Knowledge Organiser

Year 9 Autumn 2 2026

"There is no end to education. It is not that you read a book, pass an examination, and finish with education. The whole of life, from the moment you are born to the moment you die, is a process of learning."

Jiddu Krishnamurti



YEAR 9 KNOWLEDGE ORGANISER: OF MICE AND MEN

CHARACTERS

George: A migrant worker who protects and cares for Lennie. George dreams of some day owning his own land, but he realizes the difficulty of making this dream come true.	**Lennie**: A migrant worker who has learning difficulties, is large, and very strong. He relies on George's guidance.
Candy: an old handyman who lost his hand in a ranch accident and is kept on the payroll. A kind man who welcomes George and Lennie.	**Curley**: The son of the ranch owner, Curley is a mean little guy who picks fights. He is recently married and extremely jealous of any man who looks at or talks with his wife.
Curley's Wife: recently married, she is unhappy and lonely. She taunts the ranch workers into talking to her, which gets them into trouble.	**Crooks**: The black stable worker who cares for the horses. A symbol of racial injustice, Crooks is isolated from the other hands because of his skin color.
Slim: The leader of the mule team whom everyone respects. Slim becomes an ally to George and helps protect Lennie when he gets in trouble.	**Carlson**: An insensitive ranch worker who owns a luger, a type of gun.

THEMES AND CONTEXT

The Great Depression:
On October 29 1929, millions of dollars were wiped out in the Wall Street Crash. It led to the People losing their life savings and a third of America's population became unemployed. Steinbeck encourages us to empathise with the plight of migrant workers during the Great Depression.

The American Dream:
The idea that equality of opportunity is available to any American, allowing the highest goals to be achieved. The American Dream is shown to be impossible: reality defeats idealism.

Prejudice in America:
In 1930's America, black people were considered as second-class citizens- they were paid less than their white counterparts and they had to work harder than everyone else. The Jim Crow Laws were enforced between 1876 and 1965 that provided a legal basis for segregating and discriminating against African-Americans.

VOCABULARY:

Migrant – someone who moves from one place to another	**Prejudice** - A preconceived opinion about someone or something that is not based on reason or actual experience.	**Microcosm** – a place, character, or event in a story that symbolises something in reality.
Derogatory language – words used to insult, belittle, or show a lack of respect	**Segregation** - The separation or isolation of a race, class, or ethnic group from others.	**Oppression** – the cruel or unfair use of power by a dominant group to limit the freedoms of others
Juxtaposition – two (characters) compared sided by side to highlight their differences	**Marginalised** – pushed to the edge of society; treated as insignificant.	**Foreshadowing** – a structural technique that hints at future events in a text
Burden – a heavy responsibility that is difficult to deal with	**(Colour) connotations** – the ideas and feelings symbolically linked to a colour	**Emasculate** – to deprive (typically a man) or their strength or power
Hierarchy - A system in which members of an organisation or society are ranked according to status or authority.	**Parallel** - characters, events etc. that are similar to show structural patterning	**Cyclical structure** – a structural technique where a story ends in a way that references its beginning

MATHS KNOWLEDGE ORGANISER – YEAR 9 TERM 2

	Topic	Information	Example
1	Expand	To expand a bracket, **multiply** each term **in the bracket** by the expression **outside** the bracket	$3(m+7) = 3x + 21$
2	Factorise	The **reverse** of **expanding**. Factorising is writing an expression as a product of terms by '**taking out' a common factor**	$6x - 15 = 3(2x - 5)$, where 3 is the common factor.
3	Inequality symbols	$\boldsymbol{x > 2}$ means **x is greater than 2** $\boldsymbol{x < 3}$ means **x is less than 3** $\boldsymbol{x \geq 1}$ means **x is greater than or equal to 1** $\boldsymbol{x \leq 6}$ means **x is less than or equal to 6**	State the integers that satisfy $-2 < x \leq 4$. -1, 0, 1, 2, 3, 4
4	Factorising Quadratics	When a quadratic expression is in the form $x^2 + bx + c$ find the two numbers that **add to give b** and **multiply to give c**.	$x^2 + 2x - 8 = (x + 4)(x - 2)$ (because +4 and -2 add to give +2 and multiply to give -8)
5	Difference of Two Squares	An expression of the form $\boldsymbol{a^2 - b^2}$ can be factorised to give $\boldsymbol{(a + b)(a - b)}$	$x^2 - 25 = (x + 5)(x - 5)$ $16x^2 - 81 = (4x + 9)(4x - 9)$
6	Rearranging Formulae	**Use inverse operations** on both sides of the formula (balancing method) until you find the expression for the letter	Make x the subject of $y = \frac{2x-1}{z}$ Multiply both sides by z $yz = 2x - 1$ Add 1 to both sides $yz + 1 = 2x$ Divide by 2 on both sides $\frac{yz + 1}{2} = x$ We now have x as the subject.

