## Key Stage 1

## Mathematics <br> Reasoning: Test 1

| Name |  |
| :--- | :--- |
| Date |  |

(†)

1.

$$
31 \quad 13
$$

3. 



20 ml
$20^{\circ} \mathrm{C}$
20 cm
20kg
4.

5.

6. Janice has 9 small dolls. There are 15 in a full set.


How many more dolls does she need to complete her set of 15 dolls?

7. Here are 41 balls: 24 rugby balls and 17 footballs.


Complete the addition and subtraction calculations below.
$\square+\square=41$
$\square-\square=17$

8. Match the name of the 3D shape to the correct shape.

> Pyramid


Cylinder


Cube

१. Circle the odd numbers.
13
54
55
26 87

$$
91
$$

10. Here are 12 toy cars. Asjal takes $\frac{3}{4}$ of the cars to play with at his friend's house.


How many cars does Asjal take to his friend's house?

11. There is milk in this jug.


How much milk is in the jug?

12. Write the missing numbers in this sequence.

| 67 | 57 | 47 |  | 27 |  |
| :--- | :--- | :--- | :--- | :--- | :--- |

13. Draw an arrow to show 75 on the number line.

14. Cakes are sold in packs of ten.


How many cakes are in the picture above?

15. Complete this calculation.
$\square \div 4=5$
16. Circle the longer time interval.

1 hour 65 minutes
17.A shop sells bags of tennis balls in packs of 5 .


In a week the shop sells 35 balls.
How many packs of tennis balls are sold?

18. Here are some 2D shapes:

triangle

oblong

square

hexagon

Write the name of each shape in the correct column below.

| Has 4 sides | Does not have four sides |
| :--- | :--- |
|  |  |
|  |  |

19. Here are 2 sets of weights.


Circle the heavier set of weights.
20. Write a digit in each box to make this subtraction correct.
$7 \square$ $=65$
21.Janice brings 15 packets of plain crisps and 17 packets of flavoured crisps for a party. If there are 27 children in the class and each child has one pack each, how many packs will be left over?
Show your workings.

22.A class of children sit in groups of 4 . There are seven groups.


Write the calculation you would use to calculate how many children there are in the class.

23. Tick the calculations that are correct.

$$
\begin{aligned}
& 9+4=4+9 \square \\
& 9-4=4-9 \square \\
& 9 \times 4=4 \times 9 \square \\
& 9 \div 4=4 \div 9
\end{aligned}
$$

24. Write a fraction that is equivalent to $\frac{1}{2}$.

25. Circle the 3D shapes which have faces that are triangles.

26. There are 24 sweets in a packet.

The sweets are shared equally among 3 children: Asjal, Janice and Tom.
Janice gives 2 of her sweets to Asjal.
How many sweets does Asjal have now?

27.
a) How much money is represented by the following coins?

b) Circle 2 sets of coins that show different ways to make this amount: 75p

28. Here is an arrow.


Draw a new arrow to show this arrow after it has made a quarter turn clockwise.
29. Write the number 102 in words.

30.Janice buys a magazine for 38p. She pays with a 50p piece. Calculate the change Janice will receive.

31.A class choose their favourite colour.

Here is a block diagram showing the choices of the children. Our Favourite Colours

a) 7 children chose pink as their favourite colour. Draw the bar on the graph to show how many children chose pink.
b) Janice used a tally chart to collect the information. Show the number of children who chose pink, using a tally.
$\square$

Answer Sheet: Key Stage 1 Maths Reasoning: Test 1

| question | answer | marks | notes |
| :---: | :---: | :---: | :---: |
| 1. |  |  |  |
|  | The 1 in 13 | 1 |  |
| 2. |  |  |  |
|  | 30 | 1 |  |
| 3. |  |  |  |
|  | $20^{\circ} \mathrm{C}$ | 1 |  |
| 4. |  |  |  |
|  | One quarter shaded | 1 |  |
| 5. |  |  |  |
|  | 50p | 1 |  |
| 6. |  |  |  |
|  | 6 dolls | 1 | No need to write dolls |
| 7. |  |  |  |
|  | $\begin{aligned} & 24+17=41 \text { or } 17+24=41 \\ & 41-24=17 \end{aligned}$ | 1 | Both answers correct for 1 mark |
| 8. |  |  |  |
|  | Pyramid Cylinder <br> Cube | 1 |  |
| 9. |  |  |  |
|  | $13,87,91$ and 55 are the odd numbers | 1 |  |
| 10. |  |  |  |
|  | 9 cars | 1 |  |


