

## Day 1 Maths

### Can I understand squared and cubed numbers?

**Indices** – A number that indicates how many times to multiply by.

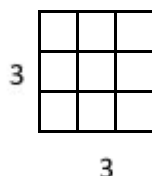
$3 \times 3$  can be written as  $3^2$



$3 \times 3 \times 3$  can be written as  $3^3$

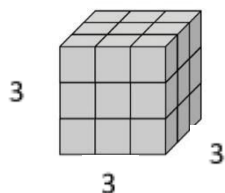


**Squared Number** – A number that is the result of multiplying a number by itself



$3^2 = 3 \times 3 = 9$  so 9 is a squared number

**Cubed Number** – A number that is multiplied by itself three times



$3^3 = 3 \times 3 \times 3 = 27$  so 27 is a cubed number

### Questions

1.  $2^2 =$
2.  $4^2 =$
3.  $2^3 =$
4.  $8^2 =$
5.  $5^3 =$
6.  $9^3 =$

True or false

7.  $4^3 > 8^2$
8.  $11^3 < 12^2$
9. 256 is a squared number?
10. Last year my age was a cube number. My age now is a square number. How old am I?  
What age will I be when I wait until my age is both a square number and a cube number?

## Day 1 English

### Can I understand and use relative pronouns?

A **relative pronoun** is used to connect a clause or phrase to a noun or **pronoun**. The clause modifies, or describes, the noun giving more information about it.

e.g.

That's the man **who** stole my parking space.

This is the place **where** I broke my arm.

This is the girl **whose** horse won the competition.

Travis was late, **which** made him cross.

The race **that** I won was the 100m sprint.

1. There is a poem in this book \_\_\_\_\_ you might like. (which / where)
2. Could you please tell me \_\_\_\_\_ you live? (who/where)
3. People \_\_\_\_\_ live in glass houses shouldn't throw stones. (who/which)
4. The place \_\_\_\_\_ they live is very close to the town centre. (where/whose)
5. Do you know anyone \_\_\_\_\_ speaks Spanish? (which /who)
6. The man, \_\_\_\_\_ name is Andre, loved rock music.
7. The homework, \_\_\_\_\_ I did last week, was really interesting.
8. Match two sentence fragments together to create two sentences using the relative pronouns **where** or **who**.

|                                    |
|------------------------------------|
| The footballer,                    |
| The Antarctic Ocean                |
| was called Samantha, scored a goal |
| penguins live, is cold all year.   |

Add a relative clause to the following sentences using the **correct relative pronoun**.

9. The girl went to school.
10. The bowl is in the kitchen.

## Day 1 Science

### Can I identify solids, liquids and gases?

#### Solids

- They can be cut or shaped.
- Anything you can take hold of is solid.
- The shape and volume do not change unless you break a bit off.



#### Liquids

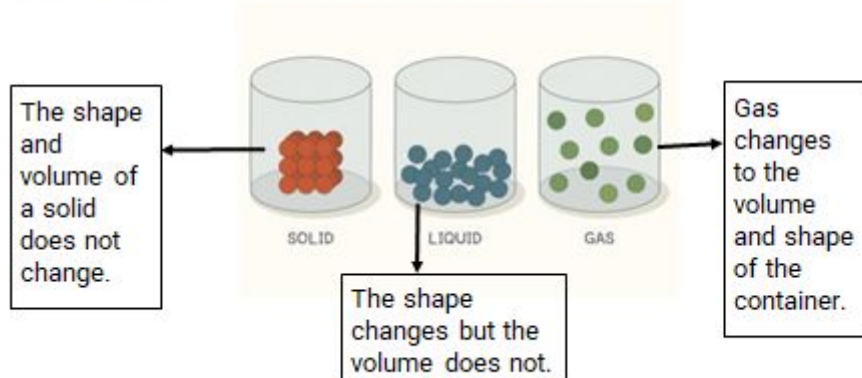
- They are runny and flow downwards.
- The surface of a liquid in a container stays level when the container is tilted.
- The shape can change depending on the container it is in.
- The volume does not change.



#### Gases

- They are all around us; most gases are invisible.
- Air is made of a mixture of different gases.
- A gas in a container fills the container and takes the same shape and volume as the container.
- A gas that is not in a container spreads out - the volume keeps increasing.

#### A main difference is volume and shape



a cylinder. When this is in the container, the volume is 80cm<sup>3</sup> but the shape turns into a cylinder.

#### Questions

1. In your house, find 2 examples of gasses, liquids and solids.

Which of these statements describe a gas, which describe a liquid and which describe a solid?

2. Does not change shape or volume.

3. Changes volume and shape when in a container.

4. The shape changes but the volume stays the same.

5. Something I can take hold of.

6. When in a container, this takes on the same shape and volume as the container.

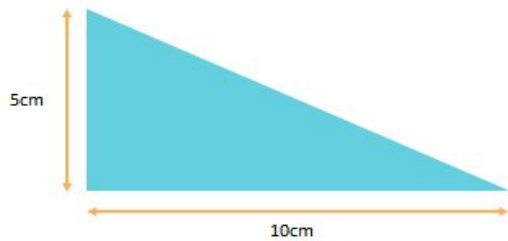
7. The volume of my container is 100cm<sup>3</sup>, and it is in the shape of

Use this website to help <https://www.bbc.co.uk/bitesize/topics/zkqg87h/articles/zsgwwxs>

## Day 2 Maths

### Can I find the area of a triangle?

The area of a triangle is half the area of a rectangle, so the area of a triangle =  $\frac{1}{2}$  the base x the height

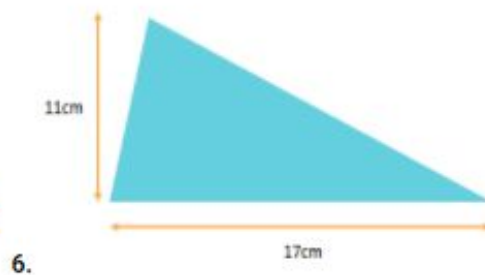
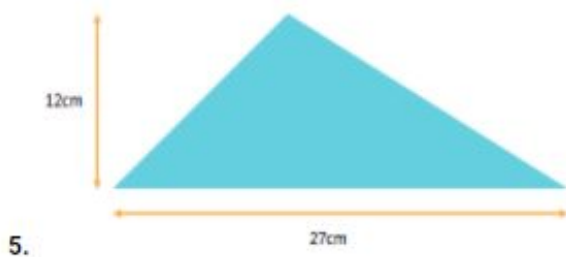
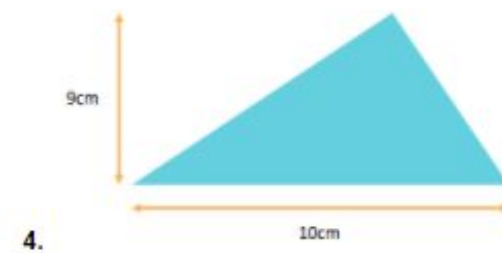
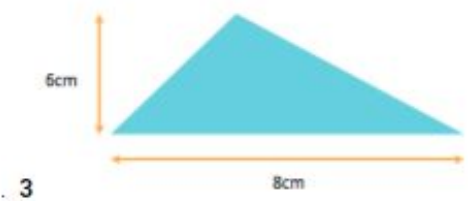
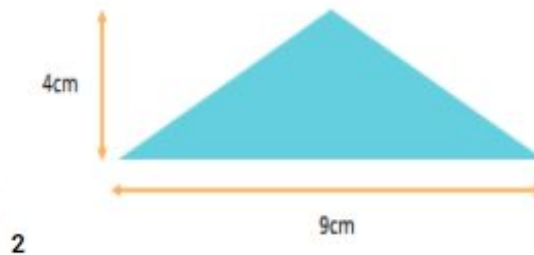
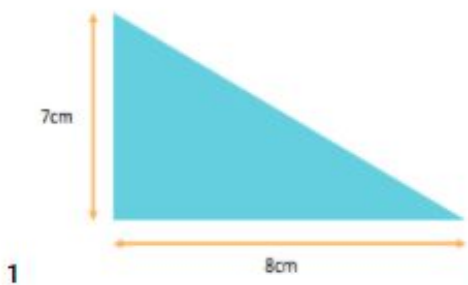


