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CCSSI CURRICULUM

Elementary School: Mathematics Content List

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SUBJECT	TOTAL TOPIC	TOTAL DURATION
Grade K Over view	8	00.06.00
Grade 1	20	00.27.00
Grade 2	15	00.25.06
Grade 3	48	01.20.36
Grade 4	41	01.14.55
Add-On Categories	6	00.07.00
TOTAL	138	03.40.37

Mathematics

Topic Name

Duration

Grade K Over view

- **Counting and cardinality**

- **Know number names and the count sequence.**
 1. Count and write - Numbers 1 to 5 00.02.00
 2. Count and write - Numbers 6 to 10 00.02.00
 3. Numbers: 11 to 20 00.00.00

- **Count to tell the number of objects.**
 1. Fun with numbers 00.02.00

- **Compare numbers.**
 1. Which is bigger number? 00.00.00

- **number and operations in Base ten**

- **Work with numbers 11–19 to gain foundations for place value.**
 1. Numbers: 11 to 20 00.00.00

Mathematics

Topic Name	Duration
<ul style="list-style-type: none">• Geometry	
<ul style="list-style-type: none">• Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).	
1. Get shape crazy	00.00.00
<ul style="list-style-type: none">• analyze, compare, create, and compose shapes.	
1. Get shape crazy	00.00.00

Grade 1

<ul style="list-style-type: none">• operations and algebraic thinking	
<ul style="list-style-type: none">• Represent and solve problems involving addition and subtraction.	
1. Addition : 1 to 5	00.02.00
2. Addition : 6 to 9	00.02.00
3. Addition : 10 to 18	00.02.00
4. Addition of two two-digit numbers (Method)	00.02.00
5. Subtraction : 1 to 5	00.02.00
6. Subtraction : 6 to 9	00.02.00
7. Subtraction : 10 to 18	00.02.00

Mathematics

Topic Name	Duration
<ul style="list-style-type: none">• Understand and apply properties of operations and the relationship between addition and subtraction.	
1. Subtraction : 1 to 5	00.02.00
2. Subtraction : 6 to 9	00.02.00
3. Subtraction : 10 to 18	00.02.00
<ul style="list-style-type: none">• number and operations in Base ten	
<ul style="list-style-type: none">• Understand place value	
1. Which is bigger number?	00.00.00
<ul style="list-style-type: none">• Suggested Topics	
1. Missing Numbers (11 to 20)	00.00.00
2. Clap and catch	00.00.00
<ul style="list-style-type: none">• Measurement and Data	
<ul style="list-style-type: none">• Measure lengths indirectly and by iterating length units.	
1. Measurement	00.00.00
2. Long and Short	00.02.00
3. Long and short	00.01.00
4. Long and Short 2	00.01.00

Mathematics

Topic Name	Duration
<ul style="list-style-type: none">Tell and write time	
1. Time	00.01.00
2. Time keepers	00.00.00
<ul style="list-style-type: none">Geometry	
<ul style="list-style-type: none">Reason with shapes and their attributes.	
1. Shapes and Angles	00.02.00

Grade 2

<ul style="list-style-type: none">Number and Operations in Base Ten	
<ul style="list-style-type: none">Suggested	
1. Table of Two	00.02.00
2. Table of Three	00.02.00
3. Table of four	00.02.00
4. Table of five	00.02.00
5. Making groups of 2's, 5's and 10's	00.02.00
6. Fill the Chart	00.02.00

Mathematics

Topic Name	Duration
• Measurement and Data	
• Measure and estimate lengths in standard units	
1. Long and Short	00.02.00
2. Long and short	00.01.00
3. Long and Short 2	00.01.00
• Work with time and money	
1. Time	00.01.00
2. Time keepers	00.00.00
• Suggested Topics	
1. The same sum rule	00.00.00
2. Make your Own balance	00.02.00
3. Length of the Boundary	00.02.00
4. Pictograph and its Interpretation	00.04.06

Mathematics

Topic Name

Duration

Grade 3

- **Operations and Algebraic Thinking**

- **Represent and solve problems involving multiplication and division.**
 1. Multiplication Tree 00.02.00
 2. Multiplication Patterns 00.02.00
 3. Division as equal sharing 00.02.00
 4. Division as a repeated subtraction 00.02.00
 5. Division of an object into equal parts 00.02.00
 6. Division (Method) 00.02.00

- **Understand properties of multiplication and the relationship between multiplication and division**
 1. Multiplication (Method) 00.02.00
 2. Multiplication and Division (Game) 00.02.00

- **Multiply and divide within 100**
 1. Multiplication of Integers 00.02.00

Mathematics

Topic Name	Duration
<ul style="list-style-type: none">Solve problems involving the four operations, and identify and explain patterns in arithmetic.	
1. Multiplication (Method)	00.02.00
2. Multiplication Tables (Practice)	00.00.00
<ul style="list-style-type: none">Number and Operations in Base Ten	
<ul style="list-style-type: none">Use place value understanding and properties of operations to perform multi-digit arithmetic.4	
1. Rounding off Numbers	00.05.06
<ul style="list-style-type: none">Suggested	
1. Fun with odd numbers	00.01.00
2. Even and odd numbers	00.02.00
3. Even and odd numbers	00.00.00
4. Math is fun	00.00.00
<ul style="list-style-type: none">Number and Operations—Fractions	
<ul style="list-style-type: none">Develop understanding of fractions as numbers.	
1. Concept of Fraction	00.05.09
2. Fractions on the Number Line	00.00.00
3. Equivalent Fractions	00.04.17

