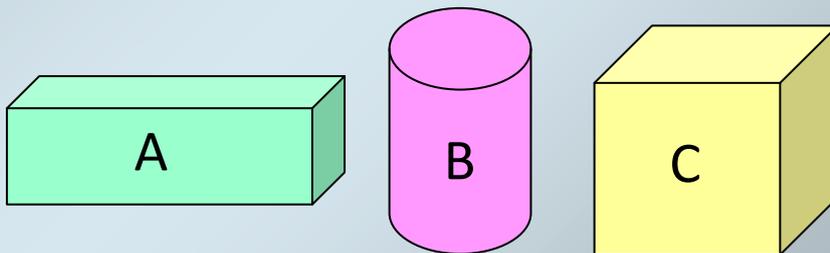# Bright Stars

Year 4

Practice SATs

Mathematics Pack

A   B   C

PARENT PACK:

Guidelines

Mark Scheme

PUPIL PACK:

Mental Maths Test

Written Questions

To be used with

Year 4 English Paper:

Roman Relics

Year 4

PARENT PACK

Mathematics Practice SATs

Guidelines and Mark Scheme

Administering the Test

There are two tests in Year 4: a mental maths test consisting of 20 marks and a written maths test consisting of 35 marks. It does not matter which one your child does first.

Administering the mental maths test

Give your child the Mental Maths Answer Sheet.

Children must only have a pencil for the mental maths test. They can jot working down, but should not be given any extra paper.

There are 20 questions in the mental maths test. Read each question twice to your child and ask them to write their answers next to each number on the sheet provided. For the first ten questions give them 5 seconds to answer. For the next ten questions, give them 10 seconds to answer.

Administering the written test

No help should be given with the test and calculators are not allowed. You may read the questions aloud to your child, however you must not read any digits or numbers in the questions aloud. It is very important that you do not re-phrase questions or suggest ways of working out answers.

Explain they need to write their answers in the boxes or on the lines provided.

Children may use the following resources during the test:

- A pencil or pen

- A centimetre ruler

- A rubber

- A mirror (if you have one)

Before starting the written test, explain to your child:

- You will have 45 minutes to do the test.

- Show your working as you may get extra marks for that.

- If you find a question hard, leave it and go back to it later.

- When you have finished, check through your answers.

Mental Maths Questions

For these questions, give 5 seconds to answer each question:

1. What is two thousand subtract three?

2. What is one third of twenty-one?

3. Divide forty-nine by seven.

4. What is seven hundred and twenty-nine rounded to the nearest ten?

5. How many centimetres are there in half a metre?

6. What is eight times three?

7. What is seventeen multiplied by one hundred?

8. What is nineteen take away eight?

9. What is sixty plus fifty?

10. What is double twenty-one?

For these questions, give 10 seconds to answer each question:

11. How many faces does a cuboid have?

12. Add together eight, seven and nine.

13. If you buy a pear costing 40p with a £1 coin, what change do you get?

14. What do you add to fifty-five to make one hundred?

15. A rectangle has two sides of 4cm and two sides of 6cm. What is its perimeter?

16. What is twenty-four subtract seventeen?

17. I have a bag of forty sweets. Ten are red. What fraction are red?

18. If I have £1, how many chocolate bars costing 20p can I buy?

19. I have a litre of water. I pour out 250ml. How much water do I have left?

20. I have three boxes, each containing 40 cartons of orange juice. How many cartons of orange juice do I have altogether?

