Summer Math Expectations/Opportunities for Rising 3rd Grade Summer of 2020

## Our expectations for rising third graders is fluency in addition and subtraction facts through the sum of 20.

Throughout the school year, students have learned and practiced essential math facts as a regular part of their math instruction. We would like students to gain competence with these math facts so they will return to school in August ready to work with mathematical concepts that go beyond the basic facts. To this end, students need to be fluent with the specific facts for their grade level.

Fluency is defined by Fosnot and Dolk (2001) as "knowing how a number can be composed and decomposed and using that information to be flexible and efficient with solving problems." While it is useful to hold some math facts in memory, it is important to learn them in different mathematical situations. Jo Boaler, in her book Mathematical Mindsets, discusses the development of fluency as developing number sense and focusing on big ideas and the connections between them.

While students still need to have efficient recall of math facts, we are learning that they can best assimilate these facts through the use of numbers in a variety of ways and in different situations. So, this summer, we are hoping you can expose your children to a variety of math experiences. We encourage our returning students to utilize IXL this summer to continue the work they were doing during the school year (new students will receive IXL login information from the IT department by the week of June 15th). We are also providing you with a ten week calendar with daily math activities. Some of these suggestions may be to solve a problem, look for math in their everyday world, or play a math game with someone at home. There are fluency practice sheets as well. These are suggestions for Monday through Friday, although you certainly could do them as it suits your family's schedule. Your child can mark off the days that they have completed on the calendar to keep track and use the journals to solve any of the problems.

Please notice on the webpage that there are games that your child may enjoy playing to review important skills. A PDF with the calendar and the activities may be found here as well.

We wish you and your young mathematicians an exciting summer of exploration!