$$\text{Area} = \frac{1}{2} \times 10\text{cm} \times 5\text{cm} = 25\text{cm}^2$$



$$\text{Area} = \frac{1}{2} \times 10\text{cm} \times 6\text{cm} = 30\text{cm}^2$$

### Questions - find the areas



## Day 2 English: Can I understand subjunctive mood?

The subjunctive form is mostly used in **formal** language (if you were the Queen, for example). It can be used to give **advice** or talk about **unreal** or **hypothetical** situations.

### To Advise Advise Ask Command Demand Insist Propose Recommend Request

| Noun/pronoun | Verb (can change tense) | that | Noun/pronoun | Infinitive verb<br>(must always be in root form for the subjunctive to be grammatically correct) |
|--------------|-------------------------|------|--------------|--|
| I            | propose                 | that | Jimmy        | listen.  |
| She          | demanded                | that | he           | be...  |
| We           | command                 | that | she          | write.   |
| Her parents  | insist                  | that | Venus        | have...  |
| The teachers | ask                     | that | children     | attend   |

### Unreal situations Desire Hope Wish Dream

| If | Noun/pronoun | were | situation                 |
|----|--------------|------|---------------------------|
| If | I            | were | rich...                   |
| If | I            | were | famous...                 |
| If | he           | were | to attend a party...      |
| If | they         | were | going to book the holiday |

Examples of subjunctive mood:

- If I were chosen, I would do my best.
- We ask that the match be postponed due to the rain.

### Questions - which of these are in the subjunctive mood?

1. Our school rules require that all children be honest.
2. We have asked for the match to be postponed due to the rain.
3. The game needs to start now.
4. I request that Serena be allowed to come home.
5. I wish I was a bird with wings.
6. If it wasn't for that women's bravery, they would have been hurt.
7. If Roger were in charge, none of this would be happening.

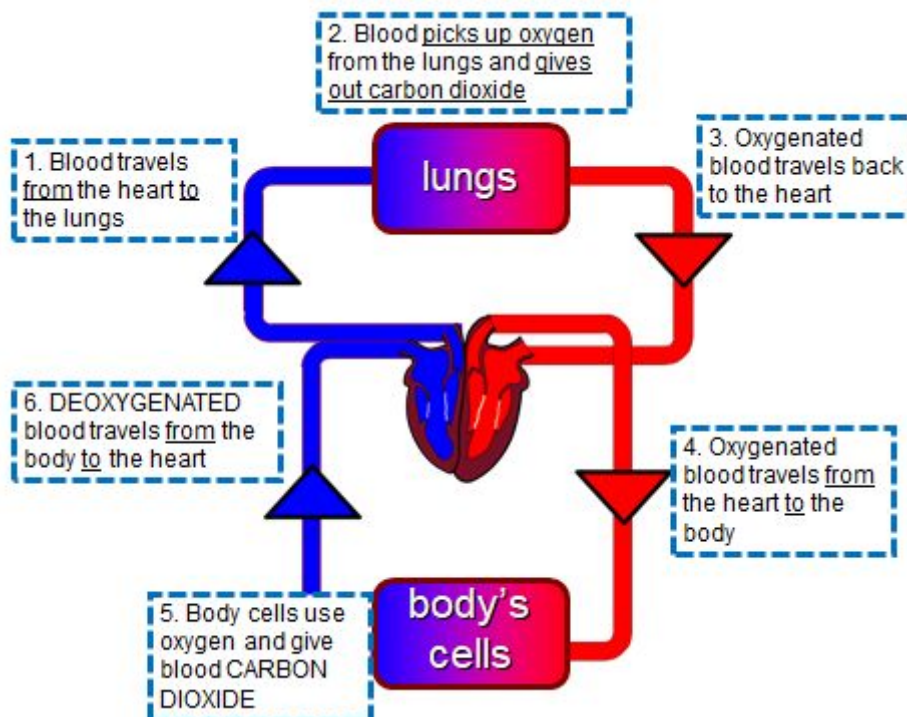
Make up 2 sentences of your own in the subjunctive mood.

## Day 2 Science: Can I understand the circulatory system?

The circulatory system consists of:

- the heart ( pumps blood around the body)
- blood vessels (which carry blood)
- blood

How the blood circulates around the body.



**Transport:** Blood transports materials around the body and protects against disease. It contains:

- **Red blood cells** which transport oxygen, the more red blood cells the body has the more oxygen it can carry, which it needs for energy for exercise.
- **White blood cells** which protect against disease.
- **Blood platelets** which help the blood to clot and repair a cut.
- **Plasma** which is a liquid that carries these cells. It also transports important nutrients.

<https://www.bbc.co.uk/bitesize/topics/zwdr6yc/articles/zqv4cw>

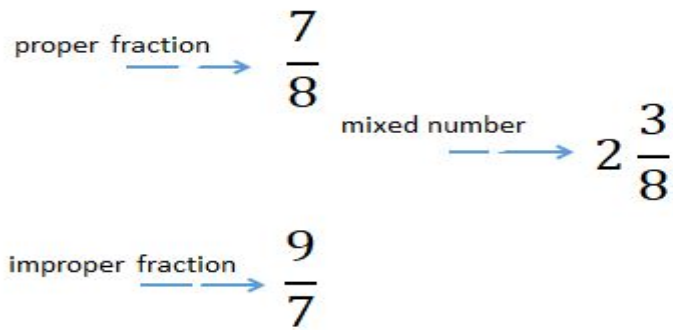
### Questions

1. What does the circulatory system consist of?
2. Is the blood that leaves the lungs oxygenated or deoxygenated?
3. Where does the blood leave from to go to the body?
4. Is the blood that reaches the heart from the body oxygenated or deoxygenated?
5. Why does blood have to be pumped to the lungs?
6. What part of blood helps a boxer with a cut?
7. Why would having lots of white blood cells benefit someone?
8. How would a sports person benefit from having more red blood cells?

## Day 3 Maths: Can I understand how to multiply fractions?

### Fractions recap

Numerator  $\longrightarrow$  3  
Denominator  $\longrightarrow$  4



### Multiplying Fractions

$$\frac{2}{3} \times \frac{3}{4} = \frac{2 \times 3}{3 \times 4} = \frac{6}{12}$$

1. Multiply the numerators
2. Multiply the denominators

$$\frac{1}{4} \times \frac{1}{3} = \frac{1}{12} \quad \frac{3}{7} \times \frac{2}{9} = \frac{6}{63} \quad \frac{2}{3} \times 2 = \frac{2}{3} \times \frac{2}{1} = \frac{4}{3}$$

### Multiplying an Improper Fraction

$$\frac{9}{8} \times \frac{3}{7} = \frac{9 \times 3}{8 \times 7} = \frac{27}{56}$$

The process remains exactly the same.

