

# Pirate Origami

## Overview:

Participants will learn to fold an Origami pirate hat and use math to change the size of the hat.

## Goals:

- Learn basic origami folds.
- Learn how math can be used to change the size of a project.

**Time Required:** 30 minutes

## Materials:

- For each group/person:
  - Large rectangular kraft paper or newspaper with a 2:3 ratio
  - Cellophane tape
  - Pencil
  - Art supplies (markers, crayons, pencils, etc.)

**Vocab:** Origami

## Procedure – Pirate Hat:

1. Start by introducing the term “origami”. Origami is the Japanese art of paper folding. Ask “How many of you have done origami?”
2. Ask students, “How do you identify pirates?” Accept all answers, lead students to identify a pirate hat as a key item. That is what we will make in this activity.
3. Tell students there are two kinds of hats we most associate with pirates. The first is called a “Tricorne Hat” – think Captain Jack Sparrow’s hat in *Pirates of the Caribbean*. Ask, “Why do you think it is called a “Tricorne” hat?” (It is called a Tricorne or Tri-corner because it has 3 corners or points.) The second kind of hat was worn by Navy Admirals – pirates are sometimes shown wearing this kind of hat sideways, think Cap’n Crunch. Ask, “What do you think this kind of hat is called? Why?” (This is a Bicorne hat, it has 2 corners or points.)
4. Follow the directions on the slide deck to fold an Origami Pirate Hat.
5. Ask, “What kind of hat did we make? How do you know?”
6. Ask students, “How can you use math to change the size of your hat?” Discuss how the paper used should be in a 2:3 ratio. So, if my paper is 10 inches long, how wide should it be? (15 inches)  
Can you make a hat that is twice as big? Can you make one half-size?

## Reflection:

1. Review vocabulary, specifically the prefixes “Tri” and “Bi”.
2. What are some other ways we can use ratios?
3. What other Origami Pirate Designs can you make?



## *Origami Pirate Hat & Boat*

### **Extension:**

1. Follow the directions on the slide deck to fold a boat.
2. Research and fold some other pirate-themed origami designs.

### **Resources:**

Hondow, Robyn. "Origami Boat Instructions." *Origami*, 2021, [www.origami-fun.com/origami-boat.html](http://www.origami-fun.com/origami-boat.html).

Houchin, Keri. "Origami Pirate Hat Easy Paper Folding." *Backyard Summer Camp*, 19 May 2022, [backyardsummercamp.com/origami-pirate-hat/](http://backyardsummercamp.com/origami-pirate-hat/).

Jacobs, Andrew. "Using Origami to Teach Math: A Fun Lesson Plan." *JAM Paper*, 24 Aug. 2022, [www.jampaper.com/blog/using-origami-to-teach-math/](http://www.jampaper.com/blog/using-origami-to-teach-math/).

Maggio, Sasha. "Types of Pirate Hats." *eHow*, Leaf Group, 2023, [www.ehow.com/list\\_7700183\\_types-pirate-hats.html](http://www.ehow.com/list_7700183_types-pirate-hats.html).

"Military Bicorn: American." *The Metropolitan Museum of Art*, 2023, [www.metmuseum.org/art/collection/search/173613](http://www.metmuseum.org/art/collection/search/173613).

"Tricorn: Italian." *The Metropolitan Museum of Art*, 2023, [www.metmuseum.org/art/collection/search/81668](http://www.metmuseum.org/art/collection/search/81668).

