

Young children are natural mathematicians!

The books and activities in this Storytime S.T.E.A.M. Backpack focus on exploring and playing with different mathematical ideas. S.T.E.A.M. stands for Science, Technology, Engineering, the Arts, and Mathematics.

Mathematicians:

- Are brave and bold
- · Take risks and discover
- Make mistakes, repeat, tinker, and change their thinking
- Ask questions, share ideas, and consider other perspectives

1 2 3

While you're reading these stories and playing with the materials, consider the following ideas and techniques to grow confidence and a love for math:

Read together: One of the best ways to deepen your reading time together is to pause and ask questions:

- What do you think will happen in this story, and why do you think so?
- What will happen next? How do you know?
- What connections can you make between this story and another story?
- What do you see, notice, or wonder about?
- What (numbers, patterns, shapes or other math concepts) do you see?

Play Together:



- Work together to build the featured pictures out of geometric shapes.
- Make your own fun shapes together!

Books:

Round Is a Tortilla/ Las tortillas son redondas

by Roseanne Greenfield Thong

Figuras y ratones / Mouse Shapes by Ellen Stoll Walsh

Activity: Tangram Puzzle

CHOKING HAZARD — Small parts. Not for children under 3 yrs.

tacoma public library

Tacoma Public Library

1102 Tacoma Avenue South Tacoma, Washington 98402 | 253.280.2800 tacomalibrary.org

Shape Hunt

Have your child choose their favorite shape and look for that shape all around the house, or on a walk outside. Count how many times you found that shape.

Create a Shape Sensory Bin

Materials:

- A container or box (shoebox size or larger, without a lid)
- Substrate of choice (dry rice or beans, or shredded paper, etc.)
- Fabric bandana etc. to be used as a blindfold (optional)
- Household items in a variety of shapes
 - Blocks and toys
 - Pads of paper
 - · Lids from empty jars

Instructions:

- Fill the container with your substrate of choice. You can even use mud or shaving cream for a bit of messy fun!
- Add a variety of safe household items to the box, covering them with the substrate.
- Allow your child to explore the feel of the items with their hands. Have them name the shapes and talk about their features. How many sides do they have?
- For an extra level of challenging fun, have your child cover their eyes and name the shapes just by touch.

Rolling Shapes

Pick Your Favorite Materials:

- Play dough
- Drinking straws
- Paper
- Pencils, markers, etc.

What shape is my _____?

Tune: The More We Get Together

What shape is my _____, my _____, my _____?

What shape is my _____?
My ____ is ____!

*Sing this song while holding up different shapes.

Instructions:

- Help your child draw their favorite shapes to use as a guide. Children can build shapes with or without drawing them first. See what works best for your child!
- Option 1 Roll the playdough into strips and lay them down to make shapes.
- Option 2 Make the lines of shapes with straws and connect them with balls of play dough.
- Option 3 Any combination of the above, or create your own special way to make or build a shape!

Early Learning tips

As you read about shapes and find them all around you, have your child **trace** them with their fingers or **draw** the shapes in the air.

Many picture books feature shapes in the artwork, but not in the text. **Can you find them?**

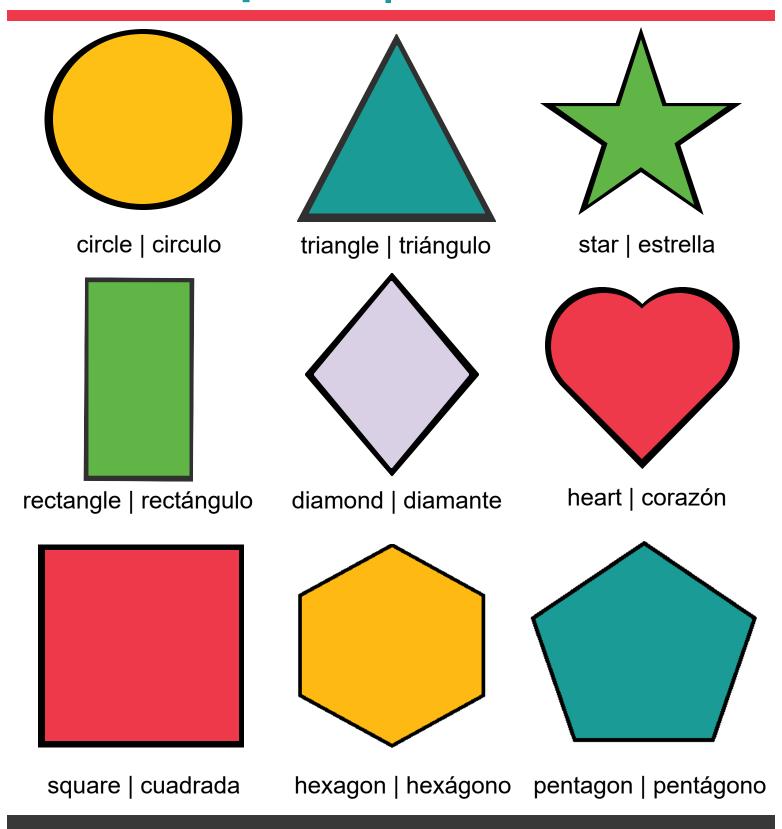
Talk about the shapes.

How many sides do they have? Are the corners pointy or round? Do they roll?



- Cuauhtémoc: Shapes Formas by Patty Rodriguez
- Los diez puntos negros/Ten Black Dots by Donald Crews
- Ultima Parada de la Calle Market/Last Stop On Market
 Street by Matt de la Peña

Shapes | Formas



tacoma public library

Tacoma Public Library

1102 Tacoma Avenue South Tacoma, Washington 98402 | 253.280.2800 tacomalibrary.org