

Max the Monkey's Coordinate Adventure

Learning objective: To identify, describe, and plot points on a 2D grid using coordinates in the first quadrant.

Read each question carefully. Remember to write the horizontal coordinate (x) first, followed by the vertical coordinate (y), putting them inside brackets like this: (x, y).

Max the Monkey is designing a jungle obstacle course for his friends. He has drawn a map on a grid. The x-axis represents the distance in metres from the Great Banyan Tree, and the y-axis represents the height above the jungle floor in metres.

Word bank: x-axis · y-axis · coordinate · origin · grid · horizontal · vertical · plot

1. Max places a coconut at (2, 4). Explain which direction you move along the x-axis and which direction you move along the y-axis to find this point starting from (0,0). (2 marks)

2. On Max's grid, a banana is at (5, 2) and a mango is at (5, 7). What is the distance in metres between the banana and the mango? (2 marks)

3. Max plots three corners of a square at (1, 1), (1, 4), and (4, 1). What are the coordinates of the fourth corner? (2 marks)

4. Max wants to build a bridge between two points. Point A is at (3, 6) and Point B is at (8, 6). Describe the line that connects these two points. Is it horizontal or vertical? How do you know? (4 marks)

5. Look at the grid: The river is a straight line from (0, 2) to (6, 2). A vine hangs from (3, 5) down to (3, 2). If Max swings on the vine, at what coordinate does he cross the river? Explain why. (5 marks)

6. Plot the following points on the grid provided below: A(2, 8), B(6, 8), C(6, 4), D(2, 4). Join the points in order. What shape have you drawn? (5 marks)

7. If Max moves from (1, 1) to (4, 1) and then to (4, 5), how many total units has he travelled? (5 marks)

Draw: Draw a 10x10 coordinate grid. Label the x-axis from 0 to 10 and the y-axis from 0 to 10. Mark the 'Origin' at (0,0).



Extension challenge: Extension Task: Write a short paragraph describing how you would explain to a friend how to find a treasure hidden at (7, 3) on a map. Total: /25