1. Multiply the numerators
2. Multiply the denominators

$$\frac{4}{3} \times \frac{1}{2} = \frac{4}{6} \quad \frac{3}{2} \times \frac{5}{4} = \frac{15}{8}$$

### Multiplying a Mixed Number

$$2\frac{2}{5} \times \frac{1}{2} = \frac{12}{5} \times \frac{1}{2} = \frac{12 \times 1}{10} = \frac{12}{10}$$

1. Change the 1 number to an improper fraction.
2. Multiply as before

$$3\frac{1}{3} \times \frac{2}{4} = \frac{10}{3} \times \frac{2}{4} = \frac{20}{12} \quad 2\frac{1}{4} \times \frac{2}{3} = \frac{9}{4} \times \frac{2}{3} = \frac{18}{12}$$

### Questions

1.  $\frac{1}{3} \times \frac{1}{3} =$     2.  $\frac{1}{5} \times \frac{1}{5} =$     3.  $\frac{1}{4} \times \frac{2}{3} =$     4.  $\frac{2}{7} \times \frac{4}{5} =$     5.  $\frac{7}{9} \times \frac{4}{5} =$

6.  $\frac{6}{7} \times \frac{11}{12} =$



## Day 3 English: Can I use commas to avoid ambiguity?

We use commas:

- To separate items in a list.
- After a fronted adverbial.
- To indicate extra information in a sentence.
- After direct speech.

Sometimes we need to use a comma to make the sentence clear even if there is no grammatical rule that requires it. Can you see the difference in the placement of a comma can make?

Slow children crossing



Slow, children crossing



Lower,  
please!



Lower please!



Eat Daniel!



Eat, Daniel!



### Questions

Can you show the huge difference one comma makes to the meaning of these sentences by illustrating each version or explaining the difference in words? Colour in your pictures – be imaginative.

1. We're going to learn to cut and paste kids.

We are going to learn to cut and paste, kids.

2. I find inspiration in cooking my family and teachers.

I find inspiration in cooking, my family and teachers.

Rewrite these sentences adding commas to give the sentence 2 different meanings.

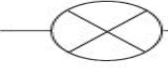









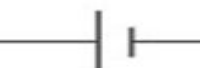

3. The view I imagined was amazing.
4. He brought home some old folders and a doughnut which he ate as soon as he got hungry.
5. When the lightning turned incredibly bright yellow people began to get scared.

Try and make up three examples of your own?



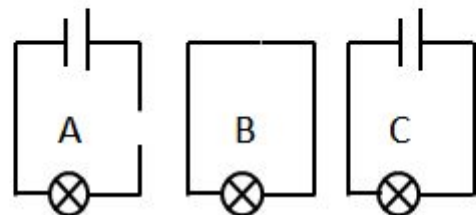
### Day 3 Science: Can I understand electrical circuits?

Electricity will only travel around a circuit that is complete. That means it has no gaps. An electrical circuit can be drawn using symbols.

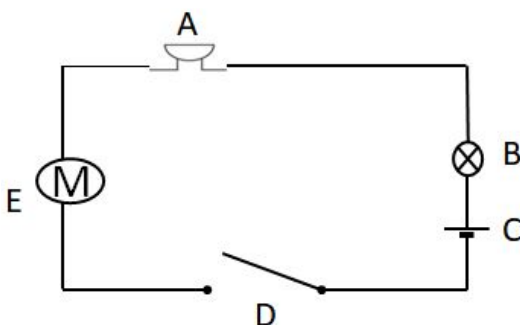
|   |   |   |
|---|---|---|
|    | <b>BULB (LAMP)</b> - a component which lights up when electricity passes through it in a circuit.                 |    |
|    | <b>Motor</b> - a component that moves (spins) when electricity passes through it in a circuit.                    |    |
|    | <b>Buzzer</b> - a component that makes a noise when electricity passes through it in a circuit.                   |    |
|    | <b>Wire</b> - plastic-coated electrical wire which conducts electricity around a circuit.                         |    |
|    | <b>Switch</b> - part of a circuit which can easily be opened or closed to control the flow of electrical current. |    |
|  | <b>Cell</b> - battery, power source which stores chemical potential energy that can power a circuit.              |  |

### Questions

1. Which one of these circuits will work? Why?



2. Label the circuit below.



3. Draw a circuit that will allow a light to be turned on and a sound to be made when you want it to.

#### Day 4 Maths: Can I understand how to divide fractions?

$\frac{\text{Numerator}}{\text{Denominator}}$  e.g.  $\frac{1}{2}$  Proper fraction  $\frac{7}{8}$  Improper fraction  $\frac{8}{7}$   $\frac{4}{3}$

Mixed number  $2\frac{1}{3}$  or  $6\frac{3}{4}$

#### Dividing fractions

$$\frac{1}{2} \div \frac{1}{4} =$$

**Step one:** Turn the fraction you are dividing by, upside down so that the numerator is now the denominator. Convert any whole numbers to fractions (e.g.  $2 = \frac{2}{1}$ )

$$\frac{1}{2} \div \frac{1}{4} = \frac{1}{2} \times \frac{4}{1}$$

**Step two:** Change the divide sign to multiply.

$$\frac{1}{2} \div \frac{1}{4} = \frac{1}{2} \times \frac{4}{1}$$

**Step three:** Now multiply the fraction like you would do normally (multiply the numerators together and the denominators together).

$$\frac{1}{2} \div \frac{1}{4} = \frac{1}{2} \times \frac{4}{1} = \frac{1 \times 4}{2 \times 1} = \frac{4}{2} = 2$$

$$1 \div \frac{1}{5} = \frac{1}{1} \times \frac{5}{1} = \frac{1 \times 5}{1 \times 1} = \frac{5}{1} = 5$$

$$2 \div \frac{2}{5} = \frac{2}{1} \times \frac{5}{2} = \frac{2 \times 5}{1 \times 2} = \frac{10}{2}$$

$$= 5$$

#### Questions

1.  $\frac{1}{4} \div \frac{1}{2} =$

2.  $1 \div \frac{3}{10} =$

3.  $2 \div \frac{1}{2} =$

4.  $3 \div \frac{1}{4} =$

5.  $\frac{1}{2} \div \frac{3}{5} =$

## Day 4 English: Can I use hyphens to avoid ambiguity?

Hyphens join either prefixes or whole words to other words to make one thing.

These new words can be nouns (e.g. ex-wife), adjectives (e.g. well-worn) and verbs (e.g. to spot-check).

A hyphen is shorter than a dash and has no spaces on either side. Dashes go between words, not inside them, and have a space either side, e.g. I love chocolate - it's my favourite treat.

Using hyphens can help make a sentence make sense.

### Nouns

Steffi was **runner-up** in the tennis tournament.

### Adjectives

The **man-eating** shark swam past the boat.

### Verb prefixes

Martina tried to repress a sneeze but she couldn't.

Boris had to **re-press** the shirt because there were creases still left in it.

