

## **\*\*Problem Solving Math Homework Guidelines\*\***

Dear Parents,

Math homework this year will consist of four math problems each week. The homework will be handed out on Monday and is due at 8:00 a.m. on Monday of the following week. The homework also requires a parent signature. This can be you or any other adult at home or school. Make sure before you sign the homework that you do two things: check to be sure the work is complete and have your child explain at least one problem to you. Parent involvement is **important**. The problems will provide students the opportunity to think on a deeper level in order to problem solve math concepts we will have covered in class. Each problem requires the student to complete several steps in order to fully understand the concept of problem solving.

The first step, **Understand**. The students are required to read each problem two times. Then they should underline the question only. Next, they should put a box around any important words or numbers in the question that will be needed to solve the problem. Next, they go back to the rest of the problem and continue to box important words or numbers that will be useful in solving the problem. Lastly, they should cross out any extra information that may confuse them in solving the problem. They will record the information in 2 boxes. 1. Question Summary: What do I need to find out? 2. Important Information: What do I know?

The second step, **Plan**. This is where students make a plan on how to solve the problem using the information they know. Again, there are 2 boxes. 3. Draw a Picture: This can be a strip diagram, a pictorial model, a table, a number line, or other way of modeling the problem. 4. Operation: Write a number sentence or explain how you will work the problem. We are starting the year writing number sentences but will move towards explanations. Ex: *I will find the sum by adding 39 and 165.* 😊

The third step, **Solve**. Students are required to show their work to solve the problem in this box. They also must check their work. Most often they will do the inverse operation but could also write a fact family, draw a picture, or show another way to solve. They should put a box around their number answer.

The fourth and final step, **Check**. In this box students will evaluate whether their answer makes sense and check to make sure their solution answers the question. They should write a complete sentence that answers the original question.

Students will turn in their homework by 8:00 a.m. on Monday. The teacher will check to make sure each student has a parent signature and has fully completed the four problems. If the homework is not complete or is not turned in, the student will still be required to complete the work to receive their grade.

The students will have opportunities to collaborate with their classmates on how they solved the given problems. Math problems can be solved many different ways. It is important for students to see that their peers may get the same answer but that they solved the problem differently. The collaboration time is important for students to be able to verbally explain to their peers how they think through, or problem solve, in order to solve a problem.

Attached you will find an example of a "Problem Solving" math homework problem with all the steps completed. We have been solving problems using this format each day in class. The sample is to show you, the parent, what is required for each of the four problems that will be assigned weekly. Each week the answers to the homework will be uploaded to the Third Grade page at [perry.mansfieldisd.org](http://perry.mansfieldisd.org). If your child would like to pull up the homework and check their answers to ensure a perfect score, that is okay with us! If they get stuck or need help, they are welcome to use this resource as well. We hope to make this an easy practice for you and your child.

If you have any questions regarding the math homework please, do not hesitate to contact your child's teacher. If your child needs extra help with homework, they may attend Homework Club from 7:30 to 7:55, Tuesday through Friday.

Sincerely,

*Brandie Horne & Michelle Meister*

[BrandieHorne@misdmail.org](mailto:BrandieHorne@misdmail.org)

[JoyMeister@misdmail.org](mailto:JoyMeister@misdmail.org)

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