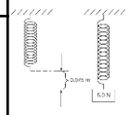
AQA ENERGY – part 1

Energy stores and changes

Mechanical	*Force acts upon an object*
Electrical	*Electric current flow*
Heat	*Temperature difference between objects*
Radiation	*Electromagnetic waves or sound*

Energy pathways

Kinetic energy	*Energy stored by a moving object*	½ X mass X (speed)^2 ½ mv^2
Elastic Potential energy	*Energy stored in a stretched spring, elastic band*	½ X spring constant X (extension)^2 ½ ke^2 (Assuming the limit of proportionality has not been exceeded)
Gravitational Potential energy	*Energy gained by an object raised above the ground*	Mass X gravitational field strength X height mgh



System	*An object or group of objects that interact together*	EG: Kettle boiling water.
Energy stores	*Kinetic, chemical, internal (thermal), gravitational potential, elastic potential, magnetic, electrostatic, nuclear*	Energy is gained or lost from the object or device.
Ways to transfer energy	*Light, sound, electricity, thermal, kinetic are ways to transfer from one store to another store of energy.*	EG: electrical energy transfers chemical energy into thermal energy to heat water up.
Unit	*Joules (J)*	

Work	*Doing work transfers energy from one store to another*	By applying a force to move an object the energy store is changed.	Work done = Force X distance moved W = Fs
Power	*The rate of energy transfer*	1 Joule of energy per second = 1 watt of power	Power = energy transfer ÷ time P = E ÷ t Power = work done ÷ time, P = W ÷ t

	Units
Specific Heat Capacity	*Joules per Kilogram degree Celsius (J/Kg°C)*
Temperature change	*Degrees Celsius (°C)*
Work done	*Joules (J)*
Force	*Newton (N)*
Distance moved	*Metre (m)*
Power	*Watts (W)*
Time	*Seconds (s)*

Specific Heat Capacity	*Energy needed to raise 1kg of substance by 1°C*	Depends on: mass of substance, what the substance is and energy put into the system.

Change in thermal energy = mass **X** specific heat capacity **X** temperature change

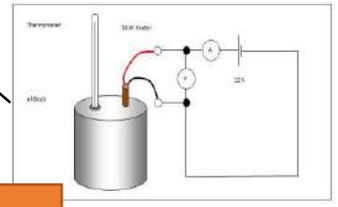
ΔE= m **X** c **X** Δθ

HIGHER: efficiency can be increased using machines.

Efficiency = Useful power output / Total power input

Efficiency = Useful output energy transfer / Total input energy transfer

Efficiency	*How much energy is usefully transferred*



Energy Conservation and Dissipation

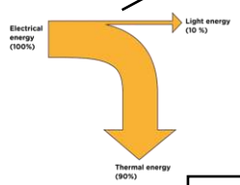
Dissipate	*To scatter in all directions or to use wastefully*	When energy is 'wasted', it dissipates into the surroundings as internal (thermal) energy.



Ways to reduce 'wasted' energy	*Energy transferred usefully*	Insulation, streamline design, lubrication of moving parts.

Principle of conservation of energy	*The amount of energy always stays the same.*	Energy cannot be created or destroyed, only changed from one store to another.

Closed system	*No change in total energy in system*
Open system	*Energy can dissipate*



Useful energy	*Energy transferred and used*
Wasted energy	*Dissipated energy, stored less usefully*

HIGHER: When an object is moved, energy is transferred by doing work.

Work done = Force X distance moved

Frictional forces cause energy to be transferred as thermal energy. This is wasted.

Reducing friction - using wheels, applying lubrication. Reducing air resistance – travelling slowly, streamlining.

Prefix	Multiple	Standard form
Kilo	*1000*	10^3
Mega	*1000 000*	10^6
Giga	*100 000 000*	10^9

	Units
Energy (KE, EPE, GPE, thermal)	*Joules (J)*
Velocity	*Metres per second (m/s)*
Spring constant	*Newton per metre (N/m)*
Extension	*Metres (m)*
Mass	*Kilogram (Kg)*
Gravitational field strength	*Newton per kilogram (N/Kg)*
Height	*Metres (m)*

Year 9 Geography - Prisoners of Geography topic Knowledge Organiser – Half Term 2

Homework 1 - Write the key words below and write out the correct definition to match up.