## Numbers - the numbers 21 to 99 are all written with a hyphen.

I counted to **fifty-nine** in French.

### Ages

This dog must be at least five years old.

My **ten-year-old** brother is called John.

### Questions

Rewrite the following sentences putting in hyphens so that the sentence makes sense.

1. A quick thinking policeman saved the cat.
2. Take your ticket, passport and suitcases to the check in.
3. The tennis player had to reserve as her last ball hit the net.
4. My lucky number is thirty three.
5. All eighteen year old people can vote in the United Kingdom.

Can you rewrite these sentences so that they make sense (some will need hyphens, some won't)?

6. He always buys sugar free drinks.
7. I watched the mouse re-treat into the hole.
8. Can you resign this letter, please?
9. I saw a bird eating spider at the zoo.
10. Yvonne re-sented having to do homework on her birthday.

## **Day 4 History: Can I understand the Vikings attitude to law and order?**

The Viking age was between 793-1066AD.

If there was a dispute or an argument between people, they could agree to settle it themselves. If it was a serious dispute between 2 men they could have a Holmgang. This was a duel or fight to the death.

If they chose or couldn't settle the dispute themselves they could take their case to a Thing. A Thing was an assembly where the Vikings met. Every man had to respect the Thing and was required to attend.

As the Vikings had no written laws, the law speaker man would read out the laws (which he remembered by heart) at the start of each Thing. This was to ensure that nobody had changed any of them since the last Thing.

The trials of people who were thought to have broken the law were held at the Thing. Every free person (slaves were not allowed) was entitled to speak and give evidence, but generally, the chieftain and the law speaker would decide the outcome and the punishment.

There were 3 punishments:

- A fine equal to what was stolen or damaged
- Being semi-outlawed (outlawed for a short time)
- Being fully-outlawed (outlawed forever)

Being outlawed meant that all of your property was taken off you and you could no longer live in the community. No one was allowed to help you to find food, shelter or water. Worse than the loneliness, being outlawed also meant that anyone could kill you without a reason!

### **Crimes and their punishments**

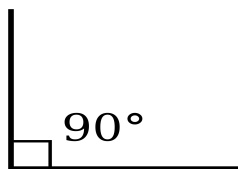
**Killing someone and announcing it** - as long as the accused was open and honest about the killing, gave the victim a chance to defend themselves, and announced it straight away, then they would normally escape death and might be outlawed instead.

**Stealing a beehive from a neighbour** - pay back the value of the beehive to their neighbours.

**Insulting a man by questioning his honour** - fight in a Holmgang

1. Where did Vikings meet to settle a dispute?
2. Who was responsible for remembering what the law was?
3. Why was it important for the laws to be read to everyone at the start of the assembly?
4. Do you see any problem with not having rules written down?
5. Vikings could settle serious disputes with a duel or fight to the death. What was this called?
6. From the examples given, what crime and punishment is most similar to today's system?

## Day 5 Maths: Can I calculate missing angles?

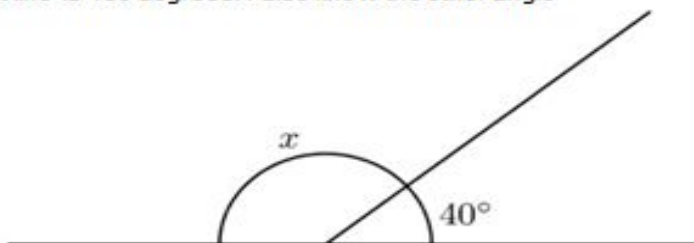


**Right angles** have exactly  $90^\circ$ , it has a square to indicate this. A **Straight angle** has exactly  $180^\circ$

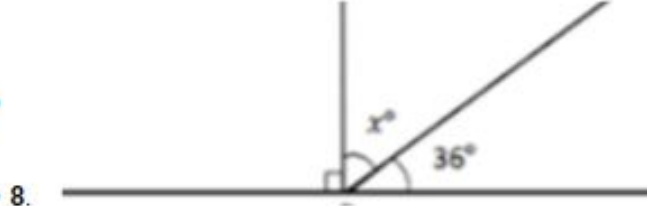
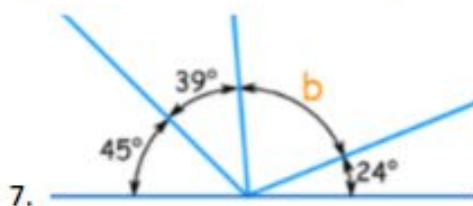
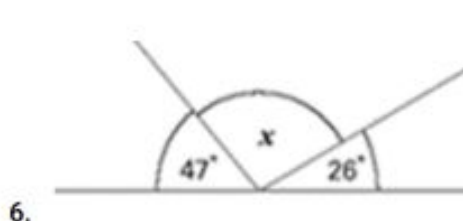
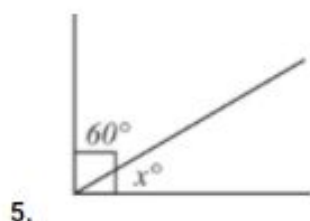
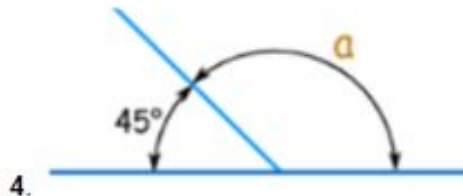
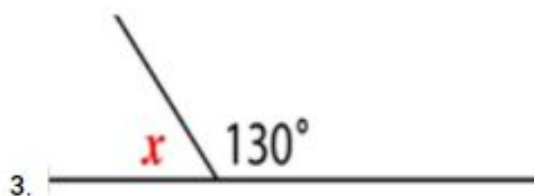
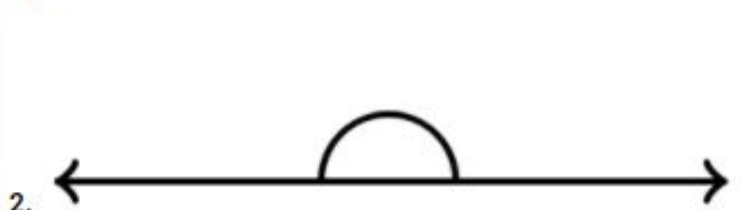
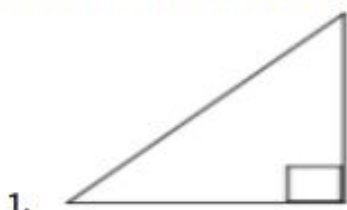
With that knowledge, we can find out the value of missing angles.

I know the angle on a straight line is 180 degrees. I also know the other angle is 40 degrees.

So,  
 $180 - 40 = x$   
 $180 - 40 = 140$  degrees



**Questions** - What is the missing angle?



## Day 5 English

### Can I use the passive and active voice?

#### Subject and object revision

In a sentence, the subject is the person or thing doing something, and the object is having something done to it.

For example, the subject in the following sentences is underlined and the **object** is in bold.

I ate an **apple**.

**The apple** was eaten by me.

You must get off the **bus**.

**Active voice** means that a sentence has a subject that acts upon its verb. **Passive voice** means that a subject is a recipient of a verb's action.

A passive verb lets us use the object of the action as the subject of the sentence.

