

Summer Math Practice

Dear Rising Fourth 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 third 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 up to 12** 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>

All the activities under Multiplication and Division are especially helpful for preparing for fourth grade. If your child does not have automaticity of their addition and subtraction facts there are several good activities to help develop that too.

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, Uno, Phase 10, Qwirkle, Sequence, Shut the Box or any game that requires problem solving, counting, or number patterns.

Multiplication Squares 1-12

12	10	11	20	6	54	77	10	25	22	80	24
110	33	1	15	2	36	8	48	18	33	30	84
14	15	20	10	40	48	12	121	16	24	7	72
30	40	4	66	30	2	35	36	22	60	9	81
88	12	24	8	64	84	40	3	90	42	45	12
10	60	6	21	27	48	20	44	6	24	99	42
77	108	48	11	63	50	70	28	56	132	30	96
120	36	66	24	18	35	60	4	63	16	108	32
20	27	5	8	36	18	7	70	16	99	36	120
50	8	30	40	36	14	54	44	80	28	6	56
12	55	55	4	32	8	96	72	88	60	9	144
100	9	18	24	3	72	45	20	5	90	49	12

Materials: Regular deck of playing cards (remove the Kings, and use the Jacks as 11 and the Queens as 12)
Two different colored pencils, highlighters, markers, or crayons

Directions:

- Play with two players.
- The object of the game is to “capture” or shade in the most squares.
- On each turn a player draws two cards and multiplies the numbers together to find the product.
- That player then draws a line on one side of that product.
- The goal is to “capture” the product by boxing it in. The player who completes the square shades it in.
- If there are no places to play on the board, the player loses a turn.
- Play continues until all boxes have been shaded in.
- The player with the most “captured” squares is the winner.

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