Max’s Measurement Mission: Area and Perimeter Quiz

Learning objective: To calculate the area and perimeter of rectilinear shapes and triangles, and to understand the difference between the two concepts.

Help Max the monkey solve these math puzzles! Read each question carefully, choose the correct answer, or write your response in the space provided. Remember to include units (cm or cm²) where necessary.

Answer Key: 1. A (Perimeter); 2. B (12cm²); 3. False; 4. 20cm; 5. 16cm²; 6. C (Base x Height / 2); 7. True; 8. 24cm; 9. 48cm²; 10. True.

Word bank: Perimeter · Area · Rectilinear · Square · Base · Height · Centimetres · Squared

1. 1. Max is building a fence around his banana patch. Is he measuring the Area or the Perimeter? A) Perimeter* B) Area C) Volume D) Capacity (1 mark)

2. 2. A rectangle has a length of 4cm and a width of 3cm. What is its area? A) 7cm² B) 12cm²* C) 14cm² D) 10cm² (1 mark)

3. 3. True or False: To find the perimeter of a shape, you multiply all the sides together. (1 mark)

4. 4. A square has a side length of 5cm. What is its perimeter? (1 mark)

5. 5. What is the area of a square with a side length of 4cm? (1 mark)

6. 6. Which is the correct formula for the area of a triangle? A) Side x Side B) Length x Width C) (Base x Height) ÷ 2* D) Base + Height (1 mark)

7. 7. True or False: Area is always measured in 'squared' units (e.g., cm²). (1 mark)

8. 8. A rectangle has a length of 8cm and a width of 4cm. What is its perimeter? (1 mark)

9. 9. A triangle has a base of 12cm and a vertical height of 8cm. What is its area? (1 mark)

10. 10. True or False: A rectilinear shape is a shape whose edges meet at right angles. (1 mark)

Draw: Draw a rectilinear shape (a shape made of only right angles) on squared paper that has a perimeter of 12cm. Label the length of each side.

Extension challenge: Max has £20 to buy fencing for a new garden. If the fencing costs £2 per meter, what is the maximum perimeter of a square garden he can build? How much would the area of that garden be?