Year 6 coverage overview

Quality First Education Trust

Autumn 1: 38 lessons				
1 Chapter 1: Numbers to 10 Million				
INSET day	INSET day	**Lesson 1: Reading and Writing Numbers to 10 Million** To construct and record numbers to 10 000 000; to recognise value of digits to 10,000,000.	**Lesson 2: Comparing Numbers to 10 Million** To compare numbers to 10 000 000 using place value.	**Lesson 3: Comparing and Ordering Numbers to 10 Million** To compare & order numbers to 10 000 000; to create combinations of numbers using a fixed number of digits.
2 Ch 1: Nos to 10 Million			**Chapter 2: Four operations of whole numbers**	
Lesson 4: Rounding Numbers To round numbers to 10 000 000 to the nearest million, hundred thousand and ten thousand.	**Lesson 5: Rounding Numbers** To round numbers to the nearest appropriate number up to & including millions; to determine when rounding is appropriate and to which value.	**Chapter 1 review and consolidation** To practise various concepts covered in the chapter	**Lesson 1: Using Mixed Operations** To use multiple operations and create expressions from a picture; to use the order of operations to solve expressions.	**Lesson 2: Order of Operations** To create and solve expressions using the four operations.
3 Chapter 2: Four operations of whole numbers				
Lesson 3: Multiplying by Tens To multiply numbers by multiples of 10; to use number bonds as a key strategy in multiplication.	**Lesson 5: Multiplying by Two-Digit Numbers** To multiply 3- & 4-digit numbers by 2-digit numbers-no regrouping or renaming; to use both number bonds & column method	**Lesson 6: Multiplying a 3-Digit Number by a 2-Digit Number** To multiply 3&4-digit nos. regrouping & renaming; & no. bonds & pattern recognition for multiplication.	**Lesson 7: Multiplying a 4-Digit Number by a 2-Digit Number** To multiply 3- and 4-digit by 2-digit numbers with regrouping & renaming; to use number bonds and the column method	**Lesson 8: Multiplying by Two-Digit Numbers** To estimate products of multiplying 3- & 4-digit by 2-digit numbers; to use knowledge of multiplication to create specific products.
4 Chapter 2: Four operations of whole numbers				
Lesson 9: Dividing by Two-Digit Numbers To divide 3-digit by 2-digit numbers using strategies; to use no. bonds, long division & bar models to divide by 2-digit numbers.	**Lesson 10: Dividing by Two-Digit Numbers** To divide 4-digit numbers by 2-digit numbers; to use number bonds and long division as the key strategies.	**Lesson 11: Dividing by Two-Digit Numbers** To divide 4-digit by 2-digit numbers using a variety of methods; to use no. bonds, long & short division as methods.	**Lesson 12: Dividing by Two-Digit Numbers** To divide 3-digit by 2-digit numbers giving rise to remainders; to use number bonds, long & short division as key to solve division problems.	**Lesson 13: Dividing by Two-Digit Numbers with Remainder** To divide 4-digit numbers by 2-digit numbers with remainder; to represent remainder as part of whole amount of money/decimal
5 Chapter 2: Four operations of whole numbers				
Consolidation to secure formal division method	*Consolidation to secure formal division method*	**Lesson 14: Solving Word Problems Using Bar Models** To use bar model heuristic to solve word problems involving multiplication & division	**Lesson 15: Solving Word Problems Using Patterns** To solve word problems using division as main strategy & pictorial to support word problems.	**Lesson 17: Finding Common Multiples** To find common multiples in real-life; use common multiples in with knowledge of time.
6 Chapter 2: Four operations of whole numbers				
Lesson 18: Finding Common Multiples To use common multiples to solve problems & organise thinking in tables & lists.	**Lesson 19: Finding Common Factors** To find largest common factor of 3-digit numbers; to use x ÷ division for common factor.	**Lesson 20: Finding Common Factors** To find the common factor of 3-digit numbers; to use x ÷ division for common factor.	**Lesson 21: Finding Prime Numbers** To use prime nos. to create other numbers; to explore prime numbers >100	**Lesson 22: Finding Prime Numbers** To explore prime numbers using concrete materials; to find prime numbers w' multiplication/division.
7 Chapter 3: Fractions				
Consolidation To be used if lessons take longer than expected or topic needs to be revisited.	**Chapter 2 review and consolidation** To practise various concepts covered in the chapter	**Lesson 1: Simplifying Fractions Using common Factors** To use concrete materials to simplify fractions; to recognise equivalence in fractions to ¼.	**Lesson 2: Simplify Fractions Using Common Factors** To simplify fractions with division & common factors & represent fractions w' concrete & pictorial.	**Lesson 3: Comparing and Ordering Proper Fractions** To compare fractions and place them in order from smallest to largest.
8 Chapter 3: Fractions				
Lesson 4: Comparing and Ordering Improper Fractions To compare and order fractions by finding common denominators.	**Lesson 5: Comparing and Ordering Fractions and Mixed Numbers** To compare and order fractions using common factors.	**Lesson 6: Adding and Subtracting Unlike Fractions** Add & subtract fractions w' different denominators & pictorial to compare/ add/subtract fraction	**Lesson 7: Adding and Subtracting Unlike Fractions** To add and subtract fractions with different denominators.	**Consolidation** Embed addition and subtraction of fractions To be used if lessons take longer than expected or topic needs to be revisited.
Half term break *(Homework: multiplication to x12 and related division facts; telling time to nearest minute)*				

