

Varied Fluency

Step 1: Describe Position

National Curriculum Objectives:

Mathematics Year 4: (4P3a) [Describe positions on a 2-D grid as coordinates in the first quadrant.](#)

Differentiation:

Developing Questions to support reading simple coordinates through identifying the number on the x axis, followed by the y axis.

Expected Questions to support reading coordinates and working out answers from a selection, some of which are incorrect.

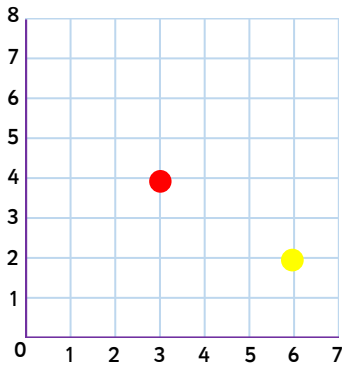
Greater Depth Questions to support reading coordinates and working out answers from a greater selection, some of which are incorrect.

[More resources](#) which follow the same small steps as White Rose.

Did you like this resource? Don't forget to [review](#) it on our website.

Varied Fluency – Describe Position

1a. Are the coordinates of each point correct?



Read across to find the number on the x axis first.

Then read up to find number on the y axis.

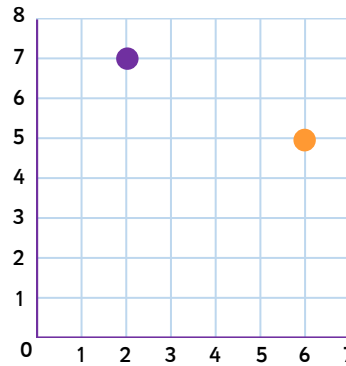
Red: (5, 4)

Yellow: (6, 3)



VF

1b. Are the coordinates of each point correct?



Read across to find the number on the x axis first.

Then read up to find number on the y axis.

Purple: (7, 2)

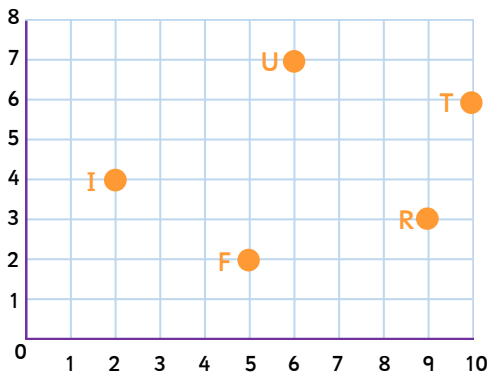
Orange: (6, 5)



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2a. What do these coordinates spell?

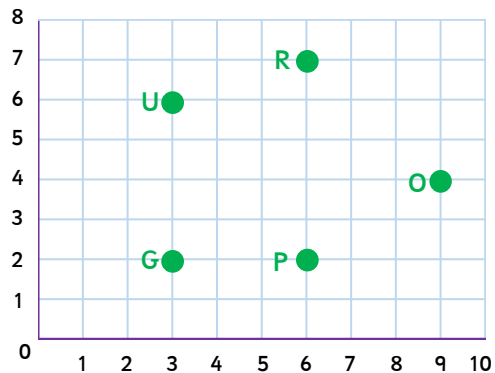
(5, 2) (9, 3) (6, 7) (2, 4) (10, 6)



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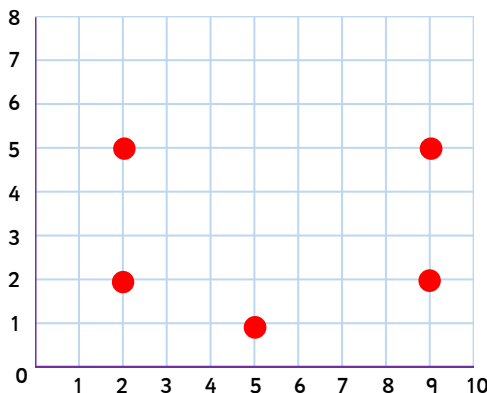
2b. What do these coordinates spell?

