

**Maths – Fractions, Percentages and Decimals**

Chernice has a bag containing 500 sweets. 23% of the sweets are red, 47% of the sweets are blue, and the rest are green.

How many green sweets are there in the bag?

- a) 430
- b) 350
- c) 200
- d) 100
- e) 150**

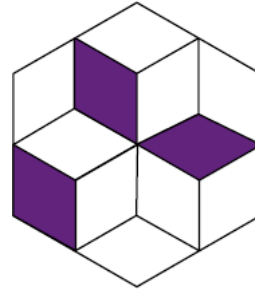
$$23 + 47 = 70$$

$$100 - 70 = 30$$

$$30\% \text{ of } 500$$

$$\begin{array}{r} \times 50 \\ \hline 30 \\ \hline = 150 \end{array}$$

What percentage of this shape is shaded?



- a) 20%
- b) 30%
- c) 50%
- d) 25%**
- e) 75%

$$\frac{3}{12} = \frac{1}{4}$$

A group of children are asked to pick their favourite colour. The following table shows their answers.

Colour	Number of children
Red	9
Orange	10
Green	5
Blue	8

What percentage of the children picked blue?

- a) 18%
- b) 20%
- c) 27%
- d) 25%**
- e) 8%

$$\frac{8}{32} = \frac{1}{4}$$

Madalyn divides a cake into 20 equal slices. She eats 4 slices of the cake.

What percentage of the cake does Madalyn eat?

- a) 30%
- b) 40%
- c) 20%**
- d) 25%
- e) 12%

$$\frac{4}{20} = \frac{20}{100}$$

Which of the numbers below is equivalent to 15/6?

- a) 10/12
- b) 15/3
- c) **2 1/3**
- d) 2/5
- e) 2 1/2

$$6 \overline{) 15} \begin{array}{l} 2 \\ \underline{12} \\ 3 \end{array} = 2 \frac{1}{2}$$

Dora has twelve 20p coins and eight 10p coins in her purse. She puts 1/3 of the 20p coins and 1/4 of the 10p coins into a charity box.

How much money does Dora put in the charity box?

- a) £1.20
- b) 60p
- c) £1.50
- d) 80p
- e) £1.00**

$$\frac{1}{3} \text{ of } 12 = 4 \times 20p = 80p$$

$$\frac{1}{4} \text{ of } 8 = 2 \times 10p = 20p$$

**Verbal Reasoning**

**Odd Ones Outs** - Three of the words below are linked. Find the two words that are not related to these three and select them both.

concur  
contrast  
counter  
correspond  
differ

enigmatic  
peculiar  
quirky  
mysterious  
eccentric

enquire  
command  
instruct  
query  
insist

gully  
gorge  
cliff  
pinnacle  
canyon

**Letter Word Codes** - Use the alphabet to help you work out the answer to the question below.

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

If the code for **KIND** is **IFJY**, what is the code for **PLUG**?

FAIL

FEEL

FUEL

FEAR

LURE

*-2 -3 -4 -5*

If the code for **FETA** is **GDUZ**, what is the code for **LESS**?

FAIL

FEEL

FUEL

FEAR

LURE

*+1 -1 +1 -1*

If the code for **NAPE** is **QDSH**, what is **IXHO** the code for?

FAIL

FEEL

FUEL

FEAR

LURE

*+3*

*opposite*

**Non – Verbal Reasoning - Find the figure like the first two.**

a)  b)  c)  d)  e)

In all figures, two shapes must have the same number of sides, and the third shape must have one less side.

a)  b)  c)  d)  e)

In all figures, the shape at the bottom of the figure must have a dashed outline.

a)  b)  c)  d)  e)

All figures must have two sets of the same two shapes in different sizes. The outer shape in the smaller set of shapes must be a 90 degree anticlockwise rotation of the outer shape in the larger set of shapes. The inner shape in the smaller set of shapes must be a vertical reflection of the inner shape in the larger set of shapes. The inner shape is grey in the larger set of shapes and is black in the smaller set of shapes.

**English - Choose the word which completes the sentence correctly.**

The team we \_\_\_\_\_ playing against had some of the best players I'd ever seen.

we're  
 is  
 was  
 where  
 were

The average human yawns five to ten times a day, with each yawn \_\_\_\_\_ approximately six seconds.

lasting  
 lasted  
 lastly  
 last  
 lasts