The dog bit **me**. (active verb)

I was bitten by the dog. (passive verb)

The sun warmed and dried **him**. (active verb)

**He** was warmed and dried by the sun. (passive verb)

#### Questions

**Rewrite these sentences in the passive voice:**

1. I missed the bus.
2. I threw the ball.
3. He opened a packet.
4. The policeman stopped the car.

**Rewrite these sentences in the active voice:**

5. The television programme we watched.
6. The lesson was enjoyed by the children.
7. The lamp post we almost walked into.
8. Honey is made by bees.

Make up sentences of your own and then rewrite either using the passive or active voice.

#### Remember

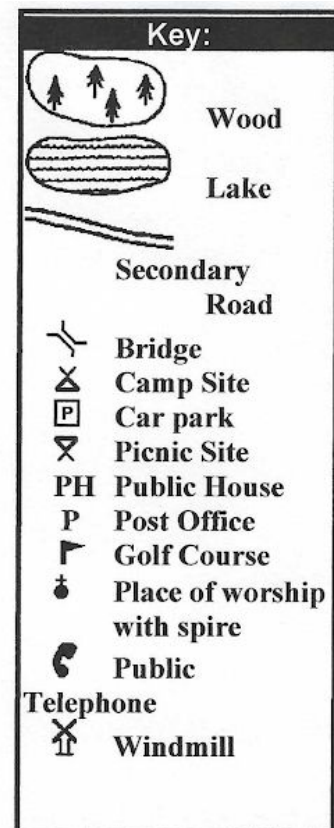
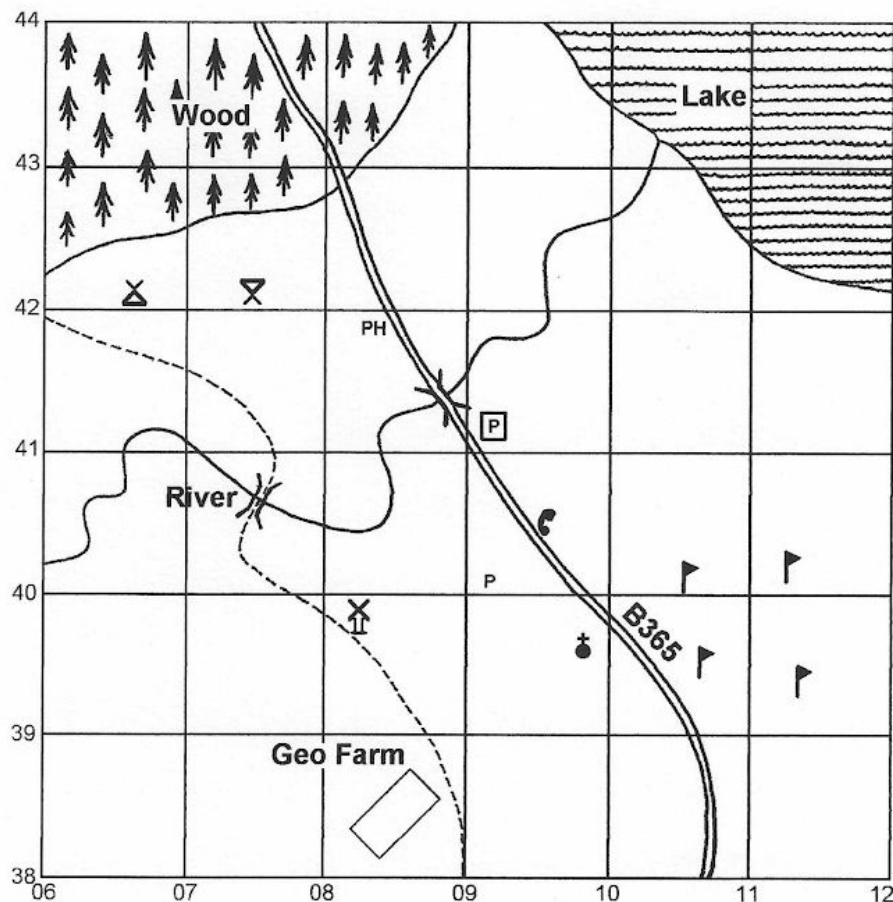
The subject comes before the verb in active sentences. The subject does the action.

The action is done to the subject in a passive sentence.

The words 'was', 'were' and 'by' are usually in a passive sentence.

Active sentences are usually shorter.

## Day 5 Geography



Complete the questions below. The first one has been done for you.

- 1) Give a 4-figure grid reference to locate the lake  
(any from 0943,1042,1043,1142,1143)
- 2) Give a 4-figure grid reference to locate part of the wood
- 3) Give a 4-figure grid reference for a bridge
- 4) Give a 4-figure grid reference containing part of the golf course
- 5) a) What is in square 0839?  
b) What is in square 0841?  
c) What is in square 0742?  
d) What is in square 0941?



## Day 6 Maths: Can I understand linear number sequences?

A linear number sequence is a sequence where each value increases or decreases by the same amount each time.

**1, 4, 7, 10...**

**$1 \rightarrow (+3) \rightarrow 4 \rightarrow (+3) \rightarrow 7 \rightarrow (+3) \rightarrow 10...$**

Each number in a linear number sequence is called a term.

The constant change between each number is called the term to term rule. To identify the term to term rule, find the difference between two adjacent terms.

1 is the first term and 4 is the second term.

$4 - 1 = 3$  so the term to term rule is +3. E.g.

**18, 16, 14, 12...**

18 is the first term and 16 is the second term.  $16 - 18 = -2$  so the term rule is -2.

**$18 \rightarrow (-2) \rightarrow 16 \rightarrow (-2) \rightarrow 14 \rightarrow (-2) \rightarrow 12...$**

When you know the term to term rule, you can use it to find the next number in the sequence.

E.g. 2, 4, 6, ? What is the next number in the sequence?

The term to term rule is the difference between the terms =  $4 - 2 = +2$

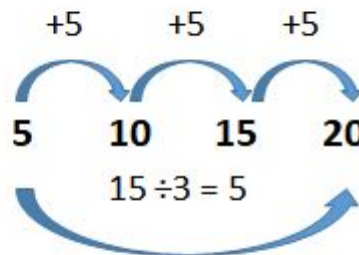
$6 + 2 = 8$  (2, 4, 6, 8)

It can also be used to find a missing number within a sequence.

E.g. 5, ?, ?, 20, What are the missing numbers?

The term to term rule is the difference between the terms. In this case, we only know the first and fourth terms.

$20 - 5 = +15$ . However, there are 3 intervals so +15 is divided by 3 to give +5.



**Questions** - find the missing values

1. 2, 4, 6, ?
2. 3, 6, 9, ?
3. 10, 8, 6, ?
4. 4, ?, 20, 28
5. ?, 12, 24, 36
6.  $\frac{1}{8}$ ,  $\frac{3}{8}$ , ?,  $\frac{7}{8}$
7. 35, 47, ?, ?
8. 28, ?, ?, 52
9. 39, ?, ?, 111

## Day 6 English: Can I use modal verbs?

**Modal verbs** are auxiliary verbs which cannot usually work alone. They are used with a main verb.

These are the modal verbs: Could, should, can, would, may, ought to, must, shall, will, might

They are used for a number of purposes:

### To ask a question

I **should** take it.

**Should** I take it?

### To indicate how likely something is to happen or how possible it is

He was running so late this morning he **could** miss registration.