Key Term
Superpower
Prisoner of Geography
Military
Ideology
Geography
Economic

Definitions
A belief system or set of ideas that influences political or social structures.
The use of armed forces to defend or project power.
The physical features, location, and resources of a country.
A country or group with the ability to influence global events and policies.
Economic strength through trade, industry, and financial systems.
When a country's location or terrain limits its ability to grow or exert power.

Homework 2 – USA

Write a short paragraph (6–8 sentences) explaining why the USA is a superpower.
You must use at least 4 of the criteria below using the knowledge you have learnt in lesson.

Military Power – Size, technology, global presence
Economic Strength – GDP, trade, influence on global markets
Cultural Influence – Media, brands, language, lifestyle
Geography – Natural resources, location, size
Political Influence – Role in international organisations (e.g. UN, NATO)
Technology and Innovation – Leadership in science, tech companies



Give specific examples (e.g. companies, military bases, global events)
Use geographical vocabulary where possible.

Homework 3 – China

Write a short paragraph (6–8 sentences) explaining why China could be the next superpower country.

You must use the criteria to the right and using the knowledge you have learnt in lesson.

Criteria	Does China meet this? (✓)	Explanation
Strong military	✅	China has one of the largest armies and is investing in advanced weapons.
Fast-growing economy	✅	China has the second-largest economy and is a major global exporter.
Advanced technology	✅	China leads in areas like 5G, AI, and electric vehicles.
Cultural impact	X	Chinese culture is growing globally, but less dominant than Western media.
Access to natural resources	✅	China has large reserves of coal, rare earth metals, and other key resources.

Year 9 Geography - Prisoners of Geography topic Knowledge Organiser – Half Term 2

Homework 4 - Russia

Write out the five features below about Russia's superpower status.

Rank the following features from **1 to 5** (1 = strongest, 5 = weakest) based on how well they apply to Russia today. Then, write a short opinion explaining your top and bottom choices.

Feature	Your Rank (1–5)	Explanation
Military power		Russia has a large army and nuclear weapons, giving it strong military influence.
Economic strength		Russia's economy has struggled due to sanctions and reduced global trade.
Global political influence		Russia is active in global affairs but faces isolation from many Western nations.
Cultural impact		Russian culture has limited global reach compared to countries like the USA.
Natural resources		Russia has vast reserves of oil, gas, and minerals that support its economy.

Homework 5 – Africa

In your book match the impact to the explanation of the impacts on development in Africa, making countries prisoners of geography.

Impact	Explanation
Physical geography	European empires negatively impacted development
Education	Home to world's largest hot desert
Colonialism	Over 50% of people have suffered from water-related diseases
Disease	40 million children haven't been to school
Agriculture	Desertification makes food production hard

Homework 6 – Middle East

Task 1 - Use the word bank to complete the paragraph below.
Word Bank: oil, superpower, economy, exports, influence

The Middle East is rich in natural resources, especially _____. These resources are vital for the global _____ and are heavily relied on by many countries. By controlling large amounts of _____, countries in the region can gain political and economic _____. This gives the Middle East the potential to become a global _____.

Task 2 - In your own words, explain **one reason** why natural resources could help the Middle East become a superpower. Write **2–3 sentences**.

History Knowledge Organiser – Year 9 – Half term 2 – Why had the certainty of 'never again' after the First World War unravelled by 1939?

Key Terms

1. Armistice	An agreement between countries to stop fighting, such as the armistice that ended fighting in World War One in 1918.
2. Treaty	A formal agreement between countries, often made to end a war or settle disagreements.
3. Reparations	Money that a country is forced to pay to another country for damage caused during a war.
4. League of Nations	An international organisation created after World War One to help countries solve disagreements peacefully and prevent another war.
5. Dictatorship	A system of government where one person or a small group has most or all of the political power.
6. Fascism	An extreme political belief that supports a powerful leader, strict control and strong nationalism.
7. Communism	A political and economic system where wealth and businesses are meant to be shared or controlled by the state.
8. Nationalism	A strong belief that your country is more important than other countries and should have its own interests protected.
9. Propaganda	Information designed to influence people's opinions or behaviour, often by presenting one side of an argument.
10. Great Depression	A worldwide economic crisis during the 1930s that caused businesses to close and unemployment to rise.
11. Rearmament	The process of building up a country's armed forces and weapons after they have been reduced.
12. Appeasement	The policy of giving an aggressive country what it wants in the hope that this will prevent war.
13. Remilitarisation	The process of putting soldiers or weapons into an area where military forces are not supposed to be allowed.
14. Anschluss	The union of Germany and Austria in 1938, which was achieved when Nazi Germany took control of Austria.
15. Expansionism	The policy of increasing a country's territory by taking control of other countries or areas.

