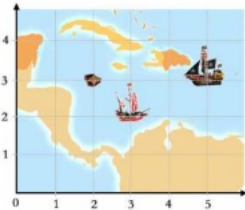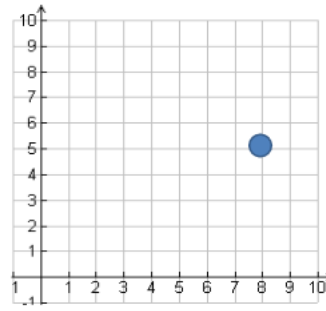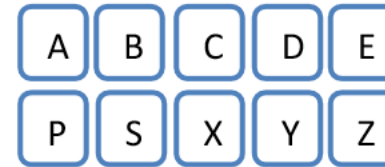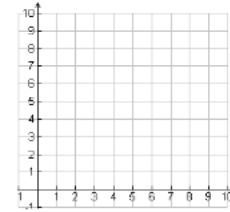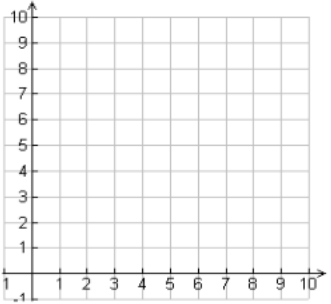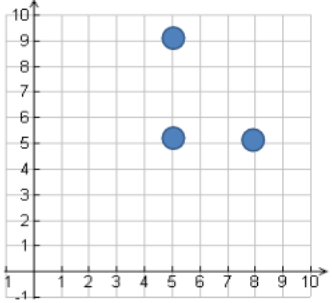| Fluency	Reasoning	Problem Solving
• Write the co-ordinates of the coloured dots. ___ ___ ____ _____ • Draw the shapes on the co-ordinates given. ■ (2, 6) ● (6, 2) ▲ (9, 0) • Write the co-ordinates of the ships. 	• Point A is marked on the grid. Henry says that point A is at (5,8) Aisha says that point A is at (8,5) Who is correct? Can you explain what mistake one of the children has made? • Junaid says: You can say either number first in co-ordinates, it doesn't matter. Do you agree with Junaid? Explain why.	• Can you place the letters below on the grid by following the rules? A B C D E P S X Y Z The letters at (1,1), (1,2) and (1,3) are all symmetrical about a vertical line. The letter at (8,3) is not symmetrical and is made of straight and curved lines. The letters at (1,1), (2,1) and (5,1) are symmetrical about a horizontal line. The letter at (5,1) consists of just straight lines. The letters at (5,3) and (2,0) consist of just curved lines. The letters at (5,3), (5,2) and (5,1) are consecutive in the alphabet. The letters at (0,2) and (1,2) are at the two ends of the alphabet.
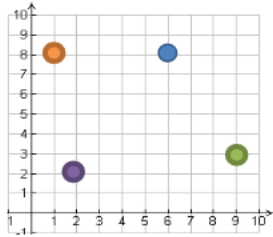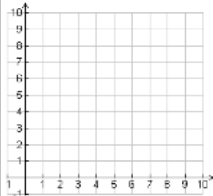
Fluency	Reasoning	Problem Solving

Fluency

- Plot the points on the grid below to make a 2d shape.

  (2,9) (2,2) (5,9) (5,2)

Tom draws a shape on the same grid using these co-ordinates.

(2,9) (2,6) (5,9) (5,6)

What is the same and what is different about your shape and Tom's shape?

- Write co-ordinates for a friend to plot that make the following shapes:
  a) Triangle
  b) Trapezium
  c) Rhombus

Reasoning

- Henry plots three points on a grid.

  Aisha says *"You can make a square if you mark another point at (8, 9)"*

  Is Aisha correct?

- Here are the co-ordinates of corners of a rectangle that has width of 4.

  (7, 2) and (14, 2)

What are the other two co-ordinates?

Problem Solving

- There are 12 points marked on the grid that are all corners of squares. Can you work out where the 4 squares are?
  The purple dots are corners of more than one square.