(3, 2) (6, 7) (9, 4) (3, 6) (6, 2)



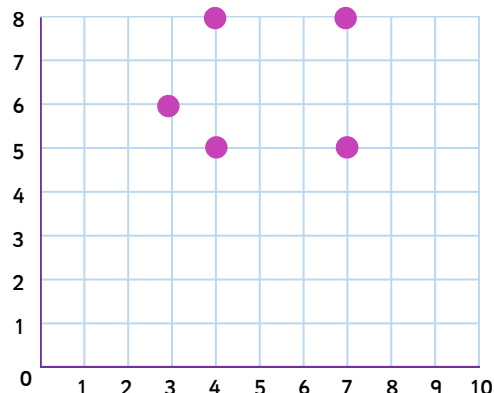
VF

3a. Write the coordinates which join together to form a rectangle.



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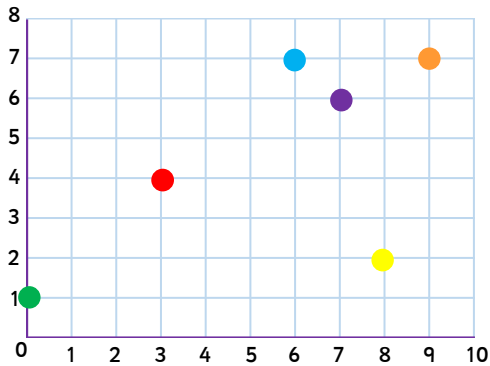
3b. Write the coordinates which join together to form a square.



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4a. Are the coordinates of each point correct?

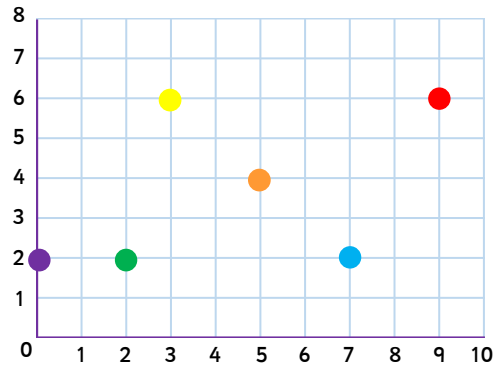


Purple (6, 7) Yellow (8, 2) Green (1, 0)
Red (4, 3) Blue (6, 7) Orange (9, 6)



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4b. Are the coordinates of each point correct?



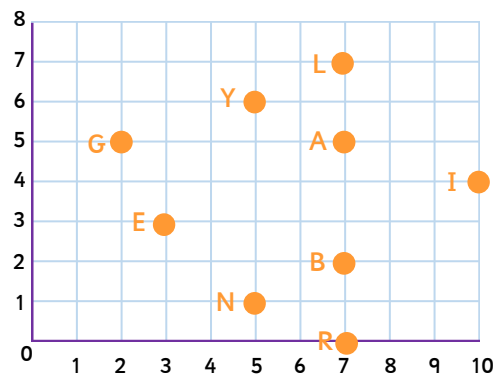
Purple (0, 2) Yellow (3, 6) Green (1, 1)
Red (9, 6) Blue (2, 7) Orange (4, 5)



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5a. What do these coordinates spell?

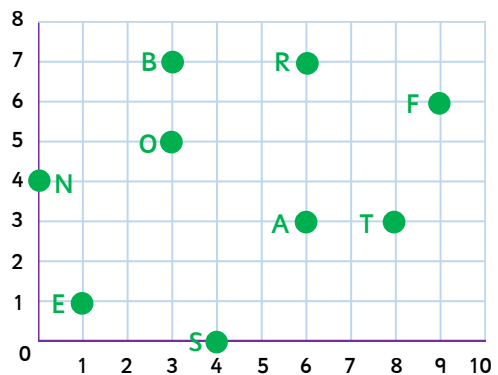
(7, 0) (3, 3) (10, 4) (2, 5) (5, 1)



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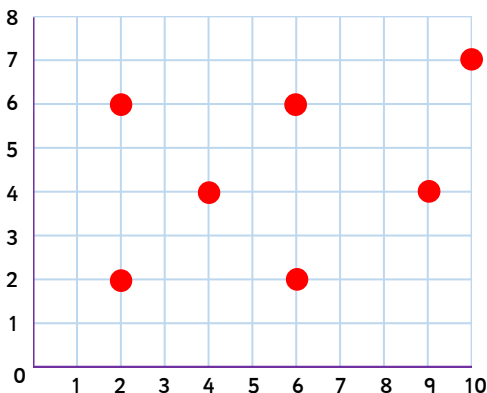
5b. What do these coordinates spell?