Mathematics

Topic Name	Duration
4. Multiplication of Fractions	00.00.00
5. Fractions to Decimals and Decimals to Fractions	00.06.11
6. Halves and Quarters of shapes	00.00.00
7. One half, one third and one fourth	00.02.00
8. Colour the parts (Halves and Quarters)	00.02.00
9. Colour the Circle	00.02.00
• Measurement and Data	
• Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects	
1. How long does it take?	00.00.00
2. Time	00.01.00
3. Time keepers	00.00.00
4. Spot on	00.00.00
5. Heavy and Light	00.02.00
6. Variety of Vessels	00.02.00
7. Comparing container capacity	00.02.00
8. Centimetres and millimetres	00.01.00
9. How many can fit in	00.02.00

Mathematics

Topic Name	Duration
<ul style="list-style-type: none">• Represent and interpret data	
1. Introduction to Bar Graph	00.04.21
2. Reading a Bar Graph	00.02.38
3. Long and Short	00.02.00
4. Long and short	00.01.00
5. Long and Short 2	00.01.00
6. Spot on	00.00.00
<ul style="list-style-type: none">• Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	
1. Area	00.02.00
2. Concept of Area	00.00.00
3. Areas of Plane Figures	00.05.54
<ul style="list-style-type: none">• Geometry	
<ul style="list-style-type: none">• Reason with shapes and their attributes	
1. Building wonderland	00.00.00
2. Squares and Triangles	00.00.00
3. Click away cameraman	00.00.00
4. View from different angles	00.02.00
5. Identifying Angles	00.00.00

Mathematics

Topic Name

Duration

Grade 4

- **Operations and Algebraic Thinking**

- **Use the four operations with whole numbers to solve problems**
 1. Multiplication Tree 00.02.00
 2. Multiplication Patterns 00.02.00
 3. Multiplication (Method) 00.02.00
 4. Multiplication and Division (Game) 00.02.00
 5. Multiplication of Integers 00.02.00
 6. Multiplication Tables (Practice) 00.00.00
 7. Division as equal sharing 00.02.00
 8. Division as a repeated subtraction 00.02.00
 9. Division of an object into equal parts 00.02.00
 10. Division (Using Times Tables) 00.00.00
 11. Division (Method) 00.02.00
 12. Multiplication and Division (Game) 00.02.00
 13. Division of Integers 00.02.00

- **Gain familiarity with factors and multiples**
 1. Multiplication of Fractions 00.00.00
 2. LCM: Ladder or Division Method 00.03.29

Mathematics

Topic Name	Duration
3. Multiples	00.02.00
4. Factors (Introduction)	00.02.00
• Generate and analyze patterns	
1. Patterns 1	00.01.00
2. Patterns 2	00.01.00
3. Patterns 3	00.01.00
4. Picture patterns	00.00.00
5. Growing patterns	00.00.00
6. Secret messages	00.00.00
• Number and Operations—Fractions3	
• Understand decimal notation for fractions, and compare decimal fractions.	
1. Representation of a Decimal Number on the Number Line	00.03.30
2. Fractions to Decimals and Decimals to Fractions	00.06.11
3. Basic concept of Decimal	00.03.33

Mathematics

Topic Name	Duration
<ul style="list-style-type: none">• Measurement and Data	
<ul style="list-style-type: none">• Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit	
1. Spot on	00.00.00
2. Comparing container capacity	00.02.00
3. Centimetres and millimetres	00.01.00
4. How many can fit in	00.02.00
5. Length of the Boundary	00.02.00
6. Area	00.02.00
<ul style="list-style-type: none">• Geometry	
<ul style="list-style-type: none">• Geometric measurement: understand concepts of angle and measure angles.	
1. Guess Measure of an Angle	00.02.00
<ul style="list-style-type: none">• Draw and identify lines and angles, and classify shapes by properties of their lines and angles	
1. Lines and Angles	00.03.46
2. Construction: Right-Angled Triangle	00.03.17
3. Introduction to Symmetry	00.03.31
4. Symmetry	00.03.38

Mathematics

Topic Name	Duration
5. Squares and Triangles	00.00.00
6. View from different angles	00.02.00
7. Identifying Angles	00.00.00
8. Guess Measure of an Angle	00.02.00

Add-On Categories

- **Calender**

1. Name of the seven days	00.02.00
2. Relation between days, weeks, months and year	00.02.00
3. Calendar	00.01.00
4. Calendar	00.02.00
5. Complete the calendar	00.00.00
6. Get your dates right	00.00.00

TOTAL TOPIC IN ELEMENTARY SCHOOL MATHEMATICS – 138 03.40.37