

# Max's Geometry Garden Adventure

*Learning objective: To identify, compare, and order angles and classify 2D shapes based on their geometric properties.*

Read the story below and help Max the monkey solve the puzzles in his geometric garden. Remember to use your knowledge of acute, obtuse, and right angles to help him finish his project.

Max the monkey is designing a new playground for his friends. He wants to make sure every shape he uses is perfect. Max has drawn a square sandbox that has four equal sides and four right angles. Next to it, he has planned a triangular slide where one angle is very wide and larger than a right angle. Finally, he is building a hexagonal flower bed. He needs to make sure he has enough wooden fencing to go around the perimeter of all his shapes.

*Word bank: acute · obtuse · right angle · vertex · parallel · perpendicular · polygon*

**1. Max says his square sandbox has four right angles. Is he correct? Explain how you know. (2 marks)**

---

---

**2. Max's triangular slide has an angle larger than a right angle. What is the mathematical name for this type of angle? (1 mark)**

**3. A hexagon has six sides. If each side of Max's hexagonal flower bed is £4, how much will the wood cost in total? (2 marks)**

---

**4. Look at the shape of a rectangle. How many pairs of parallel lines does it have? (1 mark)**

**5. Draw an acute angle and label it clearly. How do you know it is acute? (2 marks)**

---

---

**Draw:** Draw a composite shape made of one square and one triangle joined together. Label all the right angles you can find.



*Extension challenge: Max wants to build a path that is a regular octagon. If he has £50, and each side of the octagon costs £7 to fence, will he have enough money? Show your working out.*