



# Year 9 Knowledge Organiser

You will receive a Knowledge Organiser booklet on a termly basis, which includes revision for: English, Maths, Science, MFL, History and Geography

## **Knowledge Organiser instructions:**

You will be set three pieces of homework per week and you should use the information from each topic to make a poster or a mind map. You will need to bring your work in to school and will be quizzed on each topic in class.

At the back of the knowledge organiser there are some suggested extra tasks that could be completed on top of the homework you will be set.

### **Email address for any queries:**

**For further support, scan the QR Code and it will take you to the school website:**

English: Miss Pett	pettr035@sflt.org.uk
Maths: Mr Huston	hustj008@sflt.org.uk
Science: Mrs Gilbey	gilbl117@sflt.org.uk
History: Miss Gurung	gurua221@sflt.org.uk
Geography: Mr Butters	buttf095@sflt.org.uk
MFL: Miss Lara	larae006@sflt.org.uk



**Preparing you for the Future**

## Homework schedule for the term:

Week	Subject and section	Revision technique
1 (B)	English, MFL and Maths Topic 1	Create a mind map for the information in Topic 1
2 (A)	Science, History and Geography Topic 1	Create a mind map for the information in Topic 1
3 (B)	English, MFL Maths Topic 2	Create a poster using the information in Topic 2
4 (A)	Science, History and Geography Topic 2	Create a poster using the information in Topic 2
5 (B)	English, MFL Maths Topic 3	Create a mind map for the information in Topic 3
6 (A)	Science, History and Geography	Create a mind map for Topic 3

## Optional Extra Tasks

If you would like to spend more time working independently to develop excellence in your subjects. Here is a suggested timetable for you to follow. If you have forgotten your usernames and passwords for these apps, speak to your form tutor and they will be able to support you.

<b>Monday</b>	Spend 30 minutes on Spell Zone	<b>Thursday</b>	Complete 30 minutes DEAR Time using your library book
<b>Tuesday</b>	Complete 30 minutes on Sparx	<b>Friday</b>	Spend 30 minutes learning the key words from your subjects this week.
<b>Wednesday</b>	Spend 30 minutes completing revision using BBC Bitesize		



**Your teacher will tell you which topic you should revise. Read and learn all the information in the topic, ready for a Quiz in lesson.**

**Topic 1:**

The Woman in Black is a **ghost** story by Susan Hill, in which Arthur Kipps relates his **haunting** experiences at Eel Marsh House. The tale begins on Christmas Eve, when Arthur's step-children invite him to tell a ghost story. Arthur is too disturbed by his **memories** to share his story aloud, so he writes it down.

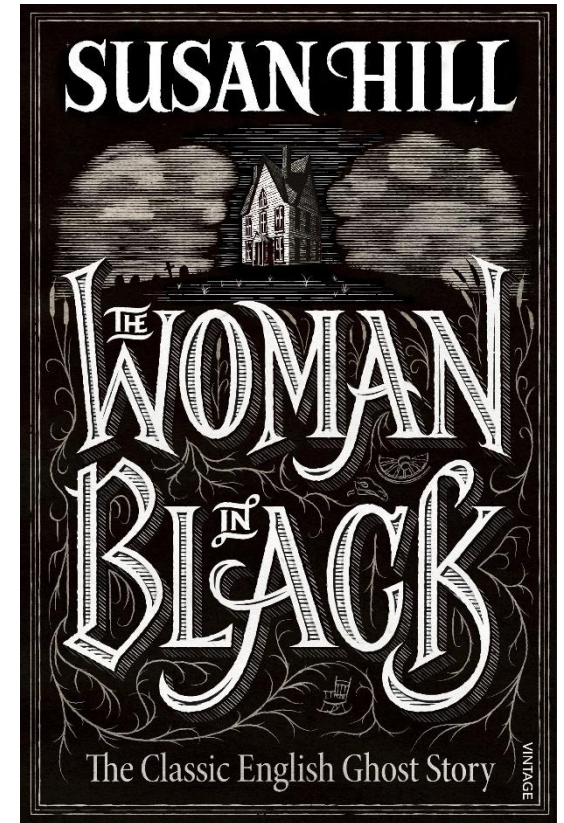
**Susan Hill**

- The Woman in Black is a '**pastiche**' (an imitation) of Victorian **gothic**
- Novelist, children's writer and playwright Susan Hill was born in Scarborough, England, on 5 February 1942.
- Her first novel, The Enclosure, was published in 1961 when she was still a student.
- The Woman in Black (1983), a Victorian ghost story, was successfully adapted for stage and television and is one of Susan Hill's most commercial successes.

**Victorian Gothic** - tropes included **psychological** and physical **terror**; mystery and the supernatural; madness, doubling, and heredity curses.

The Victorian Gothic moves away from the familiar themes of Gothic fiction - ruined castles, helpless heroines, and evil villains - to situate the tropes of the **supernatural** and the uncanny within a recognisable environment.

**Motherhood** – Many women in the Victorian era who had babies out of wedlock were deemed to be 'fallen women'. A 'fallen woman' was a woman who was no longer considered to be worthy of polite society. Unmarried women who became pregnant had extremely limited choices and, for many, the only possible route was to give up their child.





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**Topic 2: Opinion paragraphs and themes**

**Themes:**

1. **Isolation:** The setting contributes to this and the characters are often very lonely
2. **Revenge and justice:** Many of the events centre around seeking revenge and justice for a loved one
3. **Fear:** An individual's fear of the unknown and a collective fear of what is known
4. **Nature:** Arthur tries to rationalise a lot of what is happening with the concept of nature
5. **Supernatural:** many of the curious incidents occur around an element of the supernatural
6. **Family:** This is a reoccurring concept throughout the characters
7. **Memory and the Past:** The Woman in Black is one long trip down memory lane
8. **Madness:** The coincides with the supernatural and how it affects the human characters



**Year 9: Opinion paragraph writing**

**Skill 1** – Understanding the question (what)



**Skill 2** – Textual reference, or quotation (how)



**Skill 3** – Explain & give an opinion (why)



**Skill 4** – Close word analysis

**Skill 5** – Alternative interpretations

**Skill 6** – Author's intentions and influences  
(social/political/religious)

**Skill 7** – Criticism/bias\*



- **For summary and sequencing:** first(ly), next, meanwhile, subsequently
- **For results/consequences:** because, as a result of, therefore, consequently
- **For contrast:** whereas, alternatively, however, unlike
- **For adding:** furthermore, moreover, in addition, another
- **For comparing:** likewise, similarly, equally, in the same way



Your teacher will tell you which topic you should revise. Read and learn all the information in the topic, ready for a Quiz in lesson.

Topic 3: Arthur Kipps

The novel follows a literary tradition of **Gothic** stories that typically include **isolated** houses or castles, hauntings and induce **fear** in the reader. Susan Hill explains that she set out to write a ghost story, inspired by her love for Henry James' novel, *The Turn of the Screw*. She read a range of ghost stories to inspire her and made a list of elements that a ghost story should contain. One of the key features of these stories, as well as the ghost itself, is a 'most **unimaginative** and straightforward' person who 'most certainly did not believe in such things as ghosts'. We see this character clearly in the rational Arthur Kipps.

Arthur narrates his own ghostly tale and we are first presented with a rational, keen and positive young man. He is determined to complete his work at Eel Marsh House, no matter how strange or scary the place is. He maintains his **optimistic** streak even after being **haunted** to a state of **fevered** terror.

Arthur:

- The novel opens on Christmas Eve and the family tell ghost stories. Edmund and Esmé urge Arthur to take part in the game, but Arthur refuses.
- Arthur realizes that he must tell his tale after all—not around the fireside, as a “diversion for idle listeners,” but written down on paper in great detail.
- Just as in the start of the **frame** story, the story of Arthur’s youth begins with a thick blanket of fog.
- He is so excited to take a train trip that he ignores the poor weather and the danger the fog presents, and presses on happily
- Arthur is amused by the idea of a “**reclusive** old woman having hidden a lot of **ancient** documents” in her old, creaky house; he thinks the assignment sounds like something out of a Victorian novel.





