Allow 50 minutes to do this test. Work as quickly and as carefully as you can.

If you want to answer these questions in multiple-choice format, use the separate multiple-choice answer sheet. If you'd prefer to answer them in standard write-in format, either write your answers in the spaces provided or circle the correct answer from the options A to E.

1. Which of the following is the most likely weight of a bag of flour?
   A  2 g    B  2 litres    C  2000 kg    D  200 mm    E  2 kg

2. Look at the grid on the right.
   Molly starts at the star. She moves 2 squares south-west, 2 squares north and one square east.
   What shape will she arrive at?
   A  rectangle    C  pentagon    E  triangle
   B  arrow    D  circle

3. Look at the bus timetable on the right.
   Jemima lives on Hart Street. She wants to arrive at Maple Lane before 10:15.
   What time should she catch the bus from Hart Street?
   Answer: ________

4. How many thirds are there in 9?
   A  3    B  18    C  9    D  27    E  30

5. Look at the shape on the right.
   Which angle is obtuse?
   A  B  C  D  E

6. A class of Year 6 children were asked whether they liked tigers, giraffes or lions. The Venn diagram shows their answers.
   How many children said they liked both tigers and giraffes, but not lions?
   A  6    C  5    E  3
   B  2    D  7

Carry on to the next question → →
7. Which of these numbers is the smallest?
   A  0.7       C  7.7       E  7.07
   B  0.77      D  77.0

8. The length of each side of this shape is 4 cm.
   What is the perimeter of the shape?
   Answer: ________ cm

9. Forty-seven thousand, nine hundred and eighty-three people went to a football match.
   What is this number rounded to the nearest thousand?
   A  47 000      C  100 000      E  47 900
   B  50 000      D  48 000

10. There are 25 CDs in a box. A shop orders 14 boxes.
    How many CDs did the shop order?
    Answer: ________

11. A class of children were asked what their favourite sandwich filling is. The results are shown by this bar chart. 25% of children said they liked ham.
    What percentage chose tuna?
    Answer: ________ %

12. What fraction of this shape is shaded?
    A  \( \frac{2}{5} \)       C  \( \frac{7}{12} \)       E  \( \frac{1}{2} \)
    B  \( \frac{3}{5} \)       D  \( \frac{3}{4} \)

13. Which of the following statements is correct?
    A  \( 5.2 \times 10 < 52 \)       C  \( 52 > \frac{520}{100} \)
    B  \( 52 > 5200 \)       D  \( 520 < 52 \)
    E  \( 52 \times 10 < 52 \)

14. A factory makes 4596 nails in a week. 2914 of the nails are sold.
    How many nails are left over?
    Answer: ________

*Carry on to the next question → →*
15. Ibrahim is trying to work out the volume of a swimming pool.
What units should he measure the volume in?
A mm³  B m²  C cm²  D m³  E cm³

16. Sunita has 75 pens and she ties them into bundles of 8.
How many pens does she have left over?
Answer: __________

17. What is 21.7 × 9.4?
A 287.68  C 117.24  E 412.96
B 532.42  D 203.98

18. Which three numbers can go in the shaded box of the table?

<table>
<thead>
<tr>
<th>factors of 55</th>
<th>factors of 70</th>
</tr>
</thead>
<tbody>
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<td>&lt;10</td>
<td>1, 2, 5</td>
</tr>
<tr>
<td>Prime</td>
<td>5, 11</td>
</tr>
</tbody>
</table>

A 1, 2, 5         D 5, 7, 11
B 2, 5, 7         E 5, 7, 10
C 7, 14, 35

19. What is $\frac{3}{5}$ of 60?
A 30  B 24  C 40  D 32  E 36

20. What number is the arrow pointing at?
A 4.55  C 4.53  E 4.5
B 4.3   D 4.45

21. Marvin made a pie chart to show the eye colours of the children in his class.
What is the modal eye colour?
A green  C grey  E brown
B blue   D amber

22. Which of these calculations gives the largest amount?
A $21 \times 20 - 18 + 19$  C $20 \times 18 - 19 + 21$
B $18 \times 19 - 21 + 20$  D $21 \times 18 - 20 + 19$  E $20 \times 19 - 21 + 18$

Carry on to the next question → →
23. Mark buys a scarf, two badges and a whistle from a sports shop.
   How much change does he receive from £20.00?
   
<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>scarf</td>
<td>£3.99</td>
</tr>
<tr>
<td>football</td>
<td>£5.99</td>
</tr>
<tr>
<td>whistle</td>
<td>£1.99</td>
</tr>
<tr>
<td>badge</td>
<td>99p</td>
</tr>
<tr>
<td>trophy</td>
<td>£2.99</td>
</tr>
</tbody>
</table>

   **A** £12.04   **C** £11.04   **E** £11.00
   **B** £12.96   **D** £11.96

   Answer: _________

24. Winston is packing eggs into egg boxes. He puts 6 eggs into each egg box.
   How many complete egg boxes can he fill with 106 eggs?
   
   Answer: _________

25. When this net is folded into a cube the opposite faces of the cube add up to 12.
   What is the missing number?

   
<table>
<thead>
<tr>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 5 ? 7</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>

   Answer: _________

26. What is the next number in this sequence?

   23   35   47   59   ?