| question | answer | marks | notes |
| :---: | :---: | :---: | :---: |
| 11. |  |  |  |
|  | 250ml | 1 | Allow any answer between 230 ml and 270 ml . |
| 12. |  |  |  |
|  | 67 57 47 37 27 17 | 1 |  |
| 13. |  |  |  |
|  | $60 \quad \downarrow \quad 80$ | 1 |  |
| 14. |  |  |  |
|  | 54 | 1 |  |
| 15. |  |  |  |
|  | 20 | 1 |  |
| 16. |  |  |  |
|  | 65 minutes | 1 |  |
| 17. |  |  |  |
|  | 7 packs | 1 |  |
| 18. |  |  |  |
|  | 4 sides: square, rectangle Not 4 sides: triangle, hexagon | 1 |  |
| 19. |  |  |  |
|  | (100g | 1 |  |
| 20. |  |  |  |
|  | Any one of $70-5,71-6,72$ $-7,73-8,74-9$ | 1 |  |


| question | answer | marks | notes |
| :---: | :---: | :---: | :---: |
| 21. |  |  |  |
|  | $\begin{aligned} & 15+17=32 \\ & 32-27=5 \end{aligned}$ <br> 5 packs | 2 | 2 marks for correct answer. <br> 1 mark for correct calculation with one error in calculation <br> e.g. $15+17$ = incorrect <br> incorrect -27 = correctly <br> calculated |
| 22. |  |  |  |
|  | $7 \times 4$ or $4 \times 7$ | 1 | No answer to the calculation needed. Mark still given if one is given incorrectly. |
| 23. |  |  |  |
|  | (V) $9+4=4+9$ $9-4=4-9$ $9 \times 4=4 \times 9$ $9 \div 4=4 \div 9$ | 1 | 1 mark for both correct and subtraction and division not ticked |
| 24. |  |  |  |
|  | $\frac{2}{4}$ or any other correct fraction | 1 |  |
| 25. |  |  |  |
|  |  | 1 | 1 mark for both circled. |
| 26. |  |  |  |
|  | 10 sweets | 2 | 2 marks for correct answer. <br> 1 mark for correct calculation with one error in calculation. <br> e.g. $24 \div 3$ = incorrect <br> answer incorrect answer $+2=$ correctly calculated. |


| question | answer | marks | notes |  |
| :--- | :--- | :---: | :---: | :---: |
| 27. |  |  |  |  |
| a | $75 p$ | 1 |  |  |
| b | 20p, 20p, 20p $10 p, 5 p$ <br> $20 p, 20 p, 10 p, 10 p, 10 p, 5 p ~$ <br> $20 p, 20 p, 20 p, 5 p, 5 p, 5 p ~$ | 1 |  |  |

28. 

|  | 1 | Arrow can be drawn <br> anywhere on page. |
| :--- | :--- | :--- | :--- |

29. 

|  | One hundred and two | 1 |  |
| :--- | :--- | :---: | :--- |
| 30. | 12 p | 1 |  |

31. 

| a | Pink block to 7 | 1 |
| :---: | :--- | :--- |
| b | HHs \\| | 1 |


| question $\mathbf{1}$ | Page $\mathbf{1}$ Script for Questions 1-5 |
| ---: | :--- |
| 1 | Circle the digit that represents 10s in the number thirteen. |
| 2 | What number is one more than 29? |
| 3 | Circle the measurement shown by the thermometer. |
| 4 | Shade 1 quarter of the circle. |
| 5 | A pencil costs 30p and a rubber costs 20p. Asjal buys a <br> pencil and a rubber. <br> How much does he spend? |

