Key Vocabulary:

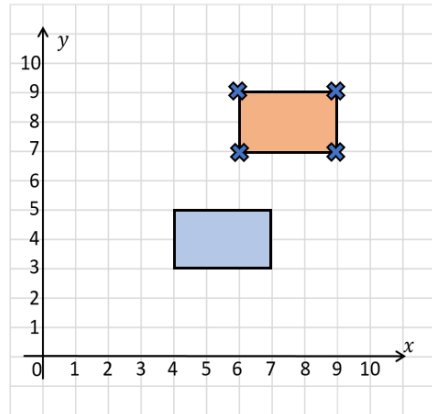| coordinate	quadrant	x-axis	y-axis	reflection	mirror line
translation	horizontal	vertical	interval	decrease	increase

What will I know by the end of this unit?

Read and plot coordinates:
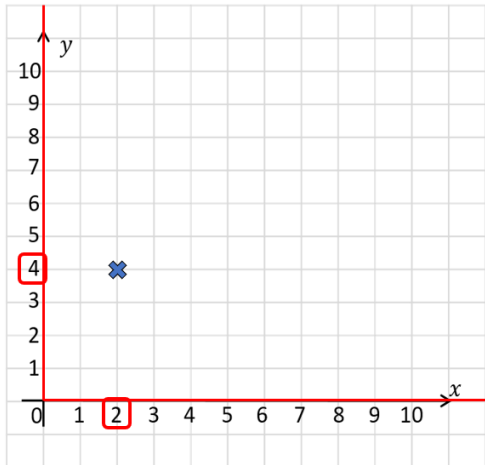
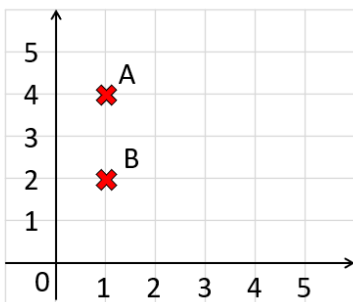How can we describe the position of point ?

$*(\boxed{2}, \boxed{4})$

Translation:

Translate the rectangle 2 squares left and 4 squares down.

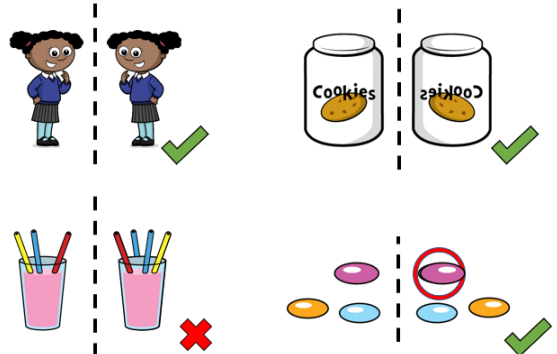### Translation with coordinates:

Point A is translated to point B.

Write the coordinates of both points.
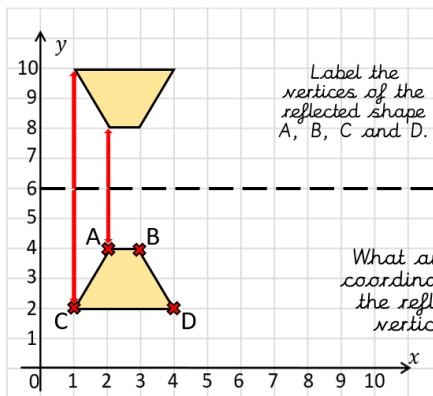
A = (1, 4)
B = (1, 2)

When a point is translated up/down, the x-coordinate stays the same and the y-coordinate changes.

Lines of symmetry:

Which images are reflections?
Which images are not?

Reflection in horizontal and vertical lines:

Label the vertices of the reflected shape A, B, C and D.

What are the coordinates of the reflected vertices?

A (2, 4)   B (3, 4)   C (1, 2)   D (4, 2)