Test 1
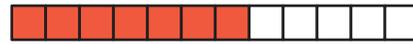
For all of the questions in this test, do the calculation entirely in your head with no written 'working' and just write down the answer.

In questions 1 to 10 you are reminded of 10 useful strategies which may help you in later questions.

1 3×29 _____

   ✱ 3×30 and then subtract 3

2 £12.40 ÷ 4   £ _____

   ✱ Divide by 2 and then by 2 again

3 48×5 _____

   ✱ Multiply by 10 then divide by 2

4 $65 - 49$ _____

   ✱ Subtract 50 then add 1

5 $204 \div 6$ _____

   ✱ Divide by 2, then by 3

6 0.7×6 _____

   ✱ You know that $7 \times 6 = 42$

7 $\frac{3}{5}$ of 30 _____

   ✱ Find $\frac{1}{5}$ then multiply by 3

8 $17 + 28 + 33$ _____

   ✱ $17 + 33 = 50$ first

9 3.9×2 _____

   ✱ The result must be about 8

10 23×8 _____

   ✱ The units digit of the result is 4

11 What temperature is 7 degrees lower than 4°C?

   _____°C

12 Round 5.47 to 1 decimal place. _____

13 Write $\frac{6}{8}$ in its simplest form. _____
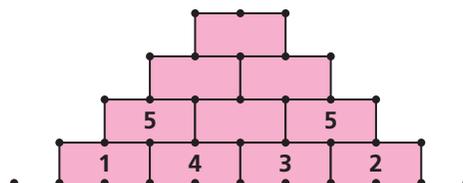
14 What fraction of the strip of squares is red?

   _____

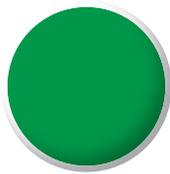**15** Given that $47 \times 34 = 1598$, what is 47×33?

   _____

16 What is the remainder when 100 is divided by 7?

   _____

17 By how much is 4×13 greater than 3×14?

   _____

18 Joanna buys 2 bottles of juice priced at 95p each and a packet of crisps priced at 89p.

   How much change will she receive from a £5 note?

   £ _____

19 Sean is thinking of a number and gives the following clues:

   "My number is:
   - less than 30
   - a multiple of 7
   - 1 more than a prime number."

   What number is Sean thinking of?

   _____

20 On this tower of bricks, the number on each brick is the sum of the numbers on the two bricks supporting it.

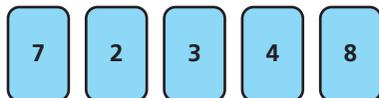   What number is on the top brick? _____

Test 2

For all of the questions in this test, do the calculation entirely in your head with no written 'working' and just write down the answer.
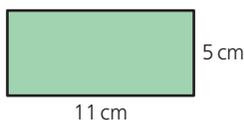
1 Round 4745 to the nearest 100 _____

2 What is 20% of 40 kg? _____ kg

3 George and Mildred share 12 sweets in the ratio 1:2

How many sweets does George get? _____

4 Angus has the five number cards below.

| 7 | 2 | 3 | 4 | 8 |

What is the smallest 5-digit even number he can make by placing all five cards side by side? _____

5 When Fay thought of a number, multiplied it by 4 and then added 5, the result was 17

What number did Fay think of? _____

6 If $a = 5$, $b = 4$ and $c = 3$, what is the value of $ab + c$? _____

7 What is the next number in this sequence?

1, 3, 6, 10, 15, _____

8 Tim has a bag of sweets. He gives 4 to Miranda and 5 each to Sam and Mary. Tim tips the rest of the sweets onto the table and counts 11

How many sweets were in the bag at the start? _____

9 Calculate the perimeter of the rectangle. _____ cm

5 cm

11 cm

10 What is the reading on the scale? _____

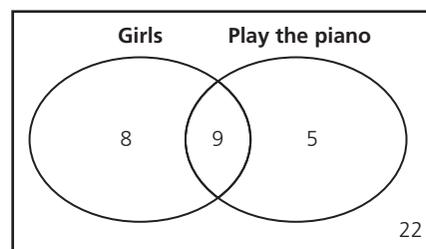**11** Two angles of a triangle are 60° and 110°.

What size is the third angle? _____°

12 What is the volume of a cuboid measuring 5 cm by 4 cm by 3 cm?

_____ cm³

13 A disco started at 18:45 and lasted 2 hours and 30 minutes.

At what time did it end? _____:_____

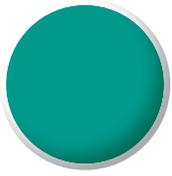*Questions 14 to 16 refer to this list of marks one pupil gained in 5 tests.*

10 6 9 5 10

14 What is the mode? _____

15 What is the median? _____

16 What is the mean? _____

17 The Venn diagram shows some information about children in Year 6

How many boys play the piano? _____

18 Which number between 65 and 70 is divisible exactly by 6?

_____

19 The product of two integers (whole numbers) both less than 20 is 66

What is the sum of the numbers? _____

20 Jennie has 20 buttons. 8 are black and half of the others are red. The rest are white.
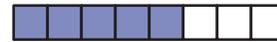
How many buttons are white? _____

Test 3

For all of the questions in this test, do the calculation entirely in your head with no written 'working' and just write down the answer.

