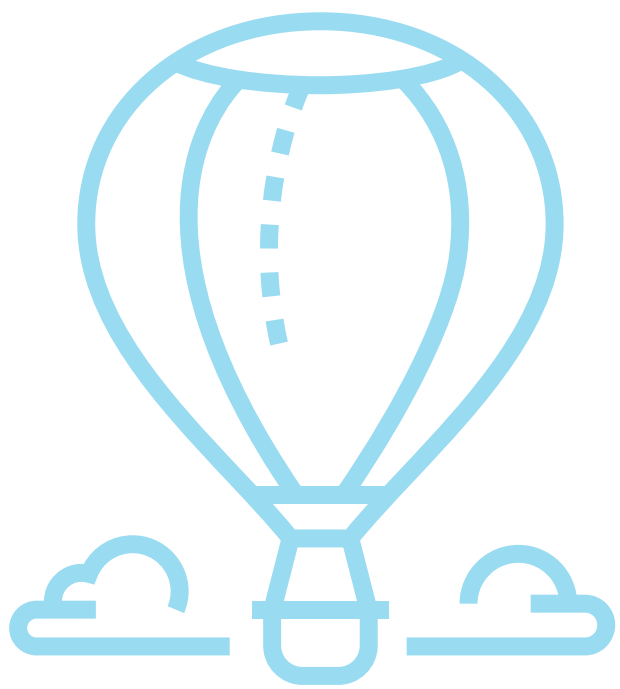


Finding Math

everywhere and anywhere

Instagram @Finding_Math

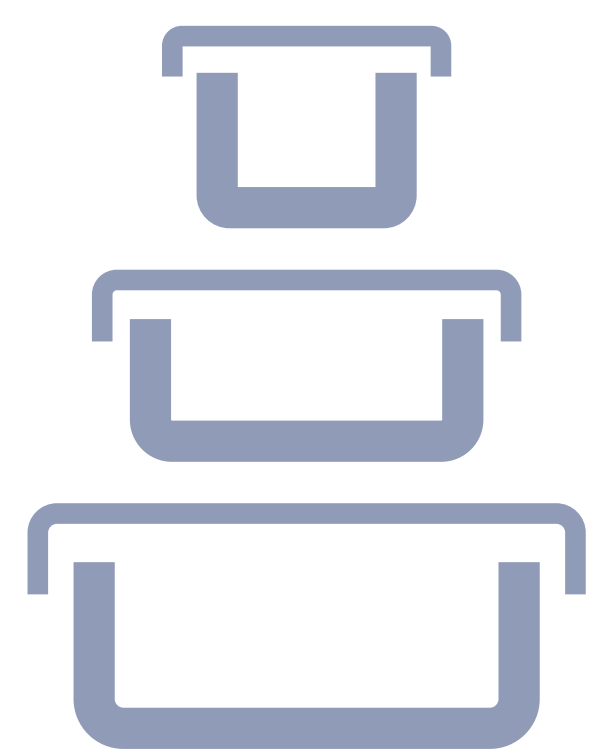


The sky is full of many things - birds, planes, stars, clouds, and insects. How many different categories of things can you find? Try recording how many different things you find in the sky each day for a week.

.....

A single object can have many different shapes. A round plastic tub may look like a rectangle from the side. A square blanket can be rolled into a ball. How many shape shifters can you find?

.....



100

Numbers can be used for many things, not just for counting. Try playing with numbers to describe different feelings. For example, "I'm feeling a 'one' (sad) today," or "I'm feeling a '100' (happy)."

.....

Look at a map together and talk about the shapes and patterns you see. What do the shapes and patterns represent? How does your home look from above verses from the street? How about a bus? The park?

.....



Use your own body to estimate and compare lengths and distances. Try having your child reach their arms out wide, and then find other things in your house that are that wide - a favorite chair? A doorway? The TV?

