

Max's Geometry Garden Adventure

Learning objective: To recognise angles as a property of shape or a description of a turn, and identify right angles.

Read the story below and help Max the monkey solve the shape puzzles in his garden. Use your knowledge of turns and angles to answer the questions.

Max the monkey is busy planning his new garden. He knows that every corner of his flower beds is a maths puzzle waiting to be solved. Max uses a square wooden tile to check the corners of his garden beds. If the corner of the flower bed fits perfectly against the corner of his tile, he knows he has found a right angle. Max turns 90 degrees to face the apple tree, which is a quarter turn. He then spots a gate that is slightly wider than his square tile, and a triangular rock that has corners sharper than his tile.

Word bank: angle · right angle · turn · degrees · acute · obtuse · quarter turn · half turn

1. Max says a right angle is the same as a quarter turn. Is he correct? Explain your answer. (2 marks)

2. Look at a square. How many right angles does a square have in total? (1 mark)

3. If Max makes a half turn, how many right angles has he turned through? (2 marks)

4. Max finds a shape with three corners. All the corners are smaller than a right angle. What do we call an angle that is smaller than a right angle? (1 mark)

5. Max buys a new garden fence panel for £12.50. It is a rectangle. How many right angles are in the four corners of his fence panel? (1 mark)

Draw: Draw a garden path with three different shapes: one with only right angles, one with angles smaller than a right angle, and one with angles larger than a right angle.



Extension challenge: Challenge: If Max turns three-quarters of a full turn, how many degrees has he turned? Research how many degrees are in a full circle.