



Math Summer Learning Packet

Seattle Public Schools is committed to making its online information accessible and usable to all people, regardless of ability or technology. Meeting web accessibility guidelines and standards is an ongoing process that we are consistently working to improve.

While Seattle Public Schools endeavors to only post documents optimized for accessibility, due to the nature and complexity of some documents, an accessible version of the document may not be available. In these limited circumstances, the District will provide equally effective alternate access.

For questions and more information about this document, please contact the following:

Shannon Matthews
Admin Secretary, Cascadia Elementary
smmatthews1@seattleschools.org

The Math Summer Prep is for incoming Cascadia students or current students who want to bridge or maintain their math skills. At Cascadia, students are working two levels above grade level. For example, a student who has completed first grade and starts as a second-grade student at Cascadia will study fourth grade math. It provides a variety of printable materials, web based materials, and math skill building games.

Summer Math Guide Grade 2

What incoming 2nd grade Cascadia math students should know:

- Multiplication facts 1-10
- Adding/subtracting multi-digit number with regrouping (up to 4 digits)
- understand place value up to 1,000,000
- Fraction basics
- Estimating and rounding whole numbers

Suggested Schedule: Do what works best for your family. While the printable packet and interactive websites do provide some feedback, having an adult there to further explain will help a lot!

Potential 30 min. Schedule:

- 5 min. -- warm up with a game*
- 5 min. -- watch a video to refine a skill
- 15 min. -- interactive website or packet work
- 5 min. -- use new skills to replay game

Potential 15 min. Schedule:

- 5 min – warm up with a game* or watch a video to refine a skill
 - 10 min – interactive website or packet work
- OR**
- Play a game for 15 minutes*

**If your student does not yet recall multiplication and division facts with fluency (10 – 15 second recall), please have them review their facts daily. The online flashcards at Mathigon have an excellent approach. See link under Interactive Websites for details.*

Resources:

Videos: These short videos (~ 5min.) to help students “warm up” to math work.

Games: These are games that you can print out, obtain at a store, or access online. The Envision math curriculum has online games which are included here.

Interactive Websites: Links to iXL & Kahn Academy as well as Mathigon. Kahn Academy has a wonderful “Get Ready Series” for summer. Links are related to topics for that week. Use what appeals to your student – different websites have different approaches.

Printable Packet: Focused practice on the weekly topic to print and complete at home. The Envision math curriculum provides at home activities for families which are included here. Parent help is essential to help students complete the worksheets. **Complete as much as needed to feel confident in the topic.**

Math Tool Kit: A set of quick reference sheets students could use in the summer and during the school year.

Week 1: Multiplication 2, 3, 4, 5, & 10 facts

Videos	Games	Interactive Websites	Printable Packet
2 facts: double! 3 facts (fun!) 4 facts 5 facts 8 facts 10 facts	Number Run: all operations through 10 (<i>app available through Apple App store & Google Play</i>) Blockout (can be played with paper or online)	Multiplication by Heart flashcards IXL Relate addition and multiplication for equal groups Write multiplication sentences for arrays Write multiplication sentences for number lines Multiplication tables for 2, 3, and 4 Multiplication tables up to 5 Multiplication tables for 2, 3, 4, 5, and 10 Multiplication tables for 2, 3, 4, 5, and 10 Multiplication facts for 2, 3, 4, 5, and 10: true or false? Multiplication facts for 2, 3, 4, 5, and 10: sorting Multiplication facts for 2, 3, 4, 5, and 10: find the missing factor Kahn Academy Get ready for multiplication (Get Ready for 4 th Grade) Basic Multiplication Multiplication Tables for 2 - 9 Multiplication for 10, 11, & 12 Get ready for division (Get Ready for 4 th Grade)	Week 1 Printable Packet
			Math Tool Kit
			2nd Grade Math Tool Kit

Week 2: Multiplication 6, 7, 8, & 9 facts

Videos	Games	Interactive Websites	Printable Packet
6 facts 6 facts (song!) 7 facts 7 skip count 9 facts (90s themed!) 9 facts 9 facts finger trick	Number Run: all operations through 10 (app available through Apple App store & Google Play) Blockout (can be played with paper or online)	Multiplication by Heart flashcards IXL Multiplication tables for 6, 7, 8, and 9 Multiplication facts for 6, 7, 8, and 9: true or false? Multiplication facts for 6, 7, 8, and 9: sorting Multiplication facts for 6, 7, 8, and 9: find the missing factor Kahn Academy Get ready for multiplication (Get Ready for 4 th Grade) Basic Multiplication Multiplication Tables for 2 - 9 Get ready for division (Get Ready for 4 th Grade)	Polypad Website guide Week 2 Printable Packet Math Tool Kit 2nd Grade Math Tool Kit

