

Max the Monkey's Coordinate Quest

Learning objective: To identify, describe, and represent the position of a shape following a reflection or translation, and to plot coordinates in the first quadrant.

Max the Monkey is mapping out the jungle floor using a grid. Help him solve these coordinate puzzles! Remember: always go along the corridor (x-axis) before you go up the stairs (y-axis).

Answer Key: 1. (3, 2)*, 2. True, 3. y-axis, 4. (5, 4), 5. B, 6. False, 7. 4, 8. C, 9. (1, 1), 10. True. (Note: Ensure students understand that the first number is the horizontal position and the second is the vertical.)

Word bank: x-axis · y-axis · coordinate · quadrant · origin · grid · translation

1. 1. Max starts at the origin (0,0). He moves 3 squares right and 2 squares up. What are his new coordinates? A) (2,3) B) (3,2)* C) (0,5) D) (3,3) (1 mark)

2. 2. True or False: The x-axis is the horizontal line on a coordinate grid. (1 mark)

3. 3. Which axis do you look at to see how far 'up' a point is located? (1 mark)

4. 4. If a point is at (2, 4) and you translate it 3 squares to the right, what is the new coordinate? (1 mark)

5. 5. Which coordinate represents the origin? A) (1,1) B) (0,0)* C) (x,y) D) (10,10) (1 mark)

6. 6. True or False: In the coordinate (5, 8), the number 8 represents the distance along the x-axis. (1 mark)

7. 7. A square has vertices at (1,1), (4,1), (1,4), and (4,4). What is the length of one side of the square? (1 mark)

8. 8. Max finds a banana at (6, 3). Which direction is the banana from the origin? A) 3 right, 6 up B) 6 left, 3 down C) 6 right, 3 up* D) 3 left, 6 up (1 mark)

9. 9. If you reflect the point (1, 5) across the x-axis, would the x-coordinate stay the same? (1 mark)

10. 10. True or False: Coordinates are always written in brackets with a comma separating the two numbers. (1 mark)

Draw: Draw a 5x5 grid. Plot a triangle where the corners are at (1,1), (3,1), and (2,4). Label the points clearly.



Extension challenge: Max has 3 bananas at (1,2), (1,4), and (3,3). If he translates all of them 2 squares to the right and 1 square down, what will their new coordinates be?