

## 4<sup>th</sup> Grade Math Differentiation

Dear Parents,

It is hard to believe that first quarter is already behind us! We wanted to share a little more about our differentiation plan for 4<sup>th</sup> grade math this year.

We are committed to supporting the idea of a growth mindset in math, including the belief that it is not meaningful to categorize ourselves as either "good or bad math people." Math is a very broad area that is made up of a variety of concepts and skills. We all have strengths and areas for growth within these different math areas. This is the basis for our flexible grouping within the classroom, which simply means that students can be grouped in various ways throughout a unit based on individual needs, demonstrated by pre-tests. We would like to highlight a few ways in which we are providing differentiation in the classroom.

Our Bridges Math curriculum offers built-in remediation for students who need a little more support, enrichment for students who are ready for more of a challenge, and "just right" work for students who are progressing appropriately with the grade level skill. It is important to note that a student could require enrichment in one skill area, but then require the "just right" or remediation work in another skill area. In the same way, a student might be very strong with rote math that follows a standard formula or procedure, but struggle with the conceptual understanding that is required to apply this skill in a project, word problem, or novel situation. Below, is a list of ways in which support and challenge are integrated into the Bridges Program.

- Support and Challenge work within lessons (see page 2 for example)
- Challenge problems on Home Connections and Student Workbook pages
- Leveled Work Places (math games done as centers)

In addition to the built-in support in the lessons and workbooks, we are also providing differentiation by implementing a variety of instructional approaches. Short, whole group mini-lessons are given to explain new concepts. Small groups with the teacher provide an opportunity to work with students on their individual levels. One-on-one check-ins with students are also conducted, as needed. At times, we will also add additional challenge problems to homework and classwork and pull from other resources, when assessment shows students need this. Students are formally assessed at the beginning and end of each unit, but also informally multiple times during instruction. Please see the email from Alison Gammage (sent on Oct. 30<sup>th</sup>) for additional information regarding assessment.

Please let us know if you have any questions regarding math differentiation. We are excited to continue to grow confident mathematicians this year!

Sincerely,

Katherine Lee & The Fourth Grade Team klee@sttimothys.org



## **Example of In-Class Differentiation:**

Students completed ratio tables using their understanding of number patterns, repeated addition, and ultimately 1-digit x 2-digit and 2-digit x 2-digit multiplication. To complete their tables, students used a strategy of choice. Some students used repeated addition, other students recognized patterns, and others used the standard algorithm for multiplying multi-digit numbers.

The strategies students chose provided some differentiation, but students were also given their "multiplier number," which provided additional differentiation as some numbers were more difficult to work with than others. All students worked on the same skill, but to varying degrees of difficulty.

Observation of student approaches to classwork is one example of how we informally assess students' understanding of concepts and develop a plan of instruction to grow them as mathematicians.

REMEDIATION (	x9)
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1	9
2	18
3	?
4	?
5	?
6	?

...continued to 30

"JUST RIGHT" (x14)

2	28
3	?
4	?
5	?
6	?

...continued to 30

CHALLENGE (x49)

1	49	
2	98	
3	?	
4	?	
5	?	
6	?	
continued to 20		

...continued to 30