



MATHS

NCETM
ALIGNED

SMARTGRADE ASSESSMENT SERIES

Year 3

Standardised test **SPRING**

Mathematics reasoning

Pupil answer booklet

First name	
Last name	
School name	
Class	
Date	

Score: / **40**

Instructions

You are **not** allowed to use a calculator to answer any questions in this test.

Your teacher will go through these instructions with you.

Questions and answers

You have approximately **45 – 60 minutes** to complete this test.

Work quickly and carefully, following the instructions for each question.

If you need to do working out, you can use the space around the question.

Some questions have a 'working out' box like this:

Show your working out in this box



The image shows a large grid for working out. On the left side of the grid, there is a rounded rectangular box containing the text "Show your working out in this box". On the right side of the grid, there is a smaller, empty rectangular box.

For these questions, you may get a mark for showing your working out.

If you cannot do a question, **go on to the next one**.

You can come back to it later, if you have time.

If you finish before the end, **go back and check your work**.

Equipment

You will need a pencil or pen and a ruler.

Marks

The number under each line at the side of the page tells you the number of marks available for each question.

1 Work out the calculations below.
Use a mental strategy that you know.

a $415 + 40 = \square$

c $\square = 136 + 500$

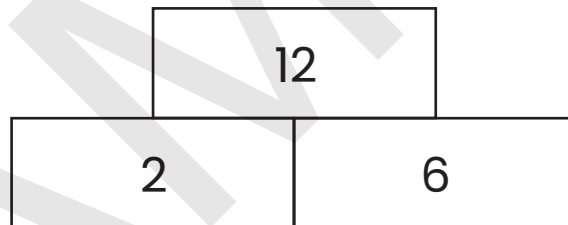
b $214 + 9 = \square$

d $645 - 300 = \square$

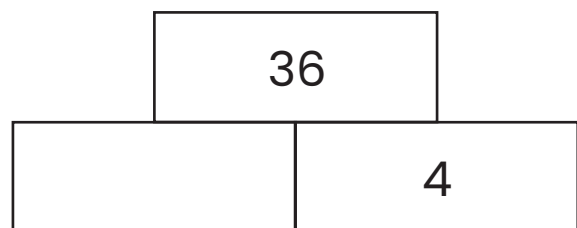
2 marks

2 The two numbers at bottom of the pyramid multiply together to equal the top number of the pyramid.

Here is an example.



Complete the two missing numbers.



2 marks

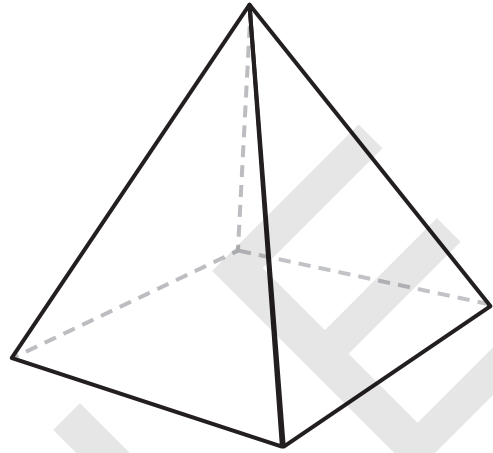
3a Name this 3-D shape. Tick (✓) **one**.

Triangular prism

Square-based pyramid

Cuboid

Cone



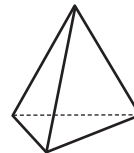
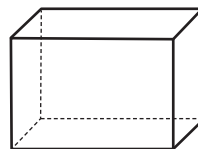
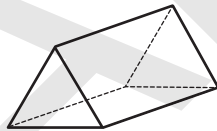
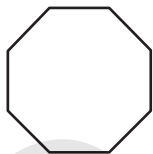
1 mark

3b Zara is thinking of a shape.

"It is a 3-D shape. It has 8 vertices and 6 faces."



Which shape is Zara describing? Circle **one**.



1 mark

4 Billy takes 10ml of medicine every day.



How many days will a 220ml bottle last?

