

# Holy Trinity – Key Maths Objectives

2016



## Foundation Stage Key Objectives

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

# Year 1 Maths Key Objectives

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

## Year 2 Maths Key Objectives

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

## Year 3 Maths Key Objectives

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

## Year 4 Maths Key Objectives

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

# Year 5 Maths Key Objectives

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

# Year 6 Maths Key Objectives

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