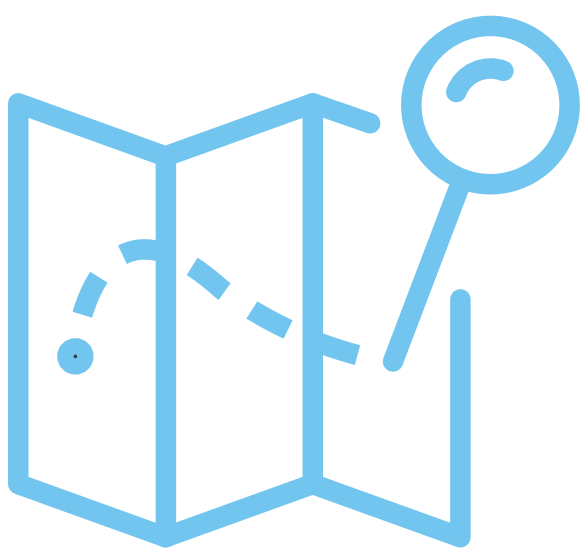
INSTITUTE FOR LEARNING & BRAIN SCIENCES

ilabs.uw.edu

Finding Math

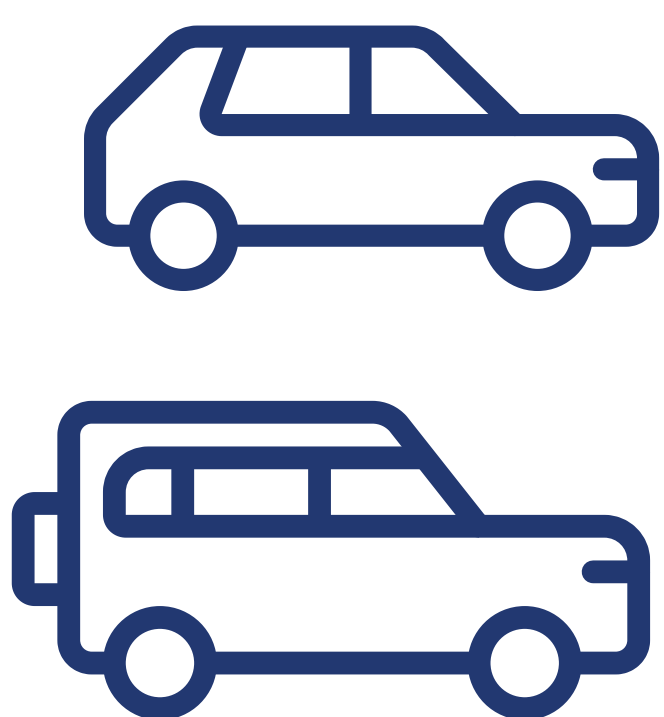
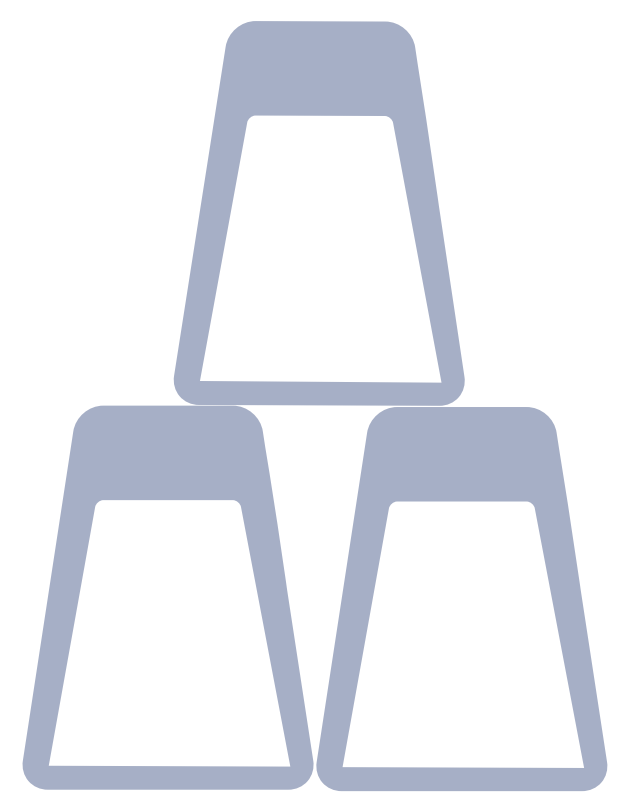
everywhere and anywhere

Instagram @Finding_Math



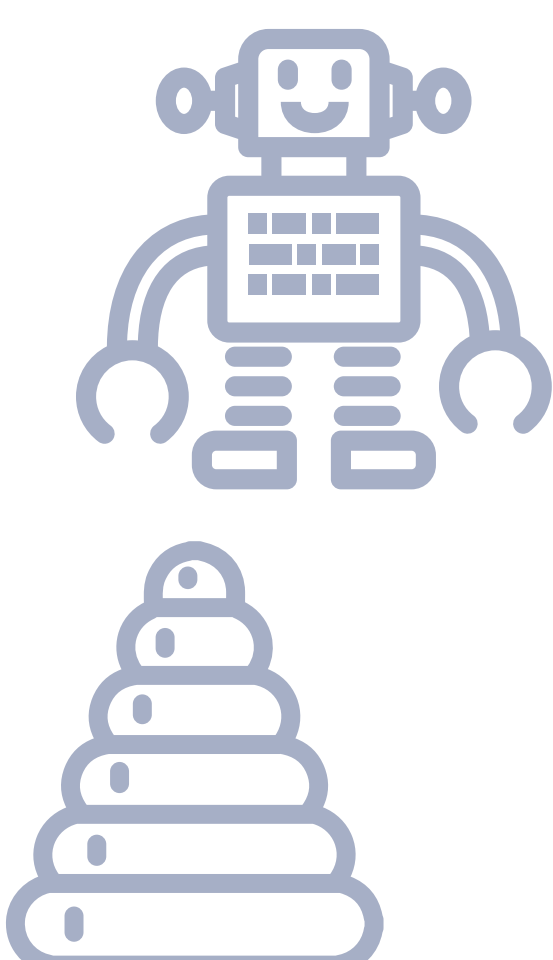
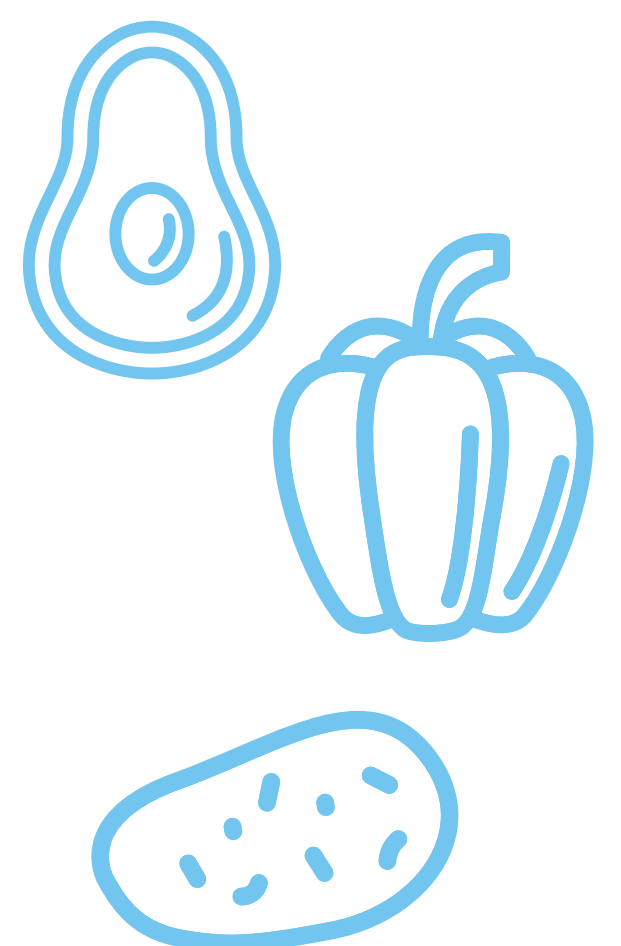
Creating a map is an opportunity to build spatial skills. First, think about what you could map out. Where is the cat's favorite spot in the house? Where do you keep the ingredients for your favorite dinner? Once you have an idea, work together to create a map.