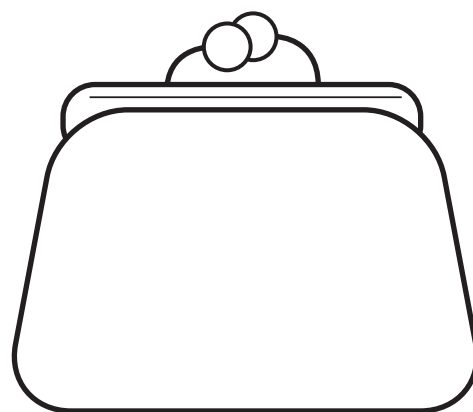
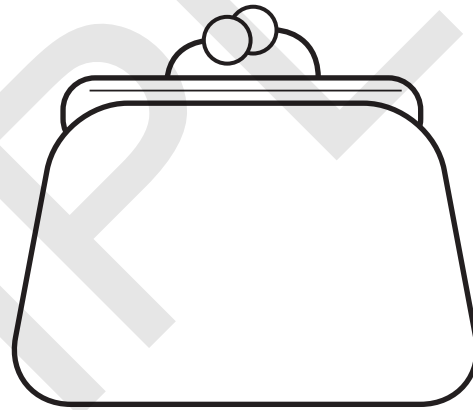
1 mark

5 Jack has some coins.

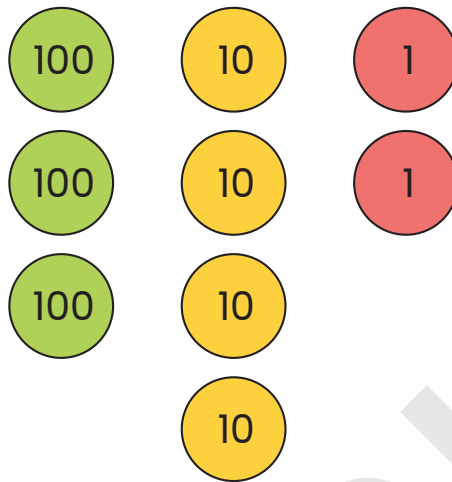
He wants to put an **equal** amount of money in each purse.

Draw a line from each coin to an empty purse to make the amounts equal.

You must use all six coins.



6 The place value counters represent a number.



Circle all the numbers that are **less than** this number.

324 401 342 306 294 384

1 mark

7 Mr. Jones has 100 stickers.
47 of them are gold and the rest are silver.



How many stickers are silver?

1 mark

8 Solve the following.

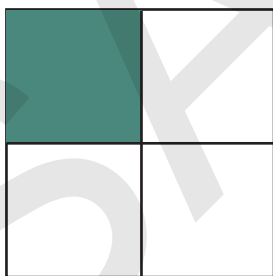
a $468 + 151 =$

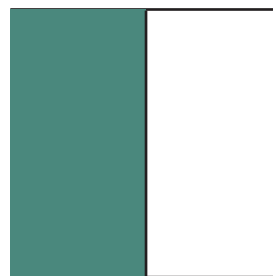
b $885 - 468 =$

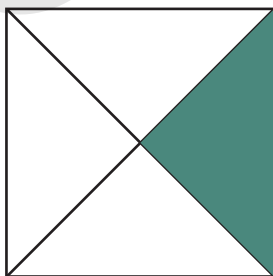
Set out your calculations in this box.

