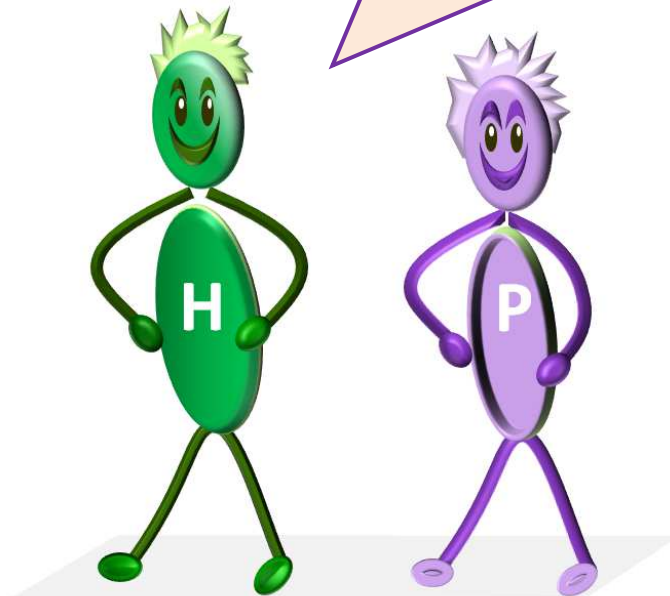


Henry and Poppy  
have fun with numbers

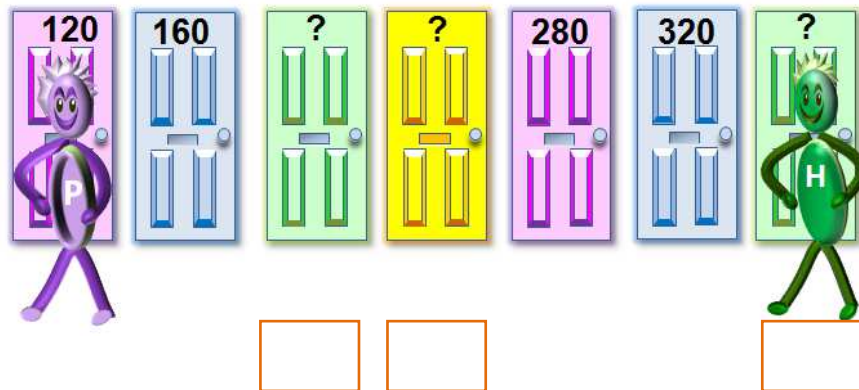
## Year 5 maths part 1

(for 9-10 year olds)

We had fun making these questions  
for you. Enjoy them.



1 Write the missing door numbers



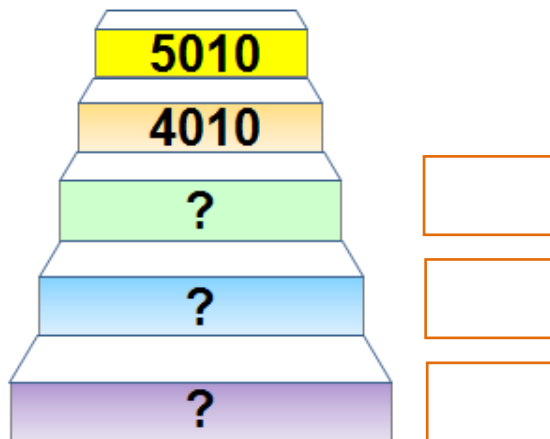
1 mark

5N1: Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000

2 Write the missing numbers



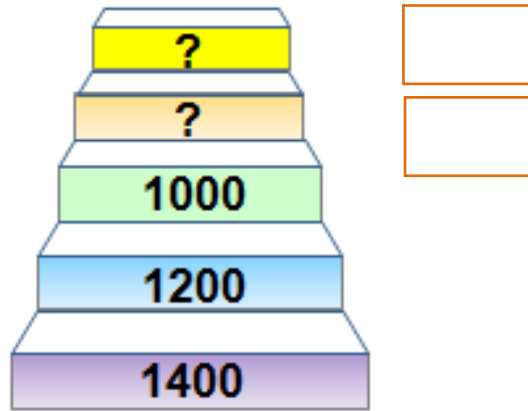
Count down the stairs



1 mark

5N1: Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000

3 Write the missing numbers



1 mark

5N1: Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000

4 Write the missing numbers



1 mark

5N1: Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000

5 Write the missing numbers



1 mark

5N1: Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000

**6** Write the missing numbers



1 mark

**5N1:** Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000

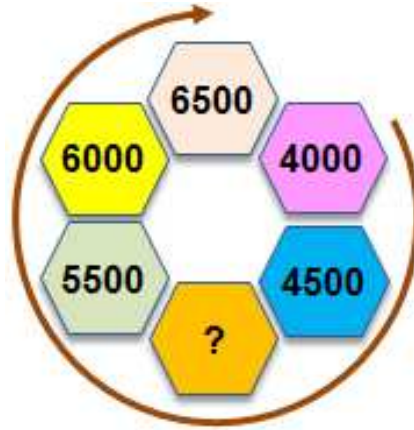
**7** Write the missing numbers



1 mark

**5N1:** Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000

8 Write the missing numbers



1 mark

**5N1:** Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000

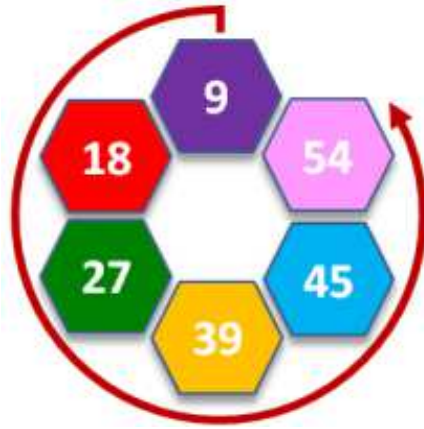
9 Which number is wrong



1 mark

**5N1:** Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000

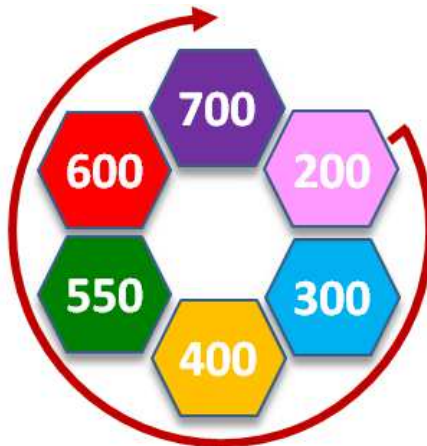
10 Which number is wrong



1 mark

**5N1:** Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000

11 Which number is wrong



1 mark

**5N1:** Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000

1

Put these numbers in order. Biggest at top.

12300

21299

9999

19998

20100

1 mark



5N2:Read, write, order and compare numbers to at least 1,000,000

2

Put these numbers in order. Biggest at top.

99230

111112

90999

888880

282828

1 mark



5N2:Read, write, order and compare numbers to at least 1,000,000

3 Put these numbers in order. Biggest at top.

999888

999090

989899

998999

999899

1 mark



5N2:Read, write, order and compare numbers to at least 1,000,000

4 Write in words the number 20301.

1 mark

Write in words the number 36210.

1 mark

Write in words the number 601030.

1 mark



5N2:Read, write, order and compare numbers to at least 1,000,000



**5**

**Write in words the number 290101.**

1 mark

**Write in words the number 310020.**

1 mark

**Write in words the number 990990.**

1 mark

5N2:Read, write, order and compare numbers to at least 1,000,000



**6** Write **299015** in **WORDS**

Write **two hundred thousand, nine hundred and six** as a **NUMBER**

1 mark

5N2:Read, write, order and compare numbers to at least 1,000,000

**7** Write **61170** in **WORDS**

Write **Three hundred thousand, one hundred and seventy two** as a **NUMBER**

1 mark

5N2:Read, write, order and compare numbers to at least 1,000,000

8

For each number word, tick (✓) the correct number.  
The first one is done for you.

10060      One hundred thousand and sixty      10600

1 mark



300201      Three hundred thousand two hundred and one      30201

1 mark



70500      Seventy thousand five hundred      7500

1 mark



5N2:Read, write, order and compare numbers to at least 1,000,000

1 Which place (✓) is the digit 7 in **60794**

thousands  
place

hundreds  
place

tens  
place

ones  
place

1 mark

5N3a: Determine the value of each digit in numbers up to 1 000 000

2 Which place (✓) is the digit 3 in **3456**

thousands  
place

hundreds  
place

tens  
place

ones  
place

1 mark

5N3a: Determine the value of each digit in numbers up to 1 000 000

3 Which place (✓) is the digit 3 in **30456**

100,000  
place

10,000  
place

1000  
place

100  
place

10  
place

1  
place

1 mark

5N3a: Determine the value of each digit in numbers up to 1 000 000

4 Which place (✓) is the digit 3 in **456304**

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
100,000 place	10,000 place	1000 place	100 place	10 place	1 place

1 mark

5N3a: Determine the value of each digit in numbers up to 1 000 000

5 Colour in the number: 523495

Hundred thousands									
Ten thousands									
Thousands									
Hundreds									
Ten									
Units									

1 mark

5N3a: Determine the value of each digit in numbers up to 1 000 000

6 Colour in the number: 601020

Hundred thousands									
Ten thousands									
Thousands									
Hundreds									
Ten									
Units									

1 mark

5N3a: Determine the value of each digit in numbers up to 1 000 000

7 Colour in the number: 900909

Hundred thousands									
Ten thousands									
Thousands									
Hundreds									
Ten									
Units									

1 mark

5N3a: Determine the value of each digit in numbers up to 1 000 000

8 What is the largest number you can make with the four digits?



1 mark

5N3a: Determine the value of each digit in numbers up to 1 000 000

9

What is the smallest number you can make with the four digits?



1 mark



5N3a: Determine the value of each digit in numbers up to 1 000 000

10

What is the largest number you can make with the four digits?



1 mark



5N3a: Determine the value of each digit in numbers up to 1 000 000

11

What is the smallest number you can make with the four digits?

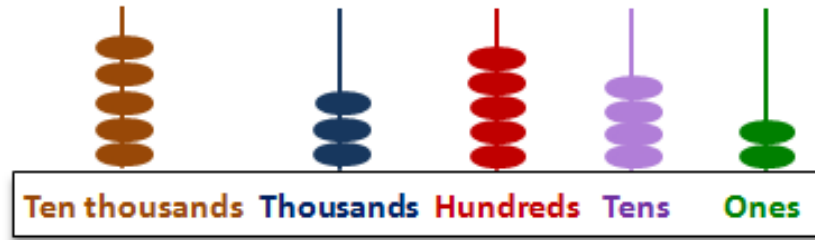


1 mark



5N3a: Determine the value of each digit in numbers up to 1 000 000

12 Write down the numbers on the thousands/hundreds/tens/units abacus



1 mark



5N3a: Determine the value of each digit in numbers up to 1 000 000

13 Draw beads on the abacus to make the number :  
**43021**



1 mark



5N3a: Determine the value of each digit in numbers up to 1 000 000



14 What is this number?

Hundred thousands	■	■	■	■	■				
Ten thousands									
Thousands	■	■	■	■	■				
Hundreds									
Ten	■	■	■	■	■				
Units	■	■	■	■	■	■	■	■	■

1 mark

5N3a: Determine the value of each digit in numbers up to 1 000 000

15 What is this number?

Hundred thousands	■	■	■	■	■				
Ten thousands	■	■	■	■					
Thousands	■	■	■	■	■				
Hundreds	■	■	■	■	■	■	■	■	■
Ten	■	■	■	■					
Units	■	■	■	■	■	■	■	■	■

1 mark

5N3a: Determine the value of each digit in numbers up to 1 000 000

1 Write these numbers as roman numerals.

80	_____
110	_____
550	_____
700	_____

1 mark



5N3b: Read Roman numerals to 1000 (M) and recognise years written in Roman numerals