Vocabulary	Wider Research	Apply
<ol style="list-style-type: none"><li>1. Ominous</li><li>2. Macabre</li><li>3. Grotesque</li><li>4. Virulent</li><li>5. Morose</li><li>6. Gothic</li><li>7. Context</li><li>8. Motherhood</li><li>9. Authorship</li><li>10. Writer</li><li>11. Bleak</li><li>12. Protagonist</li><li>13. Perspective</li><li>14. Setting</li><li>15. Foreboding</li><li>16. Criticise</li><li>17. Embedding</li><li>18. Journey</li><li>19. Narrative</li><li>20. Poetic license</li><li>21. Impression</li><li>22. Evidence</li><li>23. Portrayal</li><li>24. Sinister</li><li>25. Morbid</li></ol>	<ul style="list-style-type: none"><li>• Original production: <a href="https://www.youtube.com/watch?v=bQWwdfKnrOo">https://www.youtube.com/watch?v=bQWwdfKnrOo</a></li><li>• Plot summary: <a href="https://www.shmoop.com/study-guides/literature/woman-in-black/summary/chapter-1">https://www.shmoop.com/study-guides/literature/woman-in-black/summary/chapter-1</a></li><li>• Further reading: Carnegie winner Patrick Ness' A Monster Calls - about a young boy who struggles to cope with the consequences of his mother's illness.</li><li>• Further reading: The Graveyard Book - Neil Gaiman about a boy who is adopted by supernatural occupants of a graveyard.</li><li>• Chapter analysis: <a href="https://www.litcharts.com/lit/the-woman-in-black/chapter-1-christmas-eve">https://www.litcharts.com/lit/the-woman-in-black/chapter-1-christmas-eve</a></li></ul>	<ol style="list-style-type: none"><li>1. Practice using some of the key techniques (look at the key terminology list to the left).</li><li>2. Write a letter to Susan Hill explaining how you feel about her use of pastiche</li><li>3. The vocabulary in this novel is quite challenging - write down some of the words you do not know and look them up.</li><li>4. You could watch the film version or the play version and summarise the differences</li><li>5. Create a mind-map of words and phrases to describe Arthur Kipps. Use a thesaurus to help you.</li><li>6. Create a series of flash-cards that summarise the plot of 'The Woman in Black.</li><li>7. Create a storyboard of the novel, plotting the key events.</li></ol>





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Topic 1: Graphs

Using  $y = mx + c$

The equation of a straight line is  $y = mx + c$ . The letter 'm' represents the gradient and the 'c' represents the y-intercept. This is a linear equation and the variables x and y relate to coordinates on the line. When we input a value for x into the equation, we get a result for y. This means that x is an independent variable and y is a dependent variable as it is determined by the value of x. An example of this is located on the right for the equation  $y = 2x - 2$ .

Linear Equation Table of Solutions

change in x	Input Values x	Linear Equation $y = 2x - 2$	Output Values y	change in y
	0	$y = 2(0) - 2$	-2	
1	1	$y = 2(1) - 2$	0	2
1	2	$y = 2(2) - 2$	2	2
1	3	$y = 2(3) - 2$	4	2
1	4	$y = 2(4) - 2$	6	2

The ratio change in y : change in x is the same.

Using elimination, solve the simultaneous equations

Using elimination, solve the simultaneous equations

$$\begin{aligned} \textcircled{1} \quad & -5x + 6y = 13, \checkmark \\ \textcircled{2} \quad & 5x + 2y = 11. \end{aligned}$$

ADD:  $\textcircled{1} + \textcircled{2}$ :

$$\begin{array}{r} -5x + 6y = 13 \\ + 5x + 2y = 11 \\ \hline 8y = 24 \\ \div 8 \quad y = 3 \end{array}$$

Sub  $y = 3$  into  $\textcircled{2}$ :

$$\begin{array}{r} 5x + 2(3) = 11 \\ -6 \quad 5x + 6 = 11 \\ \div 5 \quad 5x = 5 \\ \quad x = 1 \end{array}$$

check:  $x = 1, y = 3$

$$-5(1) + 6(3) = -5 + 18 = 13$$

$x = 1, y = 3$

Straight Line Graphs

A straight line graph is a visual representation of a linear function.

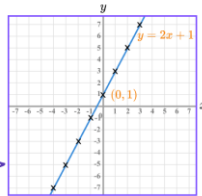
A straight line has a general equation of

$y = mx + c$

gradient y-intercept

Example  $y = 2x + 1$   
 $m = 2$ , and  $c = 1$

The graph of this equation looks like this:



Straight line graphs

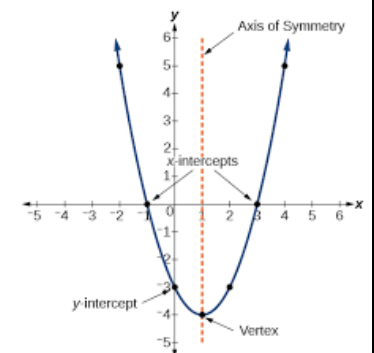
In straight line graphs, there is a linear relationship between x and y values. The line must be drawn with a ruler and pass through all of the coordinates. To find the coordinates you may need to use the equation of a line to find the y values. The gradient tells us how steep the line is and the y-intercept tells us where the line passes through the y-axis.

Simultaneous equations

A Simultaneous equation are two or more algebraic equations that share the same variables and are solved together. The number of variables must match the number of equations in simultaneous equations. One equation depends on the other equation for an answer.

Graphs and quadratic functions

A quadratic graph is always either u-shaped or n-shaped. A u-shaped graph represents a positive coefficient and an n-shaped graph represents a negative coefficient. The shape made by the graph of a quadratic function is called a parabola.





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## Topic 2: Probability of Events

### Mutually Exclusive events

A mutually exclusive event is two events that are unable to happen at the same time. For example turning left and turning right are mutually exclusive. These events can also be called disjoint events as they do not happen simultaneously.

### Experimental and theoretical probability

Experimental probability is based on actual experiments and adequate recordings of the happening of events. To determine the occurrence of any event, a series of experiments are conducted. Experiments which do not have a fixed result are known as random experiments. Theoretical probability describes how likely an event is to occur. A coin is equally likely to land on heads or tails, so the theoretical probability is  $\frac{1}{2}$ . Experimental probability will describe how frequently an event actually occurred in an experiment.

### Sample space diagrams

A sample space diagram is used to display all possible outcomes, this could be as a list or table of values. To create a sample space diagram, we need to think about the possible outcomes of a situation. If we flip a coin and roll a dice our sample space will look like the example on the right.

### Two-way tables

Two way tables are a type of frequency table used for organising data. They are also known as contingency tables. They are mostly used for categorical data, which is where the items are words rather than numbers. To construct a two way table, we need two categorical variables. One variable is featured as the top row and the other variable features on the first column of the table.

	Brown Hair	Black Hair	Blonde Hair	Total
Boys	6	6	5	17
Girls	1	9	3	13
Total	7	15	8	30

		Dice					
		1	2	3	4	5	6
Coin	H	H1	H2	H3	H4	H5	H6
	T	T1	T2	T3	T4	T5	T6



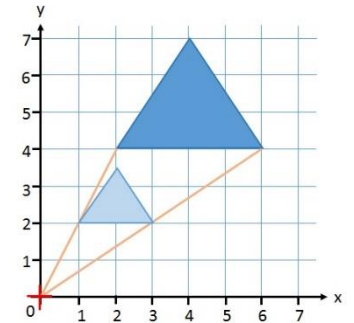


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### Topic 3: Multiplicative Reasoning

#### Enlargement

Enlargement is an example of a transformation. A transformation is a way of changing the size or position of a shape. To enlarge a shape, a **centre of enlargement** is required. When a shape is enlarged from a centre of enlargement, the distances from the centre to each point are multiplied by the scale factor.