Try finding something to build a tower with in each room of your home. Make sure it's safe! The towers may be big, small, straight or wobbly. What about pillows in the bedroom? Toilet paper rolls in the bathroom? Plastic cups in the kitchen?



Building a road is a fun way to develop spatial skills. On a sunny day, look for an open area of pavement at home or in the park. Then, use chalk to map out a road. Where does it go? What stops are along the way? Can you draw those too?

How do you create a meal in your home? Does dinner always include a vegetable? What about a starch or a protein? Talk about the categories of food you typically eat at breakfast, lunch, and dinner. How are they different? How are they the same?

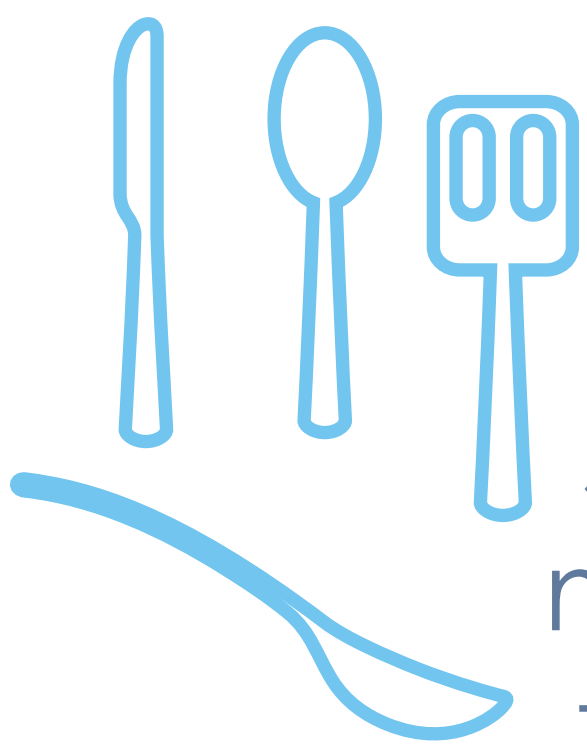


Research suggests that children explore math-related concepts about half of the time when they play. Next time your child is playing, do you notice them exploring themes like size, or categories? How might you join their play and help them to build those skills playfully?

Finding Math

everywhere and anywhere

Instagram @Finding_Math



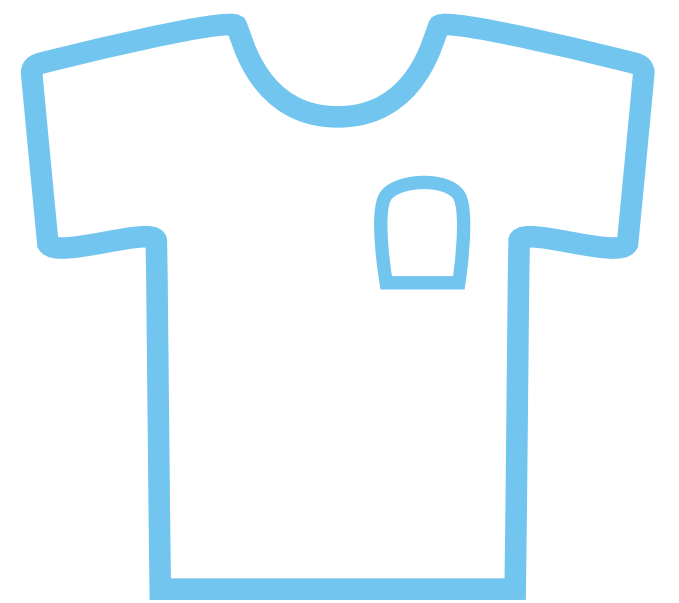
Do you like to make collections? Groups of toy cars? Stones from the beach? Action figures? Gather a favorite collection or grab a group of similar items like plates and bowls. How many different ways could you organize them? By Size? Shape? Weight? Color?

Try playing a direction game. One person gives directions, and the other(s) follow. For example, “take two steps forward, now one to the right...” Make it into a guessing game by having the direction-follower(s) guess where they are headed.



Gather a few different types of materials to build a tower. Check the recycling, the linen shelf, or the toy bin. Which materials are harder to build with? Why? Which materials can you build the tallest tower with? The softest? The funniest?

Check out your shirts. Which are your favorite? Which ones do you like less? Do your favorite shirts have something in common? Are they bright colors? Full of pattern? A certain style? Have a conversation about categories of things you like.



Spend some time looking out a window. Maybe at home or while you are in a car or bus. What do you see? Can you tell what season it is? How do you know? What clues do the plants, weather, or people's outfits give you?

