

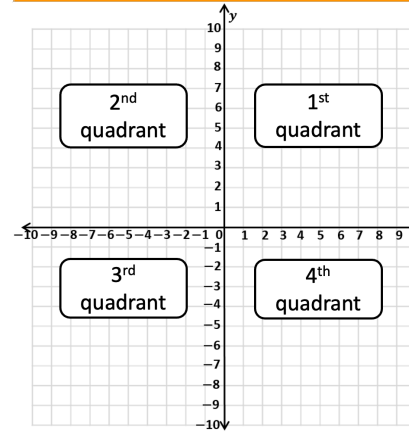


# Position and Direction Year 6

## Key vocabulary

|             |                                                                                                                                            |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Position    | Where something is located (often in relation to something else).                                                                          |
| Direction   | Where something is pointing                                                                                                                |
| Coordinates | On graphs it is usually a pair of numbers: the first number shows the distance along, and the second number shows the distance up or down. |
| Reflection  | An image or shape as it would be seen in a mirror.                                                                                         |
| Translation | Moving a shape without rotating or flipping it.                                                                                            |
| X - axis    | The line on a graph that runs horizontally (left-right) through zero.                                                                      |
| Y - axis    | The line on a graph that runs vertically (up-down) through zero.                                                                           |
| Horizontal  | Going side-to-side, like the horizon.                                                                                                      |
| Vertical    | In an up-down direction or position. Upright.                                                                                              |
| Quadrant    | Any of the 4 areas made when we divide up a plane by an x and y axis, as shown.                                                            |

## Coordinates

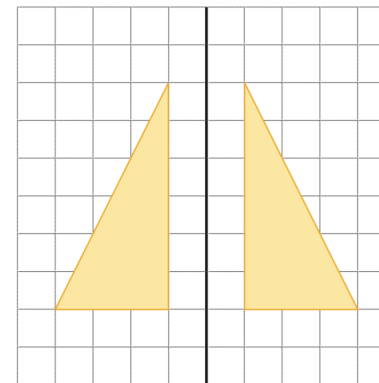


Coordinates are a useful way to locate a position on a map or a grid.

The numbers across the horizontal line of the grid are on the x-axis. The numbers on the vertical line of the grid are on the y-axis. We always read or write the number on the x-axis before the y-axis.

The x and y position are written in brackets with a comma. The coordinate of the organs spot is (3,4)

## Reflection



A shape is reflected when it is flipped over a mirror line.

The reflected image is congruent to the original. This means that the measurements of the sides and angles have not changed. Each point of the reflected shape is the same distance from the mirror line as the original shape.

## Translation

In maths, translation means moving an object on a grid. The object is moved without changing the size, turning or reflecting it.

When translating an object on a grid, it can move up or down, left or right.