#### Percentage change

To work out the percentage change we need to first find the difference between the original and new amount. We need to divide the change by the original amount and then multiply by 100.

To do this we use the percentage change formula:

$$\text{Percentage change} = \frac{\text{Change}}{\text{Original}} \times 100$$

#### Compound measures

A compound measure is a measure that involves two or more different units. Speed, density and pressure are examples of compound measures which means they are made up of two or more other measures. For example, speed is made up of distance and time.

#### Direct and Inverse proportion

A direct proportion shows the direct relation between two quantities. An inverse proportion shows the inverse or indirect relation between two quantities. An example of direct proportion would be the sales of ice cream increasing when the outside temperature increases. An example of inverse proportion would be as the mileage of a car increases, the price of the car decreases.

### Compound Measures

Compound measures are measures which are found from two other measures.

Compound Measure	Formula	Formula Triangle
Speed	$\text{Speed} = \frac{\text{Distance}}{\text{Time}}$	
Density	$\text{Density} = \frac{\text{Mass}}{\text{Volume}}$	
Pressure	$\text{Pressure} = \frac{\text{Force}}{\text{Area}}$	



Vocabulary	Wider Research	Apply
Equation Y-intercept Gradient Dependent variable Independent variable Coordinate Linear equation Mutually exclusive Sample space Experimental Theoretical Simultaneous Proportion Enlargement Compound measure Scale factor	<p><u>Topic 1</u></p> <ul style="list-style-type: none"><li>• <a href="https://corbettmaths.com/wp-content/uploads/2019/01/Drawing-Linear-Graphs.pdf">https://corbettmaths.com/wp-content/uploads/2019/01/Drawing-Linear-Graphs.pdf</a></li><li>• <a href="https://corbettmaths.com/wp-content/uploads/2019/04/Simultaneous-Equations.pdf">https://corbettmaths.com/wp-content/uploads/2019/04/Simultaneous-Equations.pdf</a></li></ul> <p><u>Topic 2</u></p> <ul style="list-style-type: none"><li>• <a href="https://corbettmaths.com/wp-content/uploads/2020/04/Independent-Events.pdf">https://corbettmaths.com/wp-content/uploads/2020/04/Independent-Events.pdf</a></li><li>• <a href="https://corbettmaths.com/wp-content/uploads/2022/11/Two-way-tables.pdf">https://corbettmaths.com/wp-content/uploads/2022/11/Two-way-tables.pdf</a></li></ul> <p><u>Topic 3</u></p> <ul style="list-style-type: none"><li>• <a href="https://corbettmaths.com/2012/08/19/enlargements/">https://corbettmaths.com/2012/08/19/enlargements/</a></li><li>• <a href="https://corbettmaths.com/2013/03/31/percentage-change/">https://corbettmaths.com/2013/03/31/percentage-change/</a></li></ul>	<p><u>Topic 1</u></p> <ul style="list-style-type: none"><li>• <a href="https://corbettmaths.com/wp-content/uploads/2013/02/drawing-linear-graphs-pdf.pdf">https://corbettmaths.com/wp-content/uploads/2013/02/drawing-linear-graphs-pdf.pdf</a></li><li>• <a href="https://corbettmaths.com/wp-content/uploads/2022/10/Simultaneous-Equations.pdf">https://corbettmaths.com/wp-content/uploads/2022/10/Simultaneous-Equations.pdf</a></li></ul> <p><u>Topic 2</u></p> <ul style="list-style-type: none"><li>• <a href="https://corbettmaths.com/wp-content/uploads/2013/02/independent-events-pdf.pdf">https://corbettmaths.com/wp-content/uploads/2013/02/independent-events-pdf.pdf</a></li><li>• <a href="https://corbettmaths.com/wp-content/uploads/2023/10/two-way-tables.pdf">https://corbettmaths.com/wp-content/uploads/2023/10/two-way-tables.pdf</a></li></ul> <p><u>Topic 3</u></p> <ul style="list-style-type: none"><li>• <a href="https://corbettmaths.com/wp-content/uploads/2019/03/Enlargements-with-Centre-of-Enlargement-pdf.pdf">https://corbettmaths.com/wp-content/uploads/2019/03/Enlargements-with-Centre-of-Enlargement-pdf.pdf</a></li><li>• <a href="https://corbettmaths.com/wp-content/uploads/2020/03/Percentage-Change-Text.pdf">https://corbettmaths.com/wp-content/uploads/2020/03/Percentage-Change-Text.pdf</a></li></ul>





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### Topic 1: Inheritance, Variation and Evolution

#### DNA and the Genome

- DNA is a polymer of nucleotides (made up of a phosphate, deoxyribose sugar and a base).
- A small section of DNA that codes for a protein is known as a gene. The entire length of DNA that exists in an organism is known as the genome.
- Large pieces of DNA condensed together are known as chromosomes. These contain many different genes for different traits of the body.

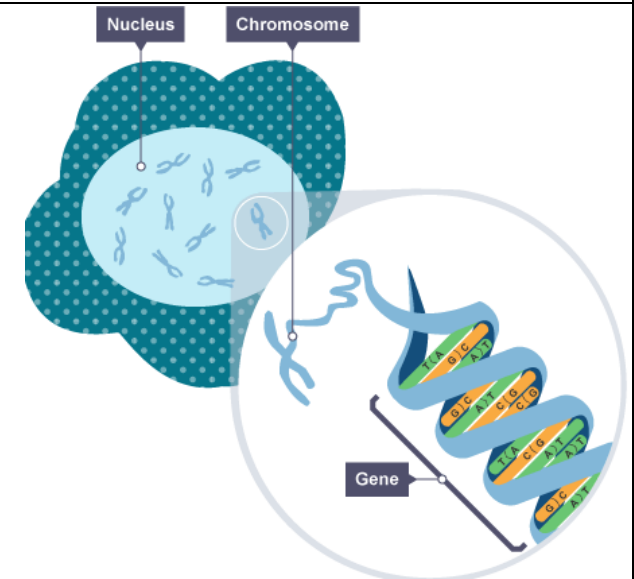
		Father's Genes	
		B	b
Mother's Genes	B	BB	Bb
	b	Bb	bb

#### Inheritance

- DNA is passed on from parents to their offspring.
- Genes can be in different forms and these are known as alleles. For example – hair colour is coded for by genes but the DNA sequence is different for Brown hair, Blonde Hair, Black Hair etc.
- Alleles inherited from parents can be dominant (if inherited they will be expressed) or recessive (will only be expressed if inherited from both parents).
- Organisms can be heterozygous or homozygous.

Heterozygous organisms will have two different alleles inherited from their parents, e.g. Bb. Homozygous organisms will have inherited the same allele from each of their parents e.g. BB or bb.

- The allele combination is known as the genotype while the physical expression of the gene is known as the phenotype.
- We use Punnett squares to represent the inheritance of alleles from parents. One box on the Punnett square represents a 25% chance of getting that genotype.



#### Evolution

- Within a population there is variation in the physiological characteristics of organisms. Those organisms better suited to their environment, are more likely to survive, reproduce and have offspring with similar characteristics, this is known as Natural Selection. These natural variations are caused by mutations in the DNA sequence.
- We can use fossils to see the changes in a population over time. For example, the evolution of humans can be seen through fossils collected that show the progression of humans from hominids.