Finding Math

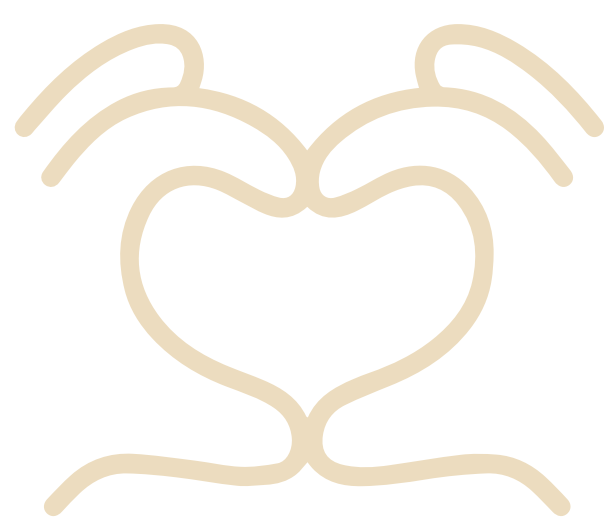
everywhere and anywhere

Instagram @Finding_Math



Using five fingers as a handy tool, see how many “fives” you can find at home. Maybe it is five slices of apple, or five bottles in the shower, or the number five on your house or apartment.

Can your hands hold a little, or a lot? Together explore size and shape by looking for something that your child can hold one of, two of, three of, and so on!



Hands are flexible, incredible tools. Working together, see how many different shapes you can make with your hands! Can you make a circle? A triangle? How about a tree?

We use our hands a lot, so we wash our hands a lot. Try creating different ways to measure how long it takes to wash and dry hands. For example, how many words of a song can you sing? Or how many silly faces?



Use your own body to estimate and compare lengths and distances. Try having your child reach their arms out wide, and then find other things in the house that are that wide - a favorite chair? A doorway? The TV?

Finding Math

everywhere and anywhere

Instagram @Finding_Math



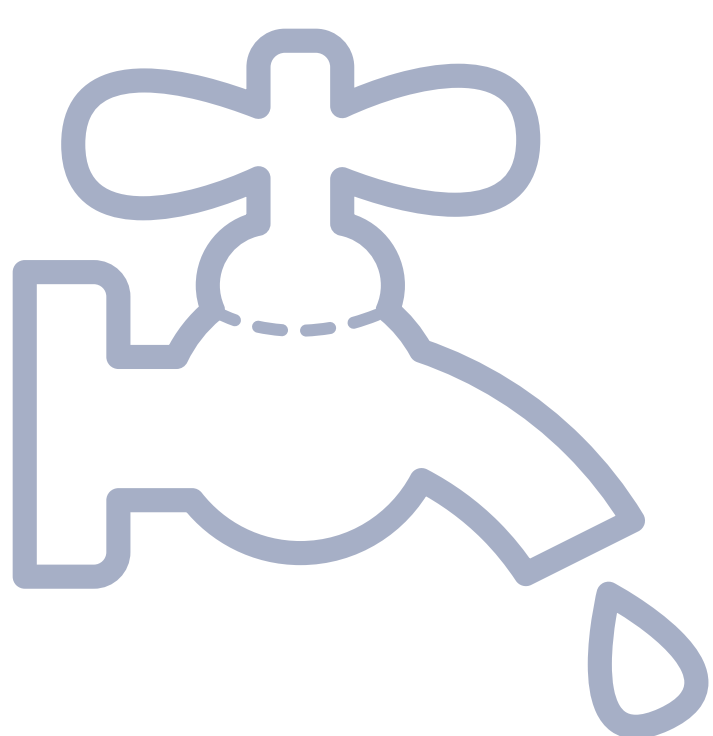
Does water have a shape? Explore this idea by filling a container with water. Then see how many different shapes water can shift into. Transfer the water into containers like pots, cups, or bowls.

What does it feel like to move your body under water? In the bath, in the pool, or at the lake, ask children to describe what it feels like to move their arm underwater. Does it feel different to move their arm fast or slow? With an open palm or a closed fist?



Do you ever drive over bridges? If so, which one is your favorite? Try to find pictures of the bridge. Then, try to build a copy of that bridge using building materials from your recycling.

Animals that live in the water come in all shapes and sizes. Have a conversation about animals that live in the water. How many different categories of animals can you think of? Consider animals that swim, animals that crawl, or animals that breathe air.



Take a walk in your neighborhood. Can you find any water? Do you live near a lake, river or a stream? Is someone in the neighborhood using a sprinkler? Or can you find a fire hydrant? How many different water sources can you find on your walk?

Finding Math

everywhere and anywhere

Instagram @Finding_Math



We wear many different hats. Have a conversation about the different hats you wear, and why you might wear one in the snow, or to the game. For fun, try collecting all the hats in the house.

Can you fit them all on your head at once?

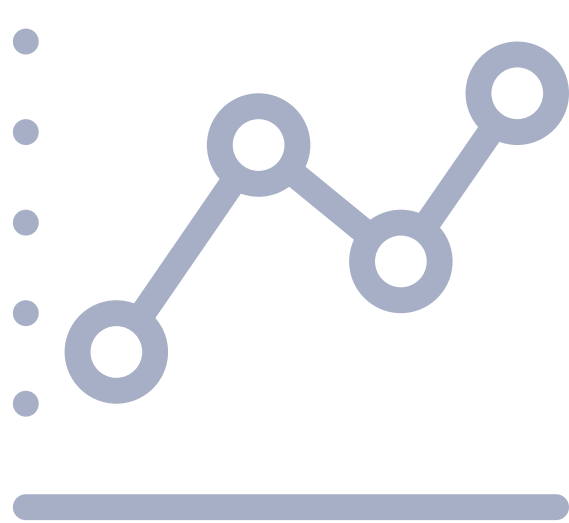
After a rainy day, find a puddle! See if you can see your footprints on dry pavement. What does the pattern look like? Who has bigger footprints? Who has smaller ones? Does the pattern change if you hop, skip, jump, or run?



What does a boat look like? What kinds of things in your home look similar and might float like a boat? Go on a hunt together to gather things you think might float. Then try them out in the sink or in the tub. Which one floats the best? The worst?

Cups and glasses come in many shapes. It might seem like they all hold different amounts (or volumes) of liquid, but often there are some surprising similarities.

