



St John of Jerusalem
Church of England Primary School

YEAR 5

Key Objectives

Before children leave year 5 they should be able to ...

Counting

Count in powers of ten up to one million

One hundred = $10 \times 10 = 10^2$

One thousand = $10 \times 10 \times 10 = 10^3$

How would you write one million?

Count forwards and backwards with positive and negative whole numbers including through zero

Continue the number sequence:

-165 -115 -65 -15

95 65 35 5

Place Value

Read, write, compare and order numbers up to one million (knowing value of each digit)

Order these numbers:

328,164

328,614

328,416

smallest

largest

Read Roman numerals to 1000 (M) and recognise years written in Roman numerals

What number do these Roman numerals represent? XXXIII =

LXXVI =

Ways to help your child

- Look out for Roman numeral on clocks and read the time.
- Read the Roman numeral dates on the end of BBC television programmes.
- Take the numbers on two buses, rearrange the digits to make the biggest and smallest number e.g. 242 and 56 becomes 65422.

Addition and Subtraction

Add and subtract whole and decimal numbers of more than 4 digits with regrouping (using the column method)

Use formal written methods to complete:

$8000 - 4680 =$

$806050 - 314783 =$

Multiplication and Division

Identify factors and multiples, finding all factor pairs and common factors

Write two more factor pairs for 40:

1×40

Write four common factors of 36 and 48:

Solve multiplication and division problems using factors, multiples, scaling, squares and cubes

Mr Sprout, the greengrocer, ordered a box of carrots to sell in his shop. The box contained 8^3 carrots.

How many carrots did he order?

Know and use prime numbers, prime factors and composite numbers (with rapid recall of primes to 19)

Sort the numbers:

6 3 16 23 17 54 84 97

PRIME

COMPOSITE (NON-PRIME)

Ways to help your child

- Practise recall of prime numbers.
- Give your child a number and challenge them to tell you the factor pairs.

Fractions

Read, write and compare decimal numbers, fractions and percentages

Sort these fractions:

$\frac{6}{10}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{6}$
smallest			largest

Know the percentage and decimal equivalent of: $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and fractions with denominator of 10 or 25

25% = $\frac{25}{100}$ = Complete the table of percentages, decimals and fractions.

= $\frac{38}{100}$ =

= = 0.55

Add and subtract proper fractions with denominators that are multiples and multiply mixed number fractions by whole numbers

Complete the fraction calculations:

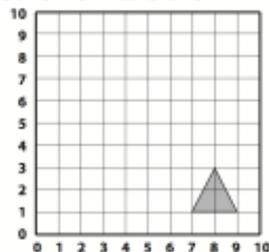
$\frac{1}{3} + \frac{2}{6} = \frac{\square}{6} + \frac{2}{6} = \frac{\square}{6}$

$\frac{8}{9} - \frac{10}{18} = \frac{6}{9} - \frac{\square}{9} = \frac{\square}{9}$

Position and Direction

Identify, describe and represent the position of a shape following a reflection or translation

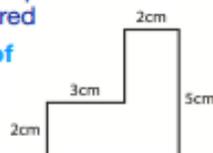
Translate this triangle 3 units left and 6 units up. Draw the new triangle location on the grid.



Measurement

Measure and calculate the perimeter and area of composite rectilinear shapes understanding cm^2 and m^2 as cm/m squared

Calculate the perimeter of this rectilinear shape:



Money

Solve problems involving converting money and calculating change

Bobby has saved £6.47 in his piggy bank. His brother, Sam, has saved 6 times as much.

How much more money does Sam have than Bobby?

Time

Solve problems involving converting units of time, crossing from minutes to hours, involving days, weeks, months and years

Lizzie started a sponsored walk at 10:20 am and finished at 4:30 pm.

How long did she walk for?

Convert the following units of time:

6 minutes = seconds

6 years 4 months = months

5 hours 40 minutes = minutes

Ways to help your child

- Look at the TV guide, how long are two shows on for? If a film starts at 18:00 and finishes two and half hours later, what time will it be?
- Combine journey times e.g. bus (20 minutes) walking (45 minutes) - how long is that?

Shape

Draw given angles and measure them in degrees

Use a protractor to measure these angles



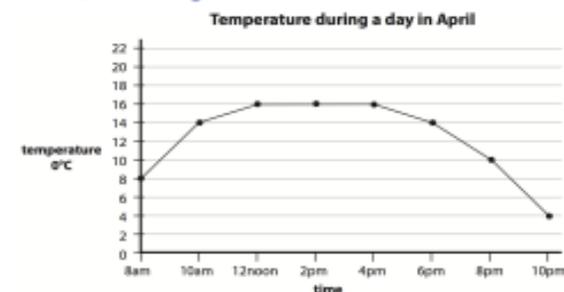
Distinguish between regular and irregular polygons

What are the differences between these regular and irregular octagons?



Statistics

Complete, read and interpret information in tables, including timetables



Read the graph and answer these questions:

What was the temperature at 3pm?

What do you think the temperature will be at midnight?

When was the sharpest rise in the temperature?

Ways to help your child

- Look at BBC sports pages, read and analyse the data. What does the data tell you?