



Montessori Math Timeline

Program	Age	Skills	Grade introduced in public school	Common Core State Standards
Beginning Numeracy	4 years +	<ul style="list-style-type: none"> -Associate value with each numerical symbol -Read, write, and build numbers 1-10 	Kindergarten to 2 nd Grade	K.CC.B.4.a K.CC.B.4.b K.CC.B.4.c
Advanced Numeracy	4 years +	<ul style="list-style-type: none"> -Read, write, and build numbers 0-10 with more abstract models -Explore the concept of "0" -Discover even and odd numbers -Compare quantities to decide if one quantity is <i>greater than, less than, or equal to</i> another quantity 	Kindergarten to 2 nd Grade	K.CC.B.4.a K.CC.B.4.b K.CC.B.4.c K.CC.C.6 K.CC.C.7 2.OA.C.3
Decimal System to 1,000	4 years +	<ul style="list-style-type: none"> -Learn to identify and name the base units of the decimal system (<i>units, tens, hundreds, and thousands</i>) -Build large numbers (like 5,678) using numbers and bead models -Understand place value -Read and write numbers to 9999 -Compare numbers using $<$, $>$, $=$ 	2 nd to 4 th Grade	2.NBT.A.1 2.NBT.A.2 2.NBT.A.3 2.NBT.A.4 4.NBT.A.1 4.NBT.A.2
Numbers 11-100	4 years +	<ul style="list-style-type: none"> -Read, write and build numbers 11-100 -Explore the naming conventions for teens and tens -Count to 100 by ones and tens -Compare numbers 0-100 using $<$, $>$, $=$ 	Kindergarten to 1 st Grade	K.CC.A.1 K.CC.A.2 K.CC.A.3 K.CC.B.5 K.NBT.A.1 1.NBT.A.1 1.NBT.B.2.a 1.NBT.B.2.b 1.NBT.B.2.c 1.NBT.B.3
Basic Addition	4.5 years +	<ul style="list-style-type: none"> -Create a story model for addition -Learn addition vocabulary (<i>addend, sum</i>) -Add four-digit numbers using models -Solve addition word problems -Write an equation to represent addition problems -"Carry" quantities greater than ten when adding -Add multiple four-digit numbers together (for example, $2,452 + 3,123 + 1,244$) 	Kindergarten - 4 th Grade	K.OA.A.1 K.OA.A.2 1.OA.A.1 1.OA.A.2 1.NBT.C.5 2.NBT.B.5 2.NBT.B.6 2.NBT.B.7 2.NBT.B.8 3.NBT.A.2 4.NBT.B.4

Advanced Addition	5 years +	<ul style="list-style-type: none"> -Memorize addition facts within 20 -Decompose numbers in pairs (5-2+3) -For numbers 1 to 9, find the number that makes ten when added -Explore addition strategies (<i>commutative property, associative property</i>) -Decide if an equation is true or false -Solve two step word problems 	Kindergarten - 2 nd Grade	K.OA.A.3 K.OA.A.4 K.OA.A.5 1.OA.B.3 1.OA.C.6 1.OA.D.7 1.OA.D.8 2.OA.A.1 2.OA.B.2
Basic Subtraction	4.5 years +	<ul style="list-style-type: none"> -Create a story model for subtraction -Learn subtraction vocabulary (<i>minuend, subtrahend, difference</i>) -Subtract four-digit number using models -Write an equation to represent subtraction -“Borrow” from a larger quantity -Solve addition and subtraction word problems 	Kindergarten - 4 th Grade	K.OA.A.1 K.OA.A.2 1.NBT.C.4 1.NBT.C.5 2.NBT.B.5 2.NBT.B.8 3.NBT.A.2 4.NBT.B.4
Advanced Subtraction	5 years +	<ul style="list-style-type: none"> -Memorize subtraction facts within 20 -Explore the connection between addition and subtraction problems (for example, 2+3=5, 5-3=2, 5-2=3) -Decide if an equation is true or false -Solve two step word problems 	Kindergarten - 2 nd Grade	K.OA.A.5 1.OA.C.6 1.OA.D.7 1.OA.D.8 2.OA.B.2
Basic Fractions	5 years +	<ul style="list-style-type: none"> -Name fractions 1/2 to 1/10 -Recognize equivalent fractions -Write whole numbers as fractions -Position fractions on a number line -Compare fractions with $<$, $>$, $=$ -Perform the four operations with same-denominator fractions -Decompose fractions (for example $\frac{3}{4} = \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$) and write an equation 	1 st Grade- 4 th Grade	1.G.A.3 3.NBT.A.1 3.NF.A.3.A 3.NF.A.3.B 3.NF.A.3.C 3.NF.A.3.D 4.NF.B.3.A 4.NF.B.3.B
Basic Multiplication	5.5 years +	<ul style="list-style-type: none"> -Create a story model for multiplication -Learn multiplication vocabulary (<i>factor, product</i>) -Skip count by numbers from 2-10 -Multiply a four-digit number by a single digit using models -Model multiplication using a linear model (skip counting), a bead bar array, and a dot array -Explore the connection between repeated addition and multiplication 	2 nd - 4 th Grade	2.OA.C.4 2.NBT.A.2 3.OA.A.1 3.NBT.A.3 4.OA.A.1

Advanced Multiplication	5.5 years +	<ul style="list-style-type: none"> -Memorize addition facts (up to tens) -Solve multiplication, addition, and subtraction word problems -Find the missing number in an equation (for example, $4 \times _ = 20$) 	3 rd - 4 th grade	3.OA.A.3 3.OA.A.4 3.OA.C.7 3.OA.C.8 4.OA.A.2
Basic Division	5.5 years +	<ul style="list-style-type: none"> -Create a story problem for division -Learn division vocabulary (<i>dividend, divisor, quotient</i>) -Divide four-digit numbers by a single digit number using models 	3 rd - 5 th grade	3.OA.A.2 5.NBT.B.6
Advanced Division	5.5 years +	<ul style="list-style-type: none"> -Explore division with remainders -Explore division of a four-digit number by a two-digit number using models -Memorize division facts (through 10_) -Connect multiplication and division -Solve word problems involving all operations. 	3 rd - 4 th grade	3.OA.A.3 3.OA.A.4 3.OA.B.6 3.OA.C.7 3.OA.C.8 4.OA.A.3 4.NBT.B.6