Compare one to another by filling a glass with water and pouring it into the next. Does it hold the same, more, or less? Compare as many as you can!



It rains a lot in Western Washington, especially this time of year. Try tracking how many days it rains in a week, or even a month. Before you start, have every member of the family guess how many days you think it might rain. Who was closest?

Finding Math

everywhere and anywhere

Instagram @Finding_Math



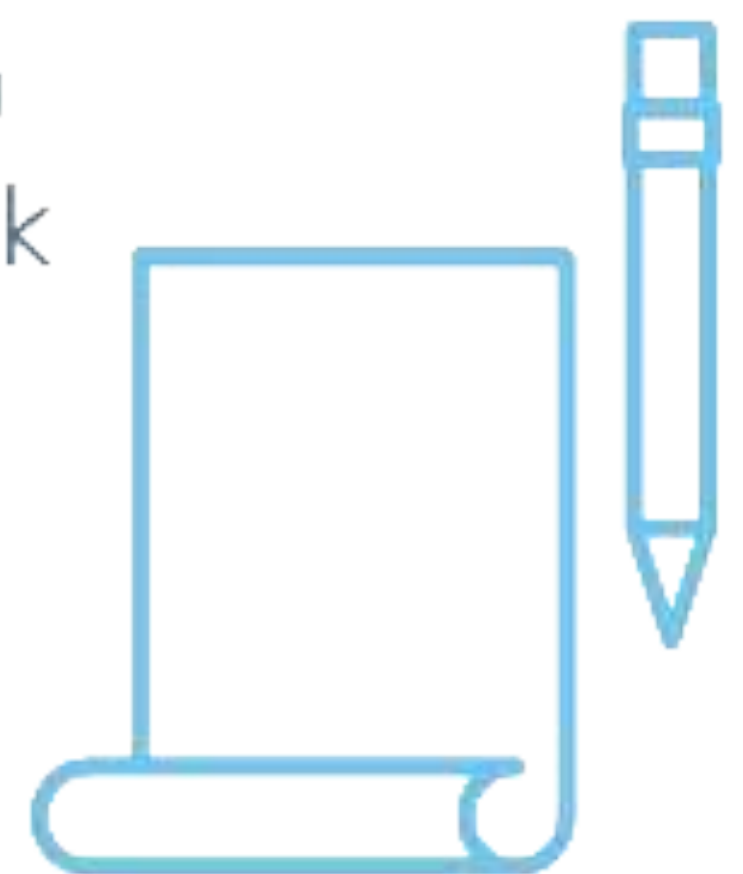
How old are you? How have you changed since last year? What do you know now that you didn't know then? What do you think you will learn next year?

We drink a lot every day. Try measuring how much you drink in one day. You could keep track of how many glasses of milk, juice, or water you drink. Or you could measure out an exact amount before you drink, and keep track throughout the day.



Look out through the nearest window. Can you see any trees? Which one is the tallest? The shortest? If you can't see any trees, what is the tallest thing you can see? Try looking out other windows. What's the very tallest thing you can see from a window?

How tall do you think you will be when you grow up? Where do you think you will live? What do you think you will do? Try writing a letter to your future self about all the things you think you would like to do and be. Then tuck it in a special place to read when you are older!



Pick a shape – any shape. A circle, a square, a triangle. Then, see how many circles you can find in one room. Once you've found all the circles, move on to the next room. Which room in your home has the most circles, or squares, or triangles?

Finding Math

everywhere and anywhere

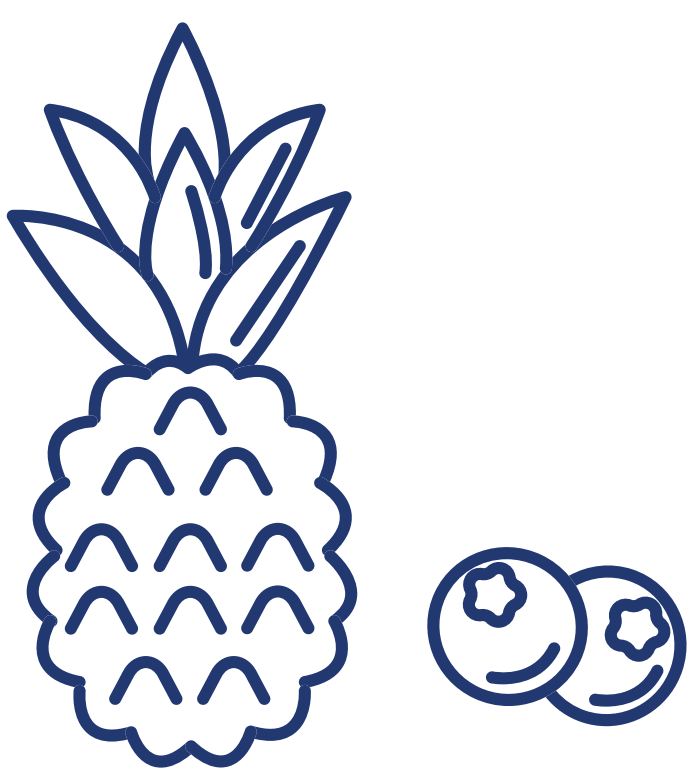
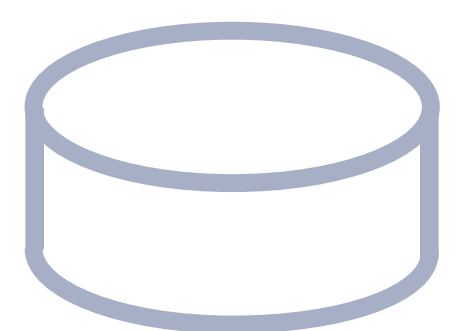
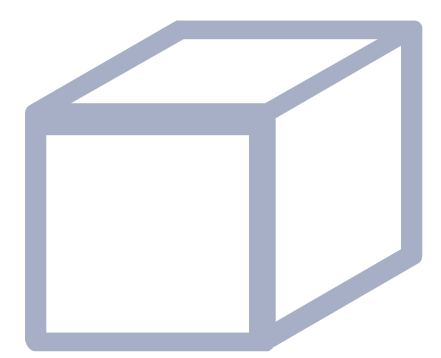
Instagram @Finding_Math



Water is one of the best exploration tools! Fill up a glass with water, and measure or mark the water level.

