

## Max's Coordinate Quest

*Learning objective: To be able to describe positions on a 2D grid as coordinates in the first quadrant.*

Help Max the monkey map out his jungle playground! Read the grid carefully, remembering to go along the corridor (x-axis) before you go up the stairs (y-axis).

Max has set up a treasure hunt in the forest. The grid is 10 units wide and 10 units high. The treehouse is at (2, 3), the banana grove is at (7, 5), the sparkling stream is at (4, 9), and the stone lookout is at (8, 1).

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

**1. Max is standing at the treehouse. Write the coordinates for his position. (1 mark)**

**2. Max walks from the stone lookout (8, 1) to the banana grove (7, 5). How many squares left and how many squares up does he move? (2 marks)**

**3. If Max moves 3 squares to the right and 2 squares down from the sparkling stream (4, 9), what are his new coordinates? (2 marks)**

**4. Plot a point at (5, 5) and label it 'Max's Lunch Spot'. Explain how you found this position using the x and y axes. (3 marks)**

**5. Which point has a higher value on the y-axis: the treehouse (2, 3) or the sparkling stream (4, 9)? (1 mark)**

**Draw:** Draw a 10x10 grid. Label the bottom axis (x) from 0 to 10 and the side axis (y) from 0 to 10. Mark the treehouse, banana grove, stream, and lookout at their correct coordinates.



*Extension challenge: Max wants to build a straight path that connects the treehouse (2, 3) to the banana grove (7, 5). Can you identify one other point that would lie exactly on that straight line?*