

Max's Geometry Puzzle Challenge

Learning objective: To identify and classify acute, obtuse, and right angles, and to recognise lines of symmetry in 2D shapes.

Max the monkey has found a collection of strange shapes! Help him solve these geometry puzzles by using your knowledge of angles and symmetry.

Word bank: Acute angle · Obtuse angle · Right angle · Symmetry · Parallel · Perpendicular

1. Max finds an angle that is smaller than a right angle. What is the mathematical name for this type of angle? (1 mark)

2. An angle measures 135 degrees. Is this an acute, right, or obtuse angle? Explain how you know. (2 marks)

3. Max draws a square. How many right angles are there in a square, and how many lines of symmetry does it have? (2 marks)

4. Look at a regular hexagon. How many lines of symmetry can you find in this shape? (1 mark)

5. Max is looking at two lines that stay the same distance apart and never meet, no matter how far they go. What are these lines called? (1 mark)

6. If Max draws a triangle where one angle is 90 degrees, what is the specific name for this type of triangle? (1 mark)

Draw: Draw a shape that has exactly one line of symmetry and at least one obtuse angle. Label the line of symmetry with a dashed line.



Extension challenge: Can you find an example of a right angle and a set of parallel lines inside your own classroom? Write down where you found them.