The Treaty of Versailles

Causes: The Treaty of Versailles was created in 1919 to officially end World War One and decide how Germany should be punished for the damage caused by the war.
Policies: Germany was forced to accept **war guilt**, pay reparations, give up territory and reduce its armed forces to prevent it from becoming a threat again.
Consequences: The Treaty caused **anger and resentment in Germany**, as many Germans believed they had been treated unfairly and wanted to overturn the terms.

The Great Depression

Causes: The Great Depression began after the **Wall Street Crash of 1929**, when the value of shares fell rapidly and banks and businesses began to fail.
Policies: Governments responded by trying to **reduce spending, support banks and create jobs.**
Consequences: The Depression caused **mass unemployment and poverty**, increased political extremism and helped dictators such as Hitler gain support.

The Rise of Dictators

Italy
Economic problems: After World War One, Italy faced **high unemployment, rising prices and poverty**,.
Fear of communism: Many wealthy and middle-class Italians feared a **communist revolution**, so they supported Mussolini because they believed he would stop communism.
Weak government: Italy had **frequent changes of government and political violence**, making many people believe that a strong leader was needed to restore order.

Germany
Treaty of Versailles: Many Germans were angry about the **harsh terms of the Treaty of Versailles**, including reparations, loss of territory and limits on Germany's armed forces.
Economic problems: Germany suffered from **hyperinflation, unemployment and the Great Depression**, making many people lose faith in the Weimar government.
Weak government: The Weimar Republic faced **political violence and frequent changes of government**, while Hitler promised to restore order and make Germany strong again.

Japan
Economic problems: Japan was badly affected by the **Great Depression**, causing unemployment, poverty and falling demand for Japanese goods.
Nationalism: Many Japanese people believed Japan needed to become **stronger and more powerful**, leading to support for military expansion and the idea of building a larger empire.
Weak government: Japan's civilian government struggled to control the military, allowing **military leaders to gain increasing influence** over Japan's politics and foreign policy.

The League of Nations Timeline

1919 – Treaty of Versailles: The League of Nations was created as part of the peace settlement after World War One.
1920 – League begins: The League officially started work, with its headquarters in Geneva, Switzerland.
1921 – Aaland Islands: The League successfully helped Sweden and Finland settle a dispute over the Aaland Islands.
1923 – Corfu Crisis: Italy occupied the Greek island of Corfu, and the League struggled to force Mussolini to withdraw.
1925 – Bulgaria Crisis: The League successfully stopped fighting between Greece and Bulgaria and helped restore peace.
1931 – Manchuria: Japan invaded Manchuria, but the League took too long to respond and failed to stop Japan.
1933 – Germany leaves: Hitler withdrew Germany from the League, weakening it further.
1935 – Abyssinia: Mussolini invaded Abyssinia, and the League's sanctions failed to stop Italy.
1936 – Rhineland: Hitler remilitarised the Rhineland, and the League did not take effective action.
1939 – World War Two: Germany invaded Poland, leading Britain and France to declare war, and the League had effectively failed to prevent another world war.

Appeasement

1935 – Anglo-German Naval Agreement: Britain allowed Germany to build a navy much larger than permitted by the Treaty of Versailles.
1936 – Remilitarisation of the Rhineland: Hitler sent German troops into the Rhineland, breaking the Treaty of Versailles, but Britain and France did not intervene.
March 1938 – Anschluss: Germany **took control of Austria**, and Britain and France did not take military action.
September 1938 – Munich Agreement: Britain and France agreed that Germany could take the **Sudetenland** from Czechoslovakia, hoping this would prevent a larger war.
March 1939 – Czechoslovakia: Hitler took control of the rest of Czechoslovakia, showing that **appeasement had failed to stop German expansion**.