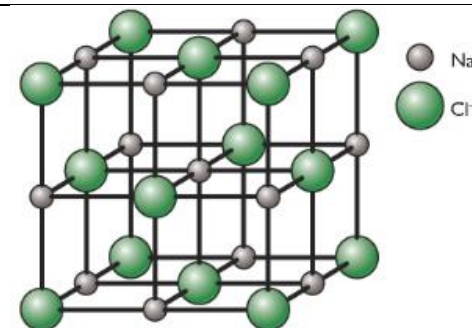


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**Topic 2: Structure and Bonding**

**Ionic Bonding and Ionic Lattices**

Ionic bonding is the electrostatic attraction between a positively charged ion (cation) and a negatively charged ion (anion). These ions are formed through the transfer of electrons in order to obtain a full outer shell. Elements in group 1 of the periodic table have one electron in their outer shell, in order for these elements to have a full outer shell, they need to lose the one electron. Losing this electron will mean the group 1 elements have one more positively charged proton than they do negatively charged electrons which results in an overall +1 positive charge. The electron lost by the group 1 elements can be transferred to elements in group 7. Group 7 elements have seven electrons in their outer shell and require eight electrons to have a full outer shell. The electron lost by the group 1 element can be gained by the group 7, giving one more negatively charged electron than positively charged protons, resulting in an overall -1 charge. The strong electrostatic interaction between the charged ions requires a lot of energy to break, causing ionic compounds to have high melting and boiling points. Ionic compounds are usually arranged in ionic lattices, large repeating structures of cations and anions as seen to the right. The positively charged cation, in the lattice shown  $\text{Na}^+$ , is surrounded by four negatively charged ions ( $\text{Cl}^-$ ). Each of those anions is surrounded by four cations and so on. This results in an ionic compound that is overall electrostatically neutral.

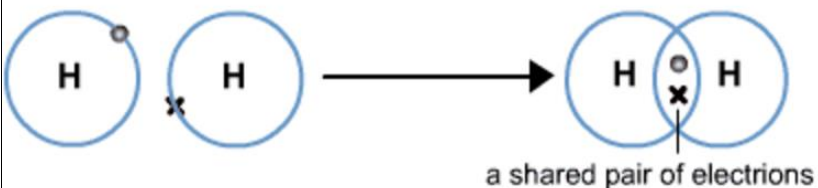


**Covalent Bonding and Giant Covalent Compounds**

Covalent bonding is the sharing of electrons between two atoms. For example, in a hydrogen gas molecule, each hydrogen atom shares one electron with the other atom. This results in both atoms having a full outer shell of electrons. A single covalent bond is made up of two electrons or one pair. A double covalent bond is made up of four shared electrons or two pairs. These covalent bonds can be drawn using a dot and cross diagram as represented by the diagram to the left. Electrons are drawn as either dots or crosses to differentiate which atom is sharing which electrons. Covalent bonds can be found in giant covalent compounds such as diamond, graphite, graphene and Buckminster fullerenes.

Two hydrogen atoms

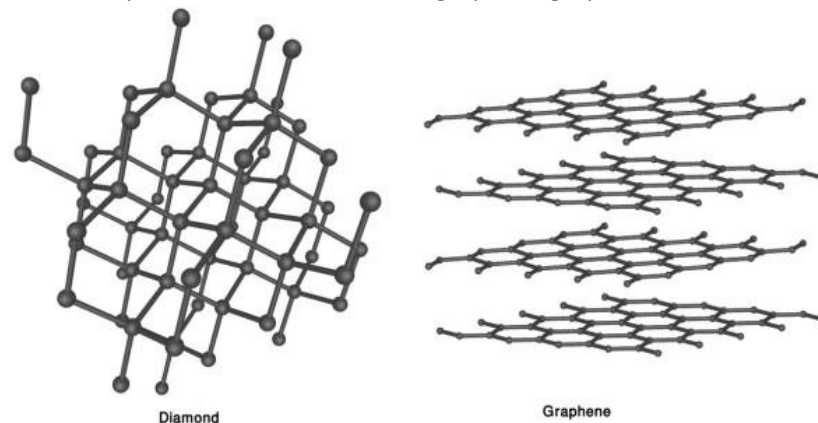
a hydrogen molecule,  $\text{H}_2$



Diamond is a giant covalent compound consisting of carbon atoms arranged in a tetrahedral structure (a triangular pyramid with four faces). Each carbon atom is covalently bonded to four other carbon atoms. This leaves no free electrons to conduct electrical current making diamond an electrical insulator. Graphene is a single layer of hexagonally arranged carbon atoms, where each atom is covalently bonded to three other carbon atoms. This leaves free electrons that are able to conduct electrical current, making graphene a good electrical conductor.

**Metallic Bonding**

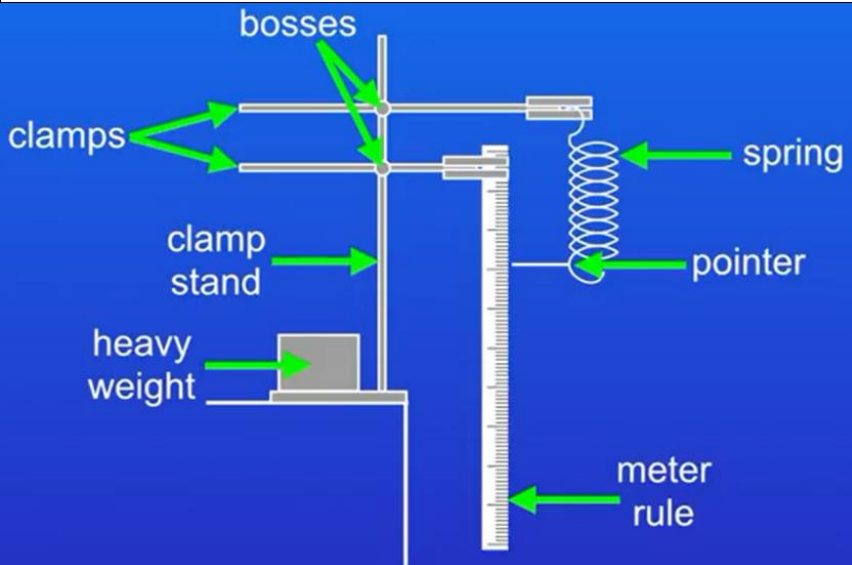
Metallic bonding occurs by the electrostatic interaction from a sea of delocalised negatively charged electrons and positively charged metal cations. This sea of delocalised electrons is what can conduct an electrical current in wires.





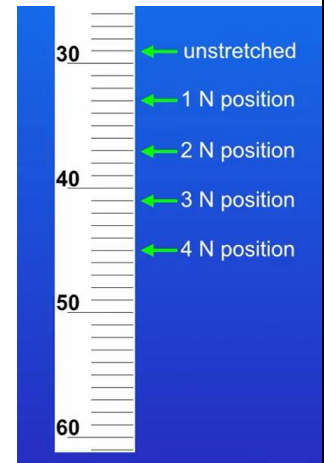
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**Topic 3: The relationship between force and spring extension**



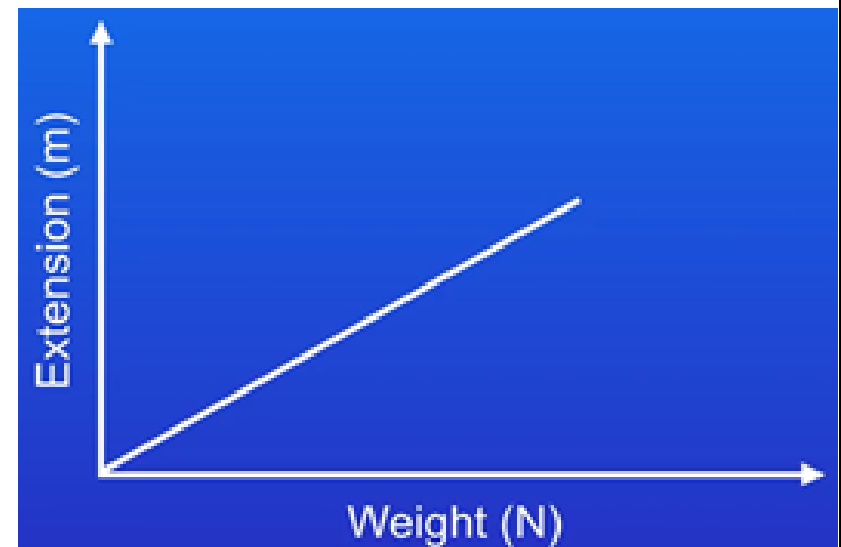
**Practical Method**

The aim of this required practical is to investigate the relationship between the force exerted on a spring and the extension of a spring. To conduct this experiment a clamp stand must first be set up with two clamps at varying levels. On the highest clamp, a spring is attached, with a pointer at the bottom of the spring and on the lower clamp a metre ruler attached. The top of the spring must be in line with the zero mark of the metre rule so the level of extension can be accurately recorded. The point on the spring will show the distance moved as the spring extends. The initial length of the spring where the pointer is indicating must be recorded to identify this extension. A heavy weight can also be placed onto the clamp stand to prevent the equipment toppling over the bench.