It was hot in the shade so it **must** have been really hot in the sun.

If we're allowed, **shall** we play outside?

### Offering advice or obligation

Children **should** be seen and not heard.

You **must** do your homework.

### Permission

**Can** we go to the shops, please?

**May** I watch television, please?

## Questions

Identify the modal verbs in these sentences.

1. Pam should go home.
2. Bjorn ought to go to bed after brushing his teeth.
3. Jimmy won't be having chips tonight.
4. Can we go to the cinema later?
5. Monica will fetch the car.

Rewrite this sentence to make a question out of it underlining the modal verb.

6. After I've finished my work I will have a break.

Rewrite these sentences adding modal verbs that will make the sentence make sense (try to think of more than one for each sentence).

7. If she keeps trying hard, she \_\_\_\_\_ just have a chance.
8. The bitter cold makes it certain there \_\_\_\_\_ be icy roads tomorrow.

Make up 2 sentences of your own including modal verbs.

## Day 6 French: Can I say which foods I like and dislike in French?

### Food Vocabulary

|                           |                               |                                   |                           |
|---------------------------|-------------------------------|-----------------------------------|---------------------------|
| les tomates<br>- tomatoes | le chocolat - chocolate       | l'eau - water                     | les carottes<br>- carrots |
| les<br>pommes -<br>apples | les bonbons - sweets          | les chips - crisps                | les gateaux<br>- cakes    |
| le poisson -<br>fish      | les sandwichs -<br>sandwiches | les bananes -<br>bananas          | la salade -<br>salad      |
| le pain -<br>bread        | les pâtes - pasta             | les pommes de terre<br>- potatoes | les frites -<br>chips     |

I like - **J'aime...**

I like tomatoes - **J'aime les tomates.**

I don't like - **Je n'aime pas...**

I don't like chocolate - **Je n'aime pas le chocolat.**

I love - **J'adore...**

I love bread - **J'adore le pain.**

I hate - **Je déteste...**

I hate sweets - **Je déteste les bonbons.**

### Questions

Translate the following sentences into English:

1. J'aime les pommes.
2. Je n'aime pas les gateaux.
3. Je déteste les carottes.
4. J'adore les frites.

Translate these sentences into French

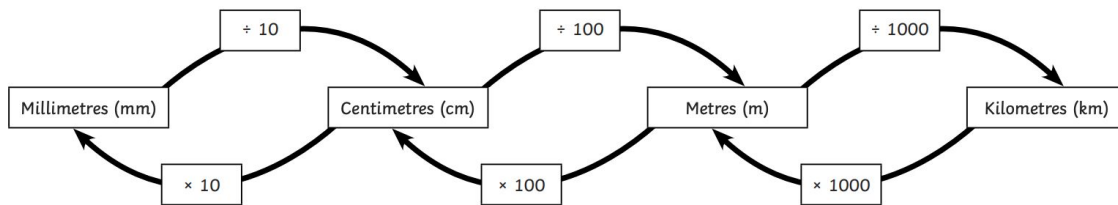
5. I like fish.
6. I don't like water.
7. I love crisps.
8. I hate pasta.

9. In French, write 4 sentences describing the foods you like, don't like, love and hate.

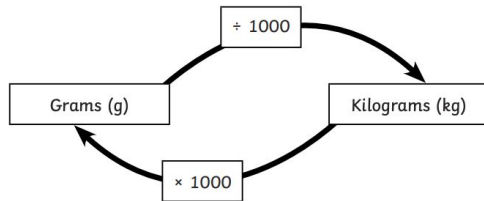
What foods do other people in your family like?

## Day 7 Maths: Can I convert measurements?

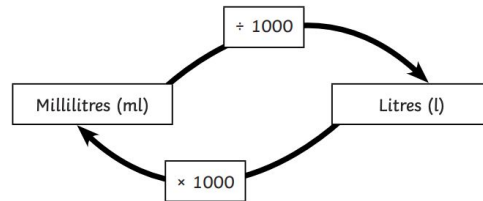
### Length



### Mass



### Capacity



### Convert these measurements:

1. 576g into kg
2. 9.7l into ml
3. 875m into cm
4. 5.54kg into g
5. 7646ml into l
6. 45.9cm into mm
7. At the fabric shop, I bought 125 metres of orange fabric, 650cm of blue fabric and 450mm of pink fabric. When I got home I used 2.5metres of the blue fabric. How many cm of fabric do I have left in total.
8. I was making a fruit punch at the weekend. The recipe told me I needed 2 litres of lemonade, 700ml of orange juice, 400ml of pineapple juice and 1litre of tropical juice. How many ml of liquid will I have in total?

### Day 7 English: Can I effectively describe a character?

When you are describing a character you need to ensure that you are not only describing their appearance, their actions and how you describe them can tell the reader a lot about the character.

Read this extract

*Descending the stairs one careful, agonising, creaking step at a time, a hunched silhouette shuffled out from the darkness. A small, extremely old man was moving slowly but purposefully towards Alice. His head was bowed, showing a white bald circle surrounded by wisps of light grey hair.*

*"Help!" Alice tried to scream again, but nothing but strangled silence could be heard. With no voice but the one inside of her own head, she begged the stranger to notice her and set her free.*

*A mottled, wrinkled hand reached forward, holding a key.*

| How is the scary character's appearance described? | What do the actions of the character tell you? |
|--|--|
|  |  |

Extension:

Can you carry on the story? Use these descriptions to help you

|                           |                            |                      |
|---------------------------|----------------------------|----------------------|
| a hunched figure hovering | narrow, unblinking eyes    | staring silently     |
| a stuffy, musty smell     | emerging from the darkness | stood motionless     |
| powerful, decaying stench | ghostly, sunken features   | a lurching hooded fi |
| deep, croaking voice      | crept menacingly           | pale, gnarled hands  |

**Day 7 French:** Can I use my knowledge of french months, foods and preferences?

|         |                  |               |               |           |             |
|---------|------------------|---------------|---------------|-----------|-------------|
| Janiver | Les<br>tomatoes  | Et            | Mai           | Aout      | Les bonbons |
| Avril   | Je n'aime<br>pas | Juin          | Mais          | L'eau     | Decembre    |
| J'adore | Mars             | Le<br>poisson | Les<br>pommes | Novembre  | Je deteste  |
| sont en | Le<br>printemps  | Le<br>automne | Octobre       | la salade | le chocolat |
| l'ete   | Juillet          | l'hiver       | Fevrier       | J'aime    | Les carrots |

Example

Septembre, octobre et novembre sont en automne

September, October and November are in autumn

Je déteste le chocolat.

I hate chocolate.

J'aime la salade

I love salad.

## Day 8 Maths

### Can I calculate the volume of a shape?

You calculate volume by multiplying the length, width, and height of a shape. The units used are  $\text{cm}^3$ .

1 Count the  $\text{cm}$  cubes to work out the volume of the cuboids.

A.



A =  $\text{cm}^3$

B.



B =  $\text{cm}^3$

VF

2 Meera is calculating the volume of the shapes she has made.



My shapes both have 4 cubes on top and 4 cubes on the bottom so they must both have the same volume.



Is Meera correct? Explain your answer.

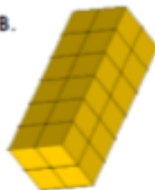
3 Count the  $\text{cm}$  cubes to work out the volume of the cuboids

A.



