

## Building Children's Math Comprehension

By Ann McCue – Instructional Coach



If you looked twice at the title, then you are not alone. Comprehension is not a word that we have come to associate with Math. Usually when parents meet with teachers, **reading** comprehension ranks high in conversations. We know how important it is for students to grow their comprehension of the texts they read. This also holds true for problem solving in math. Comprehension is vital in understanding the math that students are asked to work through daily. Just as in reading, the more students understand what is being asked, the higher the likelihood that they will be successful in selecting the correct operation, the correct tools to assist them, and then provide the correct application of these to the problem at hand.

The exciting part is that some of the same reading components, strategies, and skills can also be applied to math. This helps students to bridge the work they do in reading with their work in math. So, instead of reading and math being separate entities, they become more closely connected to each other, making it more unified for the student. Following are some reading concepts that you can use to help your child with mathematical problem solving.

1. *Look for **vocabulary** and check understanding of these terms.* Vocabulary plays a prominent role in math comprehension, just as it does in reading. Math concepts such as place value, telling time, geometry, etc. have their own distinct set of vocabulary, just as we find specific vocabulary when learning about earth science or government, etc. Checking your child's understanding of terms as they occur in their work, will allow you to assist your child in creating and deepening their understanding, sooner rather than later, within the current unit.
2. *Ask your child to **retell** in their own words.* Building further upon comprehension, when students retell a story in reading, it gives us clues as to how well they are understanding what they have just read. Similarly, when students can retell a problem, it gives us insight into how well they are comprehending the sequence in which the problem has been presented.
3. *Ask your child to **visualize** each part of the information within the problem.* In reading when we teach students to visualize, we begin doing this sentence by sentence. Students read, and create a mental image of the description. The same holds true when reading a word problem. Have your child read each sentence, stop to visualize, and then finish by telling what they "see."
4. *Does your child know what the **question** is asking?* Asking and answering questions is a mental process good readers do automatically. For math, it is the crux of word problems. If it is unclear what the question is asking, then the task of answering with accuracy becomes challenging. One of the ways we can help is by asking, 'What is the problem asking me to find?' and then helping your child isolate those parts within the problem, to **give evidence** of this.
5. *Determine if the answer **make sense**.* When children are learning to read, one of the most important strategies that teachers teach is to stop and ask if what was just read makes sense. If it does not make sense, then the child is asked to go back and reread in order to correct the error, so that the text will make sense. In math, we can apply that principle to our answers. Your child should check their answers with what they have read, and what the question is asking, to determine if their answer is plausible. If not, then they would go back and adjust, bringing alignment to the answer and the problem.

The level of problem solving that our students encounter today is so much deeper than when I was an elementary student. Connecting reading strategies to math can help students gain meaning and understanding, so they can set up problems correctly, and ultimately solve them accurately. Using what they already know in reading to help in math is a great way to do this! If you would like to know more about helping your child with problem solving techniques, please feel free to contact me or your child's teacher directly.