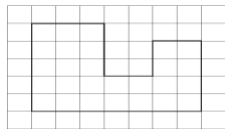


## Multiplication and division vocabulary

| Term         | Definition                                                                    | Example                                                             |
|--------------|-------------------------------------------------------------------------------|---------------------------------------------------------------------|
| factor       | a number that divides exactly into another number                             | factors of 12 = 1, 2, 3, 4, 6, 12                                   |
| Factor pairs | a <b>pair</b> of numbers that, when multiplied will result in a given product | Factor pairs of 30 =<br>5 and 6<br>2 and 15<br>10 and 3<br>1 and 30 |

### AREA

is the amount of space inside a 2D shape usually measured in squares



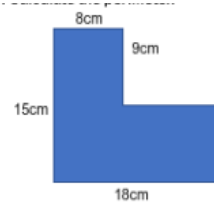
Area =

27 squares

### PERIMETER

Is the distance around a two-dimensional shape.

Perimeter = 66cm



## Roman numerals

|    |   |     |   |
|----|---|-----|---|
| 1  | I | 50  | L |
| 5  | V | 100 | C |
| 10 | X |     |   |

## Year 4 Knowledge organiser

### 2D shapes

| Name          | No. of sides |
|---------------|--------------|
| quadrilateral | 4            |
| pentagon      | 5            |
| hexagon       | 6            |
| heptagon      | 7            |
| octagon       | 8            |
| nonagon       | 9            |
| decagon       | 10           |

polygon = shape with straight sides

regular = all sides/angles the same

irregular = sides/angles **not** same

### Types of triangle



scalene equilateral isosceles Right-angled

### Types of quadrilateral



parallelogram trapezium rhombus



Square rectangle kite

### Shape vocabulary

Horizontal line



Vertical line



parallel lines



Perpendicular lines



## Measurement conversions

| Month     | Days                 |
|-----------|----------------------|
| January   | 31                   |
| February  | 28 (29 in leap year) |
| March     | 31                   |
| April     | 30                   |
| May       | 31                   |
| June      | 30                   |
| July      | 31                   |
| August    | 31                   |
| September | 30                   |
| October   | 31                   |
| November  | 30                   |
| December  | 31                   |

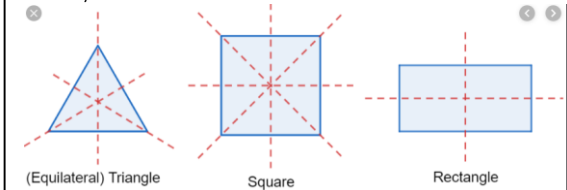
|              |                                           |
|--------------|-------------------------------------------|
| 1 centimetre | 10mm                                      |
| 1 metre      | 100cm                                     |
| 1 kilometre  | 1,000 m                                   |
| 1 kilogram   | 1,000 grams                               |
| 1 litre      | 1,000 millilitres                         |
| 1 minute     | 60 seconds                                |
| 1 hour       | 60 minutes                                |
| 1 day        | 24 hours                                  |
| 1 week       | 7 days                                    |
| 1 year       | 365 days (366 in a leap year)<br>52 weeks |
| £1           | 100p                                      |
| £5           | 500p                                      |

## Position and Direction

**Translation**- Moving a figure to a new location with no other changes.

**Symmetry**- an object is symmetrical when one half is a mirror image of the other half.

**Lines of symmetry** - The "Line of Symmetry" (shown here in white) is the imaginary line where you could fold the image and have both halves match exactly.

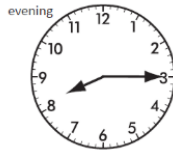


## Time

To read time on analogue clock.

To know that the shorter (hour) hand points to the hours.

The longer (minute) hand points to the minutes.



The hour hand has passed 8 and the minute hand is at 15. The time is **8:15 pm**.

## Digital



The first digits represent the hours. The last two digits represent the minutes

## 24 hour clock



In the 24 hour clock. The first two digits tell us how many hours of the day has passed. The last two digits represent the minutes

## Times tables

To know multiplication and division facts for multiplication tables up to 12 x 12

## Co-ordinates

The first number represents the **x** coordinate.

The second number represents the **y** coordinates (**x,y**)

## Angles

|                               |       |
|-------------------------------|-------|
| full turn                     | 360°  |
| half turn                     | 180°  |
| right angle                   | 90°   |
| acute angle                   | < 90° |
| obtuse angle                  | > 90° |
| angles on a straight line     | 180°  |
| angles inside a triangle      | 180°  |
| angles inside a quadrilateral | 360°  |

## Fractions, decimals & percentages

|       |      |         |
|-------|------|---------|
| 1/100 | 0.01 | ÷ 100   |
| 1/10  | 0.1  | ÷ 10    |
| 1/4   | 0.25 | ÷ 4     |
| 1/2   | 0.5  | ÷ 2     |
| 3/4   | 0.75 | ÷ 4, x3 |
| 1     | 1    | ÷ 1     |