One Newton (1N) weights can then be added to the spring to cause extension and the distance shown on the metre rule recorded. After each 1N weight is added the extension of the spring can

be identified by recording the new length of the spring and subtracting the initial length of the spring. The data obtained from this investigation used to plot a graph detailing the weight in Newtons along the x-axis and the extension of the spring (m) along the y-axis. The second part to this practical is to identify the weight of an object based upon the extension of the spring, utilising the graph produced earlier. The same method of measuring spring extension will be used as before, the unknown weight is attached to the spring and the extension measured from the metre ruler. This extension will be identified on the graph and a line drawn parallel to the x-axis from the measured extension until the line of best fit is intercepted. A second line will be drawn parallel to the y-axis from this intercept to identify the weight of the unknown object.







Vocabulary	Wider Research	Apply
<ol style="list-style-type: none"><li>Gene</li><li>Allele</li><li>Genome</li><li>Chromosome</li><li>Recessive</li><li>Dominant</li><li>Phenotype</li><li>Genotype</li><li>Homozygous</li><li>Heterozygous</li><li>Exerted</li><li>Proportionality</li><li>Compression</li><li>Extension</li><li>Newton</li><li>Electrostatic</li><li>Cation</li><li>Anion</li><li>Ionic</li><li>Transferred</li><li>Electron</li><li>Lattice</li><li>Covalent</li><li>Shared</li><li>Delocalised</li><li>Relationship</li><li>Accuracy</li><li>Parallel</li><li>Intercept</li><li>Equipment</li></ol>	<p>Mendelian Genetics - <a href="https://www.youtube.com/watch?v=Mehz7tCxjSE">https://www.youtube.com/watch?v=Mehz7tCxjSE</a></p> <p>Variation and Evolution - <a href="https://www.youtube.com/watch?v=VjIE5Qzl1S0">https://www.youtube.com/watch?v=VjIE5Qzl1S0</a></p> <p>Simulating Natural Selection - <a href="https://phet.colorado.edu/en/simulation/natural-selection">https://phet.colorado.edu/en/simulation/natural-selection</a></p> <p>Ionic Lattices - <a href="https://www.youtube.com/watch?v=PNKsbnH1vw8">https://www.youtube.com/watch?v=PNKsbnH1vw8</a></p> <p>Covalent Structures – <a href="https://www.youtube.com/watch?v=FKTsQOpLwdE">https://www.youtube.com/watch?v=FKTsQOpLwdE</a></p> <p>Dogs Teaching Chemistry: Chemical Bonds – <a href="https://www.youtube.com/watch?v=M9khs87xQ8">https://www.youtube.com/watch?v=M9khs87xQ8</a></p> <p>Investigating force and weight – <a href="https://www.youtube.com/watch?v=jQAt3e6Bz7U">https://www.youtube.com/watch?v=jQAt3e6Bz7U</a></p> <p>Required Practical Simulation – <a href="https://phet.colorado.edu/sims/html/masses-and-springs/latest/masses-and-springs_en.html">https://phet.colorado.edu/sims/html/masses-and-springs_en.html</a></p>	<p><u>Inheritance, Variation and Evolution:</u></p> <ol style="list-style-type: none"><li>Create a Punnett square to show the potential genotypes of two heterozygous dominant parents for blue eyes if “B” represents Brown eyes and “b” represents Blue eyes.</li></ol> <p><u>Structure and Bonding:</u></p> <ol style="list-style-type: none"><li>Draw a dot and cross diagram to show the covalent bonding of a chlorine gas molecule.</li><li>Explain why graphene is a better conductor than diamond.</li><li>Suggest how ionic lattices could be altered to conduct electrical current.</li></ol> <p><u>Required Practical:</u></p> <ol style="list-style-type: none"><li>Explain the importance of a pointer to investigate the relationship between force and spring extension.</li><li>Explain what is meant by the limit of proportionality and predict the change in the shape of a spring past this limit.</li></ol>



**Your teacher will tell you which topic you should revise. Read and learn all the information in the topic, ready for a Quiz in lesson.**

### Topic 1: Organised Crime

The definition of serious and organised crime, or SOC, can be given as people who have worked together for an extended period of time to plan, coordinate and conduct serious crime.

These people are, more often than not, motivated to commit these serious crimes by the potential of financial gain.

The main categories of serious offences covered are:

- Fraud - Fraud is the most commonly experienced crime in the UK. Fraud costs the UK many billions of pounds every year. The impact of fraud and related offences such as market abuse and counterfeiting, can be devastating, ranging from unaffordable personal losses suffered by vulnerable victims to impacting the ability of organisations to stay in business.
- Bribery and corruption - Bribery, corruption and the evasion of financial sanctions pose a serious risk to the UK's national security, economic prosperity and international reputation. As part of our response to illicit finance we work with partners in the UK and around the world to investigate offenders, identify the proceeds of bribery and corruption, and return funds to victims.
- Organised immigration crime - The nature of people smuggling reflects political and legal developments, and humanitarian crises in other countries, making this an ever-changing threat. The closure of migrant camps in France in 2016/17 reduced opportunistic attempts to gain entry to the UK but has provided opportunities to organised crime groups, who facilitate a greater proportion of crossings. Belgium has now become a major focus for people smugglers targeting the UK.
- Modern slavery and human trafficking - Thousands of people across the UK are being held in squalor and undertaking forced labour. Some may be fleeing war zones, others may have financial problems, but all find dream turns to nightmare as their life descends into fear, debt and drudgery in exhausting, ill-paid, dangerous and degrading work, with escape impossible, forbidden or punished. Combating modern slavery and human trafficking is one of our highest priorities. We're working with partners in the UK and around the world to pursue offenders and safeguard victims.
- Cyber-crime - We have seen a significant growth in cyber criminality in the form of high-profile ransomware campaigns over the last year. Breaches leaked personal data on a massive scale leaving victims vulnerable to fraud, while lives were put at risk and services damaged by the WannaCry ransomware campaign that affected the NHS and many other organisations worldwide. Tactics are currently shifting as businesses are targeted over individuals and although phishing attacks on individuals are increasing, fewer are falling victim as people have become more alert.





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### Topic 2: Modern Day Piracy

In April, when Somali pirates captured the MV Maersk Alabama and kidnapped the captain of the ship for four days, the news shocked many. While earlier reports of piracy may have made the news, they did not capture the public's attention in the same way that this incident did. The fact is that piracy is not just a legend from days long past, but is a dangerous trend that is actually on the upswing and for the past few years. Read the following facts to discover what you might not know about modern-day pirates.

**Weapons used.** Many modern pirates have heavy-duty firepower, including automatic weapons, mortars, and rocket-propelled grenades. Pirates are also often equipped with cell phones and other tech gadgets to keep in contact with organizers who feed them information about ships and their locations. Many pirates' weapons are specialized to their geographic location, with the most dangerous usually being in the South China Sea and Somalia.

