Spring Term Curriculum 2024

Year 5 Essential Knowledge

Maths: Multiplication

Mental

1. How to use related facts to multiply
2. How to identify multiples
   - common multiples
   - lowest common multiple
3. How to identify factors pairs
   - common factors
4. How to identify composite numbers
5. How to identify prime numbers
   - prime factors
6. How to identify squared numbers up to 12^2
7. How to identify cubed numbers up to 5^3

Written
1. **Multiples are numbers in the times tables**
- multiples of a number are divisible by that number
- some multiples can be identified using known rules
- even numbers are multiples of 2
- numbers ending in 5 or 0 are multiples of 5
- numbers ending in 0 are multiples of 10
- If you halve a number and get an even answer, then the number is a multiple of 4
- common multiples
- of related multiples
- of unrelated numbers
2. **Factors are numbers multiplied together to give a given number**
- how to use factor bugs
- factor pairs
- common factors
3. **Prime and composite numbers**
- recall prime numbers to 19
- establish if a number up to 100 is prime
- prime factors
4. **Square (^{2}) and cube (^{3}) numbers**

- to square a number you multiply it by itself
- square numbers have an odd number of factors
- use squared (^{2})to identify square root
- to cube a number you multiply it by itself and multiply the product

5. How to multiply by 10, 100 and 1,000
- multiplying by 10 twice is the same as multiplying by 100
- multiplying by 10 three times is the same as multiplying by 1,000

6. How to multiply a 4-digit number by a 1-digit number:
- formal column method
- regroup more than once

7. How to multiply a 2-digit and 3-digit number by a 2-digit number
- find the partial products:
  - ➢ multiply the ones in a separate calculation
  - ➢ multiply the tens (using a place holder) in a separate calculation
  - ➢ add the partial products in a separate calculation
- use the combined method
  - ➢ multiply the ones
  - ➢ multiply the tens (using a place holder)
  - ➢ add the partial products