## Number Relationships Study Sheet

## **DEFINITIONS**

1. sum
2. difference -
3. product
4. quotient -
5. common factor
6. common multiple -
7. prime number
8. composite number
9. face value
10. place value -
11. total value -
12. standard form -
13. expanded form -
14. exponential form -
15. divisibility rule
16. power
17. base
18. exponent
19. square root
20. perfect squares
21. prime factorization
22. factor tree
23. GCF
24. LCM -
25. scientific notation -
26. BEDMAS

## **TOPICS**

- 1. PLACE VALUE & ORDERING (sheet)
  - should know place value chart;
  - should know place, face, and total value;
  - should know how to write a number in standard & expanded form;
  - should know how to write numbers as words and vice versa;
  - should know spelling of numbers
- 2. IDENTIFYING PRIME & COMPOSITE NUMBERS (Rules of Divisibility Sheet, pp. 4 7)
  - should know all the divisibility rules;
  - should know how to identify numbers that are prime and composite
- 3. PRIME FACTORIZATION (pp. 8 11)
  - should know how to make a factor tree;
  - should know how to express a number as a product of its prime factors;
- 4. COMMON FACTORS & COMMON MULTIPLES (pp. 12 15)
  - should know how to use a Venn diagram to find GCF and LCM;
  - to find other common factors and common multiples;
- 5. CALCULATING POWERS (pp. 16 18)
  - know the parts of an power;
  - know how to write a number in standard form, expanded form, and exponential form;
  - know how to calculate powers without calculators
- 6. MENTAL MATH: MULTIPLYING & DIVIDING BY POWERS OF 10 (p. 19)
  - know the shortcuts for multiplying & dividing by powers of ten without a calculator
- 7. EXPANDED FORM & SCIENTIFIC NOTATION (20 23)
  - know how to express a number in scientific notation
- 8. SQUARES & SQUARE ROOTS (sheet, pp. 28 31)
  - know how to find square roots of perfect squares (should know from 2 12)
  - know how to find square roots of numbers that are not exact without calculators;
- 8. ORDER OF OPERATIONS (pp. 34 37)
  - know BEDMAS