French Knowledge Organiser – Year 9 - Half Term 2

Homework 1	
Modal verbs are always followed by an infinitive.	
Pouvoir	To be able to (can)
Vouloir	To want
Devoir	To have to (must)
Falloir	To be necessary to (must)
Je peux	I can
Je veux	I want
Je dois	I must
Il faut	It is necessary to
On peut	You can / One can

Homework 2	
c'était …	*it was …*
cool	cool
génial	great
intéressant	interesting
marrant	funny
romantique	romantic
sympa	nice
affreux	terrible
bizarre	weird
ennuyeux	boring
horrible	horrible
nul	rubbish
un désastre	a disaster

Homework 3	
ce matin	this morning
cet après-midi	this afternoon
ce soir	tonight
demain	tomorrow
demain matin	tomorrow morning
samedi après-midi	tomorrow afternoon
dimanche soir	Sunday evening
hier	yesterday
samedi dernier	last Saturday
le weekend dernier	last weekend
l'année dernière	last year

Homework 4	
je suis sorti(e	*I went out*
je suis resté	I stayed
je suis allé	I went
on est allés	we went
j'ai bavardé	I chatted
j'ai bu du coca	I drank coke
j'ai fait les magasins	I did shopping
j'ai fait une promenade	I went for a walk
j'ai joué au bowling	I played bowling
j'ai mangé un hamburger	I ate a burger
j'ai regardé un DVD	I watched a DVD
j'ai bien rigolé	I had a real laugh
on a dansé ensemble	We danced together

Homework 5			
Describing ourselves often involves the verbs 'avoir' (to have) and 'être' (to be). Both of these verbs are very common but irregular. It is important you learn how to form them in the present tense.			
Avoir = to have		**Être = to be**	
J'ai	I have	**Je suis**	I am
Tu as	You have	**Tu es**	You are
Il/Elle a **On a**	He / She has We have	**Il/Elle est** **On est**	He / She is We are
Nous avons	We have	**Nous sommes**	We are
Vous avez	You have (pl)	**Vous êtes**	You are (pl)
Ils/Elles ont	They have	**Ils/Elles sont**	They are
Remember, when you are talking about your age in French, you must use 'avoir' (have). **J'ai** treize ans = I'm thirteen years old. **J'ai** quatorze ans = I'm fourteen years old.			

Homework 6	
In French, to say how long you have been doing something, you use 'depuis' which means 'for' or 'since'.	
In English, we use the past tense to express this information e.g. I have been playing football for 3 years.	
'Faire' is an irregular verb so it does not follow the usual –re pattern. Instead, you must learn the different forms.	
Faire = To do	
Je	fais
Tu	fais
Il/Elle/On	fait
Nous	faisons
Vous	faites
Ils/Elles	font

Knowledge Organiser – Term 2

Spanish

HOMEWORK 1	
Mis intereses personales	
subir selfis	To upload selfies
poner filtros	To add filters
poner efectos	To add effects
cambiar mi estado	To change my status
comentar las fotos	To comment on photos
dar 'me gusta'	To 'like' something
hacer vídeos en directo	To make live videos
estar de moda	To be in fashion
estar bien informado/a	To be well informed
estar obsesionado/a	To be obsessed
leer las noticias	To read the news

HOMEWORK 2	
Las asignaturas	**School subjects**
la tecnología	design and technology
la educación física	P.E.
la religión	R.E.
la informática	information technology
la geografía	geography
la historia	history
la música	music
el inglés	English
el español	Spanish
el francés	French
las matemáticas	maths
las ciencias	science

HOMEWORK 3	
Tus opiniones	**Your opinions**
¿Te gusta (el español)?	Do you like (Spanish)?
¿Te gustan (las matemáticas)?	Do you like (maths)?
Me gusta (+ noun singular)	I like …
Me gustan (+ noun plural)	I like…
Prefiero …	I prefer …
Me encanta (n) …	I love …
Me gusta(n) mucho …	I like … a lot.
Me gusta(n) bastante …	I quite like …
No me gustan(n) nada	I don't like … at all.
Odio …	I hate …
Detesto …	I detest …
Mi asignatura favorita es…	My favourite subject is…

HOMEWORK 4	
Adjetivos	**Adjectives**
aburrido	Boring
bueno	Good
divertido	Fun
simpático	Kind / nice
fácil	Easy
interesante	Interesting
relajante	Relaxing
difícil	Difficult
creativo	Creative
emocionante	Exciting
activo	Active