A =  $\text{cm}^3$

B.



B =  $\text{cm}^3$

4 5a. Find the odd one out by matching the shape to the correct volume.

18 $\text{cm}^3$

16 $\text{cm}^3$

12 $\text{cm}^3$

8 $\text{cm}^3$

A.



B.

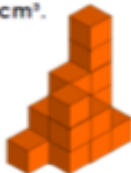


C.



Explain your reasoning.

5 True or false? The volume of this cuboid is 13 $\text{cm}^3$ .



6 Patrick is calculating the volume of the shapes he has made.



To make my shape in to a cuboid I need to add 4 more cubes.



Is Patrick correct? Explain your answer.



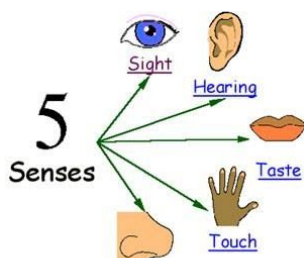
## Day 8 English Can I describe a setting?

Here are some tools to help you with descriptive writing.

**Metaphor** - A metaphor is a word or a phrase used to describe something as if it were something else: For example, "A wave of terror washed over him." The terror isn't actually a wave, but a wave is a good way of describing the feeling.

**Simile** - A simile is a figure of speech that directly compares two different things. The simile is usually in a phrase that begins with the words "as" or "like." As quick as lightning, would be an example.

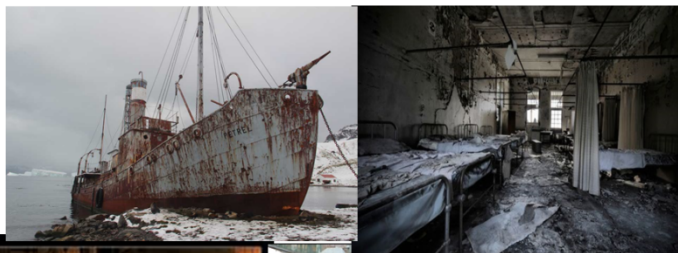
**Personification** - Personification is when you give an animal or object qualities or abilities that only a human can have. Examples are "the leaves waved in the wind", "the ocean heaved a sigh" or "the Sun smiled at us".



- ▶ When you write about a setting, you need to make sure you use lots of description so a reader can picture themselves there.
- ▶ Effective descriptions appeal to the senses.

**TASK:** Pick a setting to describe. You can use the images to help you.

Remember to show NOT tell.



## **Day 8 Science: Can I identify how exercise affects my body?**

Try these out to remind yourself about what exercise does for your body.

### **Heart beaters**

Take your pulse rate at rest (counting how many pulses you have in 15 seconds and multiplying by four may be easier than taking your pulse for 60 seconds). Do star jumps for one minute and take your pulse rate afterwards. What has happened? Take your pulse rate every minute for five minutes after the star jumps – is it back to your resting rate yet?

Did you know? When we exercise, our hearts need to pump more blood to our cells to provide enough oxygen for respiration and to remove waste products. Sportspeople try to improve their heart muscles through exercise to gain a low resting heart rate and a quick recovery rate.

### **On your marks...get set...breathe**

How many breaths do you think you take in a minute? Counting a breath as one inhalation and one exhalation, count how many breaths you take in 30 seconds and multiply by two to calculate your resting breathing rate. Then carry out one minute of exercise such as jogging and repeat to find out how your breathing rate changes with exercise. How long does it take to return to resting rate?

Did you know? The breath-holding world record is held by a Swiss free-diver who held his breath underwater for 19 minutes and 21 seconds! (DON'T TRY THIS AT HOME!)

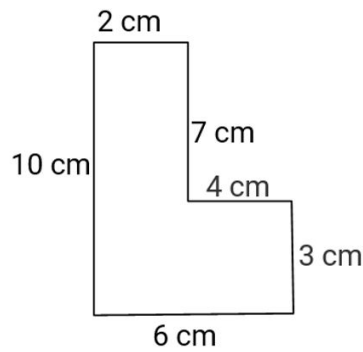
### **Mighty muscles**

Hold your arms out to the sides, parallel to the ground, while holding weights (bottles filled with sand work well but you can use cans of beans or whatever you have handy). How long can you hold your arms in this position? Can you manage longer if your family is cheering you on? How do you compare to your friends?

Did you know? The largest muscle in your body is the gluteus maximus, one of three muscles that form your buttocks. It's used in lots of activities including climbing stairs, running and cycling.

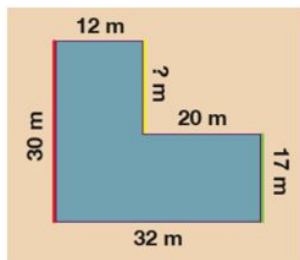
## Day 9 Maths: Measuring perimeter of compound shapes.

To measure the perimeter of a shape we to look at the lengths of all the sides and those lengths together. When working a compound shape it is important to include all edges.



|   |   |   |    |
|---|---|---|----|
|   |   | 2 |    |
|   |   | 7 |    |
|   |   | 4 |    |
|   |   | 3 |    |
|   |   | 6 |    |
| + | 1 | 0 |    |
|   | 3 | 2 | cm |
|   | 2 |   |    |

need  
add  
with



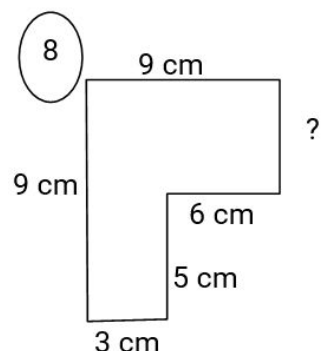
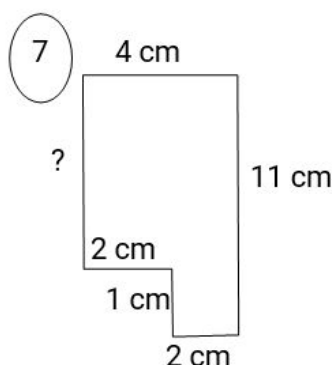
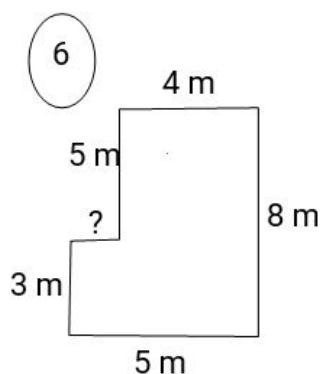
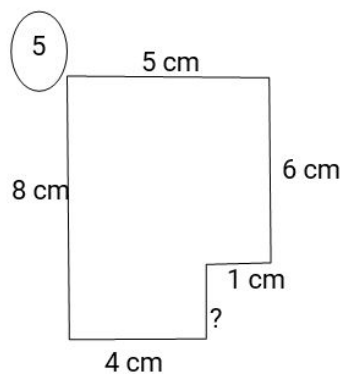
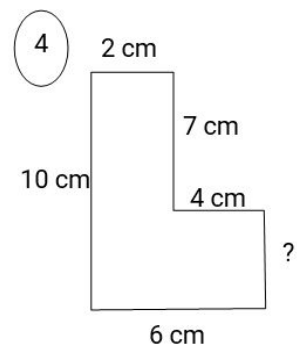
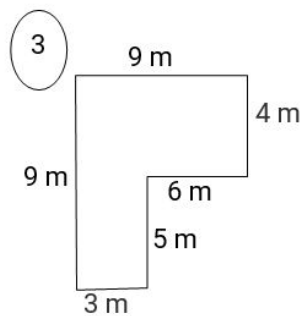
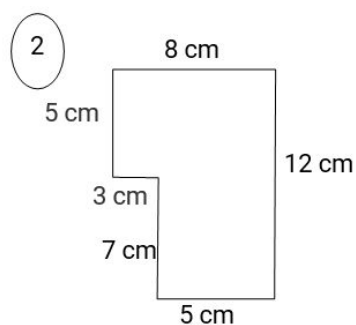
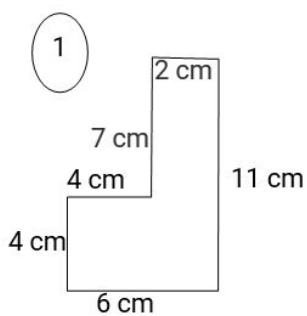
Look at the shape to the left. One of the lengths is missing. How do you find the perimeter when you don't have all the measurements? You cannot just assume that missing length (yellow) is half of the red length. You'll need to use the information that is given in the rest of the shape.