**Geographic occurrences.** With the recent news about the pirate capture off Somalia, it may appear to some that modern pirates are isolated to this geographic area. While the political upheaval in Somalia does provide an ideal, lawless hideout for pirates, the fact is pirates are often found in many places around the globe. Some areas most frequented by pirates include the Red Sea, the Indian Ocean, and the waters of Indonesia and Singapore.

**Financial loss.** The estimated annual loss due to piracy worldwide is about \$13 to \$16 billion. Unfortunately, most carriers decide not to report piracy incidents due to the financial burden. When an incident of piracy is reported, ship owners experience insurance rates that can increase by as much as 30% as well as the daily loss incurred during an investigation that can often run about \$1000 a day.

**Ties to government and organized crime.** Many modern pirates have ties to the government and organized crime, such as the pirates in Somalia and the Far East, with some pirates in the South China Sea reportedly working under the protection of the Chinese government. Other pirates take advantage of a lack of government involvement, such as the pirates near Brazil, where there is no Coast Guard or its equivalent.

**Anchored ships vs. high seas kidnapping.** Pirates boarding ships at sea and kidnapping the crew have been making the news but an older report suggests that 72% of pirate attacks occur on anchored ships where the pirates either steal the ships or take cargo and crew members' belongings. Recent trends show that kidnapping the crew in order to get ransom money is on the rise, as pirates cannot only profit from the ransom but stolen goods as well.





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### Topic 3: Impacts of Crime

Crime can cause significant social and economic problems to individuals and communities. Tackling crime can be expensive and can stretch budgets.

Crime does not just affect individuals. Communities which experience higher levels of crime are also adversely affected:

- people may become frightened inside or outside their own home
- home insurance premiums can rise
- property prices are affected
- homeowners can find it more difficult to sell their property
- new businesses may avoid the area
- existing businesses may close down due to:
  - repeated thefts and loss of income
  - costs of repairing damage from vandalism
  - loss of customers in the area

Crimes such as shoplifting and fraud cost businesses in the UK billions of pounds each year. In 2015, the cost of business crime in Scotland was over £5 billion.

Increasingly thieves are moving away from more traditional crimes such as robberies and are instead looking to use the internet to commit crime. Cybercrime mainly involves stealing highly confidential information. Access to this type of information can result in thieves stealing vast amounts of money.

Certain UK companies such as banks, insurance companies and energy suppliers have recently been the victims of internet crime. Altogether, at least a third of all crime relating to business is connected to the internet.

To prevent cybercrime, the Scottish and UK governments have set up special internet crime units. Working alongside businesses, the Scottish Business Crime Centre aims to use the latest ICT security technology to catch internet thieves.





Vocabulary	Wider Research	Apply
<ul style="list-style-type: none"> <li>• Arson</li> <li>• Attack</li> <li>• Breach</li> <li>• Communities</li> <li>• Corruption</li> <li>• Crime</li> <li>• Cybercrime</li> <li>• Drugs</li> <li>• Economic</li> <li>• Exploitation</li> <li>• Immigration</li> <li>• Impact</li> <li>• Insurance</li> <li>• International</li> <li>• Local</li> <li>• National</li> <li>• Organised</li> <li>• Piracy</li> <li>• Political</li> <li>• Security</li> <li>• Social</li> <li>• Theft</li> <li>• Trafficking</li> </ul>	<p>Impacts of Crime -  <a href="https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/articles/theimpactofcrimeonvictimandsociety/march2022#:~:text=emotional%20or%20psychological%20%E2%80%93%20any%20adverse,%20other%20detrimental%20effects%20of">https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/articles/theimpactofcrimeonvictimandsociety/march2022#:~:text=emotional%20or%20psychological%20%E2%80%93%20any%20adverse,%20other%20detrimental%20effects%20of</a></p> <p>Modern Piracy -  <a href="http://www.thewayofthepirates.com/piracy-history/modern-piracy/">http://www.thewayofthepirates.com/piracy-history/modern-piracy/</a></p> <p>Modern Piracy -  <a href="https://www.youtube.com/watch?v=cfh9suqslPs">https://www.youtube.com/watch?v=cfh9suqslPs</a></p> <p>Impacts of Crime -  <a href="https://www.youtube.com/watch?v=4IRzbBt7pKU">https://www.youtube.com/watch?v=4IRzbBt7pKU</a></p> <p style="text-align: center;"><b>Career Opportunities</b></p> <p><a href="https://www.prospects.ac.uk/job-profiles/crime-scene-investigator">https://www.prospects.ac.uk/job-profiles/crime-scene-investigator</a></p> <p><a href="https://www.prospects.ac.uk/job-profiles/border-force-officer">https://www.prospects.ac.uk/job-profiles/border-force-officer</a></p> <p><a href="https://www.prospects.ac.uk/job-profiles/detective">https://www.prospects.ac.uk/job-profiles/detective</a></p>	<p><b>Get creative</b></p> <ul style="list-style-type: none"> <li>• Create a fact sheet about Jack the Ripper.</li> <li>• Create a key word glossary</li> <li>• Create a job profile poster about a job to do with crime</li> </ul> <p><u>Exam Style Questions:</u></p> <p>1) Explain how crime impacts an individual. (5 marks)</p> <p>2) “Organised Crime does more harm than good to an area” To which extent do you agree (8 marks)</p> <p>3) With reference to a place you have studied, outline the threats of modern-day piracy on Africa. (4 marks)</p>

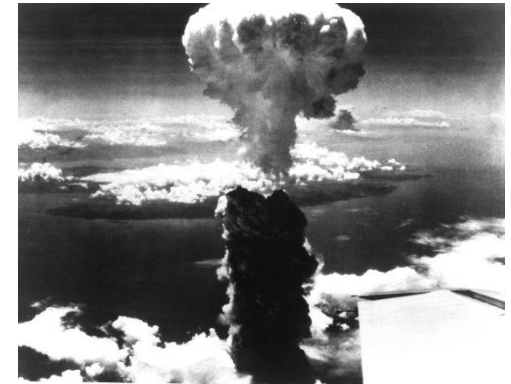


**Your teacher will tell you which topic you should revise. Read and learn all the information in the topic, ready for a Quiz in lesson.**

**Topic 1: The Arms Race**

**What was it?**

For a long time, the USSR had been aware of the atomic bomb's possibilities. But ever since the USA had dropped the atomic bomb on Hiroshima in 1945, the USSR had been even more determined to develop its own nuclear weapons. It finally succeeded in 1949 and this began a nuclear arms race, with both sides racing to develop more and bigger bombs. As the Cold War developed, the theory of Mutually Assured Destruction (MAD) took shape, which said that the existence of such massive nuclear weapons meant that a future World War could end life on earth.

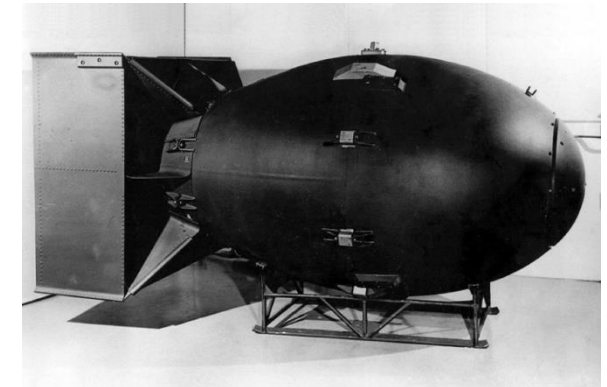


**Mutually Assured Destruction?**

The USA and USSR were locked into an expensive battle to develop the best technology and try to produce the most advanced weapons. By stockpiling so many weapons, they ironically guaranteed their own safety under the theory of MAD (Mutually Assured Destruction). Neither side would be willing to launch their weapons because they knew the other side could retaliate and wipe them out as well.

