

Summer Math Practice

Dear Rising Third Grade Parents,

Automatic recall of basic math facts is so critical to development in math that it must be given serious attention. It makes possible a greater understanding of number sense, the foundation for all higher-level mathematical thinking, and forms the brush strokes with which higher-level math concepts are painted. Basic fluency in math facts is a must for students to have the confidence and capacity to do basic computation as well as think freely about the big ideas in mathematics. When students do more than just memorize facts but engage also in rich mathematics activities, such as those presented here, students learn and can remember math facts with greater fluency. The goal is that students can answer a math fact in about 3 to 4 seconds. Throughout this second grade school year your child has grown immensely in this area. Continued practice of **addition and subtraction math facts up to 20 and multiplication and division facts for 1, 2, 3, 4, 5, and 10** during the summer is key to maintaining that growth and preparing your child for next year.

There are a variety of fun and easy ways to practice math facts. Here are a few ideas.

Check out a variety of addition, subtraction, multiplication, and division activities on our TCA website.

<https://www.tcatitans.org/family/elementary-parent-resources>

Here are some suggestions that are particularly good for preparing for third grade:

- All activities under Addition and Subtraction
- Multiplication and Division: Clear the Board and Traffic Light Flash Cards (Just use fact cards that multiple and divide by 2, 3, 4, 5, and 10), Four in a Row, and Multiplication squares 2-5-10

Online Resources: *(As with any online resource, we suggest adult supervision of sites with advertisements)*

<https://xtramath.org>

All Grade Levels – All facts - Tracks student progress and customizes the practice based on need

www.mathfactcafe.com and www.aplusmath.com

All Grade Levels – All facts - Practice flash cards online or build math practice sheets

<http://www.arcademicskillbuilders.com>

Math Games for All Grade Levels – All Operations - Look for games that encourage a speedy response to develop fluency.

The “Bedtime Math” app. (available on the app store) Gives daily problems that are differentiated with layered difficulty for all grades.

Card games, dice games, and board games are a great way to practice math skills while enjoying some family fun. Some suggestions: Yahtzee, Aggravation, Shut the Box, Uno, Phase 10, Qwirkle, Sequence, or any game that requires problem solving, counting, or number patterns.

Four in a Row

Product	80	27	7	6	2	12	20	7	70
	25	40	36	14	8	16	35	9	6
	2	50	32	45	21	10	3	6	12
	24	4	6	24	90	28	20	3	18
	18	40	8	12	16	5	35	4	24
	1	12	28	35	18	8	10	70	30
	10	15	5	32	40	24	9	15	60
	28	9	14	45	80	6	30	18	20
Factor	1	2	3	4	5	6	7	8	9
	1	2	3	4	5	10			

Directions:

Materials: 30 Counters for each player. Each player needs something different or a different color (Cereal, beads, candy, dry pasta) and 2 additional counters for the factor rows.

- Play with two players.
- The object of the game is to get four counters in a row.
- Player One places a counter on one factor in each row at the bottom of the game board.
- Player One determines the product and places a counter on that number. Say the multiplication number sentence and one of the division number sentences out loud for added practice.
- Player Two chooses one factor to change. For example, if Player One placed one counter on 6 in the top factor row and a counter on 3 on the bottom factor row, then Player Two will choose to move **either** the counter on the 6 or the 3 to create a new multiplication problem.
- Player Two determines the product and places a counter on that number.
- Players take turns changing one factor to make a new problem until one player has four counters in a row: vertical, horizontal, or diagonal.

A video demonstration is available here: <https://www.tcatitans.org/family/elementary-parent-resources>