2 Match these numbers and roman numerals.

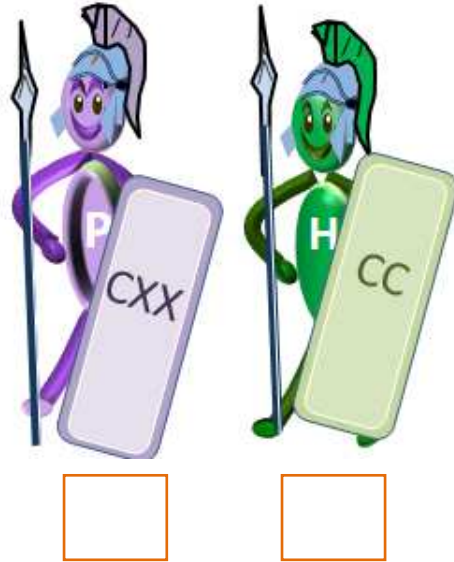
500	CCL
1000	LXX
70	D
250	M

1 mark



5N3b: Read Roman numerals to 1000 (M) and recognise years written in Roman numerals

3 Who (✓) has the biggest roman numeral?



1 mark

5N3b: Read Roman numerals to 1000 (M) and recognise years written in Roman numerals

4 Write the number for the roman numeral **CD** on Poppy's shield.



1 mark

5N3b: Read Roman numerals to 1000 (M) and recognise years written in Roman numerals

5 Write the number for the roman numeral **CM** on Henry's shield.



1 mark



**5N3b:** Read Roman numerals to 1000 (M) and recognise years written in Roman numerals

6 Henry was born in :

MMXI

What year was that:

1 mark



**5N3b:** Read Roman numerals to 1000 (M) and recognise years written in Roman numerals

7 Poppy's teacher was born in :

MCMLXXVI

What year was that:

1 mark



**5N3b:** Read Roman numerals to 1000 (M) and recognise years written in Roman numerals

8

Write 449 in roman numerals.

1 mark

**5N3b:** Read Roman numerals to 1000 (M) and recognise years written in Roman numerals



9

Write DCL in numbers.

1 mark

**5N3b:** Read Roman numerals to 1000 (M) and recognise years written in Roman numerals



10

My Mum was born in 1984



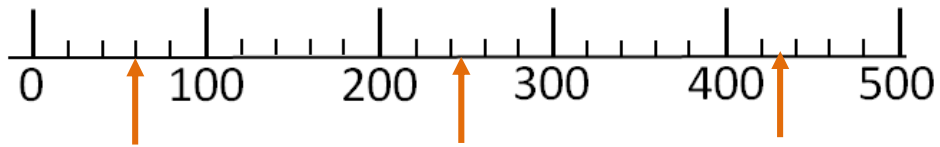
Write that in Roman numerals.

1 mark

**5N3b:** Read Roman numerals to 1000 (M) and recognise years written in Roman numerals



1 Round these numbers to the nearest 100



**60**

**250**

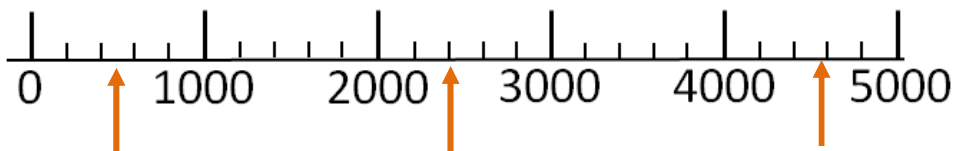
**438**

1 mark



5N4: Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10,000 and 100,000

2 Round these numbers to the nearest 1000



**499**

**2409**

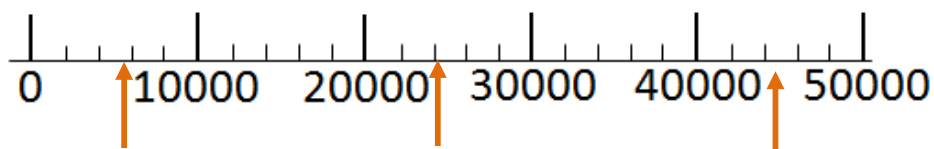
**4599**

1 mark



5N4: Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10,000 and 100,000

3 Round these numbers to the nearest 10000



**5801**

**24009**

**45099**

1 mark



5N4: Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10,000 and 100,000

4

Round and match the numbers to nearest 100

399

100

145

200

199

300

333

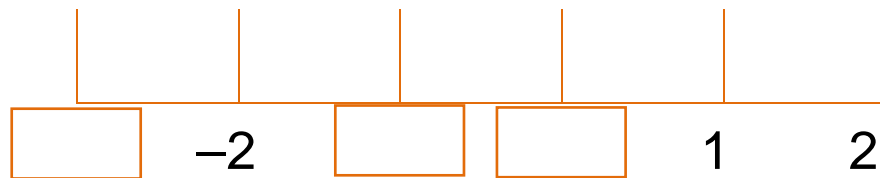
400

1 mark

**5N4:** Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10,000 and 100,000



1 Complete the number line.

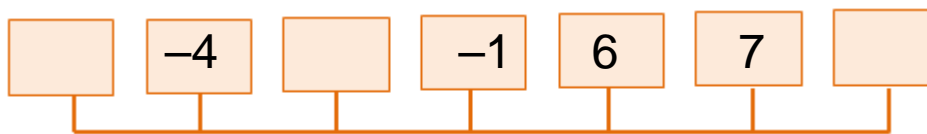


1 mark

5N5: Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero



2 Put the numbers on the number line



-2 -5 6 9

1 mark

5N5: Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero



3 Put the numbers on the number line



0 -5 -6 -1

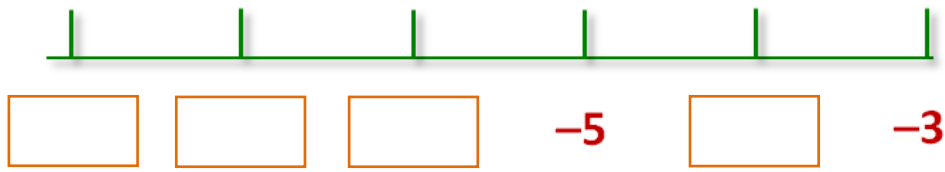
1 mark

5N5: Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero





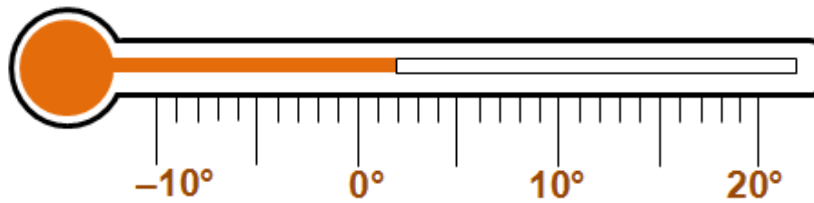
4 Complete the number line.



1 mark

**5N5:** Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero

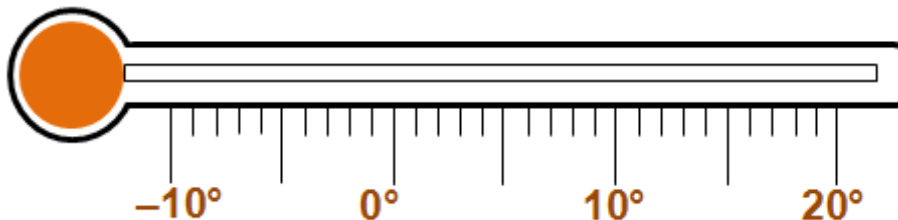
5 What is  $8^{\circ}\text{C}$  colder than the thermometer reading.



1 mark

**5N5:** Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero

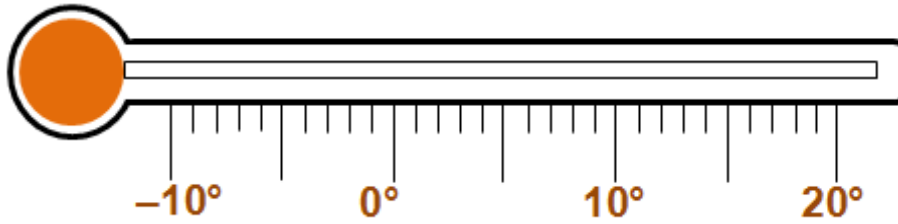
6 Today it is  $4^{\circ}\text{C}$ . Tomorrow it will be  $6^{\circ}\text{C}$  colder. Mark tomorrow's temperature on the thermometer.



1 mark

**5N5:** Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero

- 7 Today it is  $13^{\circ}\text{C}$ . Tomorrow it will be  $16^{\circ}\text{C}$  colder.  
Colour tomorrow's temperature below.



1 mark

**5N5:** Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero

- 8 What is

$$10 - 11 = \square$$

$$-3 - 3 = \square$$

$$-1 - 2 = \square$$

3 marks

**5N5:** Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero

1

Write the roman numeral **MIX** in numbers.

1 mark

5N6: Solve number problems and practical problems involving 5N1–5N5

2

Answer these calculations in roman numerals

$$\text{CL} + \text{CD} = \text{[ ]}$$

$$\text{CDX} - \text{CCLX} = \text{[ ]}$$

2 marks

5N6: Solve number problems and practical problems involving 5N1–5N5

3

Round the numbers to nearest 100 then match the roman numeral

451

DCC

726

CC

199

CD

350

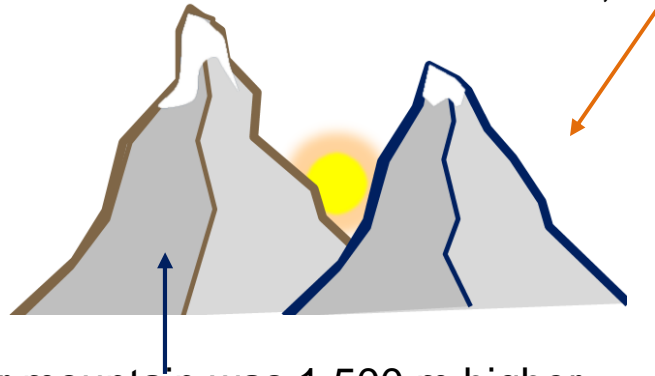
D

1 mark

5N6: Solve number problems and practical problems involving 5N1–5N5

4

One mountain was 17, 500 m high.



Another mountain was 1,500 m higher.

How high was the tallest mountain  m

1 mark

5N6: Solve number problems and practical problems involving 5N1–5N5

5

Mount Everest is 29, 000 feet high.



Another mountain called K2 is 750 feet lower.

How high is K2  ft

1 mark

5N6: Solve number problems and practical problems involving 5N1–5N5

6 This mountain is 22, 559m high.



Another mountain is 99m lower.

 m m

To the nearest 100m how high is each mountain

2 marks

5N6: Solve number problems and practical problems involving 5N1–5N5

7 This mountain is 1000m higher.



This mountain is 15499m lower.

 m m

To the nearest 1000m how high is each mountain

2 marks

5N6: Solve number problems and practical problems involving 5N1–5N5

8 What are the missing numbers (?)

$$\begin{array}{ccccccc} \boxed{14} & + & \boxed{?} & = & \boxed{6} & \square & \bigcirc \\ \boxed{?} & - & \boxed{20} & = & \boxed{-5} & \square & \bigcirc \\ \boxed{-11} & - & \boxed{11} & = & \boxed{?} & \square & \bigcirc \end{array}$$

3 marks

5N6: Solve number problems and practical problems involving 5N1–5N5

9 Match the answers with a line.

$$\begin{array}{ccccccc} \boxed{-11} & - & \boxed{2} & = & 9 & \bigcirc \\ \boxed{43} & - & \boxed{34} & = & -13 & \bigcirc \\ \boxed{-33} & + & \boxed{35} & = & 8 & \bigcirc \\ \boxed{5} & - & \boxed{-3} & = & 2 & \bigcirc \end{array}$$

4 marks

5N6: Solve number problems and practical problems involving 5N1–5N5

**10** Answer these roman numerals questions.

$$XV + V = \square$$

$$XXX + XX = \square$$

$$X - V = \square$$

$$L - X = \square$$

$$C - X = \square$$

5 marks

**5N6:** Solve number problems and practical problems involving **5N1–5N5**



1 Look at the toy shop



How much is the bat and ball altogether.