**Nuclear Power?**

Further fuelling the flame of distrust, the United States didn't tell the Soviet Union they planned to drop an atomic bomb on Hiroshima on August 6, 1945, although they had told them they had created the bomb. To help discourage Soviet communist expansion, the United States built more atomic weaponry. But in 1949, the Soviets tested their own atomic bomb, and the Cold War nuclear arms race was on.





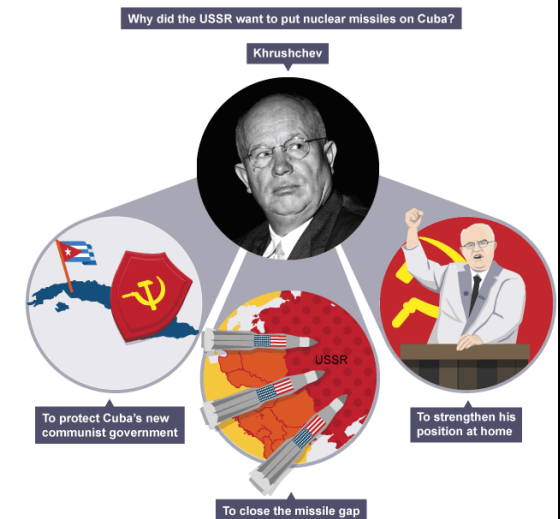


**Your teacher will tell you which topic you should revise. Read and learn all the information in the topic, ready for a Quiz in lesson.**

**Topic 2: Cuban Missile Crisis**

**The Bay of Pigs:** In April 1961, just after he was installed as President of the USA, John F Kennedy approved a plan to invade Cuba and overthrow communism. The CIA landed 1,400 Cuban exiles at the Bay of Pigs on the southern coast of Cuba with the aim of provoking an anti-communist uprising. They were easily defeated when they were met by 20,000 heavily armed Cuban troops. All were captured or killed.

22 October	Kennedy imposes a naval blockade around Cuba, to stop the Soviet ships suspected of carrying nuclear missiles from reaching Cuba.
23 October	Kennedy receives a letter from Khrushchev saying that the Soviet ships will not stop at the blockade, but will force their way through.
24 October	Despite Khrushchev's 'tough talk', the twenty ships approaching the blockade turn back (presumably to avoid direct confrontation with the US Navy).
25 October	US spy planes report increased building work at the missile launch sites on Cuba.
26 October	Kennedy receives a letter from Khrushchev promising to remove the launch sites if the USA agrees to lift the blockade and promises not to invade Cuba.
27 October	A second letter from Khrushchev says the launch sites will only be removed if the US removes its missiles in Turkey. Kennedy opts to answer only the first telegram while privately offering to consider the removal of missiles from Turkey.
28 October	In a public message to President Kennedy broadcast on Moscow radio, Khrushchev agrees to the removal of all missiles on Cuba and their return to the Soviet Union.





**Your teacher will tell you which topic you should revise. Read and learn all the information in the topic, ready for a Quiz in lesson.**

### Topic 3: The Landing on the Moon

**Buzz Aldrin and Neil Armstrong became the first people to walk on the Moon.**

Neil Armstrong stepped on to the surface of the Moon on **21 July 1969**. As he did so, he spoke the famous words: "That's one small step for man, one giant leap for mankind." A camera was able to transmit the moment to around 650 million people who were watching on television. Armstrong was closely followed by fellow astronaut Buzz Aldrin, who described the Moon as "magnificent desolation". They spent 21 hours on its surface, including a seven-hour sleep, before returning to Earth.



#### Why was the Moon landing so important?

The simple reason is that it had *never* been done before - and it was a big ambition for countries, and their space programmes, to be the first to land a human on the Moon's surface. In the run-up to the Moon landing, the US was competing with the Soviet Union in something called **the space race**. This was a competition between them to be the first to complete missions exploring the world outside the Earth's atmosphere. This race started when the Soviets - the US's enemy during **the Cold War** - launched the first Soviet Sputnik satellite in 1957. Then, Soviet cosmonaut Yuri Gagarin became the first human in space on 12 April 1961.

The Americans wanted technological superiority - and it looked like the Soviets were winning in the space race.


#### How did they get to the Moon?

The Moon is about 240,000 miles from Earth - so the Apollo mission was not going to be an easy task. It was also a dangerous mission. The Apollo mission that would eventually land a man on the Moon - Apollo 11 - was not the first.

Apollo 8 and 10 entered lunar orbit but didn't achieve the program's goal, while during Apollo 1, the crew of three tragically died in a launch pad fire. On the morning of **16 July 1969**, astronauts Buzz Aldrin, Neil Armstrong and Michael Collins blasted off aboard a Saturn 5 rocket, which propelled them out of Earth's gravity.

The Apollo 11 mission had three spacecraft: the **Command Module Columbia**, a **Service Module** and the **Lunar Module Eagle**. It took **four days, six hours and 45 minutes** to get to the Moon. The lunar module landed on the Moon at **8:17pm** on **20 July 1969**.



Vocabulary	Wider Research	Apply						
1) Missile 2) Berlin 3) Germany 4) Army 5) Nuclear 6) Wall 7) Conference 8) Blockade 9) Agreement 10) Tension 11) Landing 12) Mission 13) Apollo 11 14) Lunar 15) Tension 16) Checkpoint 17) Hydrogen Bomb 18) Atomic Bomb 19) Hiroshima 20) Nagasaki 21) Superbomb 22) MAD 23) Destruction	<p><a href="https://www.bbc.co.uk/newsround/48789792">https://www.bbc.co.uk/newsround/48789792</a></p> <p><a href="https://www.bbc.co.uk/newsround/47926055">https://www.bbc.co.uk/newsround/47926055</a></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/zyt42p3/revision/1">https://www.bbc.co.uk/bitesize/guides/zyt42p3/revision/1</a></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/zyt42p3/revision/2">https://www.bbc.co.uk/bitesize/guides/zyt42p3/revision/2</a></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/zyt42p3/revision/3">https://www.bbc.co.uk/bitesize/guides/zyt42p3/revision/3</a></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/zyt42p3/revision/4">https://www.bbc.co.uk/bitesize/guides/zyt42p3/revision/4</a></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/zyt42p3/revision/5">https://www.bbc.co.uk/bitesize/guides/zyt42p3/revision/5</a></p> <p><a href="https://www.bbc.co.uk/bitesize/guides/zyt42p3/revision/6">https://www.bbc.co.uk/bitesize/guides/zyt42p3/revision/6</a></p>	<p>1. Create a dictionary for this topic. Include all the key vocabulary, definition and use the word in a sentence.</p> <table border="1" data-bbox="1272 497 2094 831"> <thead> <tr> <th data-bbox="1272 497 1543 576">Key Word</th> <th data-bbox="1543 497 1818 576">Definition</th> <th data-bbox="1818 497 2094 576">Use the word in a sentence</th> </tr> </thead> <tbody> <tr> <td data-bbox="1272 576 1543 831"></td> <td data-bbox="1543 576 1818 831"></td> <td data-bbox="1818 576 2094 831"></td> </tr> </tbody> </table> <p>2. Do some research and create a mind map, listing the weapons and cost of the Arms Race.</p> <p>3. Create a mind map of the Cuban Missile Crisis, cause, events and consequence</p> 	Key Word	Definition	Use the word in a sentence			
Key Word	Definition	Use the word in a sentence						



**Your teacher will tell you which topic you should revise. Read and learn all the information in the topic, ready for a Quiz in lesson.**

**Topic 1: Est-ce que tu manges de la viande ? Do you eat meat?**

**Unité 0. Qu'est-ce qu'on mange à la cantine scolaire ?**

*What do you eat at the school canteen?*

**Dans le repas, il y a ...**      *In the meal, there is ...*

- **du fromage / du lait**      *cheese / milk*
- **du pain / du riz**      *bread / rice*
- **de la soupe**      *soup*
- **de la viande**      *meat*
- **de l'eau**      *water*
- **des frites / des haricots**      *chips / beans*
- **des légumes**      *vegetables*
- **des pommes de terre**      *potatoes*
- **des sandwichs**      *sandwiches*
- **un fruit**      *a piece of fruit*
- **un jus de fruit**      *a fruit juice*

**C'est ...**      *It is ...*

**Ce n'est pas ...**      *It is not ...*

- **délicieux**      *delicious*
- **savoureux**      *tasty*
- **sain**      *healthy*
- **malsain**      *unhealthy*
- **simple**      *simple*
- **équilibré**      *balanced*



- **Mon repas préféré, c'est ...**      *My favourite meal is ...*

**Describe a photo.**

Remember the **four Ws** – they help with describing photos:

- A) **Who** is in the photo.
- B) **Where** he/she is.
- C) **What** he/she is **wearing/doing**.
- D) **What** the **weather** is like.



