# Westminster Cathedral Choir School 

8+ Mathematics

## SPECIMEN PAPER

## Time allowed: 45 mins

Total marks: 100

Please read the following information carefully

- Try to answer all the questions in the space provided
- Remember to show your working out
- You will need to use a ruler
- You may not use a calculator
(I) What is the value of the 4 in the number 5247 ?
(2) Write the following numbers in order of size from the smallest to the largest

705I 750I 7015 6I05 705I 605I
(3) Use the column method of addition to answer the question below:

$$
\begin{array}{r}
27 \\
+456
\end{array}
$$

(4) Fill in the blank in the following calculation:

$$
48+\ldots=19+37
$$

(5) Michael has 617 coins in his collection. His uncle gives him another 268 coins. How many coins does Michael have altogether?
(6) Use the column method of subtraction to answer the question below:

(7) Fill in the blank in the following calculation:

$$
74+11=\quad-9
$$

(8) Peter has 418 chips on his plate. He gives 236 chips to Freddie. How many chips are left on Peter's plate?
(2)
(9) $347 \times 100$
(2)
(10) $16 \times 300$
(2)
(II) $60 \times 300$
(I2) Use the written method of multiplication to answer the question below:

## 28

## $\times \quad 9$

$\qquad$
$\qquad$
(13) Fill in the answers to the following questions:
(a) $6 \times 9=$ $\qquad$
(b) $3 \times 8=$ $\qquad$
(c) $5 \times 12=$ $\qquad$
(d) $36 \div 9=$ $\qquad$
(14) Pupils from Westminster Cathedral Choir School go on a school trip to London Zoo. If the pupils fill up 7 minibuses and there are 16 pupils in each minibus, how many pupils are there altogether on the trip?
(15) $3400 \div 10$
(I6) $6400 \div 200$
(17) Edward has $£ 60$ in his money box. If he gives one fifth of his money to his brother, how much money does he have left?
(18) Fill in the blank in the following calculation:

$$
63 \times 4=\ldots 3
$$

(19) Use the written method of division to answer the question below, giving a remainder in your answer if necessary. Write your final answer on the line at the bottom of the question

$$
5 \longdiv { 7 4 }
$$

(20) Simon has 48 friends at his birthday party. At the start of a party game, he asks them to stand in rows. If there are 8 friends in each row, how many rows are there altogether?
(21) Fill in the blank in the number pattern below:
$\begin{array}{llll}5 & 9 & 13 & 17\end{array}$
(22) Fill in the blank in the number pattern below:
$\begin{array}{llll}7 & 9 & 13 & 19\end{array}$
(23) Fill in the blank in the number pattern below:
48
24
12
3
(24) Fill in the blank in the number pattern below:

$$
\begin{array}{llll} 
& 9 & 27 & 81
\end{array}
$$

(25) Shade $\frac{5}{6}$ of the following shape

(26) What number should replace the * symbol so the following fractions have the same value?

$$
\frac{3}{5}=\frac{*}{20}
$$

(27) Write the fraction $\frac{12}{20}$ in its simplest form
(28) What is $\frac{1}{3}$ of $£ 180$ ?
(29) What is $\frac{2}{9}+\frac{5}{9}$ ?
(30) Subtract $£ 2.20$ from $£ 6.50$
(3I) Emma buys a milkshake which costs $£ 2.85$. She pays with a $£ 10$ note. How much change does she receive?
(32) Michael has $£ 32.60$ in his money box. If he spends $£ 15.40$ on snacks, how much money does he have left?
(33) What is 47 rounded to the nearest 10 ?
(34) What is 327 rounded to the nearest 100 ?
(35) Write down the mass in grams shown on the scales below:

(36) How many grams are there in 2.5 kilograms?
(37) Use a ruler to measure the length of the thick black line to the nearest halfcentimetre. Write your answer on the thin line below
(38) Miss Jones went to the cinema to watch 'The Return of the Super Monsters'. If the film is 2 hours and 45 minutes long and finished at 9.30 pm , at what time did the film start?
(39) Draw the mirror image of this shape on the grid below.

(40) A bowl of fruit contains only apples, oranges, pears and bananas. Half of the fruit are apples. There are also 2 oranges, I pear and 6 bananas.

How many pieces of fruit are there in the bowl altogether?
(4I) Max asked his friends to name their favourite ice-cream flavour.
He collected his results in the frequency table below.

| Flavour | Tally | Frequency |
| :---: | :--- | :--- |
| Vanilla | $\\|\\|$ |  |
| Strawberry | IIII |  |
| Chocolate | HH \\|\| |  |
| Banana | $\\|$ |  |

(a) Fill in the column marked 'frequency' in the table above.
(b) Use the data in this frequency table to draw a bar chart on the grid below.

(42) Tickets for a theme park cost $£ 9$ for a child and $£ 13$ for an adult.

If Mr. Brown has $£ 95$ pounds cash and then buys tickets for himself and 6 pupils, how much money does he have left over?
(43) I have a pile of sweets which contains less than 30 sweets.

If I put them into piles of 3 , I have none left over.
If I put them into piles of 2,4 or $5, I$ always have one left over?
How many sweets do I have?
(44) It takes Mr White exactly 45 minutes to walk to the cinema from his house. If the film he wants to see starts at 8.20 pm , what is the latest time he can leave home?
(45) Steven is 8 cm taller than Maddy. Peter is 12 cm shorter than Steven. Maddy is 125 cm tall. How tall is Peter? Give your answer in centimetres
(46) Nine bus stops are equally spaced along a bus route. The distance from the first to the third is 600 m . How far is it from the first to the last?
(47) Write down the letter of the box which comes next in the sequence.

A
B
C
D

(2)
(48) Write down the letter of the box which comes next in the sequence.

(2)

