## Curriculum Alignment of Skinner Elementary Montessori and Washington State EALRs Math: Grade 2– Age 7

## Using manipulatives/ equipment, your child will be introduced to:

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EALRs	Skinner Elementary Montessori
EALR 1. The student understands and applies the con- cepts and operations/ procedures of mathematics.	Placement value up to units of millions Roman Numerals 1-20
<ul> <li>Component 1.1: Understand and apply concepts and procedures from number sense.</li> <li>1.1.1 Understand place value in whole numbers to at least 1,000.</li> <li>1.1.2 Understand sequential relationships among whole numbers to at least 1,000.</li> <li>1.1.5 Understand the meaning of addition and subtraction and how they relate to one another.</li> <li>1.1.6 Use computational procedures for addition and subtraction of whole numbers to 18. 1.1.7 Apply appropriate strategies and use tools for adding and subtracting whole numbers</li> </ul>	<ul> <li>Addition</li> <li>Static/no carrying up to units of millions</li> <li>Dynamic/carrying up to units millions</li> <li>Increasing number of addends</li> <li>Subtraction <ul> <li>Static/no borrowing up to units of millions</li> <li>Dynamic/borrowing up to units of millions</li> </ul> </li> </ul>
1.1.8 Understand and apply estimation strategies to predict or determine the reasonableness of answers in situations.	<ul> <li>Multiplication</li> <li>Long multiplication with 2 to 3 digit multipliers</li> <li>Multiples (Without equipment )</li> </ul>
<b>Component 1.2: Understand and apply concepts and procedures from measurement.</b> 1.2.1 Understand that measurement is the comparison of an attribute of an object or situation with a unit that has the same attribute, using non-standard and standard units. 1.2.2 Understand differences between non-standard and standard units of measurement for length and weight in the ULS system	<ul> <li>Common multiples</li> <li>Lowest common multiples</li> <li>Commutative law</li> <li>Distributive law</li> <li>Factors</li> <li>Prime factors</li> <li>Highest common factors</li> </ul>
1.2.3 Understand how measurement units of money value, length, capacity, and time are organized in the U.S. system. 1.2.4 Understand and use a procedure to measure length, weight, capacity, time and temperature, and money value with non-standard and standard units.	<ul> <li>Division</li> <li>Short division</li> <li>Long division with 1/2/3 digit divisors</li> <li>Divisibility by 2, 5, 25, 4, 8</li> </ul>
1.2.6 Understand how to estimate in measurement situa- tions.	Fractions <ul> <li>Numerator</li> </ul>
<ul> <li>Component 1.3: Understand and apply concepts and procedures from geometric sense.</li> <li>1.3.1 Understand the concept of 2-dimensional figures and recognize their properties.</li> <li>1.3.2 Use the properties of 2-dimensional figures.</li> <li>1.3.3 Recognize the locations of points on a positive number.</li> </ul>	<ul> <li>Denominator /tamilies</li> <li>Equivalence</li> <li>Operations with like denominators</li> <li>Operations with unlike denominators</li> <li>Reducing fractions</li> <li>Operations with mixed denominators (unlike denominators)</li> </ul>
line.	Measurement
Component 1.4: Understand and apply concepts and procedures from probability and statistics. 1.4.3 Understand how to collect data. 1.4.5 Understand and read pictographs and bar graphs.	<ul> <li>Measurement conversions</li> <li>Length- meters/ yard</li> <li>Liquids- ounces/ liters</li> <li>Weight lbs/ kilos</li> <li>Temperature- Fahrenheit/ Celsius</li> <li>Time- hours, minute, seconds, months, years</li> <li>Money</li> </ul>

