

## School to Home Math Engagement for Families

First Grade: 2023-2024

Math Unit	Links to Resources (Parents)	Links to Resources (Teachers)
<b>Unit 1</b> <b>Extending Number Sequence – Understanding to Build, Compare, and Interpret Numbers within 120</b>	<a href="#">Top Marks Math</a> <a href="#">Make Mathematics Count GA</a> <a href="#">Math Games</a> <a href="#">Counting On</a> <a href="#">Five Frames</a> <a href="#">Ten Frames</a> <a href="#">Number Rack (Rekenerek)</a> <a href="#">Okta's Rescue</a> <a href="#">Number Frames App</a>	<a href="#">Illustrative Mathematics Tasks</a> <a href="#">Let's Learn Georgia</a> <a href="#">Math Learning Center Activities</a> <a href="#">Number Frames App</a>
<b>Unit 2</b> <b>Building and Explaining the Relationship Between Addition and Subtraction</b>	<a href="#">Addition and Subtraction Ladder Game</a>	<a href="#">Illustrative Mathematics Tasks</a>
<b>Unit 3</b> <b>Sorting, Sifting, and Shifting Shapes and Patterns</b>	<a href="#">Partitioning Fraction Circles</a> <a href="#">Virtual Manipulatives</a>	<a href="#">Illustrative Mathematics Tasks</a> <a href="#">Fraction Kahoot!</a> <a href="#">Virtual Manipulatives (Pattern Blocks)</a>
<b>Unit 4</b> <b>Exploring Meaningful Measurements</b>	<a href="#">Create A Clock</a> <a href="#">Learn to Count Money</a> <a href="#">Money Activities</a>	<a href="#">Illustrative Mathematics Tasks</a>
<b>Unit 5</b> <b>Problem Solving to Answer Real Life Questions</b>	<a href="#">Comparing Numbers</a> <a href="#">Big Puppy Canoe Race</a> <a href="#">Addition and Subtraction Practice Activities</a> <a href="#">10 more or 10 less lesson</a> <a href="#">10 more or 10 less Song</a> <a href="#">Telling Time Practice</a> <a href="#">Telling Time Activities</a>	<a href="#">Illustrative Mathematics Tasks</a> <a href="#">Telling Time Activities</a>
<b>Unit 6</b> <b>Culminating Capstone Unit</b>		PBL to be completed during the last week(s) of School, or throughout the 2 <sup>nd</sup> semester.

**Additional Engagement Activities that are NOT Online:****Unit 1:**➤ **Hundreds Chart Bingo**

Provide students with a number chart (1-50). The object of the game is to get 4 counters on numbers that are next to each other. ○ Give students clues for numbers to color/ cover up. ○ For example: A number that is one more than 17; A number that has a 3 in the tens place; A number less than 10; etc.

➤ **Statistical Reasoning Practice by investigating statistical investigative questions:**

The following questions are provided to get you started. However, you may wish to entertain your own questions.

- Does a plant grow faster when watered with soda, water, or milk?
- Which brand of bubble gum will give you the largest bubble?

- On a trip to the zoo or aquarium, data could be collected to answer questions like:
  - How many animals have no legs, 2 legs, 4 legs, more legs?
  - Are there more animals with fur than those without fur?
  - How many animals are larger than a golden retriever?
- How many convenience stores (clothing stores, variety stores, etc.) are there in our community?

### **Unit 2:**

- Engage in conversations about quantities within 20 in your everyday lives (such as a carton of eggs, a box of doughnuts, basketballs on a ball rack, pictures hanging on your wall, windows on a home, etc.). Ask your student to describe how they see that quantity and to explain their thinking. Listen for ways your student describes how they compose and/or decompose the quantities.
- To complete a 3-Act Task, students must discuss what they notice and wonder about mathematical situations in their daily lives. Families can encourage this thinking by having students ask questions and verbally establish a plan of how some of their “wonders” could be answered.
- This same activity can be duplicated by drawing two playing cards (using cards numbered 2-10) or two dice. Using standard dominoes, dice and/or playing cards, students can use the representations (the pips on the dice and dominoes as well as the cluster of suit graphics on the playing cards) to assist with further experimenting with joining or separating.
- Students should see data collection as a way to gather information. Have students gather data on things in their daily lives by surveying family members on things such as a taste test, an activity to complete with their family (such as which board game to play or movie to watch) or collecting items around the house and sorting them based on attributes.
- Continue to practice solving for an unknown. As you see single digit numbers or quantities in your daily lives (items in a package, digits on a card or dice, numbers on shirt or graphic) and question your student on that number’s distance from 10.

### **Unit 3:**

#### ➤ **I Spy a Shape**

Identify objects around your house that are different shapes (square, triangle, cube, cone, circle, etc.) Take turns choosing an object and describing the attributes of that object.

- **Practice With Shapes** (*See link for Virtual Manipulatives above*)
- **Shape Hunt**

Have your child go on a shape hunt for 2-dimensional and 3-dimensional shapes around the house. You could give them specific requirements for the shapes they have to find. For example:

- Two or more shapes that make another shape
- Solids that are like a box, a cylinder, a pyramid, a cone
- Five shapes that are alike in some way

You can have them take pictures of the items or draw them on a sheet of paper to display and make a shape museum.

#### ➤ **Fraction Conversations**

Foster conversations of equal shares and partitioning during daily conversations. For example, This will naturally occur when splitting a tasty treat such as a cookie or brownie.

#### ➤ **Exploring Patterns and Shapes**

Look for fabric or artwork around your house that has patterns or shapes.

Talk about the shapes and patterns in the fabric.

Talk about symmetry and the sizes of the shapes.

### **Unit 4:**

### ➤ **Measurement Conversations**

Encourage conversations at home about length measurement. This would include conversations of comparisons using the terms taller/shorter, longer/shorter, and equal. Conversations about measuring items with nonstandard units are really helpful to build connections for students. Those conversations could include questions like “How many playing cards long is our kitchen table?”

Encourage your students to discuss measurements in their daily lives. This could include conversations of “longer/shorter” to describe length of step, string, or even length of items around the house such as a blanket.

### ➤ **Estimating Measurement**

Students will be strengthening their estimation skills. Encourage students to make predictions with activities such as “How many steps will it take us to get across the room?” Once students make a prediction, measure, and reflect on how their estimation aligned with the true measurement. Now, what would happen if you took smaller steps? What would happen if you took larger steps?

#### ➤ **Create a Clock** (*see link above*)

Call out an activity and allow students to determine the approximate time it would occur. Students should show the time on their created clocks. Have the students show the time on their clock. Give the student time to explain/ justify their answer.

**Suggestions:** What time would you: Eat dinner? Get dressed for school? Attend baseball practice? Sleep? Take a bath? Read a book? Have recess? Eat lunch? Write a story?

### ➤ **Counting With Money**

Engage your students by asking them to count coins with them. While students are counting, encourage them to establish a process to keep track of their thinking. In some situations, counting coin values from largest to smallest, while in other circumstances establishing a benchmark number of ten or five is helpful.

## **Unit 5:**

### ➤ **Data Collection**

Students should see data collection to gather information. Have students gather data on things in their daily lives by surveying family members on things such as a taste test, an activity to complete with the family (such as which board game to play or movie to watch) or collecting items around the house and sorting them based on attributes.

### ➤ **Counting Coins**

Discuss coin values with your student by asking them to assist you in counting change. Also consider providing your students with an amount and challenging them to create a coin combination to establish that coin total.