

Versatility of Math at Home: A closer look at lower elementary math concepts adapted for home learning

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On March 13, educators all over Michigan began scrambling to put together material that could be adapted for home learning. In many cases, that included worksheets upon worksheets! I remember feeling worried that many of my young students who preferred visual and tangible methods of learning would struggle. After brainstorming and planning for weeks ahead, I discovered that the math tools I used in my classroom could easily be substituted by common household items and math concepts could be manipulated to fit into learning at home. Below, I outline math learning ideas for 1st grade students.

One of my favorite math tools to teach with is a ten frame! In my classroom, I use ten frames for number talks, to teach addition and subtraction, and to play math games. Students can make their own ten frames at home with an egg carton! An egg carton can be cut to make 10 spaces (or two egg cartons to make 20 spaces). A variety of items can be used to put in the spaces – Legos™, marbles, pom poms, goldfish – the possibilities are endless! The ten frame can be used to aid in addition and subtraction problems, or it can be used to play math games. With UNO cards or regular playing cards, students can draw two cards and add the numbers using the ten frame. Students can also play ‘Race to 20’ with two ten frames by rolling a dice (or drawing cards) and adding to the frames until they get to 20. This is a great game to play with family members!



During the last couple months of school, my first-grade class typically begins the Geometry unit – it is one of my favorite units to teach! When we begin learning about 2D and 3D shapes, my students go on a shape scavenger hunt in the classroom. This is a versatile activity that can be done at home, at the park, or in the neighborhood. Whether it be a tissue box, or an ice cream cone or soda can, students will begin recognizing the shapes all around us!

SHAPES SCAVENGER HUNT

primary playground

- Find something that turns that is a circle.
- Find something in the kitchen that is a square.
- Find 4 things that are rectangles.
- Find something in the shape of a heart.
- Find something in your room that is a rectangle.
- Find something that is a cylinder in the kitchen.
- Find something that is the shape of a triangle.
- Find something shaped like a cube.
- Find 3 things that are circles.








In first grade, students also learn about fractions! This is another math concept that can easily be adapted for home learning. By the end of first grade, students should be able to recognize and create halves and fourths. This is a fun concept that can be explored using food! At breakfast, students can divide a pancake into two or four equal parts to share with a family member. At lunch, students can make two or four equal parts of a sandwich.



At snack, students can divide a cookie into two or four equal parts. Hands on learning that involves food is always a win-win!