



Year 6 SATs Reasoning Paper 2

You have 40 minutes to complete this reasoning paper. Show all working clearly. Diagrams are not to scale unless stated.

1. Amy buys 3 books costing '4.75 each. How much does she spend?

2. What is the missing number: $3.6 + \underline{\quad} = 7.1$?

3. A rectangle has an area of 48cm^2 and a width of 6cm . What is its length?

4. What is the next number in the sequence: 2, 5, 10, 17, $\underline{\quad}$?

5. James has $\frac{3}{5}$ of his money left. He spent '12. How much did he have originally?

6. Draw the reflection of this shape in the mirror line. [Diagram placeholder]

7. Calculate the mean of these numbers: 4, 8, 10, 6

8. What is the volume of a cuboid $3\text{cm} \times 4\text{cm} \times 5\text{cm}$?

9. A jug contains 2.5L of water. 850ml is poured out. How much is left?

10. 45% of the pupils in a school are girls. There are 540 pupils. How many are girls?

11. Shade $\frac{2}{3}$ of this shape. [Diagram placeholder]

12. A class votes for favourite fruit: 8 like apples, 12 bananas, 10 grapes. What fraction like bananas?

13. The temperature was 3°C in the morning and 5°C in the afternoon. What was the difference?

14. $\frac{2}{3}$ of a number is 42. What is the number?

15. A train leaves at 09:45 and arrives at 11:28. How long is the journey?

16. Find the missing angle in a triangle with angles 75° and 60° .

17. A scale model has a ratio 1:20. If the model height is 6cm, what is the real height?

18. Circle all prime numbers: 11, 16, 19, 21, 23

19. A container holds 3.5 litres. How many 250ml cups can it fill?

20. Write the next two terms: 2, 6, 18, 54, ____, ____

21. Estimate: $421^{\circ} 59'$

22. A rectangle's perimeter is 30cm. One side is 9cm. What is the other side length?

23. Match the fractions, decimals and percentages: 0.25, $\frac{1}{2}$, 75%, 0.6

24. Divide '84 equally between 6 people. How much each?

25. A shop gives 15% discount on a '60 coat. What is the new price?

26. What is the missing number: $8 \times \underline{\quad} = 3,144$?

27. A pie chart shows $\frac{3}{8}$ of people chose blue. If 80 people were surveyed, how many chose blue?

28. What is the product of the first two prime numbers?

29. Solve: $2x + 5 = 21$

30. A shape has 2 pairs of equal sides and 1 right angle. What is it?