EALR's	Skinner Elementary Montessori
Component 1.5: Understand and apply concepts and procedures from algebraic sense. 1.5.1 Understand how to translate and extend a pattern. 1.5.3 Understand how to represent equality and inequality using words, pictures, and symbols 1.5.6 Apply algebraic properties to solve an equation using addition and subtraction. EALR 2: The student uses mathematics to define and solve problems. Component 2.1: Define problems 2.1.1 Identify questions to be answered to solve a problem in familiar situations.	<ul> <li>Tables, Charts and Graphs*</li> <li>Economic Geography</li> <li>Algebra</li> <li>Operations using squares and cubes of numbers</li> <li>Binomial (2 terms)</li> <li>Story problems</li> <li>Notation of squares</li> <li>Notation of cubes</li> <li>Transforming a square into a trinomial</li> <li>Finding squares on paper</li> <li>Square of 10 expressed algebraically as a binomial</li> <li>Square of 10 expressed algebraically as a trinomial</li> </ul>
<ul> <li>2.1.2 Determine what information is missing or extraneous in familiar situations.</li> <li>2.1.3 Identify what is known and unknown in familiar situations.</li> <li>2.1.3 Identify what is known and unknown in familiar situations.</li> <li>2.1.4 Understand how to use information to construct solutions.</li> <li>2.2.2 Select and use appropriate concepts and procedures from number sense, measurement, and geometric sense to construct solutions.</li> <li>2.2.3 Apply a variety of strategies to construct solutions.</li> <li>2.2.4 Determine whether a solution is viable, is mathematically correct, and answers the question.</li> </ul>	<ul> <li>Story Problems</li> <li>Using multiple functions</li> <li>Finding area</li> <li>Distance, time, and velocity</li> <li>Principal, interest, rate and time</li> <li>Fractions</li> <li>Measurement</li> <li>Ratio and proportion</li> </ul> Negative Numbers/ Integers <ul> <li>Operations with negative numbers/ integers</li> </ul>
<ul> <li>EALR 3: The student uses mathematical reasoning. Component 3.1: Analyze information.</li> <li>3.1.1 Understand how to compare numerical, measurement, and geometric information presented in familiar situations.</li> <li>Component 3.2: Conclude.</li> <li>3.2.1 Understand how to draw conclusions based on prior knowledge and the information given in a familiar situation.</li> <li>3.2.2 Understand how to evaluate the selection of procedures.</li> <li>Component 3.3: Verify results.</li> <li>3.3.1 Understand how to justify results using evidence.</li> <li>3.3.3 Understand how to validate thinking about numerical, measurement, geometric and statistical ideas.</li> </ul>	

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<ul> <li>EALR 4: The student communicates knowledge and understanding in both everyday and mathematical language.</li> <li>Component 4.1: Gather information.</li> <li>4.1.1 Understand how to follow a simple plan for collecting numerical, measurement, geometric and statistical information.</li> <li>4.1.2 Understand how to extract and use numerical, measurement, geometric, and statistical information from one or two different sources for a given purpose.</li> <li>Component 4.2: Organize, represent, and share information.</li> <li>4.2.1 Understand how to organize numerical, measurement, geometric, and statistical information to communicate for a given purpose.</li> <li>4.2.2 Understand how to represent numerical, measurement, geometric, and statistical information in graphs or other appropriate forms.</li> <li>4.2.3 Use mathematical language to explain or describe numerical, measurement, and geometric ideas and information that are relevant to second grade students.</li> </ul>	
<ul> <li>EALR 5: The student understands how mathematical ideas connect within mathematics, to other subject areas, and to real-world situations.</li> <li>Component 5.1: Relate concepts and procedures within mathematics.</li> <li>5.1.1 Understand how to use concepts and procedures from any two of the content strands, including number sense, measurement, geometric sense, statistics, and algebraic sense, in a given problem or situation.</li> <li>5.1.2 Understand how to represent a mathematical idea using equivalent mathematical models and representations.</li> </ul>	
Component 5.2: Relate mathematical concepts and procedures to other disciplines. 5.2.1 Understand and use mathematical thinking, modeling, patterns, and ideas in other disciplines. 5.2.2 Recognize the contributions of individuals and cultures to the development of mathematics.	
Component 5.3: Relate mathematical concepts and procedures to real-world situations. 5.3.1 Understand how mathematics is used in everyday life.	