Week 3: Place value up to 1,000,000 and estimating & rounding

Videos	Games	Interactive Website	Printable Packet
Finding value of a digit up to 100,000 Place value up to 1,000,000 (hundred thousands)	Triple Digit Dare (printable game – see Polypad Website Guide for online game pieces)	Multiplication by Heart flashcards IXL Place value - tens and ones Place value - up to hundreds Place value - up to thousands Convert between place values - ones, tens, and hundreds Convert from expanded form - up to hundreds Estimate to the nearest ten Round to the nearest ten Round to the nearest ten or hundred Place value models up to thousands Place value names up to thousands Place value names up to hundred thousands Value of a digit Round using a number line: nearest ten or hundred Rounding: nearest ten or hundred Rounding Rounding money amounts Rounding puzzles Estimate sums by rounding: up to 1,000 Rounding up to the 1,000,000s place	Polypad Website guide Week 3 Printable Packet
Rounding Numbers to 100	Rounding with Soccer Math (ABCYA)		Math Tool Kit
Rounding Numbers Song Rounding Numbers to the 10, 100, and 1000	Envision Game: Globbing Globbs (log into student SPS account) Base 10 Bingo (ABCYA)	Kahn Academy Intro to Place Value (Get ready for 4 th grade) Ways to write whole numbers (words and expanded form) Rounding to nearest 10 Rounding to nearest 100	2nd Grade Math Tool Kit

Week 4: Adding multidigit numbers with regrouping

Videos	Games	Interactive Website (will revisit week 7 – do what you can)	Printable Packet
2 Digit Addition with regrouping Addition with regrouping Song Adding 3-Digit Numbers with regrouping Multidigit addition (Math Antics) Column Addition explained	<p>Summit (printable game – see Polypad Website Guide for online game pieces)</p> <p>Number Run: all operations through 10 (<i>app available through Apple App store & Google Play</i>)</p> <p>Leap Frog (printable Game)</p> <p>Hoppers & Rush Hour Jr.: physical game that helps students develop multi-step problem solving skills</p> <p>Smart Games has many physical, classic logic games that also help with multi-step problem solving. Try online here.</p>	<p>Multiplication by Heart flashcards</p> <p>IXL Add a two-digit and a one-digit number - without regrouping Add a two-digit and a one-digit number - with regrouping Use models to add two-digit numbers - without regrouping Use models to add two-digit numbers - with regrouping Add two-digit numbers without regrouping - sums to 100 Add two-digit numbers with regrouping - sums to 100 Add two-digit numbers - sums to 200 Use models to add three-digit numbers - with regrouping Addition with three-digit numbers Add two numbers up to six digits Kahn Academy Strategies for Adding Two and Three – Digit Numbers Adding with Regrouping</p>	<p>Week 4 Printable Packet</p> <hr/> <p>Math Tool Kit</p> <hr/> <p>2nd Grade Math Tool Kit</p>

Week 5: Subtracting multidigit numbers with regrouping

Video	Games	Interactive Website <i>(will revisit week 7 – do what you can)</i>	Printable Packet
Subtraction with regrouping song 3-Digit Subtraction with Regrouping Math-Antics: Multidigit Subtraction	Countdown (printable game – see Polypad Website Guide for online game pieces) Number Run: all operations through 10 (<i>app available through Apple App store & Google Play</i>) Hoppers & Rush Hour Jr. : physical game that helps students develop multi-step problem solving skills	Multiplication by Heart flashcards IXL Subtract two-digit numbers - with regrouping Subtract multiples of 100 Subtract multiples of 10 or 100 Use models to subtract from three-digit numbers - without regrouping Use models to subtract from three-digit numbers - with regrouping Subtract across zeros Subtract three-digit numbers Subtract numbers up to three digits Subtract across zeros Subtract numbers with four or more digits	Week 5 Printable Packet
Kahn Academy Subtracting multidigit numbers	Smart Games has many physical, classic logic games that also help with multi-step problem solving. Try online here.	Kahn Academy Strategies for Subtracting Two and Three Digit Numbers Subtracting with Regrouping	Math Tool Kit 2nd Grade Math Tool Kit