Mark Scheme for Mental Maths Test

1. 1997

2. 7

3. 7

4. 730

5. 50cm

6. 24

7. 1700

8. 11

9. 110

10. 42

11. 6

12. 24

13. 60p

14. 45

15. 20cm

16. 7

17. 1/4 (one quarter)

18. 5

19. 750ml

20. 120

Mark Scheme for Written Test

1. 234

2. Tick against first number sentence, cross against second and tick against third.

3. 700

4. 1/4 circled

5. A. 40 B. £6 (accept 600p)

6. £2.10

7. 109, 191, 901, 910, 911

8. A. 50 in the left circle, 60 in the middle, 12 and 42 in the right circle.

B. Any number that has a zero and is in the 6 x table, for example: 30, 90, 102, 108, 120 etc.

9. 144

10. Arrow pointing to third division after one.

11. 2400g

12. A. 9cm B. True

13. 6 weeks

14. 123 + 77 = 200

15. Shape drawn like this:
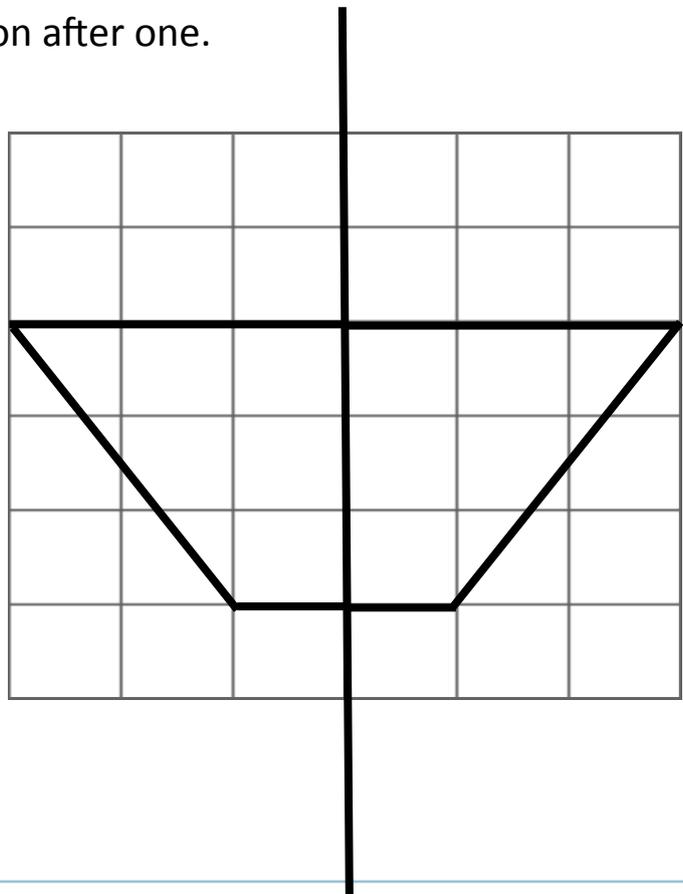
16. Mr Smith ticked. Child needs to explain that 6 cans at Mr Smith's shop would cost £1.30, whereas six cans at Mrs Khan's shop would cost £1.50.

17. 2 triangles and 3 oblongs ticked.

18. 30 ÷ 5 = 6 OR 30 ÷ 6 = 5

19. The remainder is 2.

20. 2.45 or quarter to three

21. Triangle with a right angle drawn, for example:
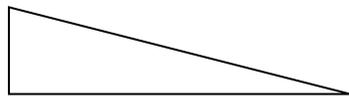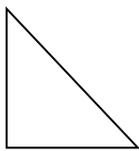
22. 3 and 6

23.

	The shape has more than three faces	The shape has more than six vertices
A	YES	YES
B	NO	NO
C	YES	NO

24. 15

25. 6

Award one mark for each correct answer, except:

5. Award one mark for A correct and one mark for B correct.

6. Award one mark for working that shows £4.60 subtract £2.50 but with wrong answer. Award two marks if answer is correct regardless of working.

8. A. Award two marks for all four numbers placed correctly. Award one mark for three numbers placed correctly. B. Award one mark for number that has a zero and is in the 6 x table.

11. Award one mark if answer given is 2.4kg. Award two marks if answer given is 2400g.

12. Award one mark for A correct and one mark for B correct.

13. Award one mark for correct working (for example: an attempt to keep adding £6.50) but with wrong answer. Award two marks if correct answer if given regardless of working.