(3, 5) (9, 6) (8, 3) (1, 1) (0, 4)



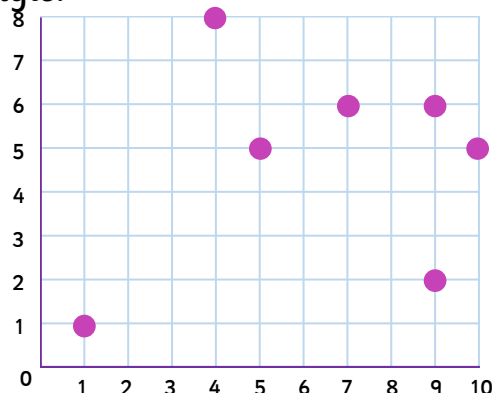
VF

6a. Write the coordinates which join together to form a square.



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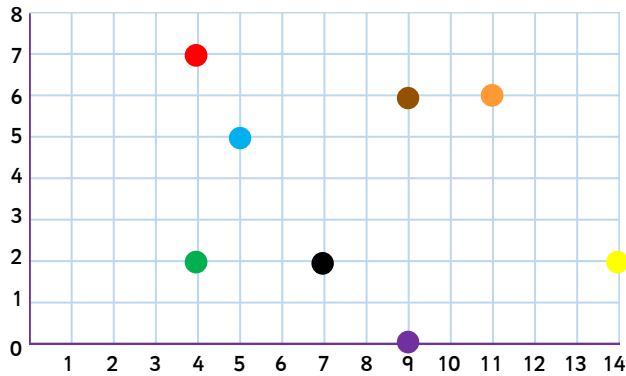
6b. Write the coordinates which join together to form a right angled triangle.



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7a. Are the coordinates of each point correct?

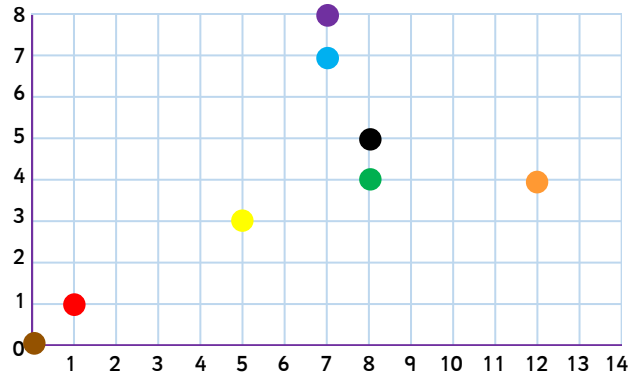


Purple: (0, 9) Yellow: (14, 2) Brown: (9, 0)
Green: (4, 2) Red: (7, 4) Black (2, 7)



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7b. Are the coordinates of each point correct?



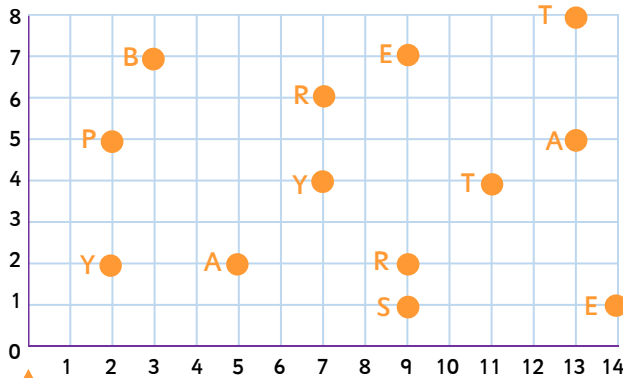
Orange: (12, 4) Blue: (8, 7) Purple: (8, 8)
Yellow: (5, 3) Green: (8, 5) Brown (0, 0)



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8a. What do these coordinates spell?