HOMEWORK 5	
Hay que…	You have to
Se debe …	You/one must / should
No se debe …	You/ one mustn't/shouldn't
Está prohibido …	It is forbidden …
llevar uniforme	wear uniform
comer chicle	chew gum
ser cortés con los profesores y los otros alumnos	be polite to the teachers and the other pupils
salir del colegio en el recreo	go out of school at break times
llevar maquillaje	wear make-up
llevar piercings	wear piercings
llevar joyas	wear jewellery
llegar a las clases a tiempo	arrive to class on time
usar el móvil	use your mobile

HOMEWORK 6	
Consiste en…	Consists of…
una falda de tablas	pleated skirt
un jersey de pico	V neck jumper
un polo	a polo t-shirt
zapatos planos	flat shoes
de cuadros/ de rayas	checked / striped
verde claro/verde oscuro	light green / dark green
azul marino/celeste	navy blue / light blue
burdeos	burgundy
de lana/ de algodón	wool/ cotton
con el escudo del colegio	with the school's badge

GERMAN YEAR 9
HT2 into HT3

Homework 1: The Present Tense *recall*

1. The Present Tense is used to express what is happening now.
2. Verbs are 'doing' words, such as *to run*, *to walk*, *to talk* and *to play*
3. When you look up a verb in a dictionary, you will find it in its infinitive form, which usually ends in -en e.g. spielen (to play)
4. You need to change the ending of the verb according to the pronoun you are using.
5. All regular verbs follow the same pattern:

pronoun	ending
ich (I)	e
du (you / informal / singular)	st
er / sie / es (he / she / it)	t
wir (we)	en
ihr (you / informal / plural)	t
sie (they)	en
Sie (you / formal / singular/plural)	en

6. Not all verbs follow the regular pattern – some are irregular in the du and er/sie/es forms - you will need to learn these ones separately…

Homework 2:

1.	Ich fahre dahin, …	**I'm going there …**
2.	um Ski zu fahren.	**to go skiing**
3.	um Wassersport zu treiben.	**to do water sports**
4.	um wandern zu gehen.	**to go walking**
5.	um Salzburg zu besichtigen.	**to visit Salzburg**
6.	um Deutsch zu lernen.	**to learn German**
7.	um im See zu baden.	**to swim in the lake**
8.	um die frische Luft zu genießen.	**to enjoy the fresh air**
9.	um Freunde zu besuchen.	**to visit friends**

Homework 3:

The construction zu + infinitive:

- um Hausaufgaben zu machen (in order to do homework)
- ohne Hausaufgaben zu machen (without doing homework)
- anstatt Hausaufgaben zu machen (instead of doing homework)

Homework 4:

1. **haben**	**to have**	8. **sein**	**to be**
2. ich habe	I have	9. ich bin	I am
3. du hast	you have	10. du bist	you are
4. er hat	he has	11. er ist	he is
5. sie hat	she has	12. sie ist	she is
6. wir haben	we have	13. wir sind	we are
7. sie haben	they have	14. sie sind	they are

Homework 5: The Perfect (Past) Tense *recall 1*

1. The Past Tense expresses something that has already happened
2. The formation of the Past Tense in German requires 3 parts:
3. Part 1 is a pronoun/ subject of the sentence
4. Part 2 is an auxiliary verb
5. Part 3 is a past participle
6. e.g. Ich (1) habe (2) gespielt (3) = I played
7. e.g. Ich (1) bin (2) geflogen (3) = I flew
8. The past participle should be at the end of the sentence
9. e.g. Ich bin nach Deutschland geflogen = I flew to Germany

Homework 6: The Perfect (Past) Tense *recall 2*

10. There is a choice of 2 different verbs for the auxiliary verb: haben *or* sein
11. If movement A ➔ B is implied, you should use SEIN
12. Otherwise, you should use HABEN
13. A past participle can end with 't' e.g. gemacht (did/ made)
14. A past participle can end with 'en' e.g. geschrieben (wrote)
15. A past participle usually begins with 'ge'
16. Some past participles have 'ge' in the middle e.g. ferngesehen (watched TV)
17. Some past participles don't contain 'ge' e.g. besucht (visited)

Homework 7: The Future Tense *recall*

The formation of the Future Tense in German requires 3 parts:
(1) pronoun / subject of the sentence
(2) part of verb werden
(3) infinitive
e.g. (1) Ich (2) werde Deutsch (3) sprechen
The infinitive should be at the end of the sentence

ich werde	I will
er / sie wird	He/ she will
wir werden	We will
sie werden	They will

Homework 8:

