

Max's Magnificent Math: The Angle Adventure

Learning objective: Identify acute, obtuse, and right angles; recognize turns and compare angles in shapes.

Help Max the monkey solve these geometry puzzles! Use your knowledge of angles to navigate the jungle paths. Write your answers clearly.

Answer Key: 1. B, 2. True, 3. Right angle, 4. C, 5. True, 6. A, 7. Obtuse, 8. False, 9. 90, 10. B. Greater Depth logic: An acute angle is always less than 90 degrees; an obtuse angle is between 90 and 180 degrees.

Word bank: Acute · Obtuse · Right angle · Degree · Clockwise · Quarter turn · Straight line

1. 1. Max is looking at a corner of a square tile. What type of angle is it? A) Acute B) Right angle* C) Obtuse D) Reflex (1 mark)

2. 2. True or False: An acute angle is always smaller than a right angle. (1 mark)

3. 3. If a shape has an angle greater than 90 degrees but less than 180 degrees, what is it called? (1 mark)

4. 4. Max turns from North to East. What fraction of a turn is this? A) Full turn B) Half turn C) Quarter turn* D) Three-quarter turn (1 mark)

5. 5. True or False: A straight line is equal to two right angles put together. (1 mark)

6. 6. Which of these angles is the smallest? A) 30 degrees* B) 90 degrees C) 100 degrees D) 120 degrees (1 mark)

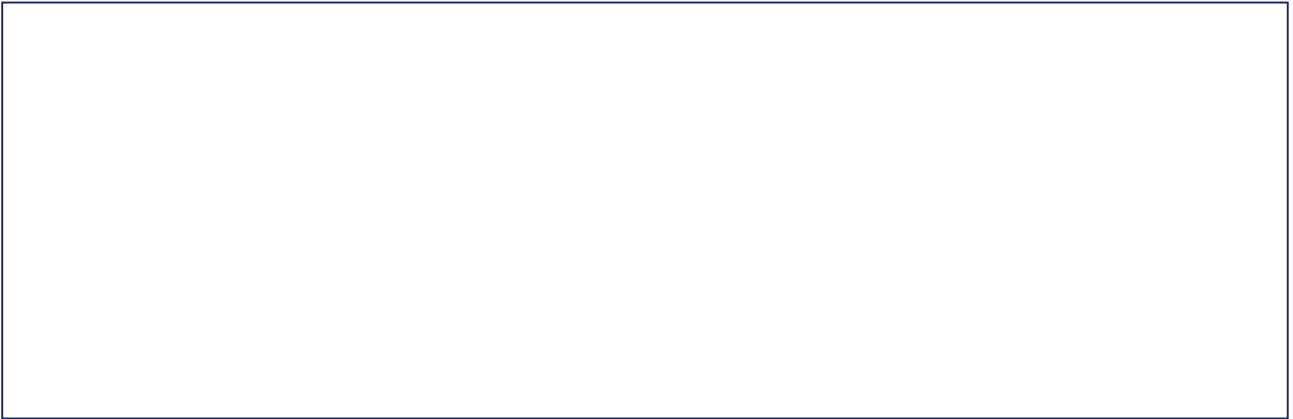
7. 7. What do we call an angle that is wider than a right angle? (1 mark)

8. 8. True or False: All triangles have at least one obtuse angle. (1 mark)

9. 9. How many degrees are in a perfect right angle? (1 mark)

10. 10. Max makes a half-turn. How many degrees has he rotated? A) 90 B) 180* C) 270 D) 360 (1 mark)

Draw: Draw a treasure map for Max that includes one acute angle, one obtuse angle, and one right angle hidden in the landscape features.



Extension challenge: 1. Explain why a square cannot contain an obtuse angle. 2. Compare and contrast an acute angle and an obtuse angle. 3. Justify your answer: Can a triangle have two right angles? Why or why not? 4. What might happen if a clock's hands were always at a 180-degree angle? 5. If Max buys a triangular wedge of cheese for £2.50, and all its angles are acute, what type of triangle is it? 6. Design a polygon with five sides and label every internal angle as either acute or obtuse.