

Math Corner

TNCDSB

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Have Fun Building Math Skills this Summer

If children don't engage in learning activities over the summer, they typically forget some of the math they learned during the school year. A study done by the University of Missouri shows that on average, students lose about 2.6 months of their math learning over the summer. *(Great Schools Staff, June 5, 2018)*

Make math relevant to daily life. Point out how numbers are used everywhere: mileage signs, prices, movie times, clothing sizes, recipes, etc. Highlight ways that you and your family use math everyday: clocks, calendars, money and measurement. Ask questions to encourage math talk, "How many do you see? How far do you think it is? What shapes do you see? How many more are there?"

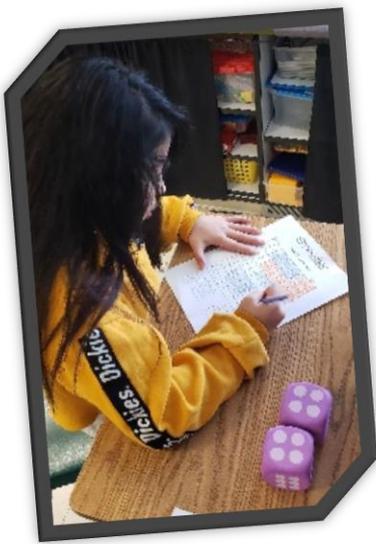
Encourage your child to estimate. Children are naturally curious, so ask 'I wonder' questions: "I wonder how many cherries will fit in this bowl? I wonder how long it will take to walk to the beach? I wonder how much these popsicles will cost? I wonder what this watermelon weighs?" Ask your child what they think the answer is and encourage them to give reasons for their estimate. Asking, "Does my answer make sense?" encourages them to think mathematically about the question, instead of just guessing. It is important to follow through with the actual answer and compare their estimate.

Count, count and count again! Count your steps, count the cars you pass, count the people on the bus and the food on your plate. Count forwards and backwards. Count by 2's, 5's, 10's, 100's. Switch it up, start at a random number and count by 10's, "83, 93, 103, 113, 123..." Give your child lots of opportunities to count up to the next ten or hundred because children often struggle with this. A few examples: "Start at 49 and count up by ones, count forward by 2's starting at 198, start at 580 and count up by 10's." Do you remember "One, Two, Buckle My Shoe" or "The Ants Go Marching"? Use the old songs and rhymes from your childhood to help your child learn to count.



Ask questions and be genuinely curious about what your child is thinking.

Be relaxed and positive! You are essential to your child's success in math. Your encouragement, interest and positive attitudes about math go a long way in helping your child. Many adults have negative feelings and anxiety towards math. When we speak negatively to our children about math it affects their behavior toward math and their belief about their own abilities. Show your child that you are willing to tackle problems that challenge you. Talk out loud as you work through problems, make mistakes and change your thinking. This models what 'thinking things through' and problem solving look and sound like. Don't give up on a problem, admit that you may need some help and ask for it. As much as we believe that math is a solitary endeavor, mathematicians discuss their ideas, seek others' opinions and appreciate feedback about their work. Studies have shown that effort trumps ability when it comes to learning math. Set high expectations and nurture perseverance and problem solving, not just in math, but as the necessary skills needed in everyday life.



Play games and build things together! Board games, cards, dice and dominoes are all games that help children learn valuable math skills. Playing games builds their understanding of numbers and operations and supports learning math facts in a fun and engaging way. Don't forget puzzles, mazes, Legos and building blocks. This type of play develops spatial reasoning, which is the ability to think about objects in three dimensions and draw conclusions about them with limited information. This reasoning helps us to locate our car in a parking garage, know if an item will fit through a door or know whether one object will stack on another.

Talk, talk and more talk! Through games and play you introduce valuable math language to your child, such as more, less, equal and positional language like next to, on the right, over or behind. When you speak to your child remember to use different math terms. Instead of always saying 'bigger', is there a more specific word you could use? What about longer, taller or wider? Make sure to ask open-ended questions, take the time to listen to the answer and the reason behind it and be ready with follow-up questions to keep the conversation and the thinking going! The more you talk with your child about math, the more their mind is stimulated to think about math. Starting school with a good language base will give your child one more tool to support their learning.



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Here are 5 simple ways to seamlessly integrate number sense activities while driving in the car, cutting vegetables, waiting in the dentist's office.....
from www.FamilyMathNight.com.

What's the Question?

Give your kids the answer and have them come up with the problem.

For example: The answer is 7. What's the question?

Sample answers: I had 10 grapes and then I ate 3. How many grapes are left?

Who Am I?

Not only are these perfect for mental math practice, but they are a great way to reinforce math vocabulary.

Sample: I am an even number greater than 10, but less than 20. The sum of my digits is 9.

Who am I?

Which Number Does Not Belong?

This is a pre-algebra activity where kids sort and classify numbers into categories.

For example: Which number does not belong: 4, 12, 17, 8, 20?

Sample answers: The number 17 does not belong because it is an odd number.

Or the number 12 does not belong because the sum of its digits is an odd number. (Be careful, there may be more than one answer, so remember to listen to their thinking!)

Which Has More?

A great mental math activity that gets kids to compare several quantities at the same time.

Example: Which has more, the number of wheels on two cars or the number of eggs in a dozen?

And the Answer is....

For this activity, kids need to compute a series of quantities in their head.

Example: Start with the number of days in a week. Subtract the number of wheels on a tricycle. Double that number. And the answer is....



If we show our children that math is about wondering, investigating, puzzling, playing and brainstorming together, then math becomes a fun family activity!

Have questions or need information? Contact Michelle George at migeorge@tncdsb.on.ca