16. Award one mark if child has done correct working for both offers but got wrong answer. Award two marks if child has ticked Mr Smith and given correct explanation as given in answers.

19. Award one mark if working is correct but answer is wrong. Award two marks if answer is correct regardless of working.

23. Award one mark if five entries in the table are correct. Award two marks if all six entries in the table are correct.

Total marks: 35

Year 4

PUPIL PACK

Mathematics

Practice SATs Booklet

Mental Maths Answer Sheet

Written Questions

Mental Maths Answer Sheet

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

11.

12.

13.

14.

15.

16.

17.

18.

19.

20.

1. Work out:

159 + 75 = ☐

2. Look at the following number sentences.

Tick each one that is correct. Put a cross next to each one that is incorrect.
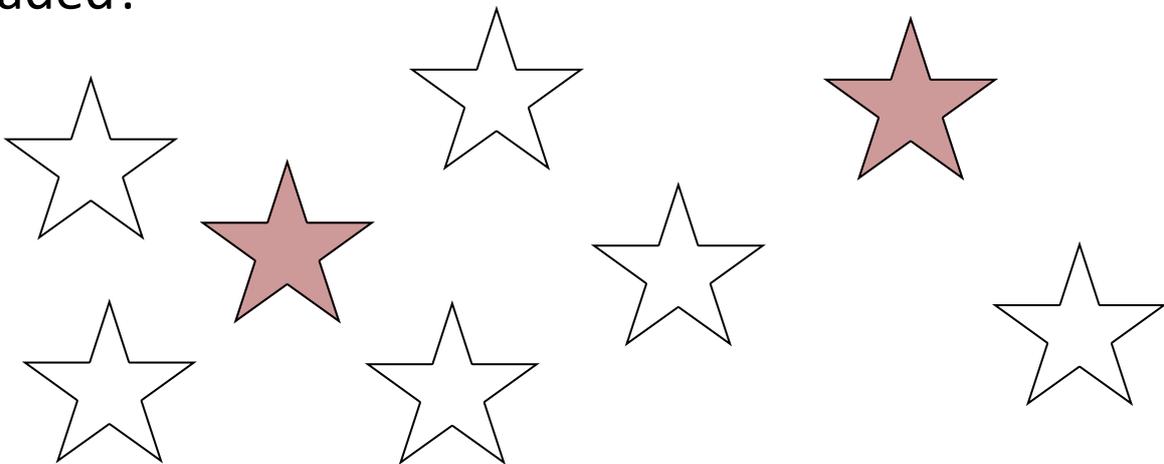
12 + 12 + 12 = 12 x 3

5 x 10 = 10 + 10 + 10 + 10

9 x 3 = 9 + 9 + 9

3. Round this number to the nearest 100:

729

4. Here are eight stars. What fraction of them are shaded?

$$\frac{4}{8} \qquad \frac{1}{4} \qquad \frac{2}{4}$$

5. This pictogram shows how many children visited each of the following stalls at a school summer fair:

☺ = 20 children

Lucky Dip	☺ ☺ ☺
Tombola	☺
Face Painting	☺ ☺ ☺ ☺
Bouncy Castle	☺ ☺
Money Tree	☺ ☺ ☺
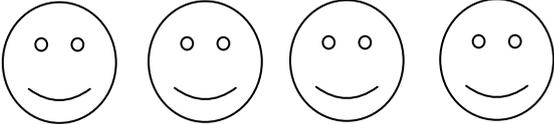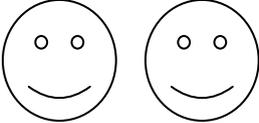
A. How many more children visited the face painting stall than the bouncy castle?

B. If each child paid 10p to do the Lucky Dip, how much money was taken?

6. Marie has £4.60. She buys a magazine costing £2.50.

How much money does she have left?

