



Summer Math Suggestions for Students Entering Grades 1, 2, 3, and 4.

Throughout the summer, many skills children have learned throughout the school year can be forgotten. It is often referred to as summer learning loss, proving that math skills must be constantly practiced. We hope that during summer, our students will continue practicing the skills introduced, developed, and mastered throughout the school year.

We ask students to continue this practice by working individually or using various online resources listed below for summer support this summer. Students transitioning from Carrollton's Montessori 5 program into our Primary first-grade classes will feel comfortable using familiar Montessori vocabulary/language and manipulatives when reviewing math lessons. Working on assignments and providing manipulatives like counters would help students solve equations. Below is a list of concepts and skills introduced, developed, and mastered throughout this school year and are potential areas for additional practice throughout the summer.

Entering Grade 1:

- Count to 100
- Count by 2s, 5s, and 10s
- Number recognition to 100 (in numerical order and out of numerical order)
- Practice addition and subtraction through 20 using manipulatives
- Write numbers to 100
- Write and solve an addition or subtraction equation ($2+2=4$)
- Solve single-digit addition and subtraction stories
- Compare single-digit numbers (greater than or less than)
- Subitize (identify the number of items in a set without counting)
- Place value of 2-digit numbers (tens and ones)
- Find page numbers in books
- Fact fluency: ways to make 5 ($1+4$, $2+3$, $5+0$) and ways to make 10 ($0+10$, $1+9$, $2+8$, $3+7$, $4+6$, $5+5$)

Entering Grade 2:

- Counting by 2s, 5s, 10s, and 100s
- Addition facts to 20
- Subtraction facts to 20
- Place value of three-digit numbers (hundreds, tens, and ones)
- Name and identify the value of coins
- Reading and writing numbers up to 100
- Compare double-digit numbers
- Telling time to the hour and a half hour
- Adding tens and ones with regrouping
- Subtracting tens (i.e., $60-40=20$) without regrouping
- Interpreting a bar graph, picture graph, and table graph
- Two-dimensional and three-dimensional shapes
- Measuring length in inches, feet, and yards

Entering Grade 3:

- Applying Addition and Subtraction Strategies
- Adding two and three-digit numbers with regrouping
- Subtracting two and three-digit numbers with regrouping
- Adding three or four two-digit numbers
- Skip Counting by 2s, 5s, 10s on a Hundred Chart
- Recognizing even and odd numbers
- Place Value to 1,000
- Counting Money (pennies, nickels, dimes, quarters, dollars)
- Analyzing data from (bar graphs, picture graphs, and line plots)
- Taking Surveys and Recording Data to Create a Tally Chart
- Telling Time to the hour, half-hour, quarter-hour
- Understanding A.M. and P.M.
- Measurement using inches, centimeters, feet, yards
- Understanding Customary and Metric Measurements
- Two-Dimensional Shapes
- Three-Dimensional Shapes
- Using Strategies to Solve Multi-step word problems

Entering Grade 4:

- Multiplication tables 0-12
- Division as it relates to multiplication
- Fractions: $\frac{1}{4}$ $\frac{1}{2}$ $\frac{3}{4}$, ordering, finding equivalent fractions
- Using benchmarks to compare fractions: 0, $\frac{1}{2}$, 1
- Place Value to 10,000
- Perimeter and Area
- Subtraction into the hundreds place
- Subtraction with zeros
- Measurement - using rulers - inches & centimeters
- Geometry - attributes of polygons, triangles, and quadrilaterals,
- Understanding angles
- Strategies for solving multi-step word problems
- Creating and interpreting data from a bar graph, picture graphs, and line plot
- Multiply with multiples of 10
- Distributive property of multiplication

Additional Math Resources that we use in Lower School:

<https://www.math-drills.com/multiplication.php>

<https://www.khanacademy>

<http://www.summerbridgeactivities.org/>

<https://www.ixl.com/>

<https://www.math-aids.com/>