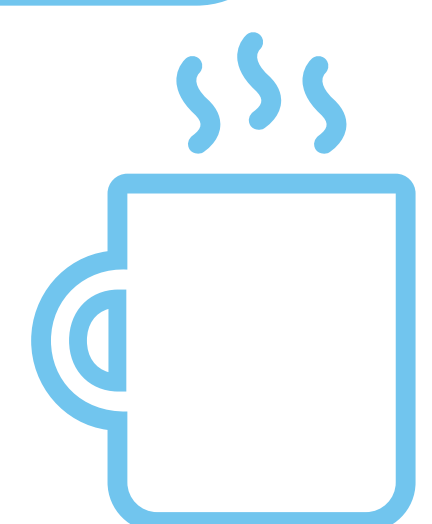
Next, drop an object into the water. How much does the water level rise? What does this tell you about the object you dropped in?

Try making a three-dimensional shape from a flat piece of paper and tape. How many different shapes can you make? Try making a cube, pyramid, or cone. What else can you make with a flat piece of paper?



At the grocery store or market, try finding the largest piece of fruit you can. Then try and find the smallest. How many small pieces equal one big piece? What do you think they each taste like?

Often the shapes that we think about are flat, like circles and squares. But most things around us aren't flat! Look at the objects you use every day and see if you can find some shapes. Maybe a circle in your mug? Can find a different shape if you look from the side?



Not all shapes are familiar. Try to find a shape that you don't know the name of. How many new shapes can you find? Draw each new shape. If you think the shape might have a name, try searching for it. Or make up a name for your new shape!

Finding Math

everywhere and anywhere

Instagram @Finding_Math

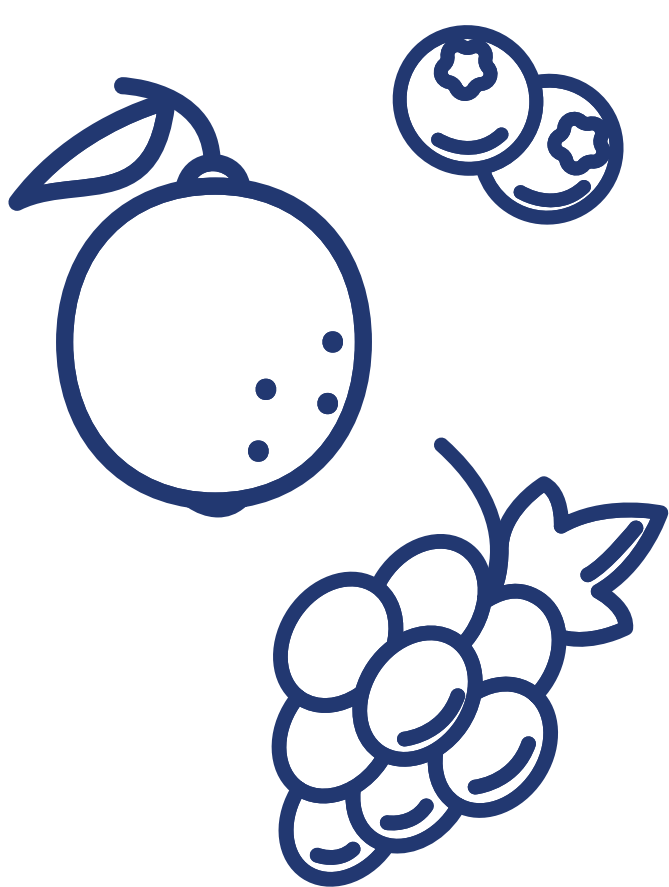
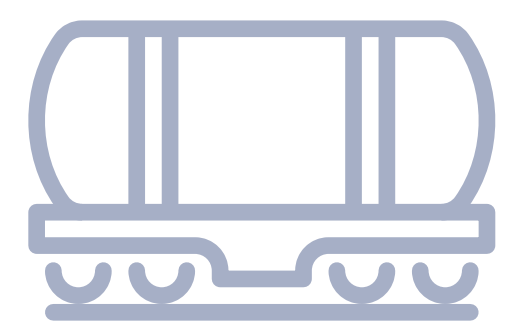
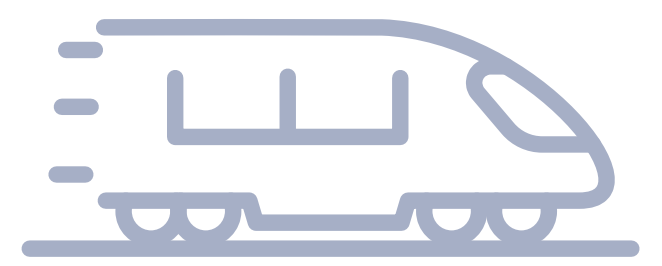


Next time you are at the grocery store, watch as the clerk packs the groceries into a bag. They are masters of spatial reasoning. Try practicing at home! Check your recycling for a bag and some containers, and start packing. Can you fit everything in one bag?

.....

Have you ever had to wait for a train while you sit in the car? Next time you are waiting in the car, try passing the time by thinking about what different kinds of things could be in the train. How many different things can you think of?

.....

