# KEY STAGE 3 MATHEMATICS Exam Checklist

# KS3 Topic Order

### <u>Year 9</u>

- 1. Number: Calculations and Rounding
- **2.** Algebra: Algebraic Expressions
- 3. Shape, Space & Measures: Shapes
- 4. Number: Indices
- 5. Algebra: Equations
- 6. Shape, Space & Measures: Measures

## 1. Number: Calculations and Rounding

- Use BODMAS in calculations
- Add, subtract, multiply and divide with decimals of any size (with and without a calculator)
- Use a calculator to perform more difficult calculations, e.g. using the fraction button
- Round to one, two or three significant figures

## 2. Algebra: Algebraic Expressions

- Understand and use the words expression, equation, formulae, inequality, term and factor
- Use conventional notation in algebra, e.g. 3 x a is written as 3a
- Use symbols =,  $\neq$ , <, >,  $\leq$ ,  $\geq$
- Rewrite algebraic expressions by taking out common factors which are constants
- Rewrite algebraic expressions by taking out common factors which are terms
- Rewrite algebraic expressions by multiplying a single term over a bracket/expanding brackets
- Use index laws in algebra for positive powers

### 3. Shape, Space and Measures: Shapes

- Recognise 2-D representations of 3-D shapes
- Draw the net of a cube or cuboid
- Draw the front elevation, side elevation and plan view of any 3D shape
- Identify the faces, edges and vertices of any 3D shape

### 4. Number: Indices

- Use index notation and index laws for positive integer powers
- Use prime factor decomposition to write any number as a product of its prime factors
- Find the highest common factor (HCF) and least (lowest) common multiple (LCM) of any two numbers

### 5. Algebra: Equations

- Solve inequalities and represent the solution set on a number line

### 6. Shape, Space and Measures: Measures

- Understand and use compound measures to solve problems, e.g. speed, density