

Max's Magnificent Geometry Adventure

Learning objective: To identify, compare, and order angles as greater than or less than a right angle, and to recognize acute, obtuse, and reflex angles.

Help Max the monkey solve these geometric puzzles. Use your knowledge of right angles (90°) to identify the different types of turns and shapes found in the jungle.

Word bank: Acute · Obtuse · Right angle · Reflex · Degrees · Vertex · Rotation · Perpendicular

1. Max finds a set of bamboo sticks. If one stick is vertical and the other is horizontal, they create a 'right angle'. How many degrees is a right angle, and what would we call an angle that is smaller than this? (2 marks)

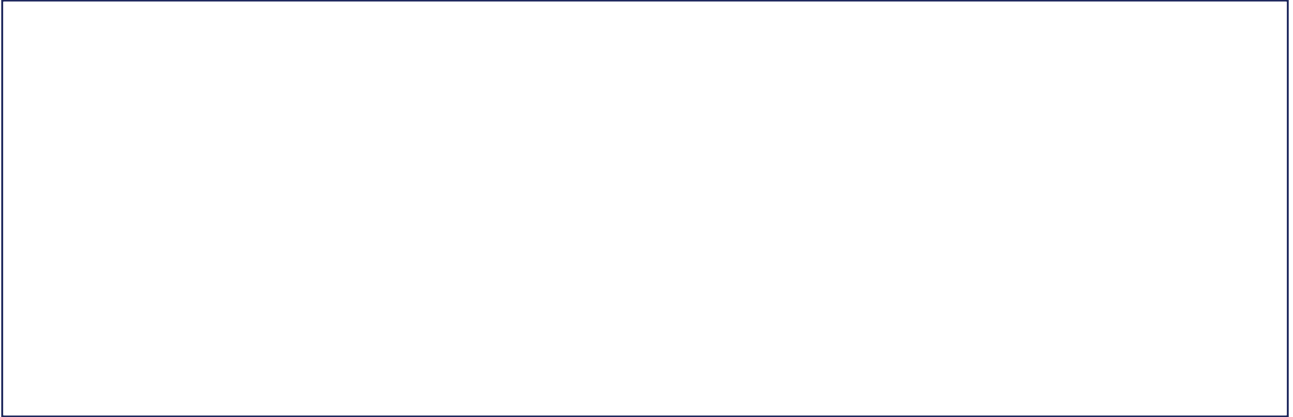
2. Look at these three angles: Angle A is 45° , Angle B is 90° , and Angle C is 135° . Categorize each angle as acute, right, or obtuse. Justify why Angle C is classified as obtuse. (3 marks)

3. Max makes a full turn while swinging from a vine. How many degrees is a full turn? If he makes a half-turn, how many right angles has he rotated through? (2 marks)

4. Compare and contrast an obtuse angle and a reflex angle. Explain why a reflex angle is always larger than an obtuse angle. (3 marks)

5. Max spots a triangle where all three angles are smaller than 90° . What might happen to the shape of the triangle if he were to increase one of those angles to 110° ? Explain your reasoning. (3 marks)

Draw: Draw a jungle scene including at least one acute angle (a bird's beak), one right angle (a square crate), and one obtuse angle (a large tropical leaf). Label each angle correctly.



Extension challenge: Design a 'Geometry Treasure Map' for Max. Include a path that requires him to make one acute turn, one right-angle turn, and one obtuse turn. Write a short set of instructions using these terms to guide him to the hidden fruit cache.