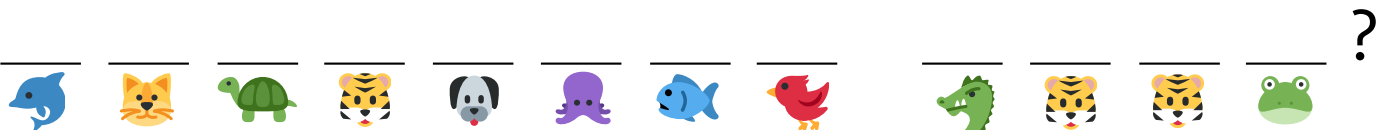
Look for objects inside or outside your house that match your glasses. How many objects of each shape can you find? Once you have found and collected your shapes, it is time to sort them. Try sorting by color, weight, big to small, or small to big.

Take it to the next level by identifying your objects as either polygons (shapes made up of straight lines only) or non-polygons. Then try recreating some of the shapes you found using household materials. For example, you can use straws or toothpicks for the edges and marshmallows for the vertices (or corners).

## INVESTIGATE AND SOLVE A SECRET CODE

Use the code key below to help you solve the mystery question. Then answer the question!

| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V | W | X | Y | Z |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
|   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |   |



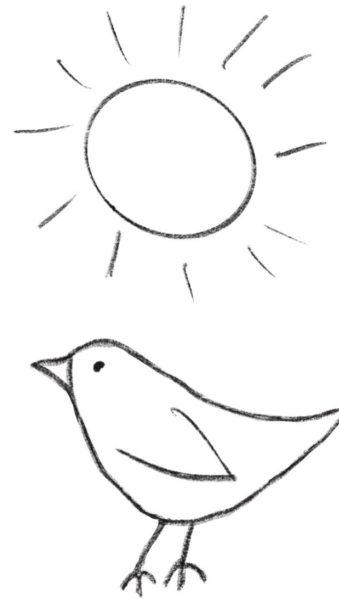
Your answer: \_\_\_\_\_

**Bonus Activity!** Get another sheet of paper and come up with your own secret code. Then write messages to your friends and family!

## INVESTIGATE LIVING AND NONLIVING THINGS

Look all around you. What is living or nonliving in your world? You can tell if something is alive by asking yourself a few questions: Does it need food or water? Does it breathe? Can it move by itself? Does it grow or change? Does it reproduce? If yes, it's alive!

 **Color in the examples of living things in green. Color the nonliving examples in red.**



 **Now it's your turn. Find your own examples and put them in this chart.**

| ITEM | LIVING OR NONLIVING? | HOW DO YOU KNOW? |
|------|----------------------|------------------|
|      |                      |                  |
|      |                      |                  |
|      |                      |                  |

 **Bonus Activity! Tell or write a story where something that's nonliving comes to life.**