Name: Form:

MATHS FUNDAMENTAL KNOWLEDGE QUIZ BOOKLET

Year 9:Term 1

Unit 1: Numerical Skills

Definition	Answer
1. Name given for whole numbers including zeros.	Integer
2. The value of a digit relating to its position in a number.	Place Value
3. Any whole number that can be divided by 2 without a remainder.	Even Number
4. Any whole number that leaves a remainder when divided by 2.	Odd Number
5. Finding an approximate answer by rounding.	Estimating
6. Ordering smallest to largest.	Ascending
7. Ordering largest to smallest.	Descending
8. The result of multiplying a number by itself $\blacksquare^2$.	Square Number
9. When one number or quantity, is not equal to another $<\ >\ \leq\ \geq$	Inequality
10. The inverse of squaring a number to find its original factor $\sqrt{}$	Square Root

Unit 2: Algebra Notation

Definition	Answer
1. A symbol (often a letter) whose value can vary.	Variable
2. A single number, variable or numbers and variables multiplied together.	Term
3. A mathematical statement that contains one or more terms combined by operations.	Expression
4. A non-changing value.	Constant
5. A number (or a symbol representing a constant value) that multiplies a variable in an algebraic expression.	Coefficient
6. A mathematical statement in which two expressions are connected by an equal sign.	Equation
7. A mathematical relationship or rule, written in symbols, in which two expressions are connected by the equals symbol.	Formula
8. The dependent variable in a formula or equation, identifiable by being on its own on one side of the equal sign.	Subject
9. The process by which symbols are replaced by numbers in order to evaluate an expression or formula.	Substitution
10. To find the solution(s) to an equation or problem.	Solve

Unit 3: Types of Number

Definition	Answer
1. Describing things which follow each other in a particular order, with no interruptions.	Consecutive
2. A positive whole number which is the product of two smaller integers.	Composite Number
3. An integer that divides another integer exactly, without a remainder.	Factor
4. Name given for whole numbers including zeros.	Integer
5. A product of a number and an integer.	Multiple
6. The result of multiplication.	Product
7. The result of division.	Quotient
8. A number that only has two distinct factors, 1 and itself.	Prime
9. Used to describe numbers or properties which are shared by different entities.	Common
10. Describing a value, set or shape which is the only one of its kind.	Unique

Unit 4: Expanding and Factorising

Definition	Answer
1. An algebraic expression with two different terms, connected by a addition or subtraction.	Binomial
2. A horizontal line, either above or below a mathematical expression, used to group or indicate that the expression should be treated as a single unit.	Vinculum
3. The number to be divided in a division.	Dividend
4. The number by which the dividend is divided in a division.	Divisor
5. To remove the brackets from an expression by multiplying terms and simplifying as necessary.	Expand
6. The procedure of inserting brackets into an expression by.	Factorise
7. An algebraic expression with one term.	Monomial
8. The number or expression above the vinculum in a fraction.	Numerator
9. The number or expression below the vinculum in a fraction.	Denominator
10. To write an expression or fraction in a more concise form using the rules of arithmetic and/or algebra.	Simplify

Unit 5: Calculating

Definition	Answer
1. Name given for whole numbers including zeros	Integer
2. The property of giving the same result irrespective of the order of numbers within a calculation e.g. 1 + 2 = 2 + 1	Commutative
3. Describing things which follow each other in a particular order, with no interruptions.	Consecutive
4. The result of a subtraction	Difference
5. Finding an approximate answer by rounding	Estimate
6. The first number in a subtraction.	Minuend
7. The second number in a subtraction.	Subtrahend
8. The result of an addition.	Sum
9. Ordering smallest to largest	Ascending
10. Ordering largest to smallest	Descending

Unit 6:Perimeter and Shape

Definition	Answer
1.Next to or adjoining.	Adjacent
2. A shape made up of two or more geometric shapes.	Compound shape
3. A triangle of equal side lengths and angles.	Equilateral
4. A triangle or trapezium having two sides of equal length.	Isosceles
5. A quadrilateral with two pairs of parallel sides and opposite sides equal length.	Parallelogram
6. The total distance around the outside of a closed 2D shape.	Perimeter
7. A plane shape (two-dimensional, flat) with at least 3 straight sides and angles.	Polygon
8. A two-dimensional shape with four sides.	Quadrilateral
9. A shape having all sides and angles of equal length.	Regular
10. A triangle where all sides and angles are unequal.	Scalene

Unit 7:Properties of Circles

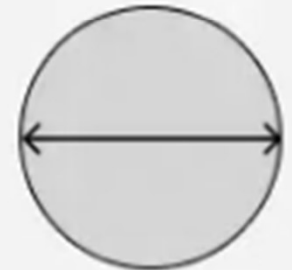| Calculate	Formula
1. Area of circle.	$\pi \times r^2$
2. Circumference of Circle.	$\pi \times d$

1. RADIUS

2. SECTOR

3. SEGMENT

4. ARC

5. TANGENT

6. CHORD

7. CIRCUMFERENCE

8. DIAMETER

Unit 8: Probability

Definition/Question	Answer
1. The probabilities of all possible outcomes of an event always add up to	
2. How do we represent probabilities?	
3. What is the estimated probability of an event happening called?	
4. How do you calculate the relative frequency of an event?	
5. How can you improve the accuracy of an estimated probability?	
6. What should each branch in a tree diagram sum to?	
7. How do you calculate the probability across branches in a tree diagram?	
8. What does $A \cup B$ mean?	
9. What does $A \cap B$ mean?	
10. What does A' mean?	