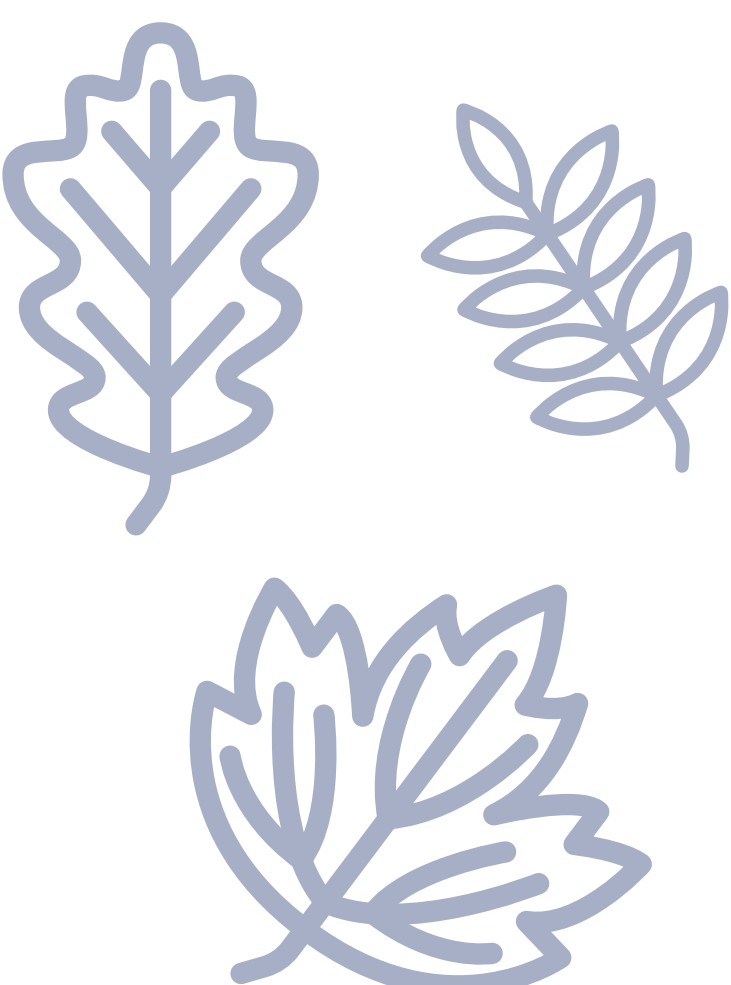
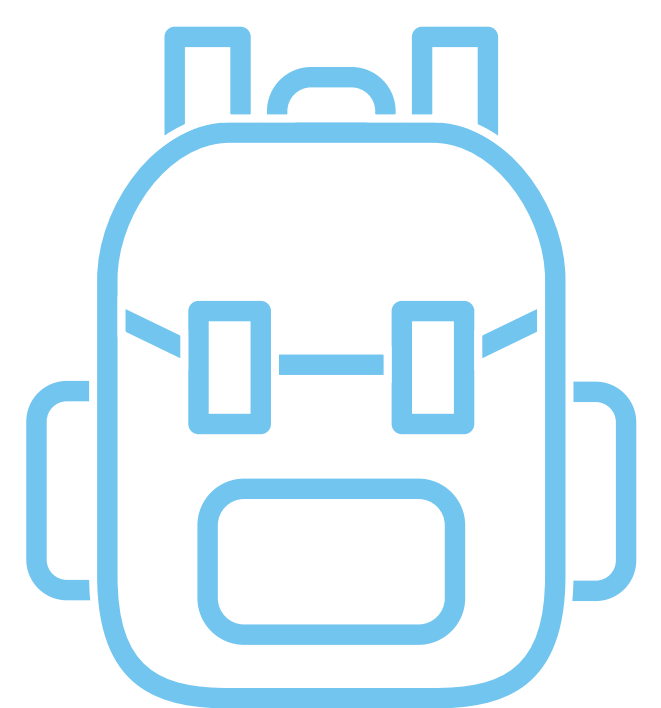


At the grocery store, find a scale in the produce area. Pick three of your favorite fruits and weigh them. You might try apples, oranges, and bananas. How many bananas do you need to reach 2 pounds on the scale? How about oranges? Apples?

.....

Pick somewhere that you would like to visit. Maybe it is grandma's house, or maybe it is the moon! Then, pack a backpack with everything you think you would need for an overnight trip. Don't forget clothes, snacks, and toys!

.....

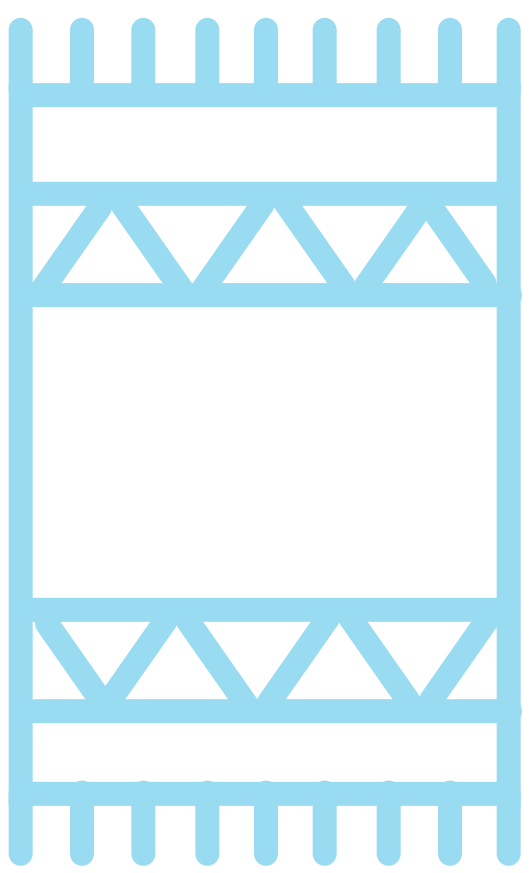


Practice counting and learning about categories by making a collection. Try working together to make a nature collection. Everything in your collection could be the same (rocks for example). Or it could be grouped by category, such as things you find in the park.