   Answer: _________

27. \[622 \times 110 = 68420\]

   What is \[55 \times 622\]?

   | A | 34 210 |
   | B | 11 405 |
   | C | 31 605 |
   | D | 13 704 |
   | E | 34 420 |

   A   B   C   D   E

   Answer: _________

28. Ashley measured the height of his garage door. It was 2.345 m tall.
   What is 2.345 m rounded to the nearest 10 cm?

   | A | 2.4 m |
   | B | 2.35 m |
   | C | 2.3 m |
   | D | 2.34 m |
   | E | 3 m |

   A   B   C   D   E

   Answer: _________ m

29. The average temperature in May is 18 °C.
   The average temperature in November is a third of the average temperature in May.
   The average temperature in September is twice the average temperature in November.
   What is the average temperature in September?

   Answer: _________ °C

30. Shania has 3 pieces of wool to make a bracelet. One piece is 160 mm long,
     another piece is 26 cm long and the last piece is 0.45 m long.
     What is the total length of wool, in centimetres, that Shania has?

   Answer: _________ cm

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*Carry on to the next question → →*
31. The diagram shows the plan of Ridzuan’s living room.
   What is the area of the living room?
   Answer: _________ m²

32. What is the sum of the factors of 21?
   A  21  B  7  C  42  D  32  E  11

33. Chris weighs 74.2 kg, Carrie weighs 67.8 kg and Colleen weighs 69.4 kg.
   What is the range of their weights?
   Answer: _________ kg

34. Shane has 15 cards. 3 of Shane’s cards are aces. Liz takes a card at random from Shane.
   What is the probability that Liz takes an ace?
   A  \( \frac{3}{5} \)  B  \( \frac{1}{3} \)  C  \( \frac{1}{5} \)  D  \( \frac{1}{4} \)  E  \( \frac{3}{8} \)

35. This spinner is made of 6 equilateral triangles.
   What is the size of the shaded angle shown?
   Answer: _________ °

36. Sandra is building a model boat. She uses 54 pieces of wood which weigh 20 g each.
   What is the total weight, in kilograms, of the wood used in the model boat?
   Answer: _________ kg

37. A, B and C are three corners of a square.
   What are the coordinates of the 4th corner?
   Answer: ( ___, ___ )

38. Which of the following statements is true?
   A  Most prime numbers end in 5.
   B  2 is not a prime number.
   C  Prime numbers only have one factor.
   D  The sum of the first 3 prime numbers is 10.
   E  All prime numbers are odd.
39. Both of these cuboids are identical. Each of their square ends has an area of 4 cm² and they are both 15 cm long.
What is the total volume of these two cuboids combined?
A 240 cm³  C 120 cm³  E 30 cm³
B 480 cm³  D 60 cm³

40. Mary keeps some animals on her farm.
She has 12 sheep, 16 cows, 24 chickens and 6 pigs.
Mary sells 8 of her sheep.
What percentage of her remaining animals are sheep?
Answer: _________ %

41. The table shows the highest temperature in Milford each day for a week.
What is the mean of these temperatures?
A 10 °C  C 6 °C  E 7 °C
B 9 °C  D 12 °C

42. Five scones cost £2.85 and three teas cost £1.80.
What is the total cost of one scone and one tea?
Answer: £ __________

43. A bucket holds 5 litres of water.
250 ml of water is drained from the bucket every minute.
How many minutes will it take for the bucket to be empty?
Answer: _________ minutes

44. What is the size of angle a?
Answer: _________ °
45. Craig has 4 dogs. He has to buy each dog a collar \((c)\) and six tins \((t)\) of dog food. Which expression shows how many collars and tins of food he needs to buy?
   \[\text{A} \quad 4tc \quad \text{C} \quad 4c + 4t \quad \text{E} \quad 4 + c + t \]
   \[\text{B} \quad c + 4t \quad \text{D} \quad 4(c + 6t) \]

46. What are the coordinates of Point Q?
   \[\text{A} \quad (3, 7) \quad \text{C} \quad (2, 9) \quad \text{E} \quad (2, 7) \]
   \[\text{B} \quad (7, 9) \quad \text{D} \quad (7, 7) \]

47. Cliff has a bag of tennis balls. 8 are green, 7 are yellow and 5 are white. He picks a tennis ball at random. What is the probability that he picks one that is not green?
   \[\text{A} \quad \frac{3}{5} \quad \text{B} \quad \frac{2}{10} \quad \text{C} \quad \frac{8}{20} \quad \text{D} \quad \frac{3}{4} \quad \text{E} \quad \frac{5}{8} \]

48. Jodie works for a bookshop. She is paid £6.50 an hour plus 5% of the cost of each book she sells. On Saturday, Jodie worked for 3 hours and sold £220 worth of books. How much money did Jodie earn?
   Answer: £ _________

49. The cost of travel insurance in pounds \((C)\) is worked out using the equation below:
   \[C = 10 + 20(x - 1)\]
   \(x\) is the number of weeks that a customer is travelling for. A customer wants travel insurance for 6 weeks. How much should the customer be charged?
   Answer: £ _________

50. Look at the sequence below:
   \[4 \quad 9 \quad 16 \quad 25 \quad 36\]
   Which expression could be used to find the \(n\)th term in this sequence?
   \[\text{A} \quad n^2 \quad \text{C} \quad n^2 - 3 \quad \text{E} \quad (n + 1)^2 \]
   \[\text{B} \quad n^2 + 3 \quad \text{D} \quad 2n + 2 \]