Ein Brief		**A letter**
1.	Sehr geehrte Damen und Herren,	**Dear Sir / Madam**
2.	ich möchte meinen Urlaub gern in (Wien) verbringen. **I'd like to spend my holiday in (Vienna).**	
3.	Ich suche …	**I'm looking for …**
4.	eine Ferienwohnung.	**a holiday flat**
5.	ein Hotel.	**a hotel**
6.	für die Zeit vom (vierten) bis (neunten) (Mai).	**for the time from (4th) to (9th) (May).**
7.	Wir sind (drei) in der Gruppe.	**There are (three) of us in the group.**
8.	Ich interessiere mich auch für Informationen über … **I'm also interested in information about …**	
9.	Mit vielem Dank im Voraus für Ihre Mühe. **With many thanks in advance for your help.**	
10.	Mit freundlichen Grüßen	**With best wishes**

Year 9 Food Knowledge Organiser

HOMEWORK 1 – Personal and Kitchen Hygiene

Personal Hygiene 	Ensuring that you as a food handler are safe within the kitchen Examples include Washing Hands Wearing an apron
Food Safety 	Ensuring that the kitchen that you are working in is safe to prepare food Examples include Wiping kitchen surfaces down

HOMEWORK 2 – The Eatwell Guide



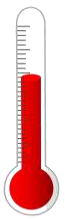
HOMEWORK 3 Macronutrients

Protein- meat, fish, eggs & beans	Needed for growth and repair
Carbohydrates- bread, rice, potatoes & pasta	Provides the body with energy
Fat- meat products, pastry products, cheese, butter, chocolate, biscuits, cakes	Protects vital organs Insulates the body

Micronutrients

Vitamins & Minerals- Fruit & vegetables
Ensure that we are healthy e.g. eyes, skin, hair
Help with the immune system

HOMEWORK 4 - Conditions bacteria need to grow

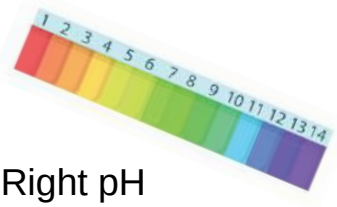

A suitable temperature


Food

A supply of moisture




Enough Time



The Right pH

Cross-contamination is when bacteria is spread between food, surfaces or equipment.
For example, using the same chopping board for raw meat and ready to eat food.

HOMEWORK 5 – Dietary Requirements

Gluten Free (Coeliac Disease)
Is an illness caused by an immune reaction to eating gluten.

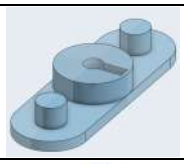
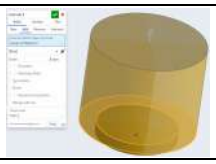
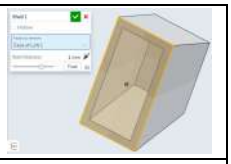
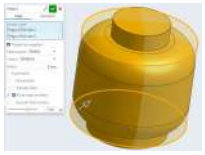
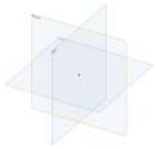
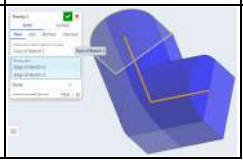
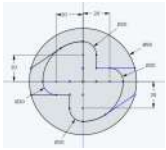
Dairy Free (Lactose Intolerance)
is when you get symptoms, such as tummy pain, after eating foods containing lactose, a sugar found in dairy products.

Vegetarian/Vegan - a meat free diet and eat a variety of healthy plant-based foods.
Vegan diet is based on plants. Vegans do not eat foods that come from animals.

Engineering & Technology - Knowledge Organiser

Year 9 Iterative Design

Hwk 1 - Learn these 3D CAD Terms

Part An individual component		**Extrude** Creating a 3D shape by stretching out a 2D sketch		**Shell** Hollowing out a 3D shape to a given thickness	
Assembly Parts are mated together to produce a complete product		**Loft** Creating a 3D shape by connecting sketches across multiple planes		**Fillet** Rounding an edge on a 3D shape to a given radius	
Plane A flat 2D surface on which to draw a sketch in 3D space		**Sweep** Creating a 3D shape by projecting a sketch along a path			
Sketch A 2D shape drawn on a plane to help construct a part					

Understand these terms better by completing your **Lego Man** task on **OnShape**

