## 11+ Entrance Exam

## Mathematics



## Sample Questions

(The exam is based on the appropriate level of the National Curriculum. Any KS2 past papers will provide excellent further practice)

Q1. These are the prices of cheese in a shop.


Cheddar cheese
82 p for 100 grams
82p for 100 grams


Mina buys $\mathbf{2 0 0} \mathrm{g}$ of Cheddar cheese and $\mathbf{1 5 0 g}$ of Edam cheese.
How much does she pay altogether?
Seb buys some cottage cheese for $£ 1.35$.
How many grams of cottage cheese does he get?

Q2. Calculate $544 \div 32$

Q3. Each of these cards has two numbers on it.


Stefan chooses one card without looking.
He adds the two numbers together.
What is the most likely total of the numbers on his card?

Q4. $\quad \mathbf{A}$ and $\mathbf{B}$ are joined by a straight line on coordinate axes.


The dots on the line are equally spaced.
What are the coordinates of $\mathbf{C}$ ?

Q5. Here are five shapes on a regular grid.


Which shape has the longest perimeter?
Which shape has only one line of symmetry?

Q6. Calculate $\mathbf{3 . 8 1}+\mathbf{1 8 . 3}$

Q7. 500 children started a 20 kilometre sponsored cycle ride.

This graph shows how far they cycled.


At what distance were exactly half of the children still cycling?

Estimate how many children completed the 20 kilometre cycle ride.

Q8. Freddie is half as tall as his mother.

Freddie is one metre shorter than his father.
Freddie's father is 180 centimetres tall.


How many centimetres tall is Freddie's mother?

Q9. Joe places some apples on a weighing scale.

The pointer shows the mass of the apples.


He takes away one apple.
The mass goes down by 120 grams.

Draw the pointer in its new position on the scale below.


Q10.
This pie chart shows the ingredients to make a food mixture for wild birds.


Estimate the percentage of mixture that is suet
Mina uses 100 grams of millet in the mixture.
Estimate how many grams of sunflower seeds she should use.

Q11. Calculate $560 \times 28$

Q12. Here are some shapes on a 1 cm square grid.


What is the perimeter of shape A?

Write the letter of the shape that has the smallest area.

Q13.


Mina has 5 more marbles than Kirsty.
Kirsty has $\mathbf{2}$ more marbles than Seb.
Altogether they have 30 marbles.
How many marbles does each child have?

Q14. In a class, 18 of the children are girls.
A quarter of the children in the class are boys.
Altogether, how many children are there in the class?

Q15. Here are five letters on a scale.


Match each letter to one of the capacities in the list below.

1200 ml

$1.7 l$

$1 \frac{1}{4} l$


1560 ml

$1.07 l$


Q16.
Cleo has $\mathbf{2 4}$ centimetre cubes.
She uses all 24 cubes to make a cuboidwith dimensions $\mathbf{6 c m}, \mathbf{2 c m}$ and $\mathbf{2 c m}$.


Write the dimensions of a different cuboid she can make using all 24 cubes.
Jon has 20 centimetre cubes.


He wants to make a cube with edges that are $\mathbf{3 c m}$ long.
How many more centimetre cubes does he need?

