MATHEMATICAL VOCABULARY: NUMBER

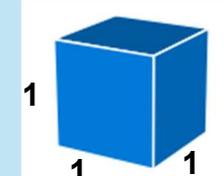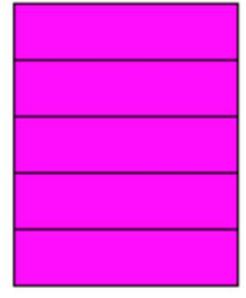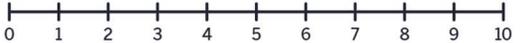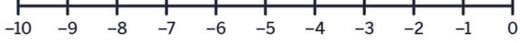| Word	What does it mean?	Example	Visual prompt
Odd Number	A whole number that cannot be divided evenly by 2.	1, 3, 5, 7, 9, 11, 13, 15, 17, 19 **Making connections:** Odd numbers end in 1, 3, 5, 7, or 9.	
Even Number	A whole number that can be divided evenly by 2. **Tip:** Even numbers are in the two times tables. Look in your multiplication grid.	2, 4, 6, 8, 10, 12, 14, 16, 18, 20 **Making connections:** Even numbers end in 0, 2, 4, 6, or 8. Two is the only even prime number.	
Square Number	A number that is the product of a number multiplied by itself. The symbol for square is ^{2}.	$1^2 = 1 \times 1 = 1$ $2^2 = 2 \times 2 = 4$ $3^2 = 3 \times 3 = 9$ **Common mistake:** It is a common mistake for pupils to read 3^2 as 3 x 2 = 6. That is incorrect. It is 3 x 3, which equals 9.	
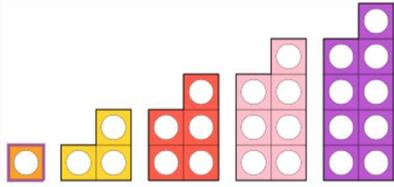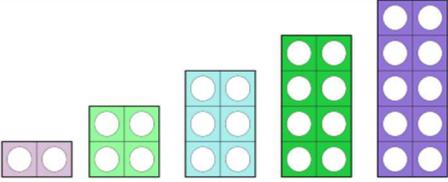
The following images were created using free virtual manipulatives available at MathsBot.com: odd number, even number, square number, prime number, factor and multiple.
The following images were made using the free virtual manipulatives available at Polypad, by Amplify: cube number, integer, positive number and negative number.

Square Root	A square root is a number that, when multiplied by itself, gives the original number.	For example, since 4 x 4 = 16, both 4 and -4 are square roots of 16. **Common mistake:** It is a common mistake for pupils to find the square root of a number by dividing it by two. This is incorrect. Squaring a number and taking its square root are opposite operations.	
Cube Number	A number that is the product of a number multiplied by itself three times. The symbol for cube is ^{3}. **Tip:** Think about a Rubik's cube.	$1^2 = 1 \times 1 \times 1 = 1$ $2^2 = 2 \times 2 \times 2 = 8$ $3^2 = 3 \times 3 \times 3 = 27$ **Common mistake:** It is a common mistake for pupils to read 3^3 as 3 x 3 = 9. That is incorrect. It is 3 x 3 x 3, which equals 27.	
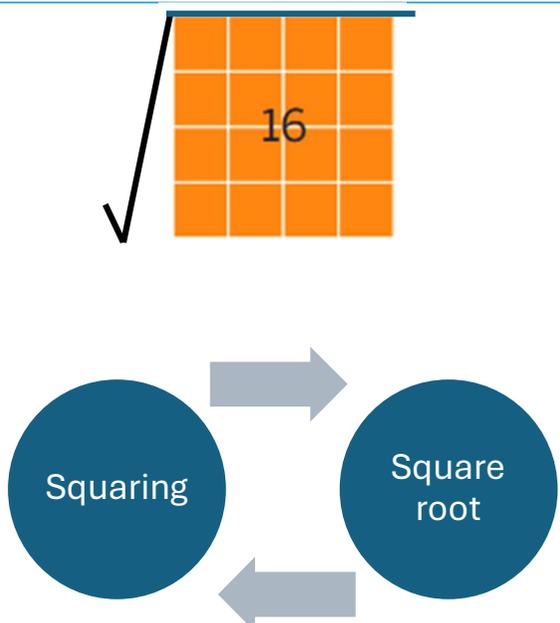
Prime Number	A number with only two factors: 1 and itself. **Making connections:** 1 is not a prime number. Why?	2, 3, 5, 7	 **Visualise it:** How many rectangular arrays can you make with 5 cubes? Only one. So it must be a prime number. Try it with 6 cubes. 6 isn't a prime number. Why?
Integer	A whole number (positive, negative, or zero).	−3, 0, 7	
Factor	A number that divides exactly into another.	Factors of 8 are 1, 2, 4, 8.	 **Visualise it:** How many rectangular arrays can you make with 8 counters. The numbers on the side of the arrays are factors.
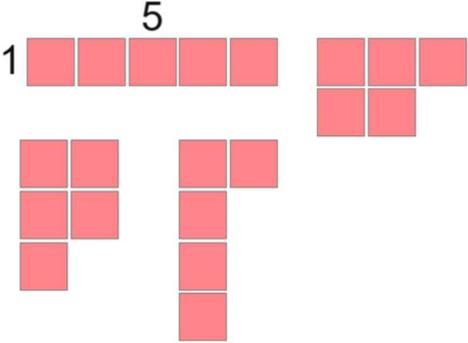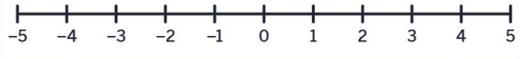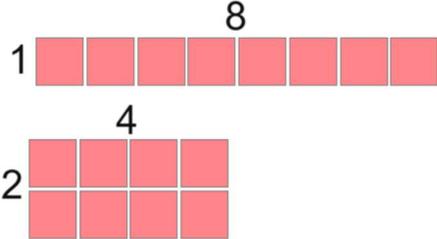
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Multiple	The result of multiplying a number by an integer.	Multiples of 4 are 4, 8, 12, 16….	
Positive Number	A number greater than zero. **Tip:** Positive numbers can be found to the right of zero on a number line. As numbers move further away from zero, to the right, they get bigger.	1, 0.5, 100	
Negative Number	A number less than zero. **Tip:** Negative numbers can be found to the left of zero on a number line. As numbers move further away from 0 to the left, they get smaller.	-1, -0.5, -100	