┌─────────────┐
│   │
│   │
│   │
└─────────────┘

7. Write these numbers in order from smallest to largest:

911	901	109	910	191

8.

A. Put these four numbers in the correct place on the sorting diagram:

60   50   12   42

Numbers with   Numbers in
a zero in them   the 6 x table
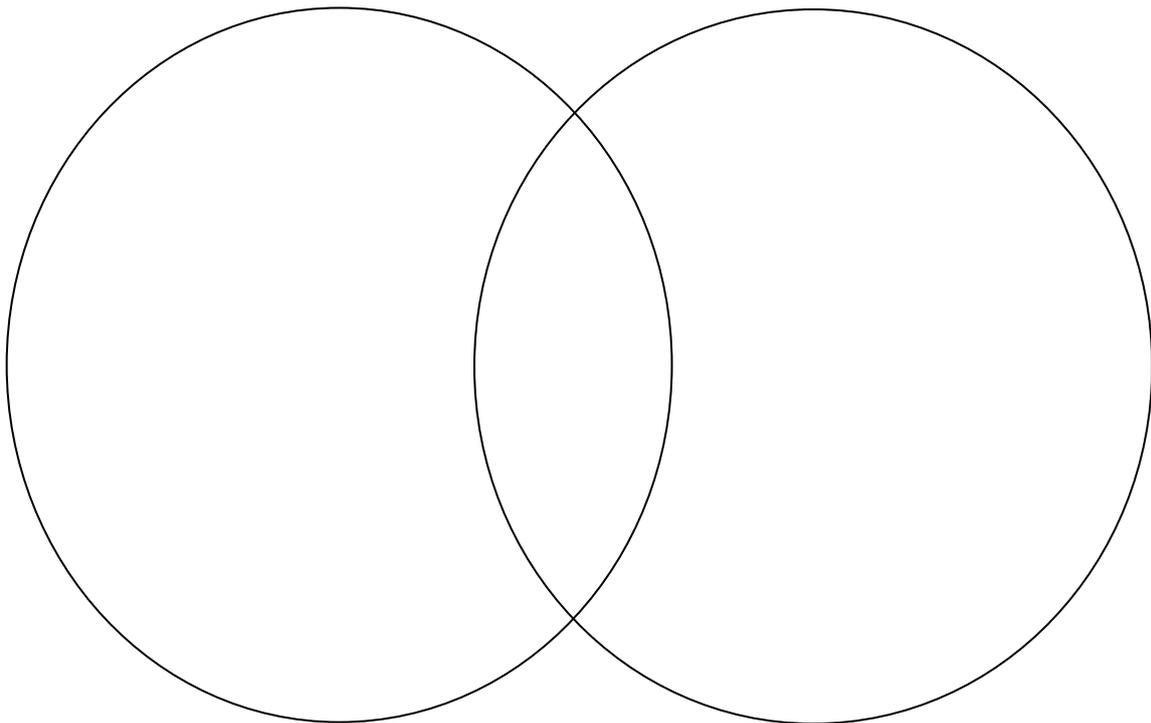
B. Think of another number that could go in the middle of the sorting diagram.

