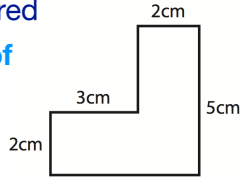


## Measurement

Measure and calculate the perimeter and area of composite rectilinear shapes understanding  $\text{cm}^2$  and  $\text{m}^2$  as  $\text{cm}/\text{m}$  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

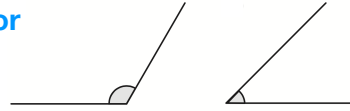
## Ways to help your child

- 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

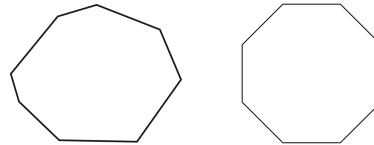
Draw given angles and measure them in degrees

Use a protractor to measure these angles



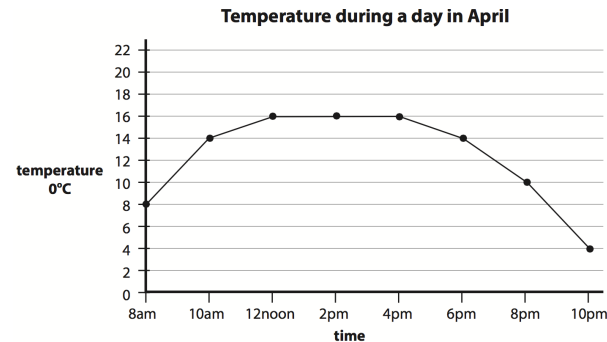
Distinguish between regular and irregular polygons

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?

# Year 5 Fundamentals of Mathematics



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 x 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:**

$\frac{6}{10}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{5}{6}$
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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% =  $\frac{25}{100}$  =

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

=  = 0.55

**Complete the table of percentages, decimals and fractions.**

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.**

