Year 6 Essential Knowledge

Maths: Fractions

1. Simplifying fractions:

- puts a fraction in its simplest form
- a fraction can be simplified if the numerator and denominator can be divided by the same number
- if the numerator and denominator cannot be divided by the same number, know how to find the highest common factor (HCF) of both

2. Compare and order fractions using the denominator:

- the denominators being compared and ordered must be made the same
- how to find the lowest common multiple (LCM) of the denominators
- how to use the LCM to turn each fraction into an equivalent fraction
- how to compare mixed numbers

3. Compare and order fractions using the numerator:

- when the numerators are the same, the larger the denominator, the smaller the fraction
- how to find the lowest common multiple of the numerators
- how to use the LCM to turn each fraction into an equivalent fraction
- how to decide whether it is more efficient to find common numerators or common denominators

4. Add and subtract fractions

- how to add and subtract fractions within 1 with different denominators
- how to add and subtract improper fractions
- how to add and subtract mixed numbers

5. Multiplying fractions and mixed number by integers:

• how to partition into wholes and parts

6. Multiplying fractions by fractions

- when a fraction is multiplied by a proper fraction, it makes it smaller
- to multiply 2 fractions, multiply the numerators and multiply the denominators

7. Dividing fractions by integers and fractions

- when a fraction is divided by a proper fraction, it makes it smaller
- how to change the integer into a fraction
- how and why the division is turned into multiplication

8. Four rules with fractions:

- how to apply BODMAS
- 9. Fractions of an amount:
 - the denominator is the number of parts the amount is being divided into
 - the numerator is the amount of those parts
 - how to divide by the denominator and multiply by the numerator to find fractions of amounts

10. Whole amounts:

- how times tables make finding the whole more efficient
- how to find the whole