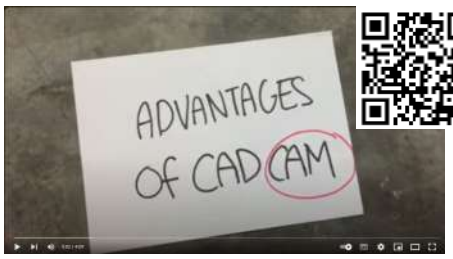
Hwk 2 - Learn and Recognise Examples of Types of Research

Primary Information you have gathered yourself	•Measurement Data •Product Analysis •Market Research •Interviews •Photos	**Secondary** Information presented by someone else	•Reviews •Historical Data •Articles •Adverts •Books

Hwk 3 - Learn and Understand Common 3D Printing Methods

FDM Fused Deposition modelling	SLA Stereolithography	SLS Selective Laser Sintering
A polymer (plastic) filament is extruded through a heated nozzle https://www.youtube.com/watch?v=qoBU0r7pT84	A laser hardens layers of liquid resin in a vat https://www.youtube.com/watch?v=yW4EbCWaJHE	Layers of metal power are fused together by laser or electron beam https://www.youtube.com/watch?v=sRC8W77MlrY&t=23s

Hwk 4 - Understand the Advantages/Disadvantages of CAD/CAM



https://www.youtube.com/watch?v=--Z-s0zW9xw

Hwk 5 - Learn and Recognise CNC Machines



Watch & LEARN

Lathe https://www.youtube.com/watch?v=-9htuGLegbI





Miller https://www.youtube.com/watch?v=nUdFqAT8i1I

Router https://

ExCELLENCE IN EVERYTHING

Engineering & Technology – Knowledge Organiser

Year 9 Product Design - UCD

Hwk 1

Identify materials:



Copper



Brass



Lead



Zinc



Carbon Steel



High Speed Steel



Aluminium



Stainless Steel

Hwk 2

Describe material classifications:

Ferrous Metal - *are metals that have an iron content in them for example mild steel, cast iron etc. (**FE**rrous = Iron)*

Non-Ferrous Metal - *are metals that do not have an iron content in them ie aluminium, copper, tin*

Thermoplastic - is a family of plastics (polymers) that can be heated, formed and allowed to cool into complex shapes. The heating process can be repeated.

Thermosetting Plastic - *once heated, processed and allowed to cool **cannot** be reheated and the process repeated. These plastics (polymers) tend to burn if attempted to be re-heated.*

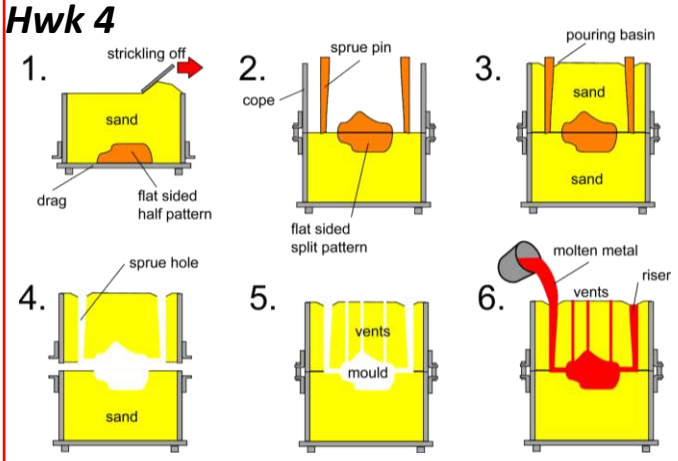
Smart Material - *are materials that react to a change (or react) in their environment such as stress, heat, uv light, electrical current, moisture etc.*

Composite - *is a combination of two or more (very different) materials that when joined create a material with enhanced physical or chemical properties.*

Hwk 3

Ferrous	Non-Ferrous	Composite
Carbon Steel	Copper	Concrete
High Speed Steel	Brass	Carbon Fibre
Stainless Steel	Lead	GRP (Glass Reinforced Plastic)
	Zinc	
	Aluminium	
	Titanium	

Hwk 4



Sand Casting Process

1) Place half of the pattern in the sand and create a mould.
2-3) Create the second half of the mould – including holes for pouring the metal + to release air.
4-6) Remove the pattern, clamp the mould together and pour in the molten metal.
7) Break away the sand from around the part.



Titanium



Concrete



GRP



Carbon Fibre

Watch & LEARN

https://www.youtube.com/watch?v=2CIcvB72dmk

EXCELLENCE IN EVERYTHING

Computing