In questions 1 to 10 you are reminded of 10 useful strategies which may help you in later questions.

1 4×19 _____

* *4×20 and then subtract 4*

2 £8.40 $\times$ 4   £ _____

* *Double and then double again*

3 $130 \div 5$ _____

* *Divide by 10 then multiply by 2*

4 $73 + 38$ _____

* *Add 40 then subtract 2*

5 $336 \div 12$ _____

* *Divide by 3, then by 4*

6 0.8×5 _____

* *You know that $8 \times 5 = 40$*

7 $\frac{3}{4}$ of 48 _____

* *Find $\frac{1}{4}$ then multiply by 3*

8 $25 + 17 + 55$ _____

* *$25 + 55 = 80$ first*

9 5.1×8 _____

* *The result must be about 40*

10 17×6 _____

* *The units digit of the result is 2*

11 What temperature is 4 degrees higher than $^-2\,°C$?

_____ °C

12 Round 35.8 to 1 significant figure. _____

13 Write $\frac{5}{4}$ as a mixed number. _____

14 What proportion of the strip of squares is shaded?

_____

15 Given that $7134 \div 58 = 123$, what is $7134 \div 29$?

_____

16 What is the remainder when 60 is divided by 8?

_____

17 By how much is 6×15 greater than 5×16?

_____

18 Gary buys 3 cans of cola priced at 55p each and a chocolate bar priced at 78p.

How much change will he receive from two £2 coins?

£ _____

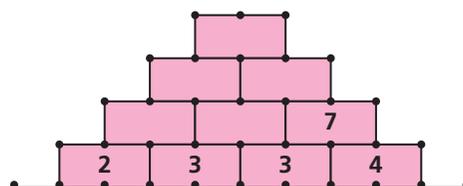**19** Melissa is thinking of a number and gives the following clues:
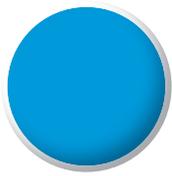
"My number is:

• between 20 and 40
• a multiple of 3
• 1 less than a square number."

What number is Melissa thinking of?

_____

20 On this tower of bricks, the number on each brick is the sum of the numbers on the two bricks supporting it.

What number is on the top brick? _____

Test 4

For all of the questions in this test, do the calculation entirely in your head with no written 'working' and just write down the answer.

1 Round 40 800 to the nearest 1000

_____

2 What is 60% of 40 ml? _____ ml

3 Philip and Mary share £2 in the ratio 3 : 2

How much does Mary get? _____

4 Harry has the six number cards below.
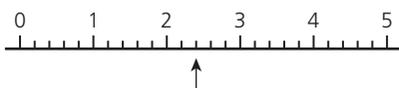
| 8 | 1 | 9 | 7 | 0 | 3 |

What is the number nearest to 1000 he can make by placing some of the cards side by side? _____

5 When Kirsten thought of a number, added 1 and then multiplied by 3, the result was 9

What number did Kirsten think of? _____

6 If $a = 3$, $b = 2$ and $c = 8$, what is the value of $a - b + c$? _____

7 What is the next number in this sequence?

1, 2, 4, 7, 11, _____

8 Isobel has a packet of sweets. She shares them with her sister. When they have each eaten 7 sweets there is 1 sweet left.

How many sweets were in the packet at the start? _____

9 Calculate the area of the rectangle. _____ cm²

2 cm
12 cm

10 What is the reading on the scale? _____

0   1   2   3   4   5

11 Two angles of a triangle are 40° and 70°.

What size is the third angle? _____°

12 What is the volume of a cuboid measuring 8 cm by 5 cm by 4 cm?

_____ cm³

13 A film started at 7.50 p.m. and ended at 10.05 p.m. How long did the film last?

_____ hours _____ minutes

Questions 14 to 16 refer to this list of the marks one pupil gained in 8 tests.

8   6   9   7   6   8   7   6

14 What is the mode? _____

15 What is the median? _____

16 What is the range? _____

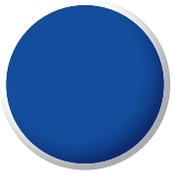**17** The Carroll diagram shows some information about children in a class.

What percentage of the children in the class wear glasses? _____%

	Boys	Girls
Do not wear glasses	7	6
Wear glasses	4	3

18 What is the smallest number greater than 100 that is divisible exactly by 3?

_____

19 The sum of two integers (whole numbers) is 12 and the difference between the integers is 4

What is the product of the numbers?

_____

20 Paige has 24 sweets. A quarter are mints and a third of the others are toffees. The rest are chocolates.

How many chocolates are there? _____

Test 5

For all of the questions in this test, do the calculation entirely in your head with no written 'working' and just write down the answer.

In questions 1 to 10 you are reminded of 10 useful strategies which may help you in later questions.

