

Max's Geometry Garden: Grade 3 Angles Assessment

Learning objective: To identify, compare, and order angles; to recognize acute, obtuse, and right angles.

Read each question carefully. Use your knowledge of geometry to solve Max the Monkey's math puzzles. Show your working out where necessary.

Max the Monkey is designing a garden for his friends. He needs to make sure all the paths and flowerbeds are perfectly angled. He has noticed that different plants grow at different angles, and he needs your help to classify them correctly.

Word bank: acute · obtuse · right angle · degrees · straight line · vertex · protractor

1. Max finds a leaf shaped like a right angle. Define what a right angle is and state its exact measurement in degrees. (2 marks)

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

3. Max says, 'All obtuse angles are larger than 90 degrees but smaller than 180 degrees.' Is Max correct? Justify your answer using mathematical vocabulary. (4 marks)

4. Compare an acute angle to an obtuse angle. How are they different? Explain why an angle of 95° is classified as obtuse rather than a right angle. (4 marks)

5. Max draws a shape with four angles. Two angles are 60° and two angles are 120° . Explain why these angles would be useful for creating a balanced shape. (3 marks)

6. Max is building a fence. If he places a wooden rail at a 90° angle to the ground, what might happen if he accidentally tilts it to 70° ? Explain the impact on the shape of the fence panel. (4 marks)

7. Creative Writing Task: Imagine you are designing a geometric playground. Describe three features you would include using different types of angles. Use the words 'acute', 'obtuse', and 'right angle' in your description to explain how you have positioned your equipment. (5 marks)

Draw: Draw one acute angle, one right angle, and one obtuse angle. Label each one clearly with its name and an estimated measurement.



Extension challenge: Total: /25. Challenge: If you have two acute angles that add up to 90° , what do we call this relationship? Research the term 'complementary angles' and explain how they differ from 'supplementary angles'.