£

1 marks



5C1: Add and subtract numbers mentally with increasingly large numbers



2 Look at the toy shop



The truck costs more than the car.

How much more

£

1 mark

5C1: Add and **subtract** numbers mentally with increasingly large numbers

3 Look at the toy shop



You give £10 for the duck.

How much change do you get

£

1 mark

5C1: Add and **subtract** numbers mentally with increasingly large numbers



4 Look at the toy shop



How much more is the 'jack-in-a-box' than the marbles.

£

1 mark

5C1: Add and **subtract** numbers mentally with increasingly large numbers

5 Look at the toy shop



How many ducks can you buy for £10

5C1: Add and **subtract** numbers mentally with increasingly large numbers



6 Look at the toy shop



You have £5.

How much do you need to save up to buy a musical instrument

£

1 mark

5C1: Add and **subtract** numbers mentally with increasingly large numbers



2 Look at the toy shop



You buy two ‘jack-in-a-box’ and a truck.  
How much do you pay.

1 mark


**5C2: Add** and subtract numbers with more than 4 digits, including formal written methods (columnar addition and subtraction)





## 4 Look at the toy shop



You have £70

Can you buy everything in the toy shop (Y/N)

2 marks




**5C2: Add** and subtract numbers with more than 4 digits, including formal written methods (columnar addition and subtraction)

1

Add these amounts

$$\begin{array}{r} \pounds 100.02 \\ \pounds 567.80 + \\ \hline \end{array}$$

$$\begin{array}{r} \pounds 345.67 \\ \pounds 654.32 + \\ \hline \end{array}$$

$$\begin{array}{r} \pounds 456.09 \\ \pounds 543.91 + \\ \hline \end{array}$$



3 marks

**5C2:** Add and subtract numbers with more than 4 digits, including formal written methods (columnar addition and subtraction)

2

Add these amounts

$$\begin{array}{r} \pounds 345.67 \\ \pounds 567.89 + \\ \hline \end{array}$$

$$\begin{array}{r} \pounds 999.00 \\ \pounds 234.90 + \\ \hline \end{array}$$

$$\begin{array}{r} \pounds 800.88 \\ \pounds 99.22 + \\ \hline \end{array}$$



3 marks

**5C2:** Add and subtract numbers with more than 4 digits, including formal written methods (columnar addition and subtraction)

3

### Subtract these amounts

$$\begin{array}{r} \pounds 567.89 \\ \pounds 100.02 - \\ \hline \end{array}$$

$$\begin{array}{r} \pounds 333.30 \\ \pounds 222.22 - \\ \hline \end{array}$$

$$\begin{array}{r} \pounds 543.01 \\ \pounds 456.91 - \\ \hline \end{array}$$



3 marks

**5C2:** Add and **subtract** numbers with more than 4 digits, including formal written methods (columnar addition and subtraction)

4

### Subtract these amounts

$$\begin{array}{r} \pounds 999.98 \\ \pounds 100.99 - \\ \hline \end{array}$$

$$\begin{array}{r} \pounds 340.30 \\ \pounds 222.02 - \\ \hline \end{array}$$

$$\begin{array}{r} \pounds 543.01 \\ \pounds 56.91 - \\ \hline \end{array}$$



3 marks

**5C2:** Add and **subtract** numbers with more than 4 digits, including formal written methods (columnar addition and subtraction)

5

Write in the missing digits

$$\begin{array}{r}
 1\ 0\ 0\ 6 \\
 5\ 2\ \square\ 4\ + \\
 \hline
 6\ 2\ 4\ 0
 \end{array}$$

$$\begin{array}{r}
 5\ 9\ 9\ 1 \\
 3\ \square\ 6\ 5\ + \\
 \hline
 9\ 0\ 5\ 6
 \end{array}$$

2 marks

**5C2: Add** and subtract numbers with more than 4 digits, including formal written methods (columnar addition and subtraction)

6

Write in the missing digits

$$\begin{array}{r}
 2\ 5\ 5\ 6 \\
 5\ \square\ 4\ 7\ + \\
 \hline
 8\ 1\ 0\ 3
 \end{array}$$

$$\begin{array}{r}
 \square\ 0\ \square\ 0 \\
 1\ 3\ 7\ 5\ + \\
 \hline
 7\ \square\ 6\ 5
 \end{array}$$

2 marks

**5C2: Add** and subtract numbers with more than 4 digits, including formal written methods (columnar addition and subtraction)

7

Write in the missing digits

$$\begin{array}{r}
 6073 \\
 4\ \square\ 2\ \square - \\
 \hline
 1849
 \end{array}$$

$$\begin{array}{r}
 9891 \\
 3\ \square\ \square\ 5 - \\
 \hline
 5926
 \end{array}$$

2 marks

**5C2: Add** and subtract numbers with more than 4 digits, including formal written methods (columnar addition and subtraction)

8

Write in the missing digits

$$\begin{array}{r}
 7009 \\
 1\ \square\ 3\ \square - \\
 \hline
 57\square 5
 \end{array}$$

$$\begin{array}{r}
 8\ \square\ 90 \\
 39\square 2 - \\
 \hline
 \square 828
 \end{array}$$

2 marks

**5C2: Add** and subtract numbers with more than 4 digits, including formal written methods (columnar addition and subtraction)

1

$1234 =$

$999 =$

$562 =$



1 mark

**5C3:** Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy

2

Round these to the nearest 10 then subtract

$2302 \rightarrow$

$204 \rightarrow$

—

1 mark

**5C3:** Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy

3

Round these to the nearest 100 then add

$1750 \rightarrow$

$220 \rightarrow$

+

1 mark

**5C3:** Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy

4

Round these to the nearest 100 to check the answers shown. Mark with ✓ or ✗

$$\begin{array}{r} 2495 \\ \text{Round } \boxed{2500} \end{array} + \begin{array}{r} 1515 \\ \text{Round } \boxed{1500} \end{array} = \begin{array}{r} \mathbf{4010} \\ \boxed{4000} \end{array} \quad \boxed{\checkmark}$$

$$\begin{array}{r} 3407 \\ \text{Round } \boxed{\phantom{000}} \end{array} + \begin{array}{r} 2469 \\ \text{Round } \boxed{\phantom{000}} \end{array} = \begin{array}{r} \mathbf{5876} \\ \boxed{\phantom{000}} \end{array} \quad \boxed{\phantom{000}}$$

$$\begin{array}{r} 5828 \\ \text{Round } \boxed{\phantom{000}} \end{array} + \begin{array}{r} 3389 \\ \text{Round } \boxed{\phantom{000}} \end{array} = \begin{array}{r} \mathbf{9217} \\ \boxed{\phantom{000}} \end{array} \quad \boxed{\phantom{000}}$$

2 marks

**5C3:** Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy

5

Round these to the nearest 100 to check the answers shown. Mark with ✓ or ✗

$$\begin{array}{r} 2795 \\ \text{Round } \boxed{2800} \end{array} - \begin{array}{r} 1905 \\ \boxed{1900} \end{array} = \begin{array}{r} 1000 \\ \boxed{900} \end{array} \quad \boxed{\times}$$

$$\begin{array}{r} 3407 \\ \text{Round } \boxed{\phantom{0000}} \end{array} - \begin{array}{r} 2469 \\ \boxed{\phantom{0000}} \end{array} = \begin{array}{r} 938 \\ \boxed{\phantom{0000}} \end{array} \quad \boxed{\phantom{\times}}$$

$$\begin{array}{r} 8828 \\ \text{Round } \boxed{\phantom{0000}} \end{array} - \begin{array}{r} 3399 \\ \boxed{\phantom{0000}} \end{array} = \begin{array}{r} 5529 \\ \boxed{\phantom{0000}} \end{array} \quad \boxed{\phantom{\times}}$$

2 marks

**5C3:** Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy



**6**

Round these to the nearest 10 and estimate the answer

$$\begin{array}{r} 19 \\ \times 242 \\ \hline \end{array}$$

Round  ×  =

$$\begin{array}{r} 29 \\ \times 31 \\ \hline \end{array}$$

Round  ×  =

$$\begin{array}{r} 103 \\ \times 199 \\ \hline \end{array}$$

Round  ×  =

3 marks

**5C3:** Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy

**7**

Round these to the nearest whole number and estimate the answer

$$\begin{array}{r} 1.9 \\ \times 2.7 \\ \hline \end{array}$$

Round  ×  =

$$\begin{array}{r} 2.8 \\ \times 3.1 \\ \hline \end{array}$$

Round  ×  =

$$\begin{array}{r} 10.3 \\ \times 19.9 \\ \hline \end{array}$$

Round  ×  =

3 marks

**5C3:** Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy

8

Round these to the nearest 10 and estimate the answer

$$\text{Round } 199 \div 19 =$$

Round   $\div$   =

$$\text{Round } 139 \div 71 =$$

Round   $\div$   =

$$\text{Round } 1596 \div 83 =$$

Round   $\div$   =

1 mark

**5C3:** Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy

9

Henry wants to buy the bat, ball, car, boat, duck and truck. He has £45.



Round each item to the nearest pound (£) and add to check if Henry has enough money.

Car

£ 

Boat

£ 

Duck

£ 

Truck

£ 

Ball

£ 

Bat

£ 

Has Henry enough money?

2 marks

**5C3:** Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy

10 Poppy wants to buy the jack-in-a-box and the musical instrument. She has £20.



Round each item to the nearest pound (£) and add to check if Poppy has enough money.

Jack-in-a-box

£

musical instrument

£

Has Poppy enough money?

2 marks

5C3: Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy

11

Henry wants to buy 4 large and 4 small pizzas



Round the prices and add to *estimate* how much he needs

Large    £     × 4 =    £

Small    £     × 4 =    £

Total                                    £

2 marks

**5C3:** Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy

12

Tick the correct answer for numbers rounded to the nearest 10

26

20

30

26

25

655

600

650

660

700

1235

1200

1230

1300

1300

3 marks

5C3: Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy

13

Tick the correct answer for numbers rounded to the nearest 100

349

300

400

350

340

6550

6500

6600

6000

7000

1235

1200

1230

1240

1300

3 marks

5C3: Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy

1

Henry and Poppy ordered pizza



Small £4.25

Medium £7.49

How much was it for 1 large and 2 mediums

2 marks


£

**5C4:** Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why





3

Henry and Poppy had a pizza party



Each person had a drink and a pizza.

They spent just over £56

How many persons were at the party.

2 marks


**5C4:** Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why



4

Henry and Poppy ordered pizza



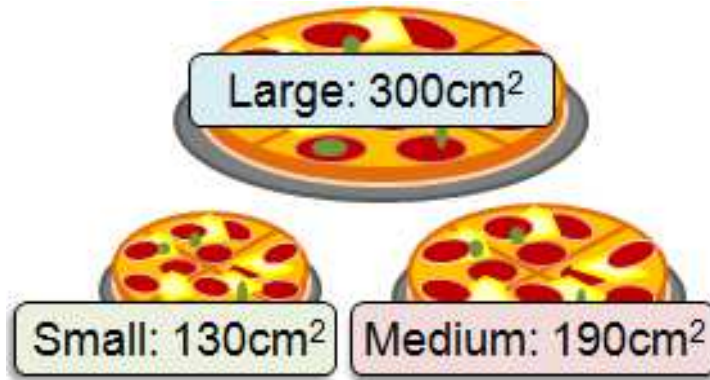
A large is the same size as a small + medium  
How much can you save by buying a large.

