

### **What's the purpose and goal for these Mental Math problems?**

The objective for mental math is to build up the students' automatic mathematical thinking. K12's curriculum doesn't provide the opportunity for students to practice and develop this skill. The more students realize they can figure mentally, the more confident they will become in their math abilities.

### **What is the best way for us to do these problems?**

Print off the page—but don't let the students to see the problems. The goal is for them to hear the problem and to figure the answer without calculator or pencil/paper, so they listen and solve it all mentally. The mental math should only take 10 -15 seconds to do. These can be done while waiting for the bread to toast, microwave to run or other times—the idea is to be low key, but it is important to do this daily vs. doing them all at one time.

The questions build on the answer of the previous problem—so they take the answer from the first question and remember it to apply the next question to that number.

Example: What is  $\frac{1}{2}$  of 16 , then what is  $\frac{1}{2}$  of that number, and what is the product of that number and 10.

### **Is there an organizational plan to the problems?**

There will be a general two week 'theme' to the questions with the hope being that by the end of the second week they have developed their mental math muscles on those concepts. We will also incorporate math vocabulary into the questions to increase the students' familiarity with them.

### **Can we do more if we want to?**

Yes, but not to the point that it is overwhelming to the student. Some students will savor the chance to do more, while other students could become more anxious.

### **What if the problems are too difficult for my student at this time?**

If your student is struggling with them, then work with your student explaining how you would think to figure out the question. This is a great opportunity to share short cuts in thinking that you find helpful—we want to build up the natural sense of math within the student. It would be helpful then to create a new set of similar problems for your student to do.