9. Calculate:

$$281 - 137 = \boxed{}$$

10. Draw an arrow on the number line to show one and three quarters:

```
 |__|__|__|__|__|__|__|__|
 0         1         2
```
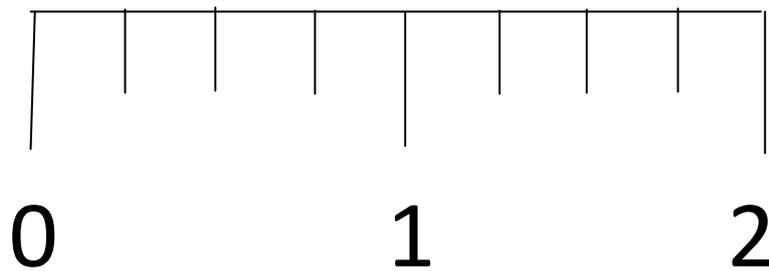
11. This scale shows how much some apples weigh:

```
0        1kg       2kg       3kg
```
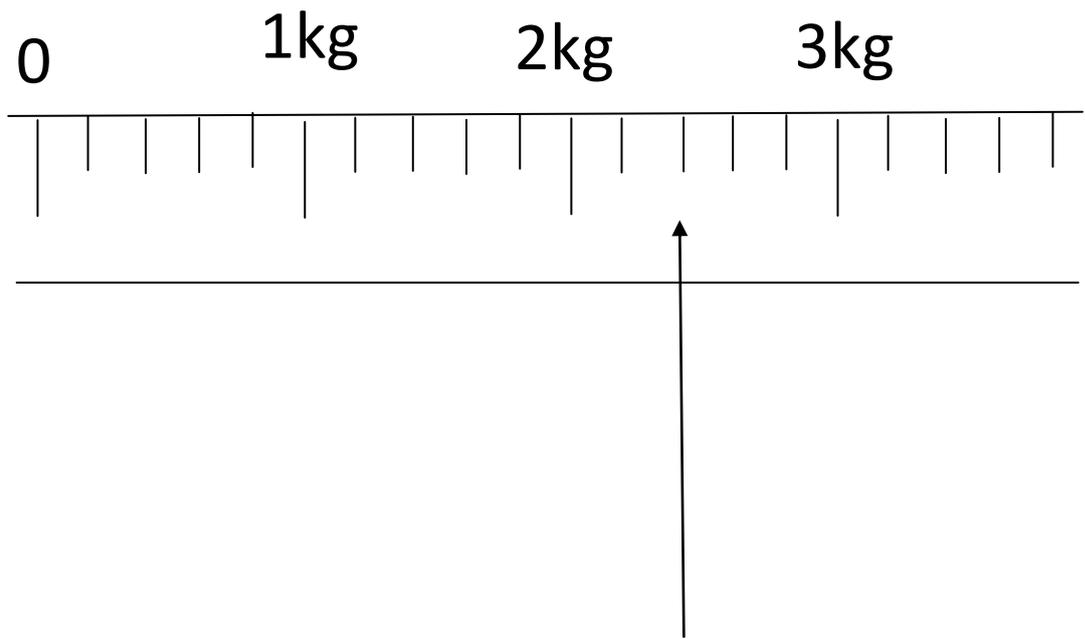
Write how much they weigh in grams:

