Dear Parents,

Problem solving is a fundamental goal of any strong mathematics program. Our school is committed to making each of our students a problem solver. It is never too early or too late to develop the real life learning skills of problem solving. Therefore, our school is embarking on a Problem of the Month program to help achieve this important goal.

Each month we will present our students with a non-routine problem for them to attack and solve. The problem will have several levels so that all students at our school will be able to work on a part of the problem appropriate to their learning development. All students should start with level A and work through the different tasks. It is understood that some students will not get too far into the problem. The process of attacking and struggling on a non-routine problem is important to learn. When your child has reached the maximum level of his/her understanding, please celebrate their progress.

Trials, errors, and retries are key attributes of good problem solvers. We ask you to encourage your students to persevere. Many students might want to initially give up. The best support for your student is encouragement through good questions. Some good questions are*: What have you tried? Why do you think it doesn’t work? Have you tried to make the problem simpler? What do you need to know to be able to solve the problem?* There are many other good questions; however, leading or guiding questions are not helpful. The process of finding and understanding a solution outweighs the benefit of having a correct answer. Doing the problem for the student actually hurts the problem-solving process. Many students will receive the hidden message that they can’t solve problems by themselves, and will learn to stop and wait for someone else to answer.

You will play an important role in supporting your child’s work on these problems. Once students have reached their level of understanding, they are asked to complete a write-up of their findings. Students should communicate how they went about solving the problem as well as the solution they found. This write-up helps students understand how they think and approach new problems. We look forward to a partnership with you around problem solving. Thank you for supporting your child.

Sincerely,