Year 5 Number: Multiplication and Division

National Curriculum Aims

- identify multiples and factors, including finding all factor pairs of a number, and common factors of 2 numbers

- know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers

- establish whether a number up to 100 is prime and recall prime numbers up to 19

- multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers

- multiply and divide numbers mentally, drawing upon known facts

- divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context

- multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000

- recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3})

Key Vocabulary

Calculate	To work out the value of something.
Sign	Using a mathematical symbol eg + / -
Operation	An action which when applied to one or more values gives an output value.
Inverse	The opposite eg the inverse of multiplication is division
Factor	Numbers we can multiply together to get another number.
Multiple	The result of multiplying a number by an integer
Prime Number	A whole number greater than 1 that can **not** be made by multiplying other whole numbers eg. 3 only has 3 x 1 = 3
Composite Number	A whole number that can be made by multiplying other whole numbers. Eg. 6 is composite as 2 x 3 = 6 (more than 2 factors)
Remainder	The amount left over when a number cannot be divided exactly.

Home Learning

- Practice times tables with your child on the way to and from school.
- Ask your child if x is a factor of a particular number
- Ask your child to teach you their chosen method when multiplying lager numbers

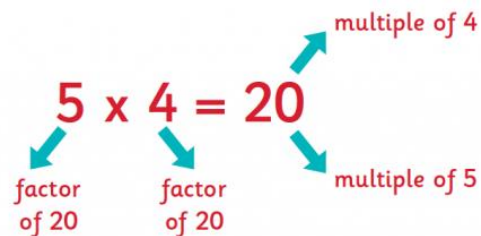## Core Knowledge and Representations
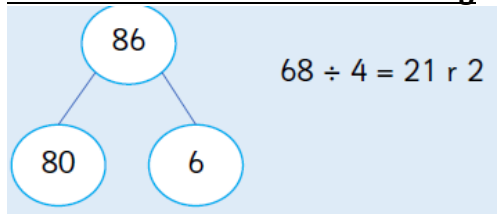
Subtraction
Multiplication

Factors and multiples

Known division facts when dividing

$68 \div 4 = 21 \text{ r } 2$

Core Knowledge and Representations

1: Group the hundreds

2 Group the tens and ones

Exchange the ten for ten ones and then group the ones.