g

12. Stacey planted a seed. At the end of each week, she measured how tall the shoot had grown:
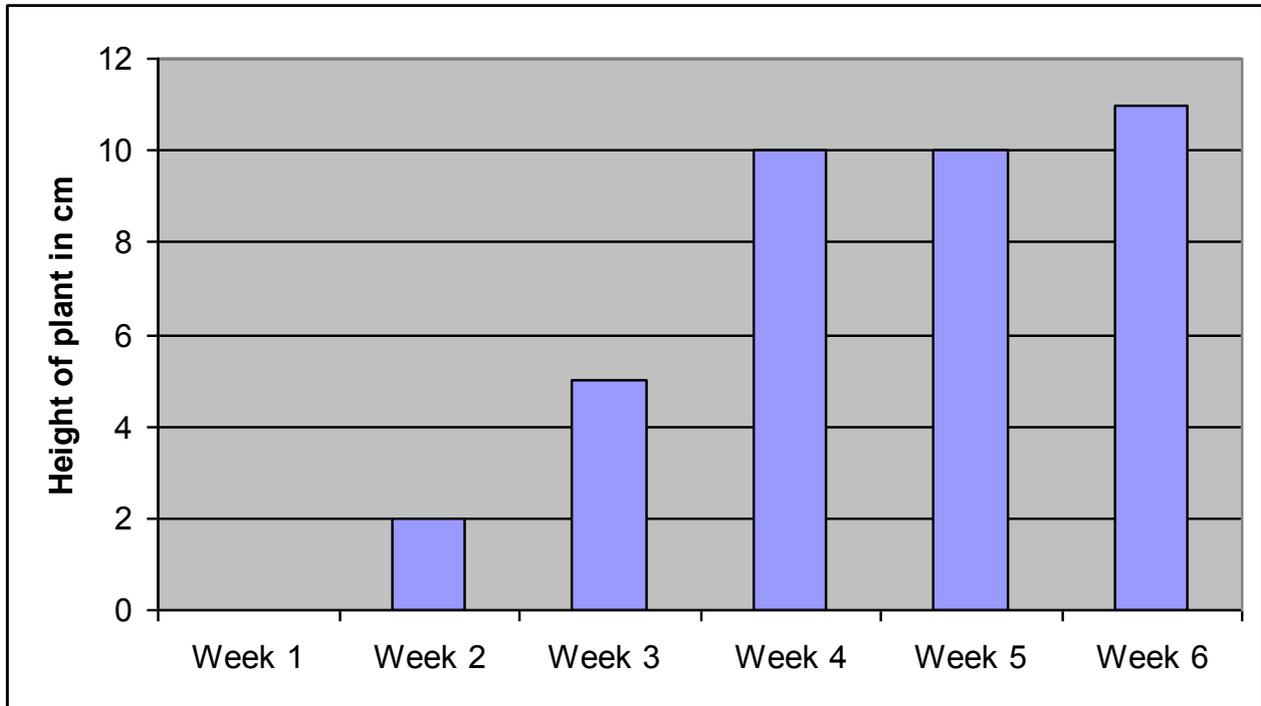
A. How much taller was the plant at the end of Week 6 than at the end of Week 2?