Year 6 coverage overview

Autumn 2: 34 lessons

1 Chapter 3: Fractions

INSET day	Lesson 8: Adding and Subtracting Mixed Numbers To add & subtract mixed nos, incl. fractions different denominators; to subtract from whole & add the remainder.	Lesson 9: Adding and Subtracting Mixed Numbers To add and subtract fractions with different denominators; to add and subtract mixed numbers.	Lesson 10: Multiplying Pairs of Proper Fractions To multiply fractions using pictorial representations and abstract methods.	Lesson 11: Multiplying Pairs of Proper Fractions To determine if the commutative law applies to fractions; to multiply fractions using concrete and pictorial.

2 Chapter 3: Fractions

Lesson 12: Multiplying Pairs of Proper Fractions To use concrete to understand & solve the multip'n of fractions; to simplify equations using pattern blocks.	Lesson 13: Dividing a Fraction by a Whole Number To divide a fraction by a whole number; to use pictorial to divide whole numbers into fractions.	Lesson 14: Dividing a Fraction by a Whole Number To divide fractions by whole nos. concrete & pictorial; to divide fractions (when numerator & divisor not easily divisible).	Lesson 15: Dividing a Fraction by a Whole Number To divide fractions by a whole number; to use pictorial to support division.	Consolidation of fractions (incl. fractions of amounts - non-unit) To be used if lessons take longer than expected or topic needs to be revisited.

3 Chapter 4: Decimals

Chapter 2 review and consolidation To practise various concepts covered in the chapter	AUTUMN TEST (according to school's timetable)	AUTUMN TEST (according to school's timetable)	AUTUMN TEST (according to school's timetable)	COMBINED LESSONS: Lesson 1: Writing and Reading Decimals To read & write decimals to thousandths; concrete to represent decimals. Lesson 2: Dividing Whole Numbers by Multiples of 10 To divide whole numbers by larger whole numbers; Dienes 1/10s, 1/100s & 1/1000s.

4 Chapter 4: Decimals

Lesson 3: Dividing Whole Numbers To be able to associate a fraction with division, and calculate decimal fraction equivalents for a simple fraction.	Lesson 5: Writing Fractions as Decimals To write fractions as decimals; to use long division as the key strategy	Lessons 6: Multiplying Decimals Without Renaming To multiply whole nos including decimal by whole numbers; to use partition & worded method.	Lesson 7: Multiplying Decimals With Renaming To multiply whole nos that include a decimal by whole numbers; to use partitioning & worded method.	Lesson 8: Multiplying Decimals With Renaming To multiply decimals by whole numbers including regrouping and renaming.

5 Chapter 4: Decimals

Lesson 10: Dividing Decimals Without Renaming To divide decimals using number bonds and number discs as the key strategies. (Method 2)	Lesson 11: Dividing Decimals With Renaming To divide decimals using bar models, number bonds & long division as key strategies, including regrouping & renaming.	Lesson 12: Multiplying a Decimal by a 2-Digit Whole Number To multiply decimals by a 2-digit whole number using number discs and the column method.	Lesson 13: Dividing a Decimal by a 2-Digit Whole Number To divide decimals by 2-digit numbers using number bonds and the worded method.	Lesson 14: Dividing a Decimal by a 2-Digit Whole Number To divide decimals by 2-digit whole numbers using number bonds and the worded method.

6 Chapter 5: Measurements

Consolidation To be used if lessons take longer than expected or topic needs to be revisited.	Chapter 4 review and consolidation To practise various concepts covered in the chapter	Lesson 1: Converting Units of Length: Millimetres and Centimetres To convert common measurements to metres, centimetres and millimetres.	Lesson 2: Converting Units of Length: Metres and Centimetres To convert units of measure into different units; to use knowledge of decimals & fractions to convert.	Lesson 3: Converting Units of Length: Kilometres and Metres To convert metres into kilometres as units of measure.