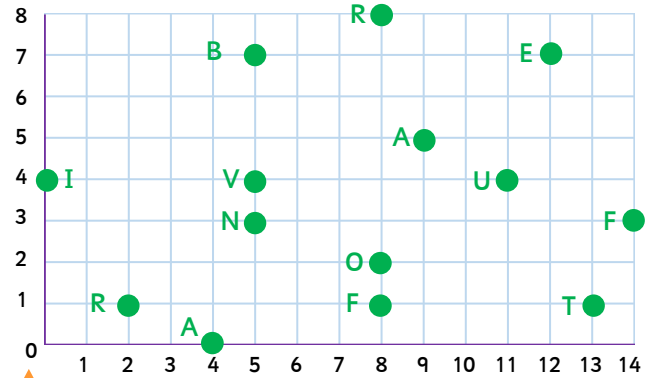
(9, 1) (9, 7) (2, 5) (13, 5) (9, 2) (5, 2)
(11, 4) (9, 8)



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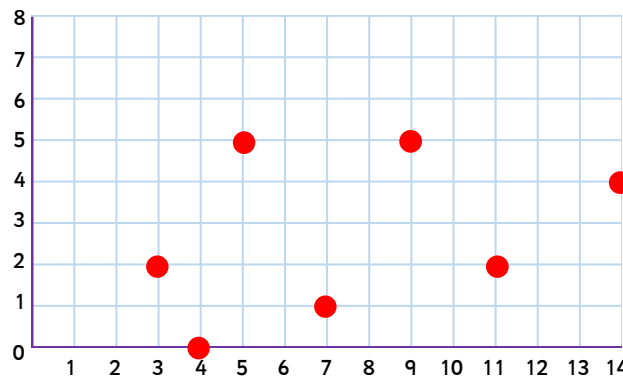
8b. What do these coordinates spell?

(8, 1) (4, 0) (5, 4) (8, 2) (11, 4) (8, 8)
(0, 4) (13, 1) (12, 7)



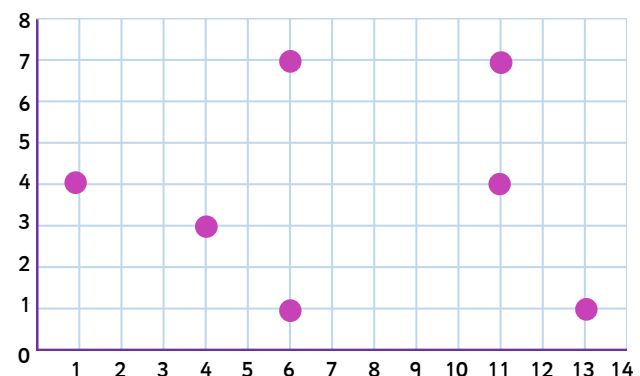
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9a. Write the coordinates which join together to form a trapezium.



VF

9b. Write the coordinates which join together to form a parallelogram.



VF

Varied Fluency – Describe Position

Developing

- 1a. The the coordinates for red should be (3, 4) and the coordinates for yellow should be (6, 2).
- 1b. The the coordinates for purple should be (2, 7) and the coordinates for orange are correct.
- 2a. The coordinates spell FRUIT.
- 2b. The coordinates spell GROUP.
- 3a. The coordinates which make a rectangle are: (2, 2) (2, 5) (9, 5) and (9, 2).
- 3b. The coordinates which make a square are: (4, 5) (4, 8) (7, 5) (7, 8).

Expected

- 4a. The coordinates for Purple: should be (7, 6); Yellow: correct; Green: should be (0, 1); Red: should be (3, 4); Blue: correct; Orange: should be (9, 7)
- 4b. The coordinates for Purple: correct; Yellow: correct; Green: should be (2, 2); Red: correct; Blue: should be (7, 2); Orange: should be (5, 4)
- 5a. The coordinates spell REIGN.
- 5b. The coordinates spell OFTEN.
- 6a. The coordinates which make a square are: (2, 2) (6, 2) (6, 6) and (2, 6).
- 6b. The coordinates which make a right angled triangle are: (9, 2) (9, 6) and (7, 6).

Greater Depth

- 7a. The coordinates for Purple: should be (9, 0); Yellow: correct; Brown: should be (9, 6); Green: correct; Red: should be (4, 7); Black: should be (7, 2)
- 7b. The coordinates for Orange: correct; Blue: should be (7, 7); Purple: should be (7, 8); Yellow: correct; Green: should be (8, 4); Brown: correct.
- 8a. The coordinates spell SEPARATE.
- 8b. The coordinates spell FAVOURITE.
- 9a. The coordinates which make a trapezium are: (3, 2), (5, 5), (9, 5) and (11, 2).
- 9b. The coordinates which make a parallelogram are: (1, 4), (6, 7), (6, 1) and (11, 4).