Max’s Magnificent Angles Challenge

Learning objective: To identify, compare, and order angles as acute, obtuse, or right angles.

Read the clues provided by Max the monkey and use your knowledge of angles to solve each puzzle. Remember, a right angle is exactly 90 degrees, an acute angle is less than 90 degrees, and an obtuse angle is more than 90 degrees but less than 180 degrees.

Max the monkey is busy organising his jungle workshop. He uses his tools to measure the corners of his wooden storage boxes. 'Every corner tells a story!' Max chirps. He finds that some corners are perfectly square, some are sharp like a thorn, and some are wide and open like a yawning hippo. Max needs your help to label these angles correctly so he can finish building his shelves.

Word bank: Acute · Obtuse · Right angle · Degrees · Vertex · Protractor

1. Max has a wooden shelf with a corner that is exactly 90 degrees. What is the mathematical name for this type of angle? (1 mark)

2. Look at an angle that measures 45 degrees. Is this an acute or obtuse angle? Explain how you know. (2 marks)

3. Max finds a leaf shaped like a triangle. Two of the angles are 30 degrees and 40 degrees. Is the third angle acute or obtuse if the total of all angles in a triangle is 180 degrees? (2 marks)

4. Order these angles from smallest to largest: 120 degrees, 45 degrees, 90 degrees, 15 degrees. (1 mark)

5. If Max opens a pair of scissors to 110 degrees, is the angle acute or obtuse? Why? (2 marks)

Draw: Draw three different angles on your paper: one acute angle, one right angle, and one obtuse angle. Label each one clearly.

Extension challenge: Find three objects around your classroom or home that have angles. Measure them using a protractor if you have one, or estimate if they are acute, obtuse, or right angles. Create a table to record your findings.