Earth Works Maths Long Term Plan 2023-24

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14
Autumn Year 3	**Place Value** Represent and partition numbers to 100, 1,000. Use number lines to 100, 1,000. Place value to 1,000: hundreds, tens and ones. Find 1, 10, 100 more or less. Estimate on a number line to 1,000. Compare and order numbers to 1,000. Count in 50s.			**Addition and Subtraction** Use and apply number bonds to and within 10. Add and subtract 1s, 10s, 100s to 3 digit numbers without exchanges. Add and subtract 1s, 10s, 100s to 3 digit numbers with exchanges. Add two 2/3 digit numbers with and without exchanges using column addition. Subtract two 2/3 digit numbers with and without exchanges using column subtraction. Complements to 100. Estimate answers. Using inverse operations. Problem solving - making decisions.					**Multiplication and Division** Making equal groups. Using arrays. Multiples of 2, 5, 10, 3. Sharing and grouping. Recap times tables and division facts/multiply and divide by 2, 5, 10. Times tables and division facts/multiply and divide by 3, 4, 8. Multiples of 10 up to 3 digit numbers. Calculations related to known facts. Reasoning about multiplication. Multiplying a 2 digit number by a 1 digit number with and without exchange, using the expanded method. Linking multiplication and division facts. Dividing a 2 digit number by a 1 digit number with and without exchange. Dividing a 2 digit number by a 1 digit number with remainders. Scaling. Correspondence problems.					**Assess-ment and Consoli-dation**
Autumn Year 4	**Place Value** Represent and partition numbers to 100, 1,000, 10,000. Use number lines to 10,000. Find 1, 10, 100, 1,000 more or less. Estimate on a number line to 10,000. Compare and order numbers to 10,000. Use Roman numerals. Round to the nearest 10, 100, 1,000.			**Addition and Subtraction** Add and subtract 1s, 10s, 100s, 1000s using mental methods/number lines. Add up to 4 digit numbers with and without exchanges using column addition. Subtract up to 4 digit numbers with and without exchanges using column subtraction. Using efficient methods. Estimate answers. Checking strategies.				**Multiplication and Division** Multiples of 3. Times tables and division facts/multiply and divide by 6, 9, 7, 11, 12. Multiply by 1 and 0. Divide a number by 1 and itself. Multiply 3 numbers. Factor pairs. Multiply and divide by 10, 100. Related multiplication and division facts. Informal written methods for multiplication; short multiplication: multiplying a 2/3 digit number by a 1 digit number. Short division: divide a 2/3 digit number by a 1 digit number. Correspondence problems. Using efficient methods.					**Assess ment and Consolid ation**
Spring Year 3	**Fractions** Understand unit fractions. Compare and order unit fractions. Understand non-unit fractions. Understand the whole. Compare and order non-unit fractions. Fractions and scales. Fractions on a number line. Equivalent fractions on a number line. Equivalent fractions as bar models. Add fractions. Subtract fractions. Partition the whole. Unit fractions of a set of objects. Non-unit fractions of a set of objects. Reasoning with fractions of an amount.						**Measurement: Length and Perimeter** Measure in m, cm and mm and combinations of these. Equivalent lengths. Compare lengths. Add lengths. Subtract lengths. Perimeter. Measure perimeter. Calculate perimeter.		. **Money** Pounds and pence. Convert pounds and pence. Add and subtract money. Find change. **Assessment**				
Spring Year 4	**Fractions** Understand the whole. Count beyond 1. Partition mixed numbers. Number lines with mixed numbers. Compare and order mixed numbers. Understand improper fractions. Convert mixed numbers to improper fractions. Convert improper fractions to mixed numbers. Equivalent fractions on a number line. Equivalent fractions families. Add two or more fractions. Add fractions and mixed numbers. Subtract two fractions. Subtract from whole amounts. Subtract from mixed numbers.			**Decimals** Tenths as fractions. Tenths as decimals. Tenths on a place value chart. Tenths on a number line. Divide a 1 or 2 digit number by 10. Hundredths as fractions. Hundredths as decimals. Hundredths on a place value chart. Divide a 1 or 2 digit number by 100. Make a whole with tenths. Make a whole with hundredths. Partition decimals. Compare and order decimals. Round to the nearest whole number. Halves and quarters as decimals.			**Measurement: Length, Perimeter and Area** Measure in km and m. Equivalent lengths. Perimeter on a grid. Perimeter of a rectangle. Perimeter of rectilinear shapes including finding missing lengths. Perimeter of regular polygons. Area. Count squares. Make shapes. Compare areas.		**Money** Write money using decimals. Convert between pounds and pence. Compare amounts. Estimate amounts. Calculate and solve problems with money. **Assessment**			

Summer Year 3	**Measurement: Time** Roman numerals to 12. Tell the time to 5 minutes/1 minute. Read time on a digital clock. Use am and pm. Years, months and days. Days and hours. Hours and minutes. Durations. Minutes and seconds. Units of time. Solve problems with time.	**Properties of Shapes** Turns and angles. Right angles. Compare angles. Measure and draw accurately. Horizontal and vertical. Parallel and perpendicular. Recognise and describe 2D shapes. Draw polygons. Recognise and describe 3D shapes. Make 3D shapes.	**Statistics** Interpret and draw pictograms. Interpret and draw bar charts. Collect and represent data. Two-way tables.	**Measurement: Mass and Capacity** Use scales. Measure mass in grams. Measure mass in kg and g. Equivalent masses. Compare mass. Add and subtract mass. Measure capacity and volume in ml/l and ml. Equivalent capacities and volumes. Compare capacity and volume. Add and subtract capacity and volume.	**Position and Direction** Introduction to position and direction. Describe position using coordinates. Plot coordinates. Draw 2D shapes on a grid.	**Consolidation**	
Summer Year 4	**Measurement: Time** Revision of telling the time to 5 minutes/1 minute. Years, months, weeks, days. Hours, minutes, seconds. Convert between analogue and digital times. Convert to and from the 24 hour clock.	**Properties of Shapes** Understand angles as turns. Identify angles. Compare and order angles. Revise 2D shapes. Triangles. Quadrilaterals. Polygons. Lines of symmetry. Complete a symmetric figure. Revise 3D shapes.	**Statistics** Interpret charts. Comparison, sum and difference. Line graphs. Interpret and draw line graphs.	**Measurement: Mass and Capacity** Measure mass, capacity and volume. Calculate using mass, capacity and volume. Problem solving and reasoning.	**Position and Direction** Describe position using coordinates. Plot coordinates. Draw 2D shapes on a grid. Translate position on a grid. Describe translations on a grid.	**Consolidation**	