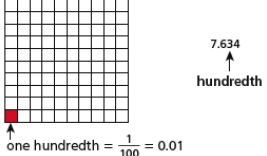
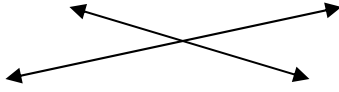
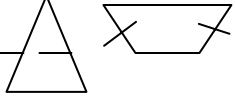

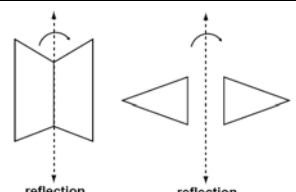
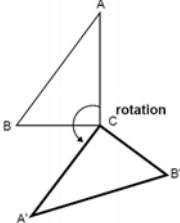
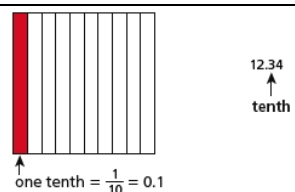
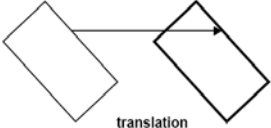


Fourth Grade Core Mathematics Vocabulary

1.	Area	The number of square units needed to cover a surface like a wall, floor or other two-dimensional shape. (L A.4)
2.	Associative property	1. Addition: Grouping the addends in different ways does not change the sum. (L1.13) Example: $3 + (7 + 5) = (3 + 7) + 5$ 2. Multiplication: Grouping the factors in different ways does not change the product. (L 1.13) Example: $2 \cdot (5 \cdot 6) = (2 \cdot 5) \cdot 6$
3.	Base (3-dimensional geometry)	1. A face of a three-dimensional polyhedron by which the figure is measured or classified. 2. When working with cylinders or cones, base refers to one of the circles on which the cylinder or cone can stand.
4.	Common denominator	A number divisible by all of the denominators being considered. Example: Common denominators for $\frac{1}{6} + \frac{1}{15}$ include 30, 60, 90, 120, ...
5.	Commutative property of addition	It makes no difference in which order two numbers are added (the commutative property does not apply to subtraction) (L1.2) Example: $a + b = b + a$ $4 + 50 = 50 + 4$
6.	Commutative property of multiplication	It makes no difference in which order two numbers are multiplied (the commutative property does not apply to division) (L 1.2) Example: $a \times b = b \times a$ $3 \times 5 = 5 \times 3$
7.	Composite numbers	Numbers that have 3 or more factors. Examples: 6 is composite because it has 4 factors (1, 2, 3, 6); 25 is composite because it has 3 factors (1, 5, 25). (L 1.23)
8.	Diameter	The distance across a circle through its center.
9.	Dimension	The height, length, or width of a figure or object. 1-dimensional figures have only length (e.g., line, line segment, ray) 2-dimensional figures have only length & width (e.g., rectangle, triangle) 3-dimensional objects have length, width, & height (e.g., cube, prism)
10.	Equation	A statement that two expressions have equal values. An equation always has an equals sign. Examples: $5 \times 4 = 20$ and $3 + 5 = 2 + 6$ and $2 = 8 - 6$. (L 1.8)
11.	Equilateral	Having all equal sides. (L B.2)
12.	Estimate	To find an approximate value or measurement of something. (L 3.4)
13.	Expression	One or more numbers, variables, or numbers and variables, with one or more operations. (L 1.14)