7 Chapter 5: Measurements

Lesson 4: Converting Units of Length: Miles and Kilometres To convert distances between miles and kilometres.	Lesson 5: Converting Units of Mass To convert units of mass from grams to kilograms using decimals & fractions.	Lesson 6: Converting Units of Volume To convert units of volume from millilitres to litres.	Lesson 7: Converting Units of Time To convert units of time from minutes to hours; to represent time using 24-hour notation.	Consolidation To be used if lessons take longer than expected or topic needs to be revisited.

Christmas holiday break (Homework: percentage of amounts)

Year 6 coverage overview

Spring 1: 29 lessons				
1 Chapter 5: Measurements				
INSET day	**Chapter 5 review and consolidation** To practise various concepts covered in the chapter	**ADDITIONAL LESSON: 4 operations – Multi-step word problems**	**ADDITIONAL LESSON: 4 operations – Multi-step word problems**	**ADDITIONAL LESSON: Word problems – Time**
2 Review & recap Chapter 7: Percentages				
ADDITIONAL LESSON: Word problems – Fractions of amounts	**ADDITIONAL LESSON: Word problems – Multiplying fractions by whole numbers**	**Revision and Mid-year Tests (A)**	**Revision and Mid-year Tests (A)**	**ADDITIONAL LESSON: Recap Fraction/Percentage equivalence**
3 Chapter 7: Percentage				
ADDITIONAL LESSON: Recap fractions, decimals and percentage equivalence	**ADDITIONAL LESSON: % of amounts (Focus on 50%, 25%, 10%, 5% and 1%)**	**Lesson 1: Finding the Percentage of a Number** To find the % of a whole number using division and multiplication; to use bar modelling as a pictorial approach to calculating %.	**Lesson 2: Finding the Percentage of a Quantity** To find the % of a quantity; to use bar model diagrams to support the division and multiplication of numbers towards the percentage.	**ADDITIONAL LESSON Problem solving with percentage change:**
4 Chapter 8: Ratio				
Lesson 3: Finding Percentage Change To find % change in an amount over time; to calculate % change where the number gives rise to a decimal.	**Lesson 1: Comparing Quantities** To use ratios and fractions to compare objects; to find the relationship between ratios, percenages and fractions.	**Lesson 2: Comparing Quantities** To determine the ratio of a quantity using concrete materials; to simplify ratios using concrete materials in addition to division	**Lesson 3 Comparing Several Quantities** To express proportions using ratio.	**Lesson 4: Finding Quantities from Ratios** To be able to use ratio to count quantities.
5 Chapter 8: Ratio				**Chapter 9: Algebra**
Lesson 5: Ratios with Measurements To be able to use ratio to measure quantities.	**Lesson 7: Comparing Ratios to Find a Quantity** To be able to solve problems involving ratio.	**Lesson 8: Word Problems Involving Ratio** To be able to solve problems involving ratio.	**Chapter 8 review and consolidation** To practise various concepts covered in the chapter.	**Lesson 1: Describing a Pattern** To determine a pattern using concrete materials and pictorial; to use a table to identify a repeating pattern; to express a rule using letter or symbol
6 Chapter 9: Algebra				
Lesson 2: Describing a Pattern To determine a pattern using concrete materials and pictorial; to use a table to identify a repeating pattern; to express the relationship between consecutive numbers in terms of a letter or symbol	**Lesson 3: Describing a Pattern** To determine a pattern using concrete materials & pictorial; to use a table to identify a repeating pattern	**Lesson 4: Describing a Pattern** To express the relationship between consecutive numbers in terms of a letter or symbol; including using a number or letter for multiplication	**Lesson 5: Writing Algebraic Expressions** To use a table to identify a pattern; to write algebraic expressions using each of the four operations.	**Lesson 6: Writing Algebraic Expressions** To use examples to identify rules; to write algebraic expressions using each of the four operations, to evaluate algebraic expressions including the use of inverse operations.
Half term				

Year 6 coverage overview

Spring 2: 25 lessons

1 Chapter 9: Algebra

Lesson 9: Using Formulae To use formaulae o solve problems; to replace a letter/variable with a number then solve the equation; to use inverse operations to solve equations.	ADDITIONAL LESSON: Algebra	Consolidation To be used if lessons take longer than expected or topic needs to be revisited.	ADDITIONAL LESSON: Revise names, properties of 2D and 3D shapes	SPRING TEST *(according to school's timetable)*

2 Chapter 10: Perimeter & Area

SPRING TEST *(according to school's timetable)*	SPRING TEST *(according to school's timetable)*	Lesson 1: Finding the Area & Perimeter of Rectangles To find area & perimeter of rectangles; calculate perimeter using known area and vice versa.	Lesson 2: Finding the Base and Height of Triangles To use prior knowledge of area to find & solve area of a triangle; to use formula for area of a rectangle to solve problems involving triangles.	Lesson 3: Finding the Area of Triangles To calculate the area of a triangle using a formula; to calculate the area of a triangle in multiple ways.

