Max’s Magnificent Maths: The World of Angles

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

Read the guide below and help Max the monkey solve the angle puzzles. Remember, a right angle is exactly 90 degrees, like the corner of a square!

Max is exploring the jungle to find hidden patterns. He knows that an angle is the amount of turn between two lines meeting at a point called a vertex. Max has spotted three types of angles on his adventure: 1. An Acute angle is smaller than a right angle (less than 90 degrees). 2. A Right angle is exactly 90 degrees, just like the corner of a wooden crate. 3. An Obtuse angle is bigger than a right angle but smaller than a straight line (between 91 and 179 degrees). Max needs to measure the angle of a tree branch, the corner of a leaf, and the beak of a bird to finish his map!

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

1. Max finds a leaf with a corner that measures 45 degrees. Is this an acute or obtuse angle? Explain your answer. (2 marks)

2. If a right angle is 90 degrees, how many degrees would an angle be if it were 'straight' (a flat line)? (1 mark)

3. Look at the letter 'L'. What type of angle is formed at the vertex where the two lines meet? (1 mark)

4. Max sees a bird's beak open wide. It measures 120 degrees. Is this acute or obtuse? Why? (2 marks)

5. List three objects you might find in your classroom that have at least one right angle. (3 marks)

Draw: Draw a treasure map for Max. Include one acute angle (a pointy mountain peak), one right angle (a square trapdoor), and one obtuse angle (a wide river bend). Label them clearly.

Extension challenge: Max has a challenge: If you add two acute angles together, can they ever form a right angle? Draw an example to prove your theory.