

Holy Trinity – Key Maths Objectives

2016



Foundation Stage Key Objectives

1	Count to 100 in unison
2	Count backwards from at least 20
3	Read and write numbers to at least 20 in numerals
4	Match 1-1 in counting
5	Recognise the number of fingers held up/dots on a dice without counting
6	Identify "one more" and "one less" to at least 20
7	Order numbers to at least 20
8	Add two single-digit numbers using quantities and objects by counting on
9	Subtract two single-digit numbers using quantities and objects by counting back
10	Solve problems using apparatus to double, halve and share
11	Compare the size of things using mathematical language
12	Spot and continue patterns
13	Recognise some coins
14	Use everyday language to talk about time
15	Begin to tell the time to the hour and half-hour
16	Describe shapes by mentioning a property
17	Recognise the difference between flat and solid shapes
18	Recognise and name common 2-D shapes
19	Recognise and name common 3-D shapes

Year 1 Maths Key Objectives

1	Count to 100 from any number
2	Count across 100 from any number
3	Count, read and write numbers to 100 in numerals
4	Count in steps of 2s, 5s and 10s
5	Read and write mathematical symbols: +, - and =
6	Identify "one more" and "one less" to 100
7	Use number bonds within 20
8	Use subtraction facts within 20
9	Add 1-digit and 2-digit numbers to 20, including zero
10	Subtract 1-digit and 2-digit numbers to 20, including zero
11	Recognise, find and name a half
12	Recognise, find and name a quarter
13	Measure and begin to record length, mass and volume (non-standard units)
14	Recognise coins and notes and that they have different values
15	Use language to sequence events in chronological order
16	Recognise and use language relating to dates
17	Tell the time to the quarter hour, including drawing clocks
18	Recognise and name common 2-D shapes
19	Recognise and name common 3-D shapes
20	Describe position, direction and movement, including whole, half, quarter and three-quarter turns

Year 2 Maths Key Objectives

1	Count in steps of 3s
2	Recognise place value in two-digit numbers
3	Compare and order numbers up to 100 using $<$, $>$ and $=$
4	Recall and use number addition facts to 20, and derive related facts
5	Recall and use number subtraction facts to 20, and derive related facts
6	Add and subtract with objects and apparatus, one- and two-digit numbers
7	Add and subtract mentally, one- and two-digit numbers
8	Understand and use the inverse relationship between addition and subtraction
9	Know $2\times$, $5\times$ and $10\times$ tables
10	Calculate mathematical statements using \times and \div symbols
11	Recognise odd and even numbers
12	Recognise, find, name and write $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$ of size, shape or quantity
13	Write simple fraction facts, e.g. $\frac{1}{2}$ of 6 = 3
14	Combine amounts of money to make a value, including using \pounds and p symbols
15	Tell the time to the nearest 5 minutes, including drawing clocks (analogue and digital clocks)
16	Describe properties of 2-D shapes, including number of sides and symmetry
17	Describe properties of 3-D shapes, including number of edges, vertices and faces
18	Interpret and construct simple tables, tally charts and pictograms

Year 3 Maths Key Objectives

1	Count in multiples of 4, 8, 50 and 100
2	Compare and order numbers up to 1000
3	Round whole numbers to the nearest 10
4	Add numbers mentally (Multiples of 1, 10 and 100 to 3-digit numbers)
5	Subtract numbers mentally (Multiples of 1, 10 and 100 to 3-digit numbers)
6	Add using standard column method
7	Subtract using standard column method
8	Estimate answers to calculations and use the inverse to check answers
9	Know 3×, 4× and 8× tables
10	Count up and down in tenths
11	Understand that tenths are objects or quantities divided into ten equal parts
12	Compare and order simple fractions
13	Recognise and show equivalent fractions
14	Find and write fractions of a set of objects
15	Add and subtract fractions with common denominators (less than one)
16	Measure, compare and calculate using standard units
17	Measure the perimeter of simple 2-D shapes
18	Add and subtract money, including giving change
19	Tell and write the time from an analogue clock, including using Roman numerals
20	Estimate and read time to the nearest minute on a digital and analogue clock (and use the 24 hour clock)
21	Identify horizontal, vertical, parallel and perpendicular lines
22	Identify whether angles are greater or less than a right angle
23	Interpret and present data using bar charts, pictograms and tables