B. Stacey said: 'From Week 3 to Week 4 the plant doubled in size.' Is this true or false?

13. Katy gets £6.50 pocket money a week. She wants to buy a toy costing £35. How many weeks does she need to save for?

14. Write the missing digits to make this correct:

$$1 \boxed{} 3 + 7 \boxed{} = 200$$

15. Imagine that this shape is being reflected in the mirror line. Draw the other half of the shape:
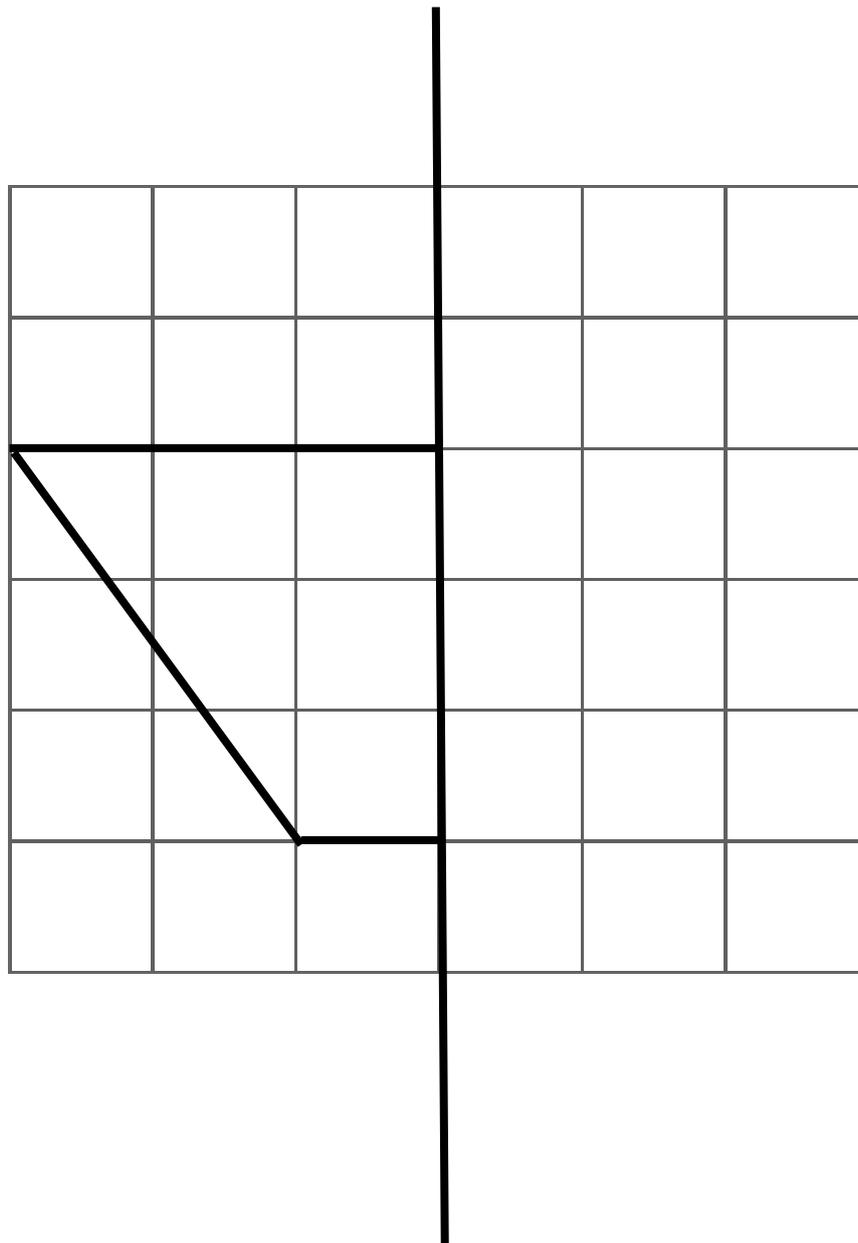
mirror
line

16.

Mr Smith's shop has this special offer:

6 cans of lemonade: was £2.60, now half price!

Mr Khan's shop has this special offer:

Each can of lemonade 30p. Buy 6 cans and get one free!

Ben wants to buy 6 cans. Whose offer would be the cheapest? Tick one:
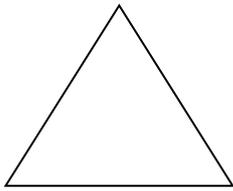
Mr Smith ☐

Mrs Khan ☐

Explain how you know:

