

Max's Magnificent Maths: The Great Angle Adventure

Learning objective: To identify, measure, and calculate angles in various shapes and around a point, meeting Year 6 National Curriculum standards.

Help Max the monkey solve these geometry puzzles! Read each question carefully and remember that precision is the key to mastering angles.

Answer Key: 1. C (90°), 2. True, 3. 180°, 4. B (Obtuse), 5. False, 6. 360°, 7. 65°, 8. True, 9. 45°, 10. D (Parallel lines do not meet).

Word bank: acute · obtuse · reflex · protractor · degrees · straight · vertically opposite · sum

1. 1. Max is looking at a corner of a square tile. What is the value of this right angle in degrees? A) 45° B) 180° C) 90°* D) 360° (1 mark)

2. 2. True or False: An acute angle is always less than 90 degrees. (1 mark)

3. 3. What is the total number of degrees in a straight line? (1 mark)

4. 4. Max spots an angle measuring 135°. What type of angle is this? A) Acute B) Obtuse* C) Reflex D) Right (1 mark)

5. 5. True or False: The angles inside a triangle always add up to 270 degrees. (1 mark)

6. 6. How many degrees are there in a full turn around a central point? (1 mark)

7. 7. If one angle of a triangle is 60° and another is 55°, what is the size of the third angle? (1 mark)

8. 8. True or False: Vertically opposite angles are always equal in size. (1 mark)

9. 9. If a 90° angle is bisected (cut exactly in half), what is the size of the resulting angle? (1 mark)

10. 10. Which statement is correct regarding angles and lines? A) Parallel lines have 90° angles. B) A reflex angle is less than 180° . C) A protractor measures length. D) Angles around a point sum to 360° .* (1 mark)

Draw: Draw a geometric garden for Max the monkey that includes one acute angle, one obtuse angle, and one reflex angle. Label each angle with its approximate measurement.



Extension challenge: Max has a piece of string that forms a quadrilateral. If three of the angles measure 110° , 70° , and 110° , calculate the size of the final missing angle and explain how you found your answer.