1 11 × 19 _____

  ✳ 10 × 19 and then add 19

2 128 ÷ 8 _____

  ✳ Divide by 2, by 2 and then by 2 again

3 123 × 5 _____

  ✳ Multiply by 10 then divide by 2

4 85 − 38 _____

  ✳ Subtract 40 then add 2

5 330 ÷ 15 _____

  ✳ Divide by 3, then by 5

6 1.3 × 4 _____

  ✳ You know that 13 × 4 = 52

7 $\frac{2}{3}$ of 72 _____

  ✳ Find $\frac{1}{3}$ then multiply by 2

8 4.8 + 3.5 + 1.2 _____

  ✳ 4.8 + 1.2 = 6.0 first

9 5 × 19 _____

  ✳ The result must be about 100

10 13 × 9 _____

  ✳ The units digit of the result is 7

11 What temperature is 11 degrees lower than 7 °C?

  _____°C

12 Round 3.494 to 2 decimal places. _____

13 Write $\frac{8}{12}$ in its simplest form. _____

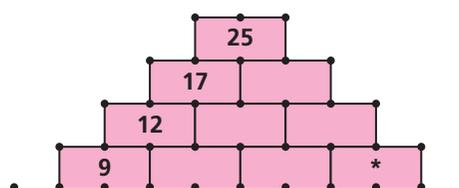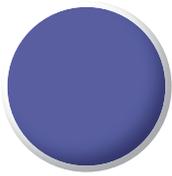**14** What fraction (in its simplest form) of the shape is red?

  _____

15 Given that 35 × 62 = 2170, what is 34 × 62?

  _____

16 What is the remainder when 80 is divided by 6?

  _____

17 By how much is 4² greater than 3²?

  _____

18 Lacey buys 2 bottles of lemonade priced at £1.05 each and 2 packets of crisps priced at 75p.

  How much change will she receive from a £5 note? £ _____

19 Joe is thinking of a number and gives the following clues:

  "My number is:
  • between 10 and 30
  • 1 less than a square number
  • 1 more than a multiple of 7"

  What number is Joe thinking of? _____

20 On this tower of bricks, the number on each brick is the sum of the numbers on the two bricks supporting it.

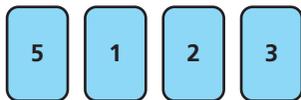 What number is on the brick marked with a star (*)? _____

Test 6

For all of the questions in this test, do the calculation entirely in your head with no written 'working' and just write down the answer.

1 Round 405 600 to the nearest 10 000 _____

2 What is 15% of £10.00? £ _____

3 Sienna and Corey share 40 conkers in the ratio 1:3

How many conkers does Corey get? _____

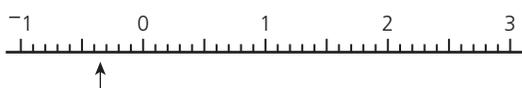**4** Libby has the four number cards below.

| 5 | 1 | 2 | 3 |

What is the smallest 4-digit even number she can make by placing all four cards side by side? _____

5 When Joel thought of a number, multiplied it by 3 and then subtracted 4, the result was 17

What number did Joel think of? _____

6 If $a = 3$, $b = 6$ and $c = {}^-3$, what is the value of $ab + c$? _____

7 What is the next number in this sequence?

1, 3, 7, 15, 31, _____

8 Reuben has a collection of stamps. He gives a third of the stamps to his little brother Archie. Archie received 44 stamps.

How many stamps does Reuben have now? _____

9 Calculate the perimeter of the rectangle. _____ cm

2.5 cm
8.5 cm

10 What is the reading on the scale? _____

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 ⁻1        0        1        2        3
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        ↑
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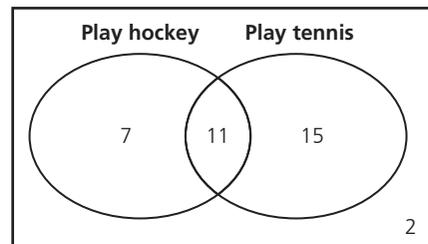
11 Two angles of a triangle are 55° and 105°.

What size is the third angle? _____°

12 What is the volume of a cuboid measuring 2 cm by 8 cm by 2 cm?

_____cm³

13 A $2\frac{1}{2}$ hour film ended at 21:10

At what time did it start? _____:_____

Questions 14 to 16 refer to this list of the marks one pupil gained in 10 tests.

8 7 6 8 7 8 5 9 8 9

14 What is the mode? _____

15 What is the median? _____

16 What is the mean? _____

17 The Venn diagram shows some information about people in a sports club.

How many people are in the club? _____

Play hockey | **Play tennis**

7   11   15

2

18 Which number between 80 and 90 is divisible exactly by 14?

_____

19 The product of two integers (whole numbers) both less than 10 is 35

What is the sum of the numbers? _____

20 A farmer has 120 animals. 40 are cows and $\frac{3}{4}$ of the others are sheep. The rest are pigs.

How many pigs are there? _____