_____

_____

_____

17. John wants to make a triangular prism. He has been given these shapes to cut out.

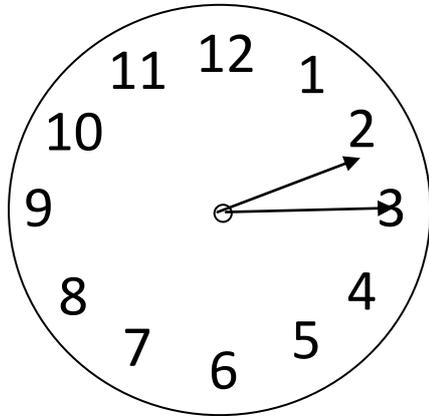Tick the ones he needs to cut out to make his triangular prism:
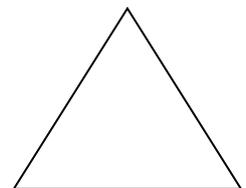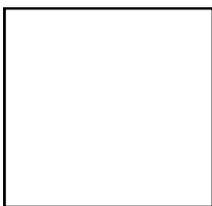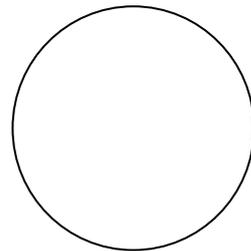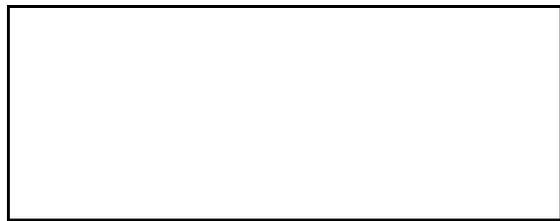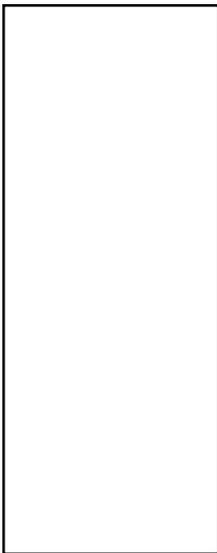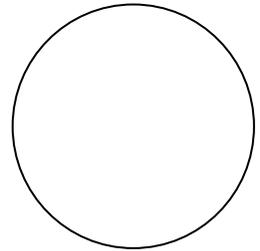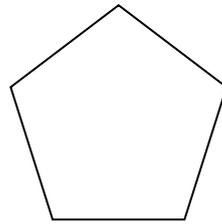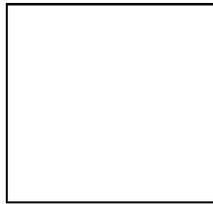
18. Here is a multiplication:
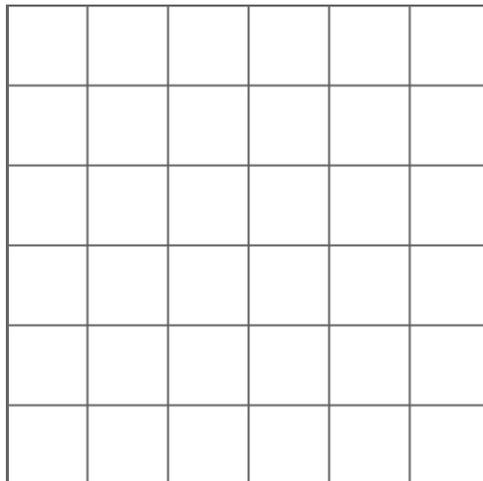
$$6 \times 5 = 30$$

Write a division which uses these same 3 numbers:

19. What is the remainder when you divide 122 by 8?

20. What time will it be in half an hour?

21. Draw a triangle with a right angle on this grid:

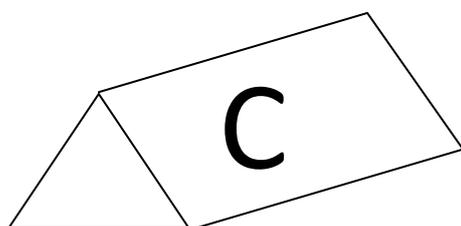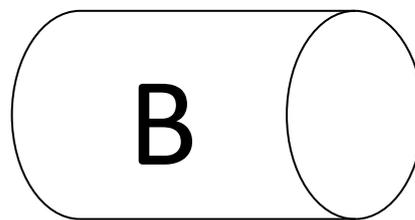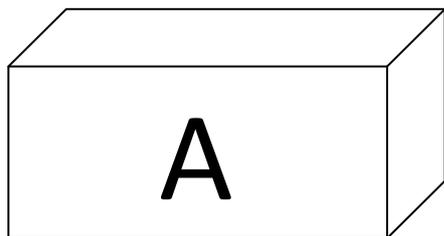22. Rachel has a rod 9 cubes long.

She breaks it into two pieces.

One piece is double the number of cubes than the other.

How many cubes are in each piece?

☐ and ☐

23. Look at these three shapes:

Now complete this table by writing YES or NO in each box.

	The shape has more than three faces	The shape has more than six vertices
A		
B		
C		

24. Write in the missing number:

$$\boxed{} \times 6 = 90$$

25. There are 24 jumpers in the washing basket.

One half are red.

One quarter are yellow.

The rest are blue.

How many are blue?