Week 6: Review multiplication facts 0 - 10

Video <i>*Week 1 & 2 videos*</i>	Games	Interactive Websites	Printable Packet
<p>Multiply by 0 & 1</p> <p>7 skip count</p> <p>8 facts</p> <p>Equal Groups Multiplication song</p> <p>Multiplication facts review</p>	<p>Number Run: all operations through 10 (app available through Apple App store & Google Play)</p> <p>Blockout (can be played with paper or online)</p>	<p>Multiplication by Heart flashcards</p> <p>IXL</p> <p>Multiply by 0</p> <p>Multiply by 1</p> <p>Multiply by 2</p> <p>Multiply by 3</p> <p>Multiply by 4</p> <p>Multiply by 5</p> <p>Multiply by 6</p> <p>Multiply by 7</p> <p>Multiply by 8</p> <p>Multiply by 9</p> <p>Multiply by 10</p> <p>Multiplication tables up to 10</p> <p>Multiplication facts up to 10: true or false?</p> <p>Multiplication facts up to 10: sorting</p> <p>Multiplication facts up to 10: find the missing factor</p> <p>Multiplication facts up to 10: select the missing factors</p> <p>Kahn Academy</p> <p>Get ready for multiplication (Get Ready for 4th Grade)</p> <p>Basic Multiplication</p> <p>Multiplication Tables for 2 - 9</p> <p>Multiplication for 10, 11, & 12</p> <p>Get ready for division (Get Ready for 4th Grade)</p>	<p>Week 6 Printable Packet</p> <p>Math Tool Kit</p> <p>2nd Grade Math Tool Kit</p>

Week 7: Review Adding and subtracting multidigit numbers with regrouping

Videos <i>*week 4 & 5 videos*</i>	Games	Interactive Websites <i>(some are the same from week 4 & 5 – feel free to go back and do ones new to you)</i>	Printable Packet
Addition with regrouping Adding 3-Digit Numbers with regrouping	Number Run: all operations through 10 <i>(app available through Apple App store & Google Play)</i>	Multiplication by Heart flashcards IXL Complete the addition sentence: up to three digits Add two numbers up to four digits Addition up to three digits: fill in the missing digits	Week 7 Printable Packet
Subtraction with regrouping song 3-Digit Subtraction with Regrouping Math-Antics: Multidigit Subtraction	Hoppers & Rush Hour Jr.: physical game that helps students develop multi-step problem solving skills Smart Games has many physical, classic logic games that also help with multi-step problem solving. Try online here.	Complete the subtraction sentence: up to three digits Subtract numbers with four or more digits Add, subtract, multiply, and divide Kahn Academy Adding and Subtracting within 1,000	Math Tool Kit 2nd Grade Math Tool Kit

Week 8: Fraction Basics

Video	Games	Interactive Websites	Printable Packet
<p>Fractions are parts</p> <p>Fractions Song</p> <p>Fractions on a Numberline</p> <p>Kahn Academy Grade 3 Fraction Basics</p> <p>Fractions!</p>	<p>Fraction Fling (ABCYA)</p> <p>Hoppers & Rush Hour Jr.: physical game that helps students develop multi-step problem solving skills</p> <p>Smart Games has many physical, classic logic games that also help with multi-step problem solving. Try online here.</p>	<p>Multiplication by Heart flashcards</p> <p>IXL Equal parts</p> <p>Make halves, thirds, and fourths</p> <p>Make halves, thirds, and fourths in different ways</p> <p>Make sixths and eighths</p> <p>Make halves, thirds, fourths, sixths, and eighths</p> <p>Identify the fraction</p> <p>Which shape illustrates the fraction?</p> <p>Show fractions: fraction bars</p> <p>Show fractions: area models</p> <p>Match fractions to models</p> <p>Write fractions using numbers and words</p> <p>Fractions of number lines: unit fractions</p> <p>Fractions of number lines: halves, fourths, and eighths</p> <p>Fractions of number lines</p> <p>Identify fractions on number lines</p> <p>Kahn Academy Understand Fractions</p> <p>Equivalent Fractions and Comparing Fractions</p>	<p>Week 8 Printable Packet</p> <hr/> <p>Math Tool Kit</p> <hr/> <p>2nd Grade Math Tool Kit</p>