2 marks


£

**5C4:** Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why

# Henry and Poppy ordered pizza



There was a deal:

- A. 1 small free with 2 large**
- B. 1 medium free with 3 large**

Large: £8.99; Medium: £7.49; Small: £4.25

Use the area of a pizza to find the best deal

2 marks


Deal:

**5C4:** Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why

1

Colour, crossing the grid using multiples only of..



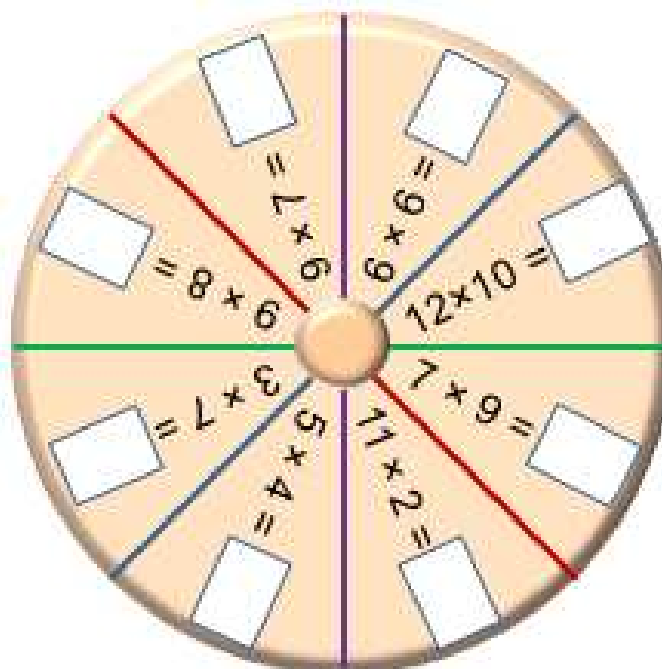
5 in red ; 7 in blue ; 4 in green

3 marks

**5C5a:** identify **multiples** and factors, including finding all factor pairs of a number and common factors of two numbers

2

Fill in the blanks



2 marks

**5C5a:** identify **multiples** and factors, including finding all factor pairs of a number and common factors of two numbers

3

On the grid colour the factors of ...



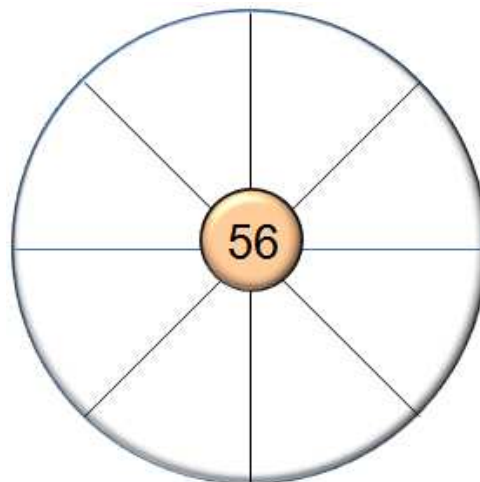
42 in red ; 60 in blue

2 marks

**5C5a:** identify multiples and **factors**, including finding all factor pairs of a number and common factors of two numbers

4

Complete the factor pairs for 56

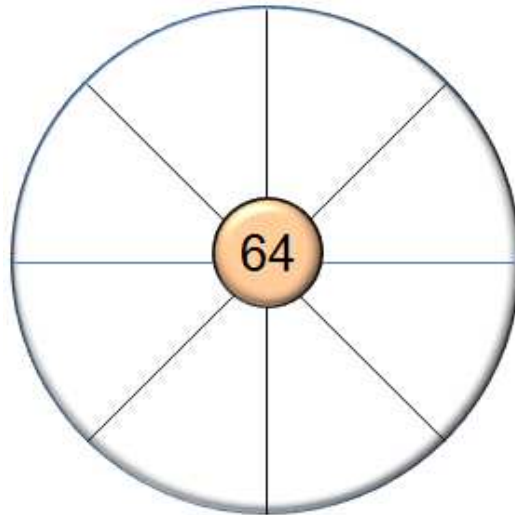


1 mark

**5C5a:** identify multiples and factors, including finding all **factor pairs** of a number and common factors of two numbers

5

Complete the factor pairs for 64



1 mark



**5C5a:** identify multiples and factors, including finding all **factor pairs** of a number and common factors of two numbers

6

On the grid colour the common factors of ...



24 and 36 in green

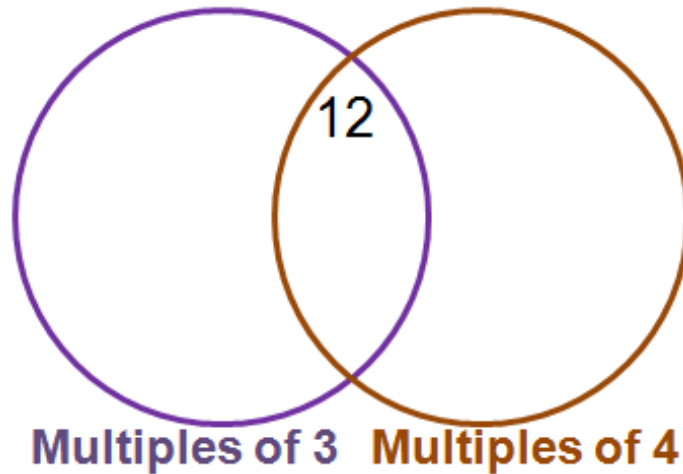
2 marks



**5C5a:** identify multiples and factors, including finding all factor pairs of a number and **common factors** of two numbers

7

Complete the Venn diagram



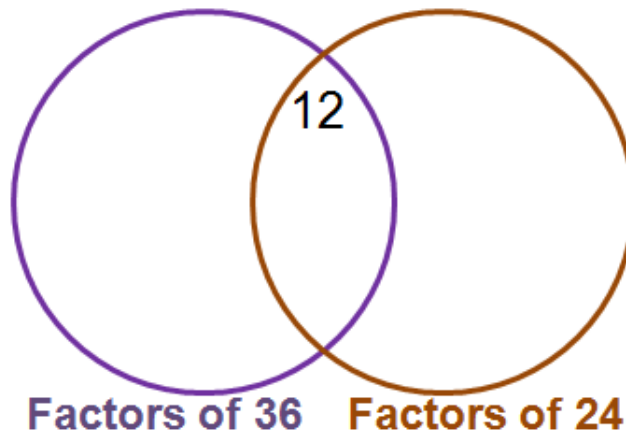
with these numbers: 9, 16, 36, 24, 6, 7, 18

1 mark

**5C5a:** identify **multiples** and **factors**, including finding all factor pairs of a number and **common factors** of two numbers

8

Complete the Venn diagram



with these numbers: 9, 18, 12, 4, 8, 3, 2, 6

1 mark

**5C5a:** identify multiples and **factors**, including finding all factor pairs of a number and **common factors** of two numbers

1

True ✓ or False ×

1 is a prime number

0 is not a prime number

A prime number can be divided by 2

A prime number ends in 5

Prime numbers are all odd

A prime number only has two factors,  
1 and the itself

1 mark



**5C5b:** know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers



1

On the grid colour all the prime numbers



1 mark



**5C5c:** establish whether a number up to 100 is prime and recall prime numbers up to 19

2

Sort these numbers

2, 3, 4, 5, 6, 7, 9, 10, 11,  
12, 13, 14, 15, 16, 17, 19

Prime

Not Prime

1 mark



**5C5c:** establish whether a number up to 100 is prime and recall prime numbers up to 19

3

Colour all the numbers which only have two factors - 1 and the number

91	92	93	94	95	96	97	98	99	100
81	82	83	84	85	86	87	88	89	90
71	72	73	74	75	76	77	78	79	80
61	62	63	64	65	66	67	68	69	70
51	52	53	54	55	56	57	58	59	60
41	42	43	44	45	46	47	48	49	50
31	32	33	34	35	36	37	38	39	40
21	22	23	24	25	26	27	28	29	30
11	12	13	14	15	16	17	18	19	20
1	2	3	4	5	6	7	8	9	10

1 mark



**5C5c:** establish whether a number up to 100 is prime and recall prime numbers up to 19

1

### Sort these numbers

1, 4, 8, 9, 16, 25, 10, 11,  
12, 13, 14, 15, 16, 17, 19

Squared

Cubed

1 mark

**5C5d:** recognise and use square numbers and cube numbers, and the notation for squared ( $^2$ ) and cubed ( $^3$ )

2

### Fill in the boxes with numbers

One cubed,  $1^3 = \square \times \square \times \square = \square$

Two cubed,  $2^3 = \square \times \square \times \square = \square$

Three cubed,  $3^3 = \square \times \square \times \square = \square$

1 mark

**5C5d:** recognise and use square numbers and cube numbers, and the notation for squared ( $^2$ ) and cubed ( $^3$ )

3

Fill in the boxes with numbers

One squared,  $1^2 =$    $\times$    $=$

Two squared,  $2^2 =$    $\times$    $=$

Three squared,  $3^2 =$    $\times$    $=$

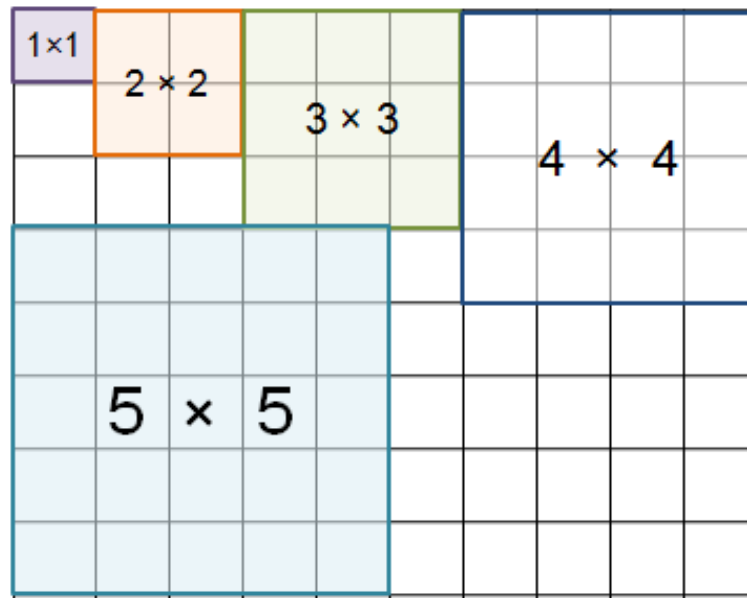
1 mark

**5C5d:** recognise and use square numbers and cube numbers, and the notation for squared (<sup>2</sup>) and cubed (<sup>3</sup>)

4

A square has equal sides.

So a number squared means a number is multiplied by itself.

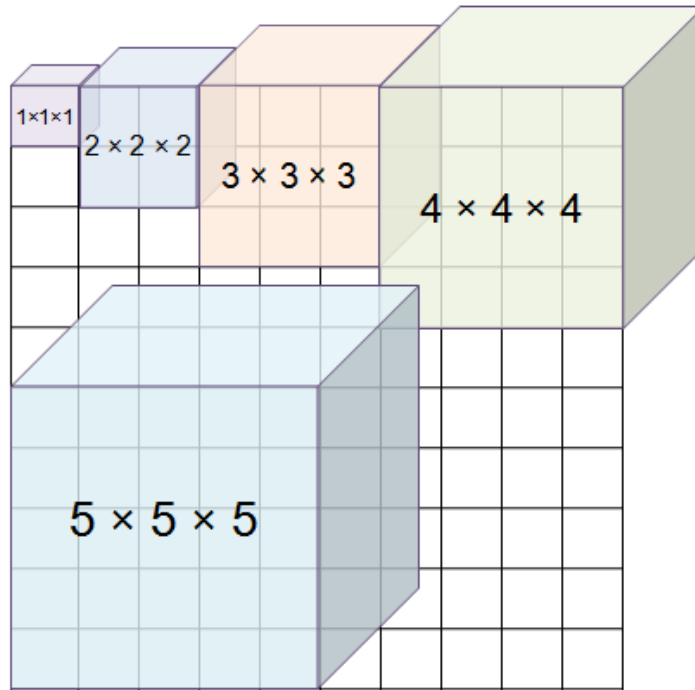


1 mark

**5C5d:** recognise and use square numbers and cube numbers, and the notation for squared (<sup>2</sup>) and cubed (<sup>3</sup>)

5 A cube has equal sides.

So a number *cubed* means a number is multiplied by itself then by itself again.