2 marks

9 Tick (✓) all the shapes that show **one quarter** shaded.



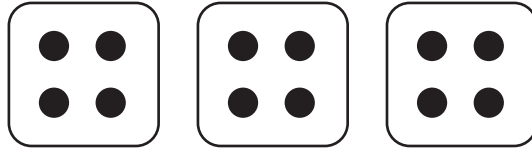






1 mark

10 Tick (✓) the calculations that match the representation.



$4 + 3$

$3 + 4$

3×4

4×3

$4 \times 4 \times 4$

$4 + 4 + 4$

2 marks

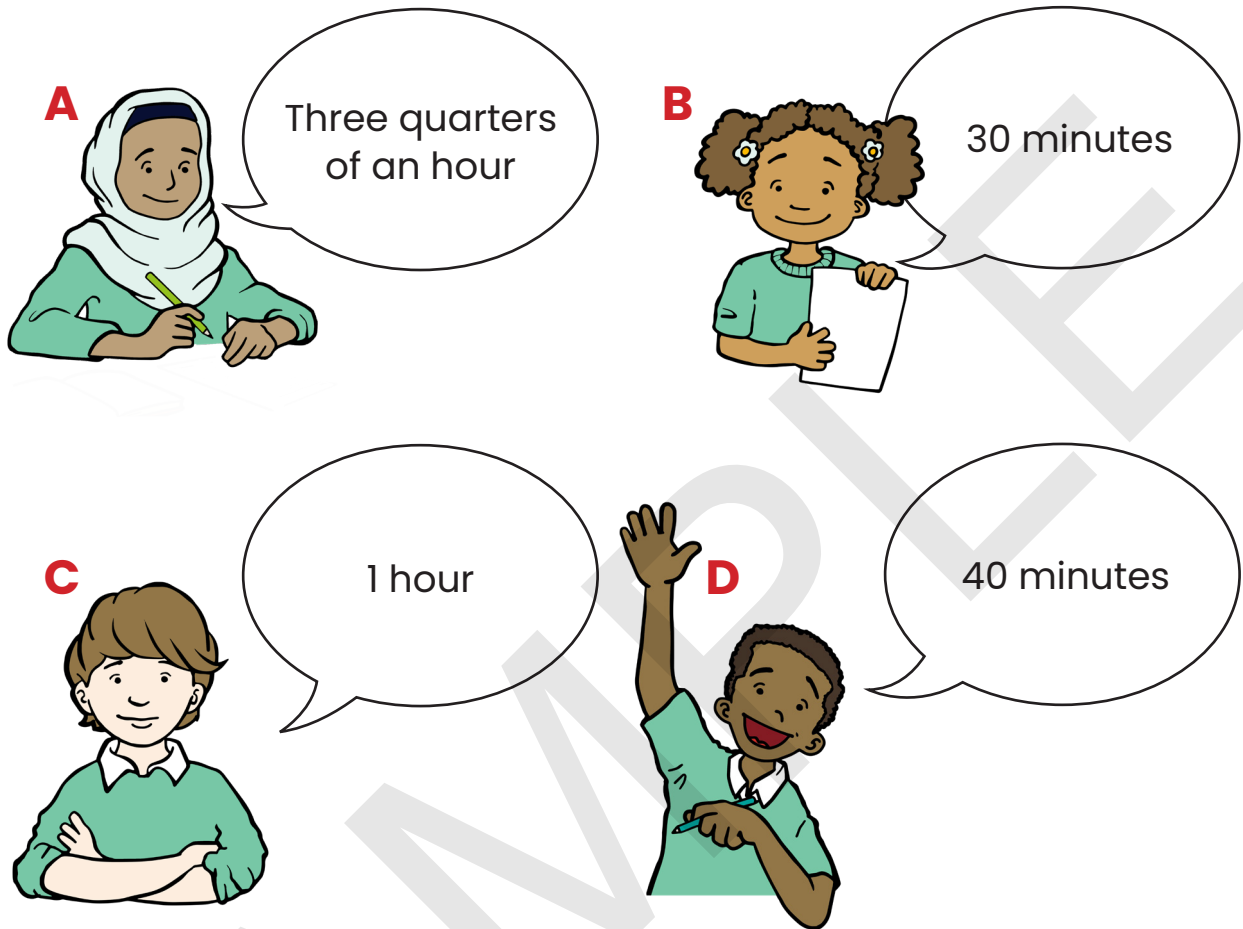
11 Estimate and mark the position of these numbers on the number line.

400 750 890



2 marks

13 Four children share the time spent completing homework.



Order the time intervals from **shortest to longest**.
Write the letter in each empty box.