14.	Hundredths	A unit fraction representing one of one hundred equal parts, written as $\frac{1}{100}$ or 0.01.									
15.	Identity property of addition	Adding zero to a number gives a sum identical to the given number. (L 1.6)									
16.	Identity property of multiplication	Multiplying a number by 1 gives a product identical to the given number. (L 1.6)									
17.	Inequality	A number sentence that uses an “is greater than” (>), “is less than” (<), “is greater than or equal to” (\geq), “is less than or equal to” (\leq), or “is not equal to” (\neq symbol). (L 1.14, 2.10) Example: $5 \leq 4 + y$.									
18.	Intersecting lines	Lines that meet at a point. (L A.2) 									
19.	Isosceles	1. A trapezoid with a pair of opposite congruent sides. 2. A triangle with at least two congruent sides. (L B.2)	 <p>Note to teachers - be sure to draw various types of trapezoids, including right trapezoids and trapezoids with opposite sides of different lengths.</p>								
20.	Median	The number in the middle of a set of data arranged in order from least to greatest or from greatest to least; or the average of the two middle terms if there is an even number of terms. (L 1.20) For the data values of 8, 12, 7, 9, 3, 0, 3 <table border="1" data-bbox="431 1209 1110 1371"> <tr> <td>Mean</td> <td>$(8+12+7+9+3+0+3)/7 = 6$</td> </tr> <tr> <td>Median</td> <td>0, 3, 3, 7, 8, 9, 12 (the middle value is 7)</td> </tr> <tr> <td>Mode</td> <td>3 (the most often occurring value is 3)</td> </tr> <tr> <td>Range</td> <td>$12 - 0 = 12$ (the difference between the smallest and largest data values)</td> </tr> </table> <i>Example:</i> For the data: 6, 14, 23, 46, 69, 72, 94 → The median is 46 (the middle number) For the data: 6, 14, 23, 69, 72, 94 → The median is also 46 (the average of the two middle numbers in the list)		Mean	$(8+12+7+9+3+0+3)/7 = 6$	Median	0, 3, 3, 7 , 8, 9, 12 (the middle value is 7)	Mode	3 (the most often occurring value is 3)	Range	$12 - 0 = 12$ (the difference between the smallest and largest data values)
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Range	$12 - 0 = 12$ (the difference between the smallest and largest data values)										
21.	Mode	The number that occurs most frequently in a set of data. (L 1.20) Example: For the set of data {42, 36, 75, 75, 80}, 75 is the mode because it occurs most often. For the set of data {25, 45, 25, 55, 45, 65}, 25 and 45 are the modes. If no number occurs most often, then the set of data has no mode.									
22.	Parallel	Lines going in the same direction and always being the same distance apart. If lines are parallel, they never meet or cross each other. Example: rails of a railroad track or the sides of a ladder. (L A.2)									

23.	Perimeter	The perimeter of any closed figure is the distance around the outside of the figure. (L A.4)								
24.	Perpendicular lines	Lines that lie on the same plane that intersect to form right angles (90 degrees). (L A.2) 								
25.	Place value	The value of a digit as determined by its place in a number Example: In the number 135, the 3 means $3 \cdot 10$ or 30; in the number 356, the 3 means $3 \cdot 100$ or 300. (L 2.8)								
26.	Prime number	A number, greater than 1, that has exactly 2 factors (1 and itself). (1 has only one factor so it is not prime.) (L 1.23)								
27.	Radius	The distance from the center of a circle to any point on the circle.								
28.	Range	The difference between the greatest number and the least number in a set. (L 1.20) For the data values of 8, 12, 7, 9, 3, 0, 3 <table border="1" data-bbox="430 777 1112 934"> <tr> <td>Mean</td> <td>$(8+12+7+9+3+0+3)/7 = 6$</td> </tr> <tr> <td>Median</td> <td>0, 3, 3, 7, 8, 9, 12 (the middle value is 7)</td> </tr> <tr> <td>Mode</td> <td>3 (the most often occurring value is 3)</td> </tr> <tr> <td>Range</td> <td>$12 - 0 = 12$ (the difference between the smallest and largest data values)</td> </tr> </table>	Mean	$(8+12+7+9+3+0+3)/7 = 6$	Median	0, 3, 3, 7, 8, 9, 12 (the middle value is 7)	Mode	3 (the most often occurring value is 3)	Range	$12 - 0 = 12$ (the difference between the smallest and largest data values)
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29.	Reflection	A transformation of a figure by reflecting it over a line, creating a mirror image of the figure; the effect of a flip is a reflection. 								
30.	Rotation	Turning a figure around a given point. 								
31.	Scalene	A triangle with no equal sides is a scalene triangle.								
32.	Simplify	1. To rewrite a fraction as an equivalent fraction with a smaller numerator and denominator. 2. To rewrite a fraction in simplest form -- as an equivalent fraction where the numerator and denominator have no common factors other than 1.								
33.	Tenth	A unit fraction representing one of ten equal parts of a whole, written as $\frac{1}{10}$ or 0.1. 								
34.	Thousandth	A unit fraction representing one of a thousand equal parts of a whole, written as $\frac{1}{1000}$ or 0.001.								

35.	Translation	A transformation of a figure by moving it without turning or flipping it in any direction; the effect of a slide is a translation.	
36.	Variable	In a mathematical sentence, a variable is a symbol used to represent an unknown number or a number that varies, usually a lower case letter; y, a, b, x. (L 1.3)	

Additional 4th Grade CST Vocabulary

- Bilateral Symmetry
- Coordinates
- Greatest Common Factor
- Horizontal axis
- Negative integers
- Net
- Ordered pairs
- Origin
- Outliers
- Prism
- Probability
- Pyramid
- Quadrant
- Rotational Symmetry
- Tree diagram
- Value
- Vertical axis

