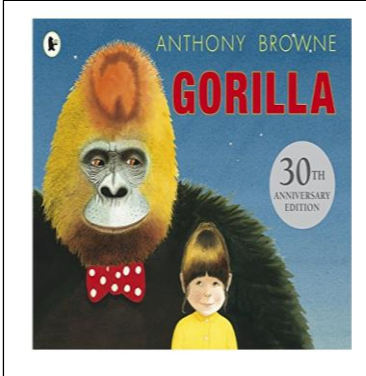# Hillside Maths Key Learning Overview
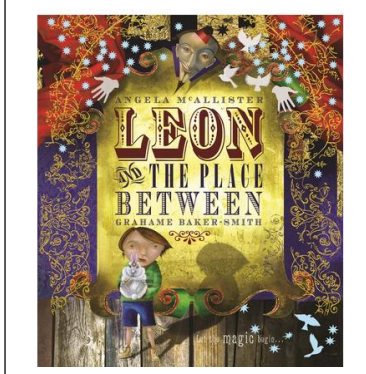
Year 4

Y4 Autumn Term

Text – Gorilla by Anthony Browne

Opportunities to link text:

Text – Leon and the Place Between by Graham Baker-Smith

Opportunities to link text:

Number: Place Value

Count in multiples of 6, 7, 9, 25 and 1,000

Find 1,00 more or less than a given number.

Recognise the place value of each digit in four-digit number (thousands, hundreds, tens and ones).

Order and compare numbers beyond 1,000.

Identify, represent and estimate numbers using different representations.

Round any number to the nearest 10, 100 and 1,000.

Solve number and practical problems that involve all of the above and with increasingly large positive numbers.

Count backwards through zero to include negative numbers.

Number: Addition and Subtraction

Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate.

Estimate and use inverse operations to check answers to a calculation.

Solve addition and subtraction two step problems in contexts, deciding which operations and methods to use and why.

Measurement: Length and Perimeter

Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.

Convert between different units of measure [for example, kilometre to metre].

Number: Multiplication and Division

Recall and use multiplication and division facts for multiplication tables up to 12 x 12.
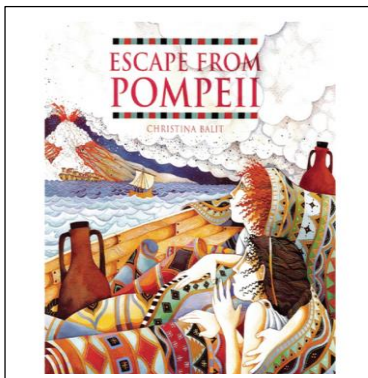
Count in multiples of 6, 7, 9, 25 and 1,000.

Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers.

Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one-digit, integer scaling problems and harder correspondence problems such as *n_* objects are connected to *m* objects.
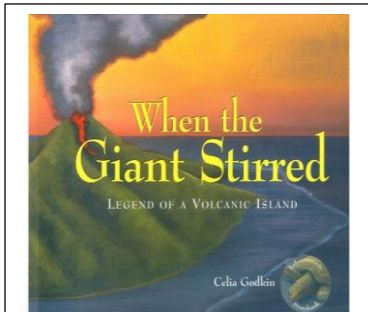
Y4 Spring Term

Text – Escape From Pompeii by Christina Balit

	Opportunities to link text:

Text – When The Giant Stirred by Celia Godkin

	Opportunities to link text:

Number: Multiplication and Division

Recall and use multiplication and division facts for multiplication tables up to 12 x 12.

Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers.

Recognise and use factor pairs and commutativity in mental calculations.

Multiply two-digit and three-digit numbers by a one-digit number using formal written layout.

Solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one-digit, integer scaling problems and harder correspondence problems such as *n* objects are connected to *m* objects.

Measurement: Area

Find the area of rectilinear shapes by counting squares.

Number: Fractions

Recognise and show, using diagrams, families of common equivalent fractions.

Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.

Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.

Add and subtract fractions with the same denominator.

Number: Decimals

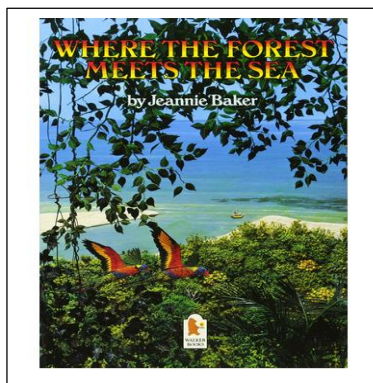Recognise and write decimal equivalents of any number of tenths or hundredths.

Find the effect of dividing a one or two-digit number by 10 or 100, identifying the value of the digits in the answer as ones, tenths and hundredths.

Solve simple measure and money problems involving fractions and decimals to two decimal places.

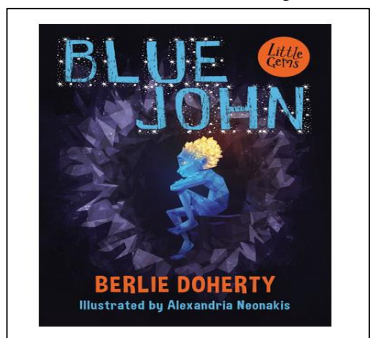Convert between different units of measure [for example, kilometre and metre].

Y4 Summer Term

Text – Where the Forest Meets the Sea by Jeannie Baker

Opportunities to link text:

Text – Blue John by Berlie Doherty

Opportunities to link text:

Number: Decimals

Compare numbers with the same number of decimal places up to two decimal places.

Round decimals with one decimal place to the nearest whole number.

Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$

Understand the effect of dividing a one or two-digit number by 10 or 100. Identifying the value of digits in the answer as ones, tenths and hundredths.

Measurement: Money

Estimate, compare and calculate different measures, including money in pounds and pence.

Solve simple measure money problems involving fractions and decimals to two decimal places.

Measurement: Time

Read, write and convert time between analogue and digital 12-hour and 24-hour clocks.

Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.

Statistics

Interpret and present discrete continuous data using appropriate graphical methods, including bar charts and time graphs.

Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.

Geometry: Properties of Shapes

Identify acute and obtuse angles and compare and order angles up to two right angles by size.

Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and size.

Identify lines of symmetry in 2D shapes presented in different orientations.

Complete a simple symmetric figure with respect to a specific line of symmetry.

Geometry: Position and Direction

Describe positions on a 2-D grid as co-ordinates in the first quadrant. Plot specific points and draw sides to complete a given polygon.

Describe movements between positions as translations of a given unit to the left/ right and up/ down.