

March 2021



# Home Connections in Mathematics

## Are We There Yet?

Short jaunts in the car can be a great time to continue to build your child's sense of numbers and how they are used in the world around us. Below are a few things you might try.

### Count

Young children love to count, and counting is a foundational skill. Driving anywhere can provide lots of opportunities to count types of cars, buses or trucks. Children sometimes struggle to count over the decade or century- up and over a ten or 100. You can help to count up and over the decade or century by modelling counting and then discussing patterns in our number system. It is also valuable to take opportunities to count by numbers other than one. For example, you might count by twos to count the tires on trucks, count by fours for legs on horses or cows.

### Notice, Read and Talk About Numbers in the World

Students often struggle relating a number to the quantity it represents. Try a scavenger hunt for different numbers. Challenge your child to find a spot where she might find about five, ten, 50 or 100 people. Discuss with her how to determine if she is close to the target. Older children might benefit from comparing populations to numbers familiar to them. The populations of smaller centres might be compared to the number of students in their school. Larger centres might be compared to the population of the town or city in which you live. By doing activities like these, we can help students develop a sense of quantity and personal benchmarks to use when estimating.



### Engage in Real-life Proportional Reasoning

As students move from grade to grade, the curriculum requires them to do more and more proportional reasoning. Travelling presents many opportunities to engage your child in authentic situations where he or she considers how two quantities scale together. When filling the gas tank, have your child check the level of the gas tank before filling. Share the capacity of the tank and ask



them to predict the number of litres and the cost of the gas.



"Are we there yet?" is a great question to turn back on your children and play with. Share with them the length of the trip. Have them track on road signs the distance to the

destination or the next stop. Predict the length of time to the destination based on the speed you are travelling, or the time taken to your current location. Check predictions against the predictions on the GPS or App.

### Play With Numbers

Some of the long hours in the car can be spent playing with numbers to enhance students' understanding and enjoyment of math.

*Guess My Number* is a game that is easily played that reinforces some key ideas about the relative size of numbers. To play the game, select a range of numbers comfortable for the children playing. One player chooses a number and others try to guess that number. After each guess, a hint is given as to whether the guess is too high or too low. Challenge your child to develop a strategy to make the fewest guesses or develop a strategy with them.

McNugget Numbers are a set of numbers that can be fun to play with. Originally, Mc Nuggets were sold in boxes of 6, 9, and 20. A McNugget Number is a number you can make combining the numbers 6, 9 and 20. (For example, 15 is a McNugget number because you could order a box of 6 and a box of 9.) You could challenge younger children to find the numbers of McNuggets that could be ordered between 10 and 20 with only boxes of 6 and 9. Older students could be challenged to find numbers of McNuggets that could **not** be ordered with whole boxes of McNuggets or even the largest number that could not be ordered. (It is 43.) Finding all the McNugget numbers would be a great family challenge.



Children benefit from the opportunity to understand how numbers are used in the world in many useful and enjoyable ways.