## count · play · explore

### DISCOVER THE POWER OF MATH

Early math activities for you and your child to enjoy together.

**Babies Count** - Walk across the room with your baby. Count each step out loud.

**Toddlers Count** - Take a walk together and count how many trucks pass you on the street.

**Preschoolers Count** - Make dinner together. Count and measure the ingredients. How many pieces, cups, teaspoons, slices, etc. did you use?

**Kindergarteners Count** - Practice skip counting by fives from 5 to 100. Gather 100 pennies, put them in piles of five, and count the piles by 5s.

**Grade School Kids Count** - Practice telling time with your child to the hour or half-hour. Practice with different types of clocks and watches. Use both digital and analog clocks and watches.

**Babies Play** - Use your baby's toys to make comparisons. Talk about which toy is biggest and which is smallest. Talk about the toys that are about the same size.

**Toddlers Play** - Play with play dough! Make different size play dough worms and compare the sizes. Can you make a worm bigger than your toe? your foot? your arm?

**Preschoolers Play** - Play with water. Pour water from a cup into different size containers. How many cups of water will fit into each container? Find out which container will hold the most.

**Kindergarteners Play** - Make a boat that will float with five pennies inside. Try making boats with different materials – popsicle sticks, tinfoil, modeling clay, paper, etc. See how many pennies your boat can hold without sinking.

**Grade School Kids Play** - Play the game Piglet. Find instructions at <a href="https://bit.ly/31EvlyV">https://bit.ly/31EvlyV</a>.

**Babies Explore** - Let your baby explore different spaces. Where will your baby fit? A cardboard box, under the table, a corner of a room, a cereal box?

**Toddlers Explore** - Explore sound. Make percussion music with pots and pans. How does the pot sound when struck with a hand? with a stick?

**Preschoolers Explore** - Explore a plant. Notice the shape and size of the plant's leaves. Measure the length of the leaves.

**Kindergarteners Explore** - Explore volume. Find four containers of different shapes and sizes. Find out which one holds the most. Which one holds the least?

**Grade School Kids Explore** - Explore measuring tools. Figure out when it makes sense to measure objects in inches, feet, yards, and miles. What unit of measurement would you use to measure your height, the distance to another city, a pencil's length?



### STEM FAMILY ACTIVITIES

for independent learning

# SHAPES IN NATURE

#### **Activity:**

1. Have you ever noticed different shapes in nature? It's time to go on a shape hunt! Write down the following shapes on a piece of paper and go for a walk around your neighborhood. Write down what you find that matches the different shapes.

Circle Square
Triangle Rectangle
Oval Diamond
Star Heart

- 2. Challenges find an object in nature
  - has more than one type of shape
  - has more than 3 ovals
  - has more than 2 squares
  - has one small circle and one large circle

Create your own scavenger hunt!
 Instead of shapes, create a nature hunt where others have to find different colors, different sized objects, or objects that start with the letters of the alphabet.

- 4. If you can find the shapes in nature, then you can draw objects from nature using shapes. Try it!
  - Draw a tree using shapes.
  - Draw a flower using shapes.
  - Draw a cat or dog using shapes.

### **Optional Technology Connections:**

Watch this video to help you get ready to look for shapes in nature.

tinyurl.com/natureshape



Take pictures of what you find during your scavenger hunt. Show you pictures to someone else to see if they can figure out the shapes you found!

Use this template to create your own nature scavenger hunt.

tinyurl.com/hunttemplate

Want to learn how to draw animals by using simple shapes? Check out this tutorial video:

tinyurl.com/animalshapes



Optional: Go to this link to print a "STEM journal" to record your observations and questions.
tinyurl.com/STEMjournal11



fresno county superintendent of schools



For more resources or support, contact

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or visit our website: stem.fcoe.org