Finding Math

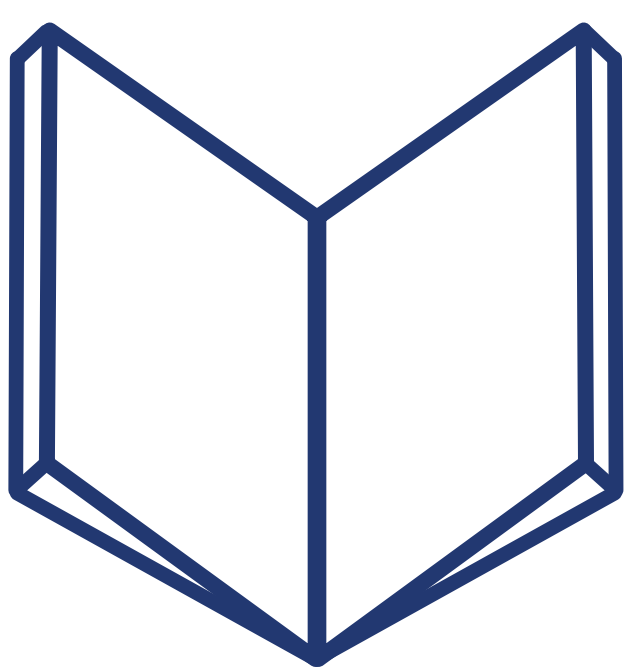
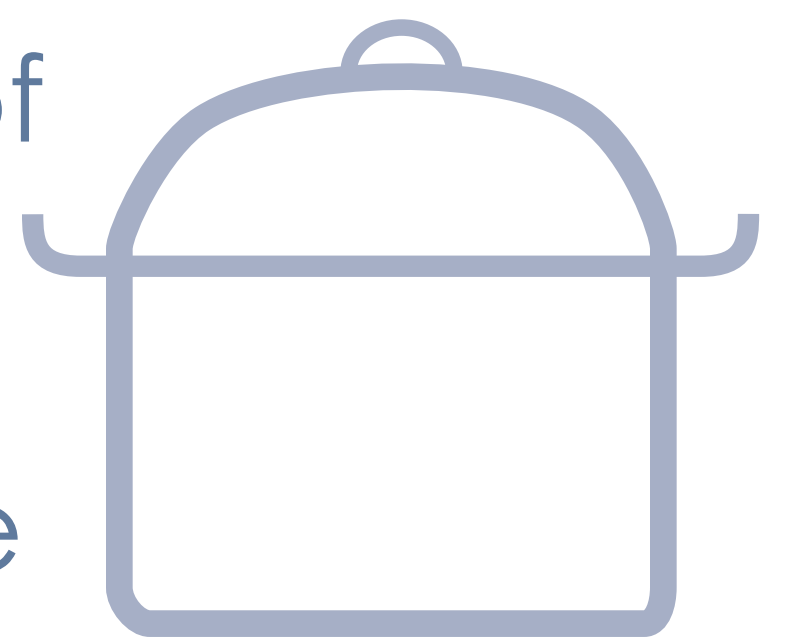
everywhere and anywhere

Instagram @Finding_Math



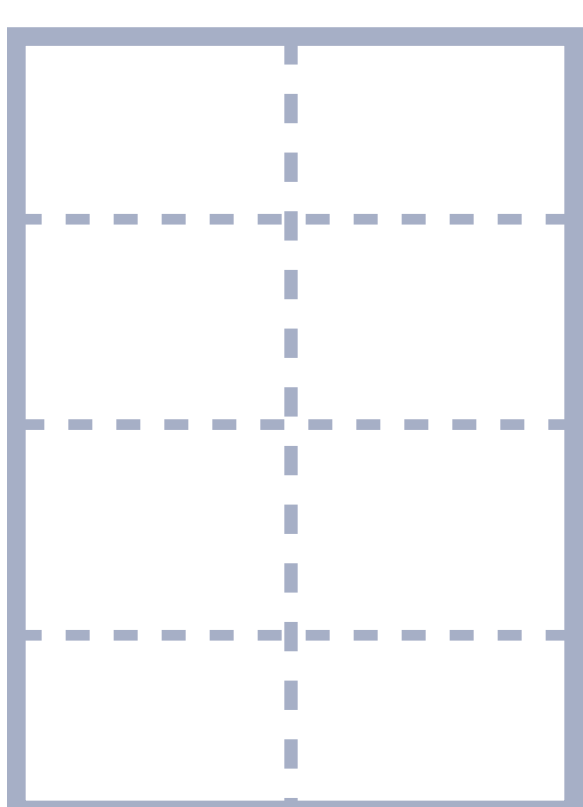
There are patterns under our feet! Can you find designs that repeat on a rug? Is there a pattern in the wood floor? Find as many different types of floor patterns as you can in one day.

Together, you can think about what foods float or sink in a pan of water. Does pasta float before it is cooked? How about after? What about rice? Or your favorite vegetable?



Reading books is a wonderful place to explore math together. In addition to counting objects, you can talk about where on a page a character is drawn. Or you can talk about how long it takes you to read one book verses two books.

In one family, we are often different heights. Baby brother is shorter than big sister. Mom is taller than auntie. The cat is the shortest of them all. Talk about what it is like to be different heights. What is your experience? Share how you see the world.



Dividing can be tricky. Try starting with a piece of paper. How could you create two pieces? Eight pieces? Do you have more or less paper than you had before? Why?