1 mark

**5C5d:** recognise and use square numbers and cube numbers, and the notation for squared ( $^2$ ) and cubed ( $^3$ )

1

## True (T) or False(F)

Product means two numbers multiplied

Product means two numbers added

If you multiply a *whole* number by 10 the answer ends in 0

If you multiply a *decimal number* by 10 you move the decimal point one place to make the number bigger

If you multiply a *decimal* number by 10 the answer ends in 0



1 mark

5C6a: Multiply and divide numbers mentally drawing upon known facts

2

## True (T) or False(F)

Product of two odd numbers is odd

Product of an even and odd number is odd

Multiples of 5 end in zero

Multiples of 2 are even



1 mark

5C6a: Multiply and divide numbers mentally drawing upon known facts

3

Halving ( $\div 2$ ) by breaking down the number

$$28 \div 2 \text{ (half)}$$

$$\begin{array}{rcccl} 20 = & 20 & + & 8 & \\ & \downarrow \text{half} & & \downarrow \text{half} & \\ & \boxed{10} & + & \boxed{4} & \\ & & \downarrow \text{Add} & & \\ & & \boxed{14} & & \end{array}$$

1 mark

5C6a: Multiply and divide numbers mentally drawing upon known facts

4

Halving ( $\div 2$ ) by breaking down the number

$$46 \div 2 \text{ (half)}$$

$$\begin{array}{rcccl} 46 = & \dots & + & \dots & \\ & \downarrow \text{half} & & \downarrow \text{half} & \\ & \boxed{\phantom{00}} & + & \boxed{\phantom{00}} & \\ & & \downarrow \text{Add} & & \\ & & \boxed{\phantom{00}} & & \end{array}$$

1 mark

5C6a: Multiply and divide numbers mentally drawing upon known facts

5

Halving ( $\div 2$ ) by breaking down the number

$$54 \div 2 \text{ (half)}$$

$$\begin{array}{rccccccc} 54 = & 40 & + & 10 & + & 4 & \\ & \downarrow \text{half} & & \downarrow \text{half} & & \downarrow \text{half} & \\ & \boxed{20} & + & \boxed{5} & + & \boxed{2} & \\ & & & \downarrow \text{Add} & & & \\ & & & \boxed{27} & & & \end{array}$$

1 mark

5C6a: Multiply and divide numbers mentally drawing upon known facts

6

Halving ( $\div 2$ ) by breaking down the number

$$74 \div 2 \text{ (half)}$$

$$\begin{array}{rccccccc} 74 = & \dots & + & \dots & + & \dots & \\ & \downarrow \text{half} & & \downarrow \text{half} & & \downarrow \text{half} & \\ & \boxed{\phantom{00}} & + & \boxed{\phantom{00}} & + & \boxed{\phantom{00}} & \\ & & & \downarrow \text{Add} & & & \\ & & & \boxed{\phantom{00}} & & & \end{array}$$

1 mark

5C6a: Multiply and divide numbers mentally drawing upon known facts



7

If number ends in a 0, ignore it and half the rest. Then put the 0 back.

$$180 \div 2 \rightarrow 18 \div 2 \text{ (Ignore 0)}$$

$$18 \div 2 = 9$$

$$\text{Add 0} \rightarrow \boxed{90}$$

1 mark



5C6a: Multiply and divide numbers mentally drawing upon known facts

8

$$260 \div 2 \rightarrow \dots \div 2 \text{ (Ignore 0)}$$

$$\dots \div 2 = \dots$$

$$\text{Add 0} \rightarrow \boxed{\phantom{00}}$$

$$440 \div 2 \rightarrow \dots \div 2 \text{ (Ignore 0)}$$

$$\dots \div 2 = \dots$$

$$\text{Add 0} \rightarrow \boxed{\phantom{00}}$$

2 marks



5C6a: Multiply and divide numbers mentally drawing upon known facts

9

Doubling ( $\times 2$ ) by breaking down the number

$$24 \times 2$$

$$\begin{array}{rcccl} 20 = & 20 & + & 4 & \\ & \downarrow \text{double} & & \downarrow \text{double} & \\ & \boxed{40} & + & \boxed{8} & \\ & & \downarrow \text{Add} & & \\ & & \boxed{48} & & \end{array}$$

1 mark

5C6a: Multiply and divide numbers mentally drawing upon known facts

10

Doubling ( $\times 2$ ) by breaking down the number

$$64 \times 2$$

$$\begin{array}{rcccl} 64 = & \dots & + & \dots & \\ & \downarrow \text{double} & & \downarrow \text{double} & \\ & \boxed{\phantom{00}} & + & \boxed{\phantom{00}} & \\ & & \downarrow \text{Add} & & \\ & & \boxed{\phantom{00}} & & \end{array}$$

1 mark

5C6a: Multiply and divide numbers mentally drawing upon known facts

**11**Doubling ( $\times 2$ ) by breaking down the number

**$245 \times 2$**

$245 = 200 + 40 + 5$

$$\begin{array}{ccc} \downarrow \times 2 & \downarrow \times 2 & \downarrow \times 2 \\ \boxed{400} & + \boxed{80} & + \boxed{10} \end{array}$$

$$\begin{array}{c} \downarrow \text{Add} \\ \boxed{490} \end{array}$$

1 mark

**5C6a:** Multiply and divide numbers mentally drawing upon known facts**12**Doubling ( $\times 2$ ) by breaking down the number

**$324 \times 2$**

$324 = \dots + \dots + \dots$

$$\begin{array}{ccc} \downarrow \times 2 & \downarrow \times 2 & \downarrow \times 2 \\ \boxed{\phantom{000}} & + \boxed{\phantom{000}} & + \boxed{\phantom{000}} \end{array}$$

$$\begin{array}{c} \downarrow \text{Add} \\ \boxed{\phantom{000}} \end{array}$$

1 mark

**5C6a:** Multiply and divide numbers mentally drawing upon known facts

13

Poppy says

to  $\times 5$ , instead  $\times 10$  (add zero)  
then halve the answer

$$12 \times 5 \rightarrow \text{Do } 12 \times 10 = \boxed{120}$$

↓ half

$$24 \times 5 \rightarrow \text{Do } 24 \times 10 = \boxed{\phantom{000}}$$

↓ half

1 mark

5C6a: Multiply and divide numbers mentally drawing upon known facts

14

$$14 \times 5 \rightarrow \text{Do } 14 \times 10 = \boxed{\phantom{000}}$$

↓ half

$$42 \times 5 \rightarrow \text{Do } 42 \times 10 = \boxed{\phantom{000}}$$

↓ half

1 mark

5C6a: Multiply and divide numbers mentally drawing upon known facts

15

Poppy says

to  $\div 5$ , instead  $\div 10$   
then double the answer

$80 \div 5 \rightarrow$  Do  $80 \div 10 =$

↓ double

$240 \div 5 \rightarrow$  Do .....  $\div 10 =$

↓ double

1 mark

5C6a: Multiply and divide numbers mentally drawing upon known facts

16

$300 \div 5 \rightarrow$  Do .....  $\div 10 =$

↓ double

$160 \div 5 \rightarrow$  Do .....  $\div 10 =$

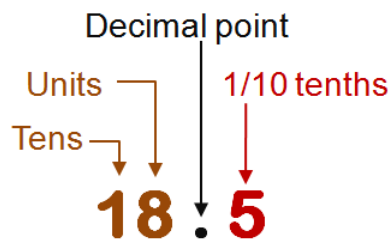
↓ double

1 mark

5C6a: Multiply and divide numbers mentally drawing upon known facts

1

Decimal numbers have a **decimal point**.  
The **point** is between the whole number  
(units, tens) and the fraction (tenths)



**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

2

Which ones are decimal numbers (✓)

- |      |                          |
|------|--------------------------|
| 12   | <input type="checkbox"/> |
| 13.2 | <input type="checkbox"/> |
| 1.6  | <input type="checkbox"/> |
| 100  | <input type="checkbox"/> |
| 99.5 | <input type="checkbox"/> |

1 mark

**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

3

Which is the biggest decimal number (✓)

- |     |                          |
|-----|--------------------------|
| 2.2 | <input type="checkbox"/> |
| 0.9 | <input type="checkbox"/> |
| 1.6 | <input type="checkbox"/> |
| 1.7 | <input type="checkbox"/> |

1 mark

**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

4

Which is the smallest decimal number (✓)

- |     |                          |
|-----|--------------------------|
| 2.7 | <input type="checkbox"/> |
| 0.9 | <input type="checkbox"/> |
| 1.8 | <input type="checkbox"/> |
| 1.7 | <input type="checkbox"/> |

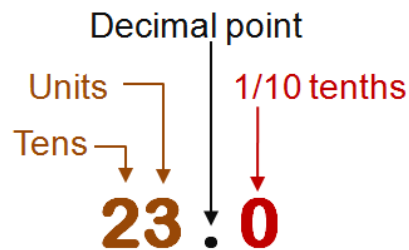
1 mark



**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

5

You can write a whole number like a decimal number



There are no tenths so it is really just 23

**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

6

Write these whole number like decimal numbers

- |    |                      |
|----|----------------------|
| 2  | <input type="text"/> |
| 9  | <input type="text"/> |
| 27 | <input type="text"/> |
| 99 | <input type="text"/> |

1 mark



**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

7

Which is the biggest decimal number (✓)

2.0

15.0

9.0

22.0

1 mark



**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

8

Which is the smallest decimal number (✓)

21.0

5.0

90.0

22.0

1 mark



**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000



1

Write a number as a decimal number then  
 To multiply by 10  
**move the decimal point 1 place**  
 to make the number *bigger*...

$$9.0 \times 10 = 90.0$$

$$\begin{array}{r} \times 10 \\ 9.0 \square \end{array} \rightarrow \begin{array}{r} \text{↻} \\ 90.0 \end{array}$$

If you need spare boxes  put them after the number

**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

2 Multiply these numbers by 10

$$5.0 \times 10 \quad \begin{array}{r} \text{↻} \\ 5.0 \end{array} \rightarrow \begin{array}{r} \text{↻} \\ \square \square \square \end{array}$$

$$22.0 \times 10 \quad \begin{array}{r} \text{↻} \\ 22.0 \end{array} \rightarrow \begin{array}{r} \text{↻} \\ \square \square \square \square \end{array}$$

$$85.0 \times 10 \quad \begin{array}{r} \text{↻} \\ 85.0 \end{array} \rightarrow \begin{array}{r} \text{↻} \\ \square \square \square \square \end{array}$$

3 marks

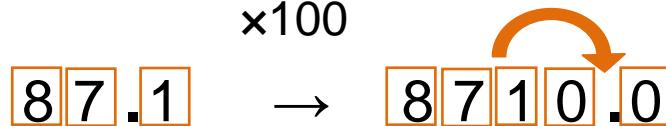
**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

3

Write a number as a decimal number then  
To multiply by 100  
**move the decimal point 2 places**  
to make the number *bigger...*

$$87.1 \times 100 = 8710.0$$

$\times 100$



If you need spare boxes  put them after the number

**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

4 Multiply these numbers by 100

$$5.1 \times 100 \quad 5.1 \quad \times 100 \quad \rightarrow \quad \square \square \square \square$$

$$22.2 \times 100 \quad 22.2 \quad \times 100 \quad \rightarrow \quad \square \square \square \square \square$$

$$85.0 \times 100 \quad 85.0 \quad \times 100 \quad \rightarrow \quad \square \square \square \square \square$$