--	--	--	--

shortest

longest

14a Fill in the missing numbers.

100	125	150			225
550	600		700	750	
348	346			340	338

3 marks

14b Zoe says,

"If I start at 0 and count forwards in 20s, I will say the number 210."



Is Zoe correct or incorrect? Explain your answer.

Use this box to explain.

1 mark

15 Fill in the missing symbols ($<$, $>$ or $=$) to compare each calculation.

2×8 $3 \times 8 - 2$

2×8 $3 \times 8 - 8$

2×8 $1 \times 8 + 8$

2×8 $1 \times 8 - 8$

2 marks

16 Two pieces of ribbon have been cut.

These are ribbon A (top) and ribbon B (bottom).










Complete the stem sentences below.

a Ribbon A is centimetres long.

b Ribbon B is centimetres longer than ribbon A.

2 marks

19 Here are the pets that children in Year 3 own.

Animal	Tally
cat 	
parrot 	
dog 	
fish 	

a 7 children have fish. Complete the tally chart.

b How many more children have dogs than parrots?

c A new child joins the class. She has 3 cats.
How many cats are now owned by Year 3 children?

20 Fill in the missing number.

$$\begin{array}{r}
 322 \\
 + 1\boxed{}9 \\
 \hline
 491 \\
 \hline
 1
 \end{array}$$

1 mark

21 Ayesha collected 329 pebbles on the beach.

She threw 100 pebbles into the ocean.

Then gave 10 pebbles to her sister and 10 pebbles to her brother.

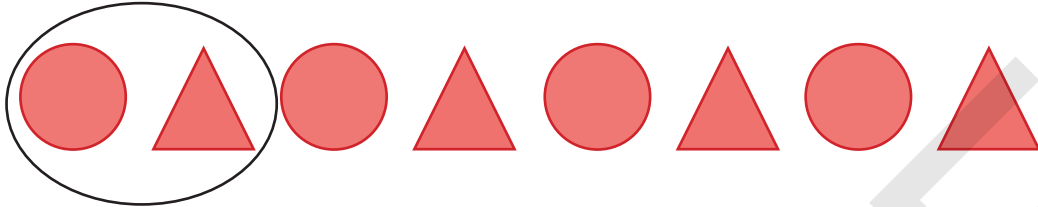
How many pebbles did Ayesha have left?

Show your working out in this box

2 marks

- 22 Molly has made a pattern by sequencing shapes.

She has circled the **unit of repeat**.



Circle the **unit of repeat** in this pattern of shapes.



1 mark

- 23 Uma has **twelve** £2 coins.

A theatre ticket costs £23.



Does Uma have enough money to buy the theatre ticket? Explain your answer.

Use this box to explain.



1 mark



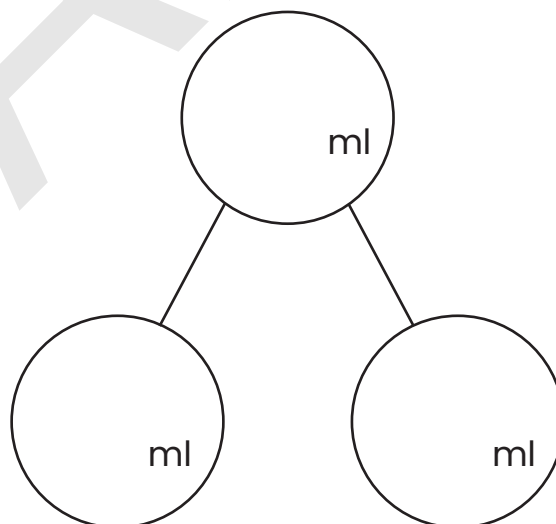
- 24 Albie drinks 365ml of water from his bottle in the morning.
 He then drinks more in the afternoon.
 In total, Albie drinks 600ml.

a How many millilitres did Albie drink in the afternoon?

Show your working out in this box

millilitres

b Complete the part-whole model to show the relationship between all three numbers.



2 marks

END OF SPRING TEST