MATH IN THE KITCHEN

Parents and families have always been important teachers of math concepts. Anytime you are cooking, counting or sorting in your household, you are doing math!

BAKING WITH FRACTIONS

One of the best ways to build fraction concepts is to bake, using only 1 measuring cup marked with 1 fraction. For example, when baking cookies, use only the ¼ measuring cup. If the recipe calls for $\frac{1}{2}$ or 1/3 of something, you have to convert the fraction and estimate. If the recipe calls for 1 cup, you have to practice addition ($\frac{1}{4} + \frac{1}{4} + \frac{1}{4} = \frac{4}{4} = 1$ cup).

FOLLOWING DIRECTIONS WITH PB&J

Practice following directions by asking your child to "direct" you in making a peanut butter and jelly sandwich. Do everything they say and don't do what they don't say. For example, if they don't tell you to use two slices of bread, start with one. If they say put peanut butter on one side and jelly on the other, flip it over and have one side with each. Do goofy things whenever you can. The messier the better! Then your children can see how important it is to pay attention to details. You can post a simple directions chart on the frig after you negotiate the correct plan and eat it!

MATH IN STORIES

During this difficult time, children may find solace in stories. There is always math in stories. There are things to count, things to compare (which is more, which is longer for example) and problem-solving situations. Don't just discuss the characters and the setting, but also look for the math in the story. There are a number of books that bring out math concepts and operations. If you don't have these books at home, many authors are allowing teachers to upload readings on **YouTube** and **Audible** is currently offering free audio books.





Here are some of my favorites:

| Title | Author | Math Topics |
|--|-----------------------|---------------------------|
| The Doorbell Rang | Pat Hutchins | Division |
| Measuring Penny | Loreen Leedy | All types of measurement |
| One Hundred Hungry Ants | Elinor Pinczes | Multiplication & Division |
| Pete the Cat and his Four Groovy Buttons | Erik Litwin | Subtraction |
| Spaghetti and Meatballs for All | Marilyn Burns | Area, Perimeter, algebra |
| Which One Doesn't Belong | Christopher Danielson | Geometry (all ages) |
| The Math Curse | Jon Scieszka | Problem-Solving |

MATH IN WRITING

When you are teaching your child strategies to solve problems it might help to do some writing. Using the following graphic organizer 4 square, students can write the strategy they are learning and the steps to implement it. They should also write about why they are doing this step. It might be helpful to do this together first and then again after practicing.



| Today I learned how to | | |
|------------------------|---------|--|
| First I | Next I | |
| Because | Because | |
| Then I | Last I | |
| Because | Because | |

MATH IN EVERYDAY STATISTICS

STATS IN STORIES



Why look at stats and data? They tell a story! Here's how you can use them to write your own.

Watch these videos that connect to the book *If America Were a Village* by David J. Smith:

- Business Insider
- Igor Gaspar

COLLECTING DATA AT HOME

During the quarantine lots of students are collecting data on what they see outside a window every day. Collect your own data for an hour every day. At the same window and same time, make tally marks of what you see (# of birds flying in the sky, # of cars that pass, # of people that walk by, sounds you hear, etc.).

Then look for the story in your data. Is this the time the mail comes? Are there birds that seem to be there every day? How many? Is there someone that walks their dog?

If you don't want to look outside your window, use a webcam on a web site. Again, at the same time, for an hour, record your data. I like the **Monterey Aquarium** web cams - they have one that is open sea. You never know what is going to show up! My guess is they also keep data because it gives them information about the life in the sea.

Once you've collected your data, you can try making a graph of your findings. Bar Graphs work well. More important than making the graph, though, is looking at what it shows you!

Anytime you look at a graph, look for the story in the number. When one item of data is more than another what does that tell you?



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