3 marks

**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

5

Write a number as a decimal number then  
 To multiply by 1000  
**move the decimal point 3 places**  
 to make the number *bigger*...

$$28.7 \times 1000 = 18700.0$$

$$\begin{array}{c}
 \times 1000 \\
 28.7 \rightarrow 28700.0
 \end{array}$$

If you need spare boxes  put them after the number

**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

6 Multiply these numbers by 1000

$$3.1 \times 1000 \quad \boxed{3.1} \xrightarrow{\times 1000} \boxed{\phantom{0}} \boxed{\phantom{0}} \boxed{\phantom{0}} \boxed{\phantom{0}} \boxed{\phantom{0}} \quad \bigcirc$$

$$23.0 \times 1000 \quad \boxed{23.0} \xrightarrow{\times 1000} \boxed{\phantom{0}} \boxed{\phantom{0}} \boxed{\phantom{0}} \boxed{\phantom{0}} \boxed{\phantom{0}} \boxed{\phantom{0}} \quad \bigcirc$$

$$75.1 \times 1000 \quad \boxed{75.1} \xrightarrow{\times 1000} \boxed{\phantom{0}} \boxed{\phantom{0}} \boxed{\phantom{0}} \boxed{\phantom{0}} \boxed{\phantom{0}} \boxed{\phantom{0}} \quad \bigcirc$$

3 marks

**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

7 Do  $6.6 \times 10$  by moving the decimal point

Do  $5.0 \times 100$  by moving the decimal point

Do  $36.3 \times 1000$  by moving the decimal point

3 marks

**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

8 What is

$34 \times 10 =$    $123 \times 10 =$

$3.4 \times 10 =$    $1.23 \times 10 =$

$4.0 \times 10 =$    $12.3 \times 10 =$

$0.34 \times 10 =$    $0.03 \times 10 =$

4 marks

**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

9

What is  $2.61 \times 100$  (✓)

26.1

261.0

260.1

1 mark

**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

10

What is  $1000 \times 23.3$  (✓)

2300.3

23000

23300

1 mark

**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

1

Write a number as a decimal number then  
To divide by 10  
**move the decimal point 1 place**  
to make the number *smaller*...

$$90.0 \div 10 = 9.0$$

$$\div 10$$

$$\boxed{9}\boxed{0}.\boxed{0} \rightarrow \boxed{9}.\boxed{0}\boxed{\phantom{0}}$$

$$6.0 \div 10 = 0.60$$

$$\div 10$$

$$\boxed{\phantom{0}}\boxed{6}.\boxed{0} \rightarrow \boxed{0}.\boxed{6}\boxed{\phantom{0}}$$

If you need spare boxes  put them before the number

**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

2 Divide these numbers by 10

$$5.0 \div 10 \quad \boxed{\phantom{0}}\boxed{5}.\boxed{0} \rightarrow \boxed{\phantom{0}}\boxed{\phantom{0}}\boxed{\phantom{0}}$$

$$22.1 \div 10 \quad \boxed{2}\boxed{2}.\boxed{1} \rightarrow \boxed{\phantom{0}}\boxed{\phantom{0}}\boxed{\phantom{0}}$$

$$85.2 \div 10 \quad \boxed{8}\boxed{5}.\boxed{2} \rightarrow \boxed{\phantom{0}}\boxed{\phantom{0}}\boxed{\phantom{0}}$$

3 marks

**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

3

Write a number as a decimal number then  
To divide by 100  
**move the decimal point 2 places**  
to make the number *smaller*...

$$234.5 \div 100 = 2.345$$

÷100

$$\boxed{2}\boxed{3}\boxed{4}.\boxed{5} \rightarrow \boxed{2}.\boxed{3}\boxed{4}\boxed{5}$$

$$21.5 \div 100 = 0.215$$

÷100

$$\boxed{\phantom{0}}\boxed{2}\boxed{1}.\boxed{5} \rightarrow \boxed{0}.\boxed{2}\boxed{1}\boxed{5}$$

If you need spare boxes  put them before the number

5C6b: Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

4

Divide these numbers by 100

÷100

$$50.1 \div 100 \quad \boxed{\phantom{0}}\boxed{5}\boxed{0}.\boxed{1} \rightarrow \boxed{\phantom{0}}\boxed{\phantom{0}}\boxed{\phantom{0}}\boxed{\phantom{0}}$$

÷100

$$121.4 \div 100 \quad \boxed{1}\boxed{2}\boxed{1}.\boxed{4} \rightarrow \boxed{\phantom{0}}\boxed{\phantom{0}}\boxed{\phantom{0}}\boxed{\phantom{0}}$$

÷100

$$185.0 \div 100 \quad \boxed{1}\boxed{8}\boxed{5}.\boxed{0} \rightarrow \boxed{\phantom{0}}\boxed{\phantom{0}}\boxed{\phantom{0}}\boxed{\phantom{0}}$$

3 marks

5C6b: Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

5

Write a number as a decimal number then  
To multiply by 1000  
**move the decimal point 3 places**  
to make the number *smaller*...

$$1287.1 \div 1000 = 1.2871$$

$\div 1000$

$1\ 2\ 8\ 7\ .\ 1 \rightarrow 1\ .\ 2\ 8\ 7\ 1$

$$341.8 \div 1000 = 0.3458$$

$\div 1000$

$\square\ 3\ 4\ 1\ .\ 8 \rightarrow 0\ .\ 3\ 4\ 1\ 8$

If you need spare boxes  put them before the  
number

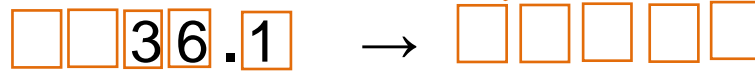
**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000



6 Divide these numbers by 1000

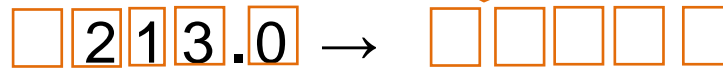
÷1000

36.1 ÷ 1000



÷1000

213.0 ÷ 1000



÷1000

1751.2 ÷ 1000



3 marks

5C6b: Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

7 What is

84 ÷ 10 =

523 ÷ 10 =

8.4 ÷ 10 =

0.523 ÷ 10 =

8.4 ÷ 100 =

5.23 ÷ 100 =

0.84 ÷ 10 =

52.3 ÷ 1000 =

4 marks

5C6b: Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

1

What is  $18 \div 100$  (✓)

18000

0.18

1.8



1 mark

**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

2

What is  $2.6 \div 1000$  (✓)

26.0

0.026

0.0026



1 mark

**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

3

I start with 23 to get 2300

What did I do (✓)

× by 10

× by 100

× by 1000

1 mark

**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

4

I start with 23 to get 0.23

What did I do (✓)

÷ by 10

÷ by 100

÷ by 1000

1 mark

**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

1

Here are six cards

$\times 10$

$\times 100$

$\times 1000$

$\div 10$

$\div 100$

$\div 1000$

Use a card to complete each calculation

$$6.7 \quad \boxed{\phantom{000}} = 0.67$$

$$6.7 \quad \boxed{\phantom{000}} = 6700$$

$$6.7 \quad \boxed{\phantom{000}} = 0.067$$

2 marks

**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

2

Here are six cards

$\times 10$

$\times 100$

$\times 1000$

$\div 10$

$\div 100$

$\div 1000$

Use a card to complete each calculation

$$123.4 \quad \square \quad = 123400$$

$$123.4 \quad \square \quad = 0.1234$$

$$123.4 \quad \square \quad = 12.34$$

2 marks

**5C6b:** Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000

1

Work out  $234 \times 3$  using different methods

**GRID** – break down 234 into 200, 30 and 4

$\times$	200	30	4
3	600	90	12

$$600 + 90 + 12 = 702$$

Do  $200 \times 3 = 600$ ,  $30 \times 3 = 90$ ,  $3 \times 4 = 12$  and add

$$234 \times 3 = 702$$

**5C7a:** Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for two digit numbers

2

What is a CARRY?

If you do  $15 \times 3$

when you do  $5 \times 3$  it is 15

You write down 5 in the units and carry a 1 to the tens column.

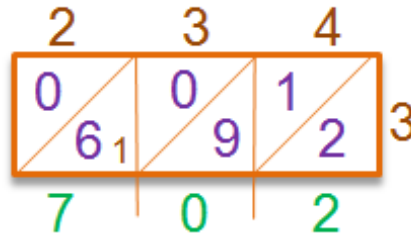
**5C7a:** Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for two digit numbers

3

Work out  $234 \times 3$  using different methods

**Lattice GRID** – write 234 on top, 3 on right

Each box has a diagonal make two triangles



Can start right or left

Do  $2 \times 3 = 6$  but write 06 with 0 in top triangle

Do  $3 \times 3 = 9$  but write 09 with 0 in top triangle

Do  $4 \times 3 = 12$  and write 1 in top triangle

Now add down diagonally remember to carry the 1.

$$234 \times 3 = 702$$

**5C7a:** Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for two digit numbers

4

Work out  $234 \times 3$  using different methods

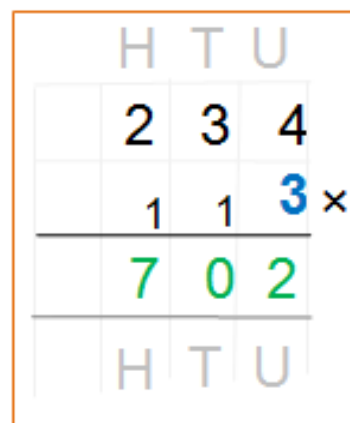
**COLUMN**

Start from right numbers

do  $3 \times 4 = 12$ , carry 1, write 2

do  $3 \times 3 = 9$  add carry 1, write 0

do  $3 \times 2 = 6$  add carry 1, write 7



$$234 \times 3 = 702$$

**5C7a:** Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for two digit numbers

## 5

Work out  $156 \times 32$  using different methods

**GRID** – break down 156 into 100, 50 and 6  
break down 32 into 30 and 2

×	100	50	6	
30	3000	1500	180	4680
2	200	100	12	312
				<u>4992</u>

Do  $100 \times 30 = 3000$ ,  $50 \times 30 = 1500$ ,  $30 \times 6 = 180$

Do  $100 \times 2 = 200$ ,  $50 \times 2 = 100$ ,  $2 \times 6 = 12$

Add everything = 4992

$$156 \times 32 = 4992$$

**5C7a:** Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for two digit numbers



**6**Work out  $156 \times 32$  using different methods**Lattice GRID** – write 156 on top, 32 on right

Each box has a diagonal make two triangles

	1	5	6	
	0 3	1 5	1 8	3
4	0 2	1 0	1 2	2
	9	9	2	

Can start right or left

Do  $1 \times 3 = 6$  but write 03 with 0 in top triangleDo  $5 \times 3 = 15$  and write 1 in top triangleDo  $6 \times 3 = 18$  and write 1 in top triangleDo  $1 \times 2 = 2$  but write 02 with 0 in top triangleDo  $5 \times 2 = 10$  and write 1 in top triangleDo  $6 \times 2 = 12$  and write 1 in top triangle

Now add down diagonally and 'around the bend'

$$156 \times 32 = 4992$$

**5C7a:** Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for two digit numbers

7

Work out  $156 \times 32$  using different methods**COLUMN**

	H	T	U	
	1	5	6	
		3	2	×
<hr/>				
	4 <sup>1</sup>	6 <sup>1</sup>	8	0
		3 <sub>1</sub>	1 <sub>1</sub>	2
<hr/>				
	4	9	9	2
	Th	H	T	U