If you look at all the vertical lengths (red, yellow and green) you can see that we know the length of two of the three. You can also see that green + yellow = red, since the two shorter lengths put together would equal the same as the longest.

If  $17 + ? = 30$ , to find the missing length you must do  $30 - 17 = 13$ .

The missing length is 13 m. Now that you know this, you can work out the perimeter of the shape in the normal way.

**Now it is your turn to try. Calculate the perimeters of the compound shapes below.**



**Day 9 English: Planning a narrative.**

When writing a narrative it is important to think about how the story begins, what is the opening setting to hook the reader. Descriptive language of the characters and setting help the reader picture what is happening. The plan format below has boxes for you to make notes about the outline of your story and some key features from the year six success criteria. Remember that writing sentences in the plan boxes helps include the criteria in your writing. The more detailed your plan the easier it will be to write.

|  |  |
|--|--|
| <b><u>Beginning</u></b><br><br><br><br><br><br><br><br><br><br><b><u>Middle</u></b><br><br><br><br><br><br><br><br><br><br><b><u>End</u></b> | <b><u>Expanded noun phrases, adverbs, adverbials of time</u></b> |
| <b><u>Conjunctions, semi colons, colons</u></b>  | <b><u>Relative clauses</u></b> (who/which/that)                  |
| <b><u>Passive voice</u></b>  | <b><u>Spellings</u></b>  |







## Day 9 PSHE: Road Safety

We all know to stop and wait at zebra crossings and to press the button and wait for the green man when using pelican crossings, but what about when these road crossing supports aren't there?



It is possible to cross the road when these safety features are missing. We just have to be more careful and use the Stop, Look, Listen, Think motto. This will allow us to cross the road safely every time.

|   |  |
|---|--|
| <p><u>Stop</u></p> <p>Come to a stop one step back from the kerb, keeping a safe distance from the road.</p>    | <p><u>Look</u></p>  <p>Look right for traffic and oncoming cars, look left for traffic and oncoming cars and then look right again! Cars move quickly and the road can change in an instant.</p>                         |
| <p><u>Listen</u></p> <p>Listen for the sound of oncoming cars. With bends and dips in the road a fast car may be coming that you can't see. Use all your senses to help you safely across the road.</p>  | <p><u>Think</u></p>  <p>After stopping, looking and listening it is important to think. Is it definitely safe to cross the road? Can everyone see me? Taking a moment to really think can stop accidents happening.</p> |

**Your turn. Using the Stop, Look, Listen, Think motto create an eye catching poster that could be put up to help people safely cross the road.**

There are some examples below.



## **Day 10 Maths: Solving 2 step word problems**

Today we are going to look at solving 2 step word problems. All of these problems require you to complete multiple steps to reach the answer. Some will require you to convert between units of measure, others will require 2 steps of different mathematical operations. You need to work out what the question is asking you to do, and choose the appropriate mathematical operation

- 1) A joiner needs 12 lengths of wood measuring 245mm and 6 pieces measuring 582mm. The wood is sold in lengths of 3m.  
Calculate how many lengths of wood are needed, and how best to cut the lengths so the longest piece is left over.
- 2) A long distance runner usually runs 30km in 5 hours. If he runs at an even pace throughout, how many metres should he have run after 75 minutes?
- 3) On Sunday I spent 98 minutes on my art project, and 35 minutes on my maths homework. On Thursday evening I spent a total of 100 minutes on my homework. What is the difference between the amount of homework I did on Sunday and Thursday evening?
- 4) One watch costs £1.30 and I bought two. If I paid with a £5 note, how much change did I receive?
- 5) I need to buy enough whiteboards for 95 students and there are 10 in a pack. When the packs arrive 4 whiteboards are damaged. How many whiteboards are undamaged?
- 6) Mum arrived at Grandma's house at 7:10am. My brother had set off at 7:00am and arrived at Grandma's house 10 minutes after Mum. How long did it take him to get there?

### **Day 10 English: Write a narrative**

This week you have been recapping your creative writing skills. You have reminded yourself of how to incorporate the passive and active voice in your writing and developed character and setting descriptions. Following the plan you created yesterday, your task today is to write your narrative.

Remember to use your plan to remind yourself of what you want to include in your narrative! See how many of the Year 6 writing skills you can use in your writing.

| <b><u>Year 6 Working At the Expected Standard Statements</u></b> | <b><u>Me</u></b> | <b><u>CT</u></b> |
|--|------------------|------------------|
| *I have used paragraphs //                                       |                  |                  |
| I have used verb tenses consistently                             |                  |                  |
| I have described the setting                                     |                  |                  |
| I have described the characters                                  |                  |                  |
| I have created an effective atmosphere                           |                  |                  |
| I have matched the tone/language to my audience                  |                  |                  |
| I have used bullet points consistently                           |                  |                  |
| I have used subheadings  |                  |                  |
| I have used the passive voice                                    |                  |                  |
| I have used conjunctions and adverbials of time for cohesion     |                  |                  |
| *I have used commas for clarity                                  |                  |                  |
| I have use modal verbs   |                  |                  |
| I have used inverted commas                                      |                  |                  |
| I have used dialogue to convey character                         |                  |                  |
| I have used dialogue to advance the action                       |                  |                  |
| I have used apostrophes for contraction in informal texts        |                  |                  |
| I have used brackets   |                  |                  |
| I have used a dash/dashes  |                  |                  |
| I have used a semi colon   |                  |                  |
| I have used colons   |                  |                  |
| I have used hyphens  |                  |                  |
| I spell most words correctly (Year 5 and 6 list)                 |                  |                  |
| My handwriting is legible and joined                             |                  |                  |



## **Day 10 Geography**

In geography, we are interested in how areas change and develop over time. Today we are going to look at how our town, Colchester, has changed and think of potential reasons as to why these changes might have occurred.



Colchester, 1891.



Colchester, 2020

**Your task:** Create a list of similarities and differences between the images of Colchester high street.

- What can you see that is the same? Can you think of any reasons why this might be?
- What can you see that is different? Can you think of any reasons why this might be?