

First Mathematics Challenge

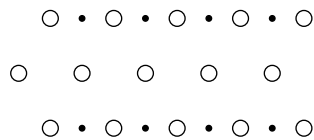
2019

Name Class

For each question, write down A B C D or E in the box next to each answer.

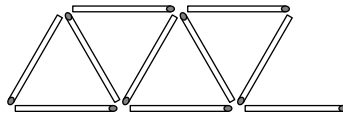
Practice Questions

P1 In the pattern of circles and dots below, how many more circles are there than dots?



- A 15 B 8 C 23 D 10 E 7

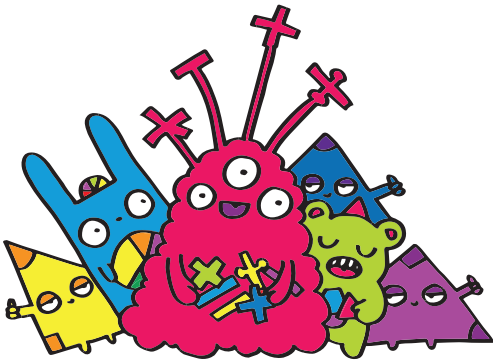
P2 Matchsticks are used to make the triangles in the diagram below.



The pattern is continued.

How many matchsticks will it take to make 6 triangles?

- A 18 B 15 C 13 D 22 E 20



Total Marks

/20

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1. Which cat caught the fish?

- A 1 B 2 C 3
- D 4 E 5



2. Anna and her two friends share 12 cakes equally.

Each of them gets:

- A 2 cakes B 3 cakes C 4 cakes
- D 5 cakes E 6 cakes



3. If yesterday was Monday, the day after tomorrow will be:

- A Tuesday B Wednesday C Thursday D Friday
- E Saturday

4. I add together an even number and an odd number. The total I get is:

- A always odd B always even C sometimes odd
- D sometimes even E it depends on the numbers

5. What is the sum of all the numbers from 1 to 6?

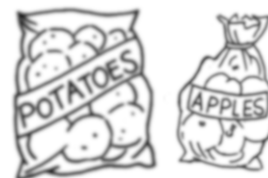
- A 18 B 19 C 20 D 21 E 22

6. Two identical bags of potatoes together weigh 8 kg.

A bag of potatoes and a bag of apples together weigh $4\frac{1}{2}$ kg.

How much does the bag of apples weigh?

- A $\frac{1}{2}$ kg B 1 kg C 4 kg D 2 kg
- E $1\frac{1}{2}$ kg

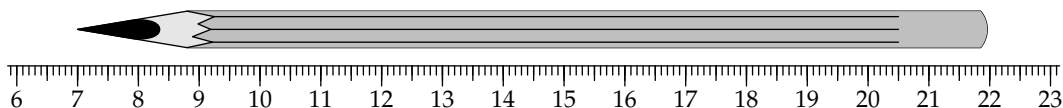


7. In the calculation on the right, what number could go into the empty box to make the calculation correct?

$$3 \times 5 = 6 + \square$$

- A 9 B 2 C 8 D 10 E 14

8. How long is the pencil in the picture below?



- A 23 cm B 8 cm C 15 cm D 31 cm E 7 cm

9. Ali bought a comic and a drink.

He paid with a £5 note.

He received £2.75 change.

The comic cost £1.60.

How much did the drink cost?



- A 65 p B £1.65 C £2.25 D £1.25 E 75 p

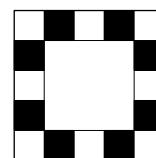
10. A train leaves Leeds at 10.45. It arrives in London 2 hours and 16 minutes later.

At what time does it arrive?

- A 12.55 B 13.00 C 12.51 D 13.01 E 13.06

11. A path around a square lawn is made of alternating black and white flagstones.

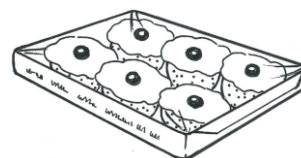
How many black flagstones will be needed to make a path that is 6 flagstones wide and 6 flagstones long?



- A 4 B 10 C 2 D 3 E 8

12. Cakes can be bought in packets of 6. There are 27 children at a party.

How many packets of cakes must be bought in order to be certain that every child at the party may have a cake of their own?



- A 3 B 6 C 4 D 7 E 5

13. Oliver has six apples.

Sally has one third the number of apples that Oliver has.

Alice has twice as many apples as Oliver.

How many apples do they have altogether?

- A 19 B 12 C 18 D 21 E 20

14. In the school dining room you can choose from 2 different types of sandwich and 5 different kinds of fruit. A meal is a sandwich and a piece of fruit.

How many different meals can you have?

- A 2 B 5 C 3 D 7 E 10

15. A film starts at 3.25 pm. It finishes at 5.18 pm. How long did the film last?

- A 2 hours B 1 hour 43 minutes C 2 hours 7 minutes
 D 1 hour 53 minutes E 1 hour

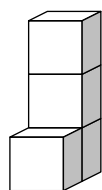
16. Isabel is thinking of two numbers.

They add together to give 12. They multiply together to give 35.

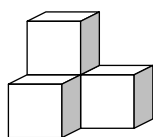
The difference between Isabel's two numbers is:

- A 23 B 2 C 7 D 5 E 0

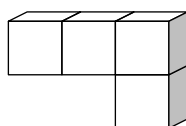
17. Which two solids are the same?



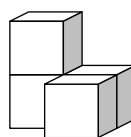
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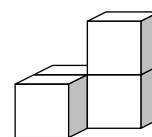
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3



4



5

- A 4 and 5 B 2 and 4 C 2 and 5 D 1 and 3 E 2 and 3

18. 4 cherries weigh the same as 1 apricot. 2 apricots weigh the same as 1 apple.

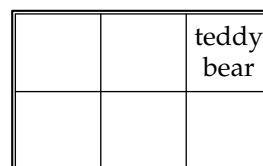
How many cherries weigh the same as 3 apples?

- A 24 B 12 C 10 D 8 E 28

19. In the toy cupboard are a football, a car, a radio, a doll, a teddy bear and a set of bricks.

The teddy bear is shown in the toy cupboard.

If the football is to the left of the bricks and the doll is directly below the bricks, which toy is to the left of the car?

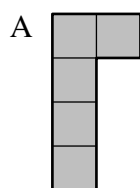
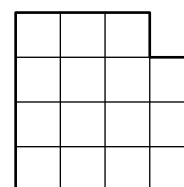


- A football B bricks C teddy bear D doll
 E radio

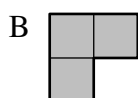
20. The floor of my garden shed is marked out in squares as shown in the diagram on the right.

Only one of the carpet tiles below can be used to cover completely the floor of my shed with no overlaps.

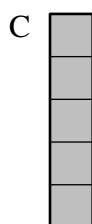
Which tile is it?



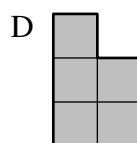
A



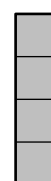
B



C



D



E