Do **30**'s first – write 0do  $3 \times 6 = 18$ , carry 1, write 8do  $3 \times 5 = 15$ , add carry 1 = 16, write 6, carry 1do  $3 \times 1 = 3$  add carry 1 = 4, write 4Now do **2**'sdo  $2 \times 6 = 12$ , carry 1, write 2do  $2 \times 5 = 10$ , add carry 1 = 11, write 1, carry 1do  $2 \times 1 = 2$ , add carry 1, write 3

Now add columns down (no carries)

$$156 \times 32 = 4992$$

**5C7a:** Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for two digit numbers

8

Work out  $126 \times 3$  using a GRID

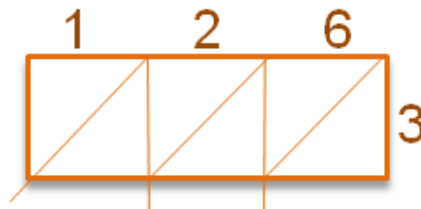
$\times$	100	20	6
3			

1 mark



**5C7a:** Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for two digit numbers

9

Work out  $126 \times 3$  using a Lattice GRID

1 mark



**5C7a:** Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for two digit numbers

10

Work out  $126 \times 3$  using a COLUMN

	H	T	U	
	1	2	6	
			3	$\times$
<hr/>				
<hr/>				
	H	T	U	

1 mark



**5C7a:** Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for two digit numbers

11

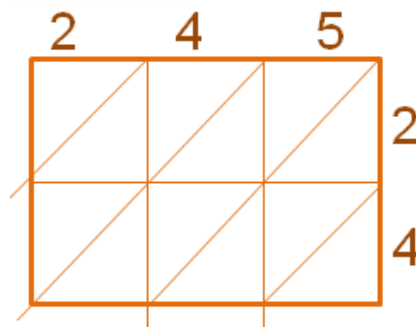
Work out  $245 \times 24$  using a GRID

$\times$	200	40	5
20			
4			

1 mark

**5C7a:** Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for two digit numbers

12

Work out  $245 \times 24$  using a Lattice GRID

1 mark

**5C7a:** Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for two digit numbers

13

Work out  $245 \times 24$  using a COLUMN

	H	T	U	
	2	4	5	
		2	4	$\times$
<hr/>				
<hr/>				
Th	H	T	U	

1 mark

**5C7a:** Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for two digit numbers

14

Work out  $306 \times 3$  using a GRID

×			

1 mark



**5C7a:** Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for two digit numbers

15

Work out  $306 \times 4$  using a Lattice GRID


1 mark



**5C7a:** Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for two digit numbers

16

Work out  $306 \times 5$  using a COLUMN

	H	T	U	
				×
	H	T	U	

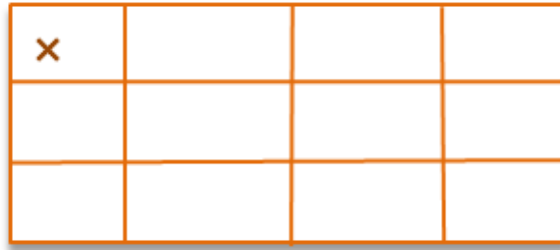
1 mark



**5C7a:** Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for two digit numbers

17

Work out  $342 \times 35$  using a GRID

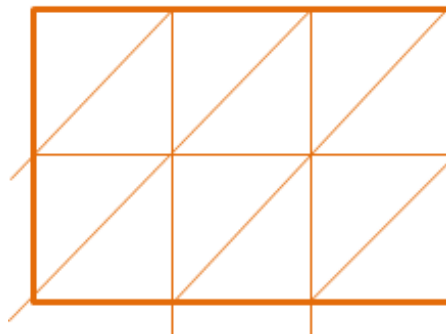


1 mark

**5C7a:** Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for two digit numbers

18

Work out  $342 \times 43$  using a Lattice GRID



1 mark

**5C7a:** Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for two digit numbers

19

Work out  $151 \times 34$  using a COLUMN



1 mark

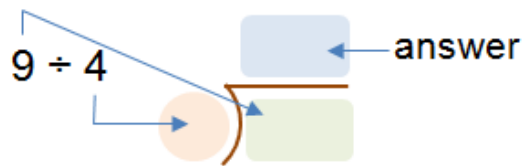
**5C7a:** Multiply numbers up to 4 digits by a one or two-digit number using a formal written method, including long multiplication for two digit numbers

1

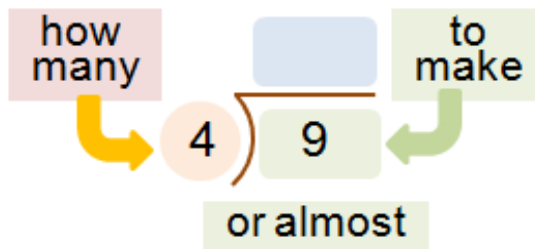
Share 9 bananas between 4 of Henry's friends



This is  $9 \div 4$  and we write it like this in a bus-stop



and say ...



we need two 4's

$$\begin{array}{r} 2 \\ 4 \overline{) 9} \end{array}$$

with a remainder

$$\begin{array}{r} \times \quad \textcircled{2} \\ \textcircled{4} \overline{) 9} \\ \underline{8} \phantom{0} \\ 1 \end{array}$$

so they get two bananas each with one left over.

1 mark

**5C7b:** Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context

2

135 ÷ 4 using short division the bus stop method

Write it like

$$\begin{array}{r} 4 \overline{) 135} \\ \underline{33} \phantom{r3} \\ 135 \\ \underline{12} \phantom{0} \\ 15 \\ \underline{12} \\ 3 \end{array}$$

4 will not go into 1

13 divided by 4 is 3 remainder 1

Carry the 1 to the 5

15 divided by 4 is 3 with remainder 3

33 r3

**5C7b:** Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context

3

Do 323 ÷ 4 using the bus stop method



1 mark

**5C7b:** Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context



4

Do  $323 \div 5$  using the bus stop method

1 mark

**5C7b:** Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context

5

Do  $323 \div 8$  using the bus stop method

1 mark

**5C7b:** Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context

1

Do  $1456 \div 5$  using the bus stop method

$$\begin{array}{r} 0291r1 \\ 5 \overline{)1456} \end{array}$$

5 will not go into 1 so write 0

Carry the 1 to the 4 making 14

14 divided by 5 is 2 remainder 4

Carry the 4 to the 5

45 divided by 5 is 0 with no remainder

6 divided by 5 is 1 with remainder 1

291 r1

**5C7b:** Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context

2

Do  $1129 \div 5$  using the bus stop method



1 mark

**5C7b:** Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context

3

2537 ÷ 8 using the bus stop method

$$\begin{array}{r} 0317r1 \\ 8 \overline{)2537} \end{array}$$

8 will not go into 2 so write 0

Carry the 2 to the 5 making 25

25 divided by 8 is 3 remainder 1

Carry the 1 to the 3 making 13

13 divided by 8 is 1 remainder 5

Carry the 5 to the 7 making 57

57 divided by 8 is 7 with remainder 1

317 r1

**5C7b:** Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context

4

Do 1729 ÷ 8 using the bus stop method



1 mark

**5C7b:** Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context

1

Do  $54 \div 4$  using the bus stop method with the remainder as a fraction or decimal

$$\begin{array}{r} 13 \text{ r } 2 \\ 4 \overline{) 54} \end{array}$$

The remainder is 2 out of 4

$\frac{2}{4}$  can be written as  $\frac{1}{2}$  or 0.5

$$54 \div 4 = 13 \frac{1}{2} \text{ or } 13.5$$

**5C7b:** Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context

2

Do  $74 \div 4$  using the bus stop method with the remainder as a fraction or decimal



1 mark

**5C7b:** Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context

3

Do  $98 \div 8$  using the bus stop method with the remainder as a fraction or decimal

1 mark



**5C7b:** Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context

4

Do  $65 \div 4$  using the bus stop method with the remainder as a fraction or decimal

$$\begin{array}{r} 16 \text{ r } 1 \\ 4 \overline{) 65} \end{array}$$

The remainder is 1 out of 4  
which is  $\frac{1}{4}$  or 0.25

$$65 \div 4 = 16 \frac{1}{4} \text{ or } 16.25$$

1 mark



**5C7b:** Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context

5

Do  $429 \div 4$  using the bus stop method with the remainder as a fraction or decimal



1 mark

**5C7b:** Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context

6

Do  $922 \div 8$  using the bus stop method with the remainder as a fraction or decimal

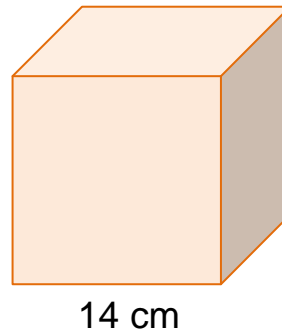
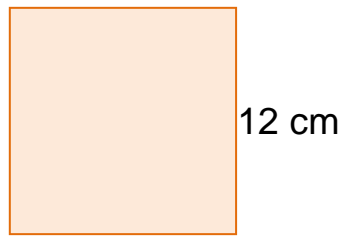


1 mark

**5C7b:** Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context

1

A square is 12 cm on one side.  
What is the area of the square.

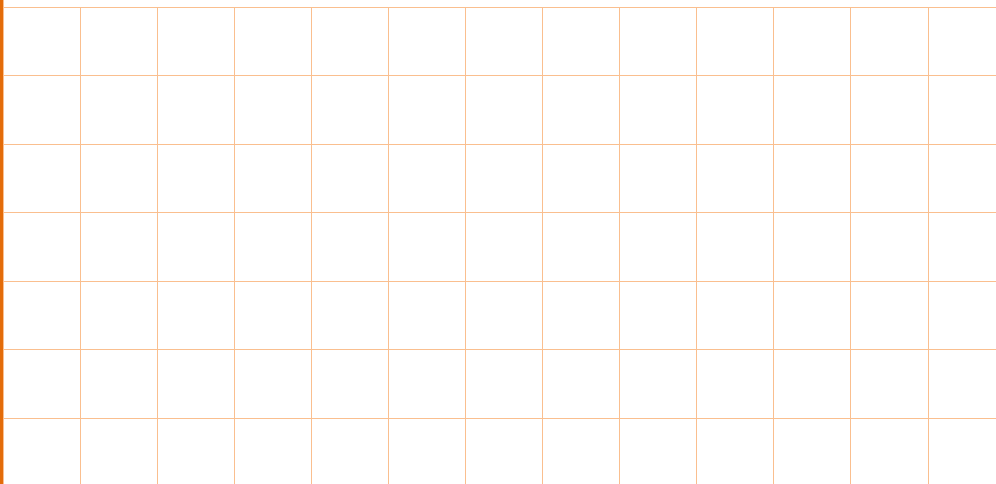


1 mark



A cube is 14 cm on one side.  
What is the volume of the cube

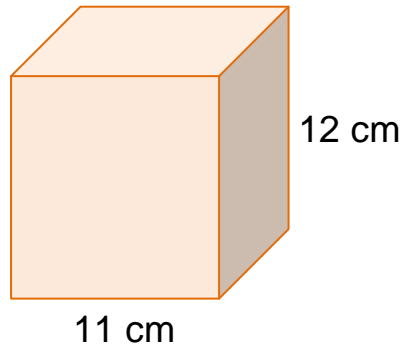
1 mark



5c8a Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes

2

A cuboid is 11 cm on one side  
and 12cm on another side.  
The volume of the cube is  $1716 \text{ cm}^3$



What is the length of the other side

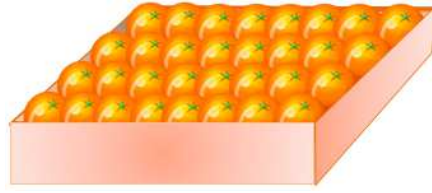
1 mark


5c8a Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes



3

There are 32 oranges in a tray.  
Each orange costs 12p



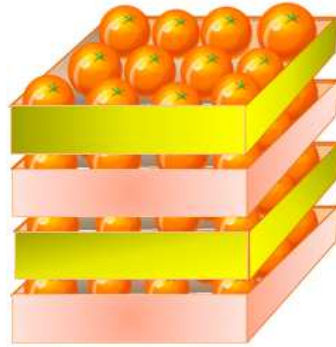
How much would 10 trays of oranges cost in pence

1 mark


5c8a Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes

4

Some oranges were neatly stacked in four trays.  
In each tray, there were four rows with three  
oranges in each row.