3 Ch10: Area & Perim | Chapter 11: Volume | | Chapter 12: Geometry |

Lesson 4: Finding the Area of Parallelograms To calculate the area of a parallelogram using an understanding of triangles; to use concrete materials to find the area of a paralleleogram.	COMBINED LESSON: Lesson 1 & 2: Finding the Volume of Cubes and Cuboids To find the volume of cubes and cuboids using materials. To determine formula for volume of cubes & cuboids & apply it to calculate the volume of shapes.	Lesson 4: Finding the Volume of Cuboids To be able to calculate, estimate and compare the volume of cubes and cuboids.	Lesson 1: Investigating Vertically Opposite Angles To investigate opposite angles; to solve problems with prior angles knowledge.	Lesson 2: Solving Problems Involving AnglesTo solve problems involving angles using the bar model heuristic; to solve problems involving angles without protractors.

4 Chapter 12: Geometry | | | | Ch15: Negative Nos

Lesson 3: Investigating Angles in Triangles To determine and show the sum of the angles inside a triangle.	Lesson 4: Investigating Angles in Quadrilaterals To investigate & find angles in quads.	Lesson 6: Naming Parts of a Circle To name parts of circles and know that the diameter is twice the radius.	Lesson 7: Solving Problems Involving Angles in a Circle To solve problems involving angles in a circle.	Lesson 1: Adding and Subtracting Negative Numers To be able to use negative numbers in context, and calculate intervals across zero.

5 Ch15: Negative Nos | Chapter 13: Position and Movement

Lesson 2: Using Negative Numbers To be able to use negative numbers in context, and calculate intervals across zero.	Lesson 1: Showing Negative Numbers To be able to use negative numbers in context and calculate intervals across zero.	Lesson 2: Describing Position To be able to describe positions on a full coordinate grid.	Lesson 4: Drawing Polygons on a Coordinate Grid To be able to draw simple shapes on a coordinate plane.	Lesson 5: Describing Translations To describe the translation of shapes on a coordinate grid.

Easter holiday break (Homework: decide as a year group)

Year 6 coverage overview

Summer 1: 28 lessons (check INSET)

1 Chapter 13: Position & Movement		Ch 14:Graphs & averages		
INSET	**Lesson 6: Describing Reflections** To be able to reflect shapes in a mirror line.	**Consolidation of translation & reflection/ using co-ordinates** *Consolidation of:* *- Co-ordinates without a grid* *- Reflection across a diagonal line* *- Unusual grids (squares hidden by numbers or negative numbers)*	**Lesson 1: Understanding Averages** To calculate the average (mean) of sets of values.	**Lesson 2: Calculating Mean** To calculate the mean.

2 Chapter 14: Graphs and averages				
Lesson 3: Calculating Mean To calculate the mean.	**COMBINED LESSONS: Lesson 5 & 6: Reading Pie Charts** To be able to read and interpret pie charts when they are split into equal parts. To be able to read and interpret pie charts when they are split into simple fractions.	**Lesson 7: Reading Pie Charts** To be able to read and interpret pie charts when they are split into percentages.	**Lesson 9: Reading Line Graphs** To read line graphs; to interpret the information in line graphs.	**SUMMER TEST** *(according to school's timetable)*

3 Revision and recap				
SUMMER TEST *(according to school's timetable)*	**SUMMER TEST** *(according to school's timetable)*	**Additional revision lesson**	Starter: **Fluent in 5 and/or Rapid Reasoning** **REVISION according to class need**	Starter: **Fluent in 5 and/or Rapid Reasoning** **REVISION according to class need**

4 Revision and recap				
BANK HOLIDAY	Starter: **Fluent in 5 and/or Rapid Reasoning** **REVISION according to class need**	Starter: **Fluent in 5 and/or Rapid Reasoning** **REVISION according to class need**	Starter: **Fluent in 5 and/or Rapid Reasoning** **REVISION according to class need**	Starter: **Fluent in 5 and/or Rapid Reasoning** **REVISION according to class need**