Year 4 Maths Key Objectives

1	Count backwards through zero, including negative numbers
2	Recognise place value in four-digit numbers
3	Round any number to the nearest 100 or 1000
4	Know tables up to 12×12
5	Use place value and number facts to carry out mental calculations
6	Use factor pairs and commutativity in mental calculations
7	Use short multiplication method
8	Recognise and use hundredths
9	Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$
10	Divide one- or two-digit numbers by 10 and 100, using tenths and hundredths
11	Round decimals with one decimal place to the nearest whole number
12	Compare numbers up to two decimal places
13	Convert between different units of metric measurement, including money
14	Find the area of rectilinear shapes by counting squares
15	Solve problems converting units of time
16	Compare and classify shapes, including quadrilaterals and triangles
17	Complete a simple symmetric figure with respect to a specific line of symmetry.
18	Describe positions on a 2-D grid using co-ordinates
19	Describe translations using a given unit to the left/right and up/down
20	Interpret and present discrete and continuous data on appropriate graphs

Year 5 Maths Key Objectives

1	Interpret negative numbers in context
2	Read Roman numerals to 1000, including years
3	Recognise and use square and cube numbers, and know the notation
4	Use rounding to check answers and determine accuracy
5	Identify multiples and factors, including finding factor pairs and common factors
6	Use vocabulary: prime numbers, prime factors and composite numbers
7	Know prime numbers up to 19
8	Multiply and divide numbers by 10, 100 or 1000, including decimals
9	Use long multiplication for multiplying numbers of up to 4 digits by one or two digits
10	Divide numbers using standard written short division
11	Convert between mixed numbers and improper fractions
12	Compare and order fractions whose denominators are multiples of the same number
13	Identify, name and write equivalent fractions including tenths and hundredths
14	Add and subtract fractions with denominators that are multiples of the same number
15	Multiply proper fractions and mixed numbers by whole numbers with support
16	Read and write decimal numbers as fractions
17	Round decimals with 2 decimal places to whole number or to one decimal place
18	Read, write, order and compare numbers with up to 3 decimal places
19	Recognise % symbol and explain as a fraction with denominator 100 (parts out of 100)
20	Understand and use common approximate conversions between metric and imperial
21	Measure and calculate the perimeter of composite rectilinear shapes
22	Calculate the area of rectangles, and estimate the area of irregular shapes
23	Use the properties of rectangles to find missing lengths and angles
24	Distinguish between regular and irregular polygons
25	Identify 3-d shapes from 2-d representations
26	Know angles are measured in degrees and compare acute, obtuse and reflex angles
27	Draw and measure angles to the nearest degree
28	Identify angles at a point, in a turn and on a straight line
29	Describe and represent the result of a reflection or translation
30	Complete, read and interpret information in tables, including timetables

Year 6 Maths Key Objectives

1	Use negative numbers to calculate intervals across zero
2	Divide numbers using long division, interpreting the remainders as appropriate
3	Use order of operations to carry out calculations
4	Use common factors to simplify fractions
5	Compare and order fractions of any size
6	Add and subtract fractions with different denominators and mixed numbers
7	Multiply simple pairs of proper fractions
8	Divide proper fractions by whole numbers
9	Calculate decimal fraction equivalents for simple fractions
10	Multiply a number with up to two decimal places by whole numbers
11	Use written division with answers of up to two decimal places
12	Solve problems involving the calculation of percentages
13	Recall and use equivalences between fractions, decimals and percentages
14	Solve problems using ratio using multiplication and division facts
15	Solve problems involving similar shapes where the scale factor is known
16	Solve problems involving proportion, using knowledge of fractions and multiples
17	Use simple formulae
18	Generate and describe linear number sequences
19	Express missing number problems algebraically
20	Convert units of measure between smaller and larger units
21	Convert between miles and kilometres
22	Calculate the area of parallelograms and triangles
23	Calculate and compare volume of cubes and cuboids
24	Illustrate and name parts of a circle
25	Finding missing angles in triangles, quadrilaterals and regular polygons
26	Recognise vertically opposite angles and find missing angles
27	Describe positions on the full co-ordinate grid
28	Translate shapes on a co-ordinate grid and reflect in the axes
29	Construct and interpret pie charts
30	Calculate the mean as an average