How many oranges were there altogether



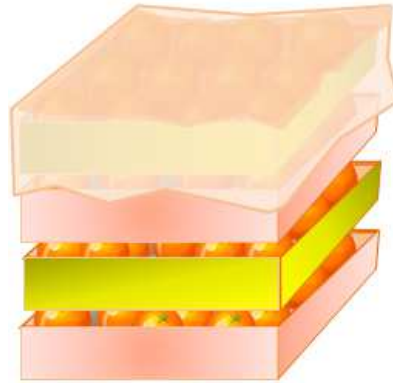
1 mark


5c8a Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes

5

Altogether there are 72 oranges in the stack of trays below.

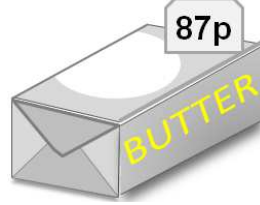
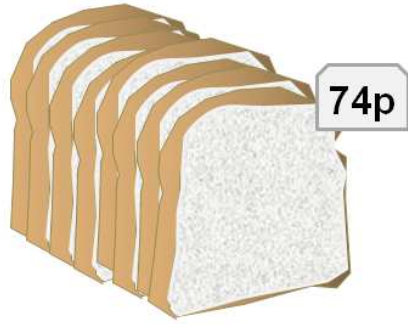
If each tray has the same number of oranges how many are in each tray.



1 mark


5c8a Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes

For my birthday party, mum's making sandwiches. And we need to buy cakes



Yes Poppy, we need 9 loaves of bread, 3 packs of butter and 30 cakes  
How much will that cost?

1 mark


5c8a Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes

Mum needs to bake 100 cakes with these cake trays



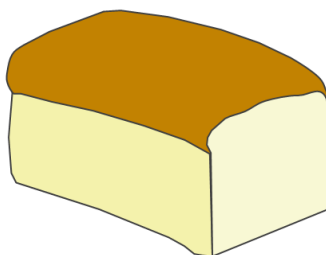
How many cake trays do we need to bake all the cakes?



1 mark


5c8a Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes

We can cut one loaf of bread into 18 slices



So how many loaves do we need for my class. There are 29 children and they eat three slices each.

1 mark




5c8a Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes

9

Poppy sold some cakes at the school fete.  
They cost 26p each.



She made a total of £12.22  
How many cakes did she sell?



1 mark


5c8a Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes

A 10p coin weighs 6.5g.



My Nanny gave me a bag with £11.60 worth of 10p coins



So what did the bag weigh, Henry



1 mark




5c8a Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes



A 10p coin weighs 6.5g.



My Nanny gave me a bag of 10p  
coins that weighed 1.365 Kg



So how many coins  
was that Henry





1 mark


5c8a Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes

Our class did a sponsored spell  
We got 5p for every correct spelling

There are 30 children in your  
class and they got 18 correct  
spellings each

So how much money  
did we make Henry

£

1 mark

5c8a Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes

Our class did a sponsored spell  
We got 6p for every correct spelling

There are 28 children in your  
class and you made £42 for  
charity.

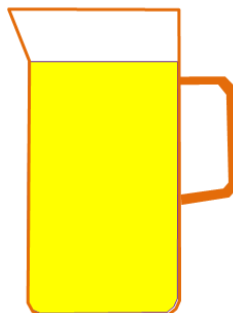
So on average how  
many spellings did we  
each get right?

£

1 mark

5c8a Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes

I can get 6 cups of orange from a 330 ml jug.



How much can one cup hold?

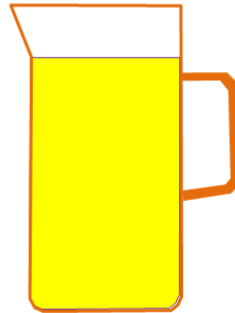
1 mark


5c8a Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes



15

I can pour 6 cups of orange into a jug.



If each cup = 60 ml, what is the capacity of the jug

ml

1 mark


**Year 5- 5c8c** Solve problems involving multiplication and division including scaling by simple fractions and problems involving simple rates

16

One cup of rice holds 190 grams.  
A large bag holds 5 kilograms



How many cups of rice can  
I get from the large bag



1 mark


5c8a Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes

A large piece of card measures 30cm by 21cm.  
I want to cut out smaller cards of 5cm by 4cm



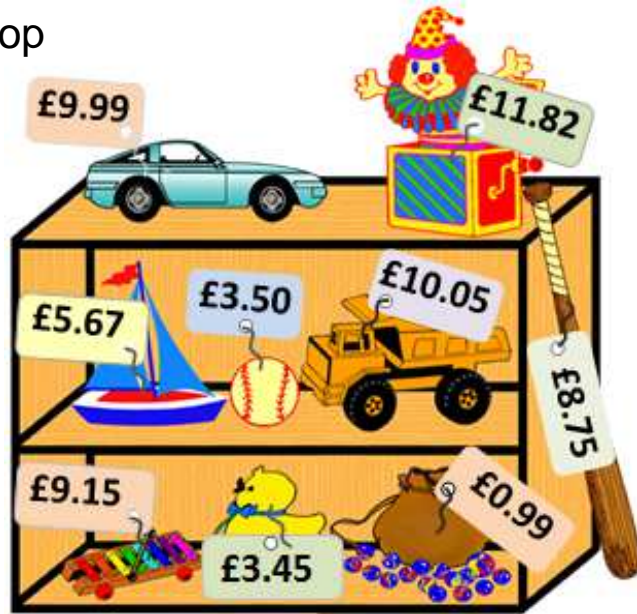
How many small cards can I  
make from the large card

1 mark



5c8a Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes

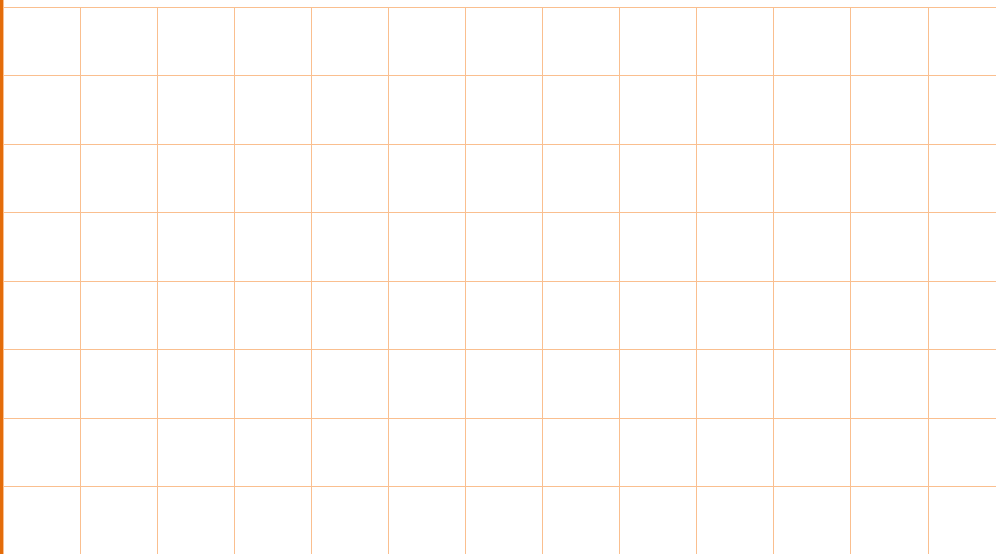
1 Look at the toy shop



How much is 2 bats and 3 balls altogether.

£

1 mark



5c8b Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign





3

Mum sent me to the shop to get three tins of beans and two loaves of bread



If you take £5 Poppy.  
How much change will you get?



£

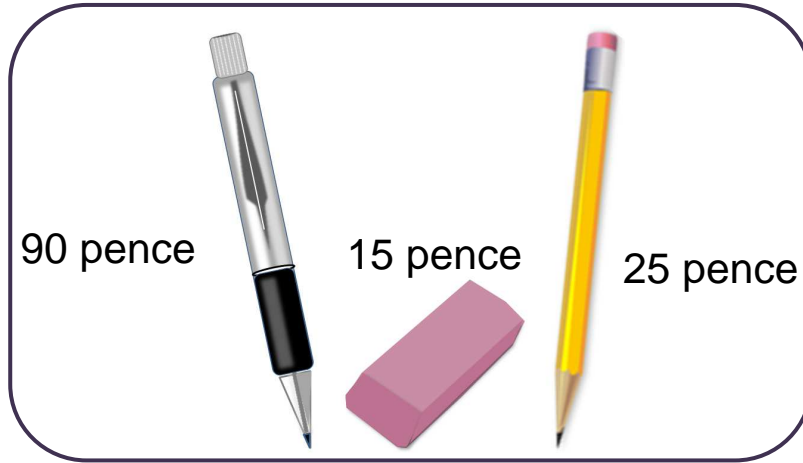
1 mark


5c8b Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign



5

Look at the prices for a pen, rubber and a pencil



How much are three pencils, a rubber and two pens

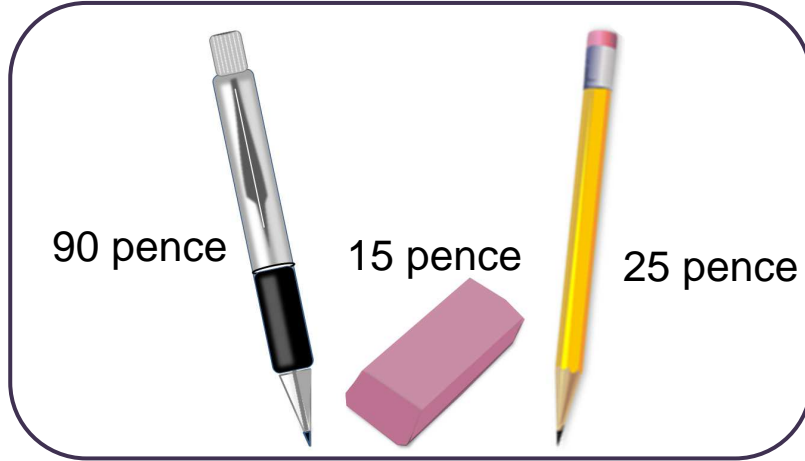
£



1 mark


5c8b Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign

**6** Look at the prices for a pen, rubber and a pencil



Each child in a class needs a pen, a pencil and a rubber.

If you had £20 how many children will get a complete set

1 mark


5c8b Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign

7

In our class everyone needs a pencil and a rubber.



90 pence		15 pence		25 pence

There are 29 children in your class  
So how much will that cost?



£



1 mark


5c8b Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign

1

**Cup Cakes  
makes 6:**

- 90g butter
- 100g flour
- 120g sugar
- $\frac{1}{4}$  tsp salt
- 2 eggs



I want to bake 18 cakes.  
How much butter do I need



1 mark




5c8c Solve problems involving multiplication and division including scaling by simple fractions and problems involving simple rates





3

In a bag of sweets there are 2 blue sweets for every 3 red sweets.



If the bag had 12 blue sweets how many red ones are there

1 mark


5c8c Solve problems involving multiplication and division including scaling by simple fractions and problems involving simple rates

4

In a bag of sweets there are 2 blue sweets for every 3 red sweets.



If a bag had 35 sweets altogether, how many blue and reds ones are there

blue

red

1 mark


5c8c Solve problems involving multiplication and division including scaling by simple fractions and problems involving simple rates

5

A 200 ml glass of orange drink is made by mixing 25ml of squash and 175ml of water.



If I wanted to make 1 litre of orange drink how much squash and water do I need



water  squash

1 mark


5c8c Solve problems involving multiplication and division including scaling by simple fractions and problems involving simple rates