5 SATs WEEK				
REVISION according to class need	**REVISION according to class need**	*Wednesday: arithmetic & reasoning paper 1*	*Thursday: reasoning paper 2*	

6 Chapter 11: Volume (remaining lessons)				
RECAP Lesson 1 and 2: Finding the Volume of Cubes and Cuboids	**Lesson 3: Finding the Volume of Cubes and Cuboids** To be able to estimate the volume of cubes and cuboids, and calculate volume using a formula.	**Lesson 5: Solving Problems Involving the Volume of Solids** To be able to calculate, estimate and compare the volume of cubes and cuboids.	**Consolidation day:** To be used if lessons take longer than expected or a topic needs to be revisited.	**Chapter 11 review and consolidation** To practise various concepts covered in the chapter.

Break for half term (Homework: decide as a year group)

Year 6 coverage overview

Summer 2: 35 lessons				
1 Chapter 12: Geometry				
Lesson 5: Solving Problems Involving Angles in a Circle <u>over 2 days</u> To be able to solve problems involving angles in a circle.	**Lesson 5: Solving Problems Involving Angles in a Circle** <u>over 2 days</u>	**Lesson 8: Drawing Qudrilaterals** To be able to draw quadrilaterals using given dimensions.	**Lesson 9: Drawing Triangles** To be able to draw triangles using given dimensions and angles.	**Lesson 10: Drawing Triangles** To be able to solve problems involving similar shapes where the scale factor is known or can be found.
2 Chapter 8: Ratio				
Consolidation day: To be used if lessons take longer than expected or a topic needs to be revisited.	**Lesson 6: Finding Ratios** To be able to compare quantities by writing a ratio.	**Lesson 9: Word Problems Involving Ratio** To be able to solve problems involving ratio.	**Lesson 10: Word Problems Involving Ratio** <u>over 2 days</u> To be able to solve problems involving ratio.	**Lesson 10: Word Problems Involving Ratio** <u>over 2 days</u>
3 Chapter 9: Algebra				**Ch.10: Area & Perimeter**
Lesson 7: Writing and Evaluating Algebraic Expressions To be able to express missing number problems algebraically.	**Lesson 8: Writing Formulae** To be able to use simple formulae.	**Consolidation day:** To be used if lessons take longer than expected or a topic needs to be revisited.	**Chapter 9 review and consolidation** To practise various concepts covered in the chapter.	**Chapter 10 review and consolidation** To practise various concepts covered in the chapter.
4 Chapter 12: Geometry				
Lesson 11: Drawing Nets of 3-D Shapes <u>over 2 days</u> To be able to recognise and make nets for 3-D shapes.	**Lesson 11: Drawing Nets of 3-D Shapes** <u>over 2 days</u>	**Lesson 12: Drawing Nets of 3-D Shapes** <u>over 2 days</u> To be able to recognise and make nets for 3-D shapes.	**Lesson 12: Drawing Nets of 3-D Shapes** <u>over 2 days</u>	**Chapter 12 review and consolidation** To practise various concepts covered in the chapter.
5 Chapter 13: Position and movement				
Lesson 3: Describe Position <u>over 2 days</u> To be able to describe positions on a full coordinate grid.	**Lesson 3: Describe Position** <u>over 2 days</u>	**Lesson 7: Describing Movements** To reposition objects so they can be reflected in the x and y axis as the mirror line.	**Lesson 8: Describing Movements** To describe the moevemnt of objects using the terms 'translation' and 'reflection'.	**Lesson 9: Using Algebra to Describe Movements** <u>over 2 days</u> To use algebra to describe the positions of coordinates in relationship to one another.
6 Chapter 13: Position and movement				
Lesson 9: Using Algebra to Describe Movements <u>over 2 days</u>	**Lesson 10: Using Algebra to Describe Movements** <u>over 2 days</u> To represent translation and reflection using algebraic notation.	**Lesson 10: Using Algebra to Describe Movements** <u>over 2 days</u>	**Consolidation day:** To be used if lessons take longer than expected or a topic needs to be revisited.	**Chapter 13 review and consolidation** To practise various concepts covered in the chapter.
7 Chapter 14: Graphs and averages				
Lesson 8: Reading Pie Charts To be able to interpret pie charts based on basic geometry.	**Lesson 10: Reading Line Graphs** To be able to interpret line graphs and use these to solve problems.	**Lesson 11: Converting Miles into Kilometres** To convert miles into kilometres and vice versa.	**Chapter 14 review and consolidation** To practise various concepts covered in the chapter.	**Consolidation day:** To be used if lessons take longer than expected or a topic needs to be revisited.
Summer holiday break				