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*Ship Shapes* is a hunt for the triangles, squares, rectangles, and other shapes found on boats, islands, and sea creatures.

Ages: 18 months to 5 years

Lexile: NA

ATOS Level: NA ISBN: 9781846867620

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# **Ship Shapes**

#### What shapes can you find on a sea monster's tail?

Topics: comparison, counting, shape recognition

#### **Activities To Do Together:**

Use the book *Ship Shapes* to look for, count, and identify shapes.

Before you read the book:

Look for the triangles on the book's cover with your child.

While reading the book:

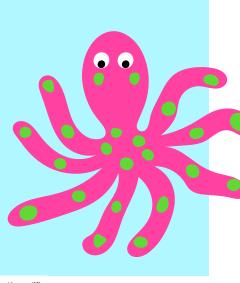
- Look at page two together. Ask questions about the shapes: Which shape is green? Which shape has the most sides? Which shapes have four sides? etc.
- Count what you see together. Count ships, count fish, count flags, count people
- Pick one of the boats in the story and talk about each of the shapes that make up the boat.

When you have finished reading the book:

- Create a collage using the shapes from the story.
- Create a square and a triangle from paper or cardboard with your child. Talk about the characteristics of each of the shapes. Discuss how are they are the same and how they are different.
- Investigate how a diamond, a square, and a rectangle are different from each other.
- Make a rectangle by putting two triangles together. Make two triangles by cutting or folding a square in half diagonally.
  - Learn about polygons. Figure out which shapes in *Ship Shape* are polygons.

• Take a walk and look for shapes. They're everywhere. Learn the names and characteristics of several new shapes you see during your walk.

• Research traffic signs together. Find out what the different traffic signs mean. Identify the shapes of traffic signs.



Early Math Project

## Conversations During Daily Routines with Infants and Toddlers:

- 1. Snack time Cut foods into shapes and enjoy snacking on triangles, squares, and circles.
- 2. Play time Turn a cardboard box into a treasure chest. Fill it with cardboard shapes to explore.
- 3. Tub time Notice and talk about the shapes of objects in and near the tub. "The tiles are squares, the drain is a circle, etc."
- 4. Park time Notice and talk about the shapes on the playground. What shape is the swing's seat? Where do you see triangles?

#### **Questions for Mathematical Thinking:**

- 1. What numbers would you use to describe a star?
- 2. How are triangles and circles different?
- 3. How are squares and rectangles the same? How are they different?
- 4. Which of the story shapes have four sides?
- 5. If you wrote a book called *Sky Shapes* what illustrations and shapes would you include in your book and why?
- 6. How is the semi-circle like the other shapes in this story? How is it different?

#### Early Math Project Resources:

Visit <u>Ship Shapes Activities</u> (https:// www.earlymathca.org/ship-shapes)

Follow this <u>link</u> or visit earlymathca.org/ external-resources for additional online resources

#### Vocabulary

#### Math words found in

**the story:** all, circle, count, crescent, diamond, oval, rectangle, semi-circle, shapes, small, square, star, triangle

#### Related math words:

angles, corners, hexagon, lines, octagon, polygon, sides, vertex

#### Words to build reading comprehension:

chest, discovered, gleams, sails, submarine, voyage



#### **Math Connections:**

The book *Ship Shapes* introduces nine common shapes. As you read the book with your child, talk about each of the shapes' names and characteristics. Explore the shapes' similarities and differences. For example, the triangle and diamond both look pointy, but the triangle has three sides while the diamond has four.

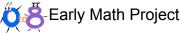
Use the book to explore the concept of what it means to be the same. Many of the shapes in this book share similar characteristics, but are also different in important ways. Both the circle and oval have curves and a round appearance, but only the oval has an egg-like shape. The circle's center is the same distance from any point along its circumference. You can demonstrate this concept by attaching a piece of string to a pencil, making a dot on a piece of paper, and drawing while the end of the string is fully stretched and held in place on the dot. Draw until the ends of the line connect making a full circle.

Your child may point out a characteristic that is shared by two different shapes and conclude the shapes are the same. For example, they may say that a star and triangle are the same because both have points. If this happens talk about the other characteristics of the shapes. You might count and compare the lines in the star and the triangle or count and compare the angles in the two shapes. Spanish Title: not available

Related Books: Circle! Sphere! by Grace Lin; Color Farm by Lois Ehlert; Color Zoo by Lois Ehlert; Have You Seen My Monster by Steve Light; Perfect Square by Michael Hall

Click this link to the <u>World Catalog</u> or enter https://bit.ly/3PJCaJ6 to find *Ship Shapes* in the public library.





In the example below, all three rectangles have the same dimensions. It is not uncommon for children to think that identical shapes like these are different because of the way the shapes are oriented. Cut out a stack of identical shapes, use them to create a picture, and talk about how the shapes are the same, despite the way they are turned. This is a fun way to reinforce the idea that the shapes remain the same even when their position is changed.

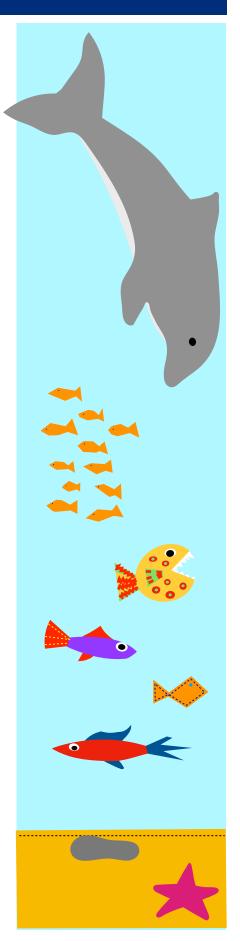


Triangles can be tricky because they appear so many different ways; tall and narrow, with three equal sides, with two equal sides, with no equal sides, short and wide, etc.

Talk with your child about the defining characteristics of the triangle. Help your child to see that three connected straight lines create a triangle. Draw large and small triangles, tall narrow triangles, low wide triangles, etc. Talk about why each of these shapes is a triangle, even though they appear different.



Count the lines and angles in each triangle together. Ask, "Is that a triangle?" Ask your child to explain their thinking - explaining why they think the shape is or isn't a triangle. If they don't identify the shape as a triangle, count the sides and angles together.





Age Level	Related <u>Infant Toddler Foundations</u> , <u>Preschool Foundations</u> and <u>CA State Standards</u>
Infant/ Toddler	<b>Spatial Relationships</b> The developing understanding of how things move and fit in space <b>Classification</b> The developing ability to group, sort, categorize, connect, and have expectations of objects and people according to their attributes <b>Attention Maintenance</b> The developing ability to attend to people and things while interacting with others and exploring the environment and play materials
Preschool/TK	Algebra and Functions 1.0 Children begin to sort and classify objects in their everyday environment
Kindergarten	<b>Measurement and Data</b> K.MD.1 Describe and compare measurable attributes

