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| **Topic/Skill** | **Definition/Tips** | Example  **Topic: Basic Number and Decimals** |
| 1. Integer | A **whole number** that can be positive, negative or zero. |  |
| 2. Decimal | A number with a **decimal point** in it. Can be positive or negative. |  |
| 3. Negative Number | A number that is **less than zero**. Can be decimals. |  |
| 4. Addition | To find the **total**, or **sum**, of two or more numbers.  ‘add’, ‘plus’, ‘sum’ |  |
| 5. Subtraction | To find the **difference** between two numbers.  To find out how many are left when some are taken away.  ‘minus’, ‘take away’, ‘subtract’ |  |
| 6. Multiplication | Can be thought of as **repeated addition**.  ‘multiply’, ‘times’, ‘product’ |  |
| 7. Division | Splitting into equal parts or groups.  The process of calculating the **number of times one number is contained within another one**.  ‘divide’, ‘share’ |  |
| 8. Remainder | The amount ‘**left over**’ after dividing one integer by another. | The remainder of is , because 6 divides into 20 exactly 3 times, with 2 left over. |
| 9. BIDMAS | An acronym for the **order** you should do calculations in.  BIDMAS stands for **‘Brackets, Indices, Division, Multiplication, Addition and Subtraction’**.  Indices are also known as ‘powers’ or ‘orders’.  With strings of division and multiplication, or strings of addition and subtraction, and no brackets, work from left to right. | , where the 2 is the index/power. |

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| **Topic/Skill** | **Definition/Tips** | **Example**  **Topic: Factors and Multiples** |
| 1. Multiple | The result of multiplying a number by an integer.  The **times tables** of a number. | The first five multiples of 7 are: |
| 2. Factor | A number that **divides exactly** into another number without a remainder.  It is useful to write factors in pairs | The factors of 18 are:  The factor pairs of 18 are: |
| 3. Lowest Common Multiple (LCM) | The **smallest** number that is in the **times tables** of each of the numbers given. | The LCM of 3, 4 and 5 is 60 because it is the smallest number in the 3, 4 and 5 times tables. |
| 4. Highest Common Factor (HCF) | The **biggest** number that **divides exactly** into two or more numbers. | The HCF of 6 and 9 is 3 because it is the biggest number that divides into 6 and 9 exactly. |
| 5. Prime Number | A number with **exactly two factors**.  A number that can only be divided by itself and one.  The number **1 is not prime**, as it only has one factor, not two. | The first ten prime numbers are: |
| 6. Prime Factor | A factor which is a prime number. | The prime factors of 18 are: |
| 7. Product of Prime Factors | Finding out which **prime numbers multiply** together to make the **original** number.  Use a **prime factor tree.**  Also known as ‘prime factorisation’. |  |

**Knowledge Organiser**