**Sur la photo, il y a ...**      *In the photo, there is ...*

- **un homme / une femme.**      *a man / a woman.*
- **un garçon / une fille.**      *a boy / a girl.*

**Il/Elle est ...**      *He/She is ...*

- **au collège.**      *at school.*
- **à la plage.**      *at the beach.*
- **à la campagne.**      *in the country(side).*

**Il/Elle porte ...**      *He/She is wearing...*

- **un tee-shirt.**      *a tee-shirt.*
- **un gilet vert.**      *a green hi-vis/waistcoat.*

**Il/Elle ramasse des déchets.**      *He/She is picking up litter.*

**Il fait beau.**      *The weather is nice.*

**Il fait mauvais.**      *The weather is bad.*

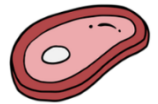
**Il pleut.**      *It is raining.*

**Unité 1. Est-ce que tu manges de la viande ?**

*Do you eat meat?*

**Je mange ...**      *I eat ...*

- **du poisson**      *fish.*
- **de la viande**      *meat.*
- **beaucoup de fruits et de légumes.**



*lots of food and vegetables.*

**Je bois du lait.**      *I drink milk.*

These negatives form a sandwich around the verb:

- ne ... pas**      not
- ne ... jamais**      never

After **pas** and **jamais**, *un/une* and *du/de la/des* change to **de**.

**Je ne mange pas...**      *I don't eat ...*

**Je ne mange jamais ...**      *I never eat ...*

- **de viande /de poisson.**      *meat/ fish.*
- **de produits d'origine animale.**      *animal products.*

**Je ne bois pas de lait.**      *I don't drink milk.*



**Your teacher will tell you which topic you should revise. Read and learn all the information in the topic, ready for a Quiz in lesson.**

**Topic 2: Qu'est-ce qu'il faut faire pour protéger les animaux menacés ? What must you do to protect endangered animals ?**

**Unité 1. Est-ce que tu manges de la viande ? Do you eat meat?**

**Est-ce que tu es pour ou contre le végétarisme ?**

*Are you in favour of or against vegetarianism?*

- **Je suis pour le végétarisme.** *I am in favour of vegetarianism.*
- **Je suis contre le végétarisme.** *I am against vegetarianism.*

**To express your opinion**

- **Je suis pour / contre ...** *I am for /against ...*
- **À mon avis, ...** *In my opinion, ...*
- **Pour moi, ...** *For me, ...*
- **Je pense que ...** *I think that ...*
- **Tu es d'accord ?** *Do you agree?*
- **Je suis d'accord.** *I agree.*
- **Je ne suis pas d'accord.** *I don't agree.*
- **Tu rigoles !** *You must be joking!*



- C'est sain.** *It is healthy.*
- La production de viande, c'est mauvais pour l'environnement.**  
*Meat production is bad for the environment.*
- Manger des animaux, c'est cruel.** *Eating animals is cruel.*
- Il y a beaucoup de vitamines dans la viande, le lait et le poisson.**  
*There are lots of vitamins in meat, milk and fish.*
- La viande, c'est très savoureux.** *Meat is very tasty.*
- Manger des animaux, c'est normal.** *It is normal to eat animals.*

**Unité 2. Qu'est-ce qu'il faut faire pour protéger les animaux menacés ? What must you do to protect endangered animals?**

- Le panda géant** *The giant panda*
- Le tigre** *The tiger*
- La tortue marine** *The sea turtle*
- L'ours polaire** *The polar bear*
- Le rhinocéros** *The rhinoceros*
- Le crocodile** *The crocodile*



- **habite ...** *lives...*
  - **dans la forêt.** *in the forest.*
  - **dans l'eau.** *in the water.*
  - **à la campagne.** *in the countryside.*
- **est menacé(e) par ...** *is threatened by ...*
  - **le changement climatique.** *climate change.*
  - **La déforestation.** *deforestation.*
  - **La pollution.** *pollution.*

- Il faut ...** *You must ...*
  - **ramasser les déchets.** *pick up litter.*
  - **recycler le papier et les bouteilles.** *recycle paper and bottles.*
  - **aller au collège à pied ou à vélo.** *go to school on foot or by bike.*
- Il ne faut pas ...** *You must not...*
  - **manger trop de viande.** *eat too much meat.*
  - **utiliser trop d'énergie.** *use too much energy.*
  - **laisser de sacs en plastique sur la plage.** *leave plastic bags on the beach.*







**Your teacher will tell you which topic you should revise. Read and learn all the information in the topic, ready for a Quiz in lesson.**

**Topic 3 : Qu'est-ce qu'on a fait récemment pour aider l'environnement ? What have we done recently to help the environment ?**

**Unité 3. Qu'est-ce qu'on a fait récemment pour aider l'environnement ?**

*What have we done recently to help the environment?*

**TIME PHRASES**

- hier yesterday
- lundi dernier last Monday
- le weekend dernier last weekend
- la semaine dernière last week
- l'année dernière last year



- **J'ai ramassé des déchets.** *I picked up litter.*
- **J'ai recyclé du papier et du plastique.** *I recycled paper and plastic.*
- **J'ai acheté des produits bio.** *I bought organic products.*
- **Je suis allé(e) au collège à pied.** *I went to school on foot.*
- **On a utilisé moins d'énergie.** *We used less energy.*
- **On a organisé une campagne anti-plastique.** *We organised an anti-plastic campaign.*

**DIFFERENT TIME FRAMES.** When you are talking about different time frames in French, using verbs correctly is vital.

- Present tense. *Je recycle* (I recycle, I am recycling); *j'utilise* (I use, I am using).
- Perfect tense. *J'ai recyclé* (I recycled); *j'ai utilisé* (I used).
- Conditional tense. *Je voudrais recycler* (I would like to recycle).

**Unité 4. Qu'est-ce que tu voudrais faire pour changer le monde ? What would you like to do to change the world?**

**Je voudrais** is an example of the **conditional tense**, which is translated using the word "would". *Je voudrais* means "I would like" and it is followed by the **infinitive**.

**Je voudrais ...**

*I would like ...*

- **utiliser moins de plastique.** *to use less plastic.*
- **acheter moins de vêtements.** *to buy fewer clothes.*
- **manger moins de viande.** *to eat less meat.*
- **organiser une campagne anti-déchets.** *to organise an anti-litter campaign.*
- **faire du travail bénévole.** *to do voluntary work.*
- **être membre d'un groupe écolo.** *to be a member of a green group.*



**Il faut** means "you must" or "it is necessary to". The **infinitive** is used after *il faut*.

**Il faut ...**

*You/We must ...*

- **aider les animaux menacés.** *help endangered animals.*
- **protéger la planète.** *protect the planet.*
- **combattre le changement climatique.** *fight climate change.*
- **aider les autres.** *help others.*

**Il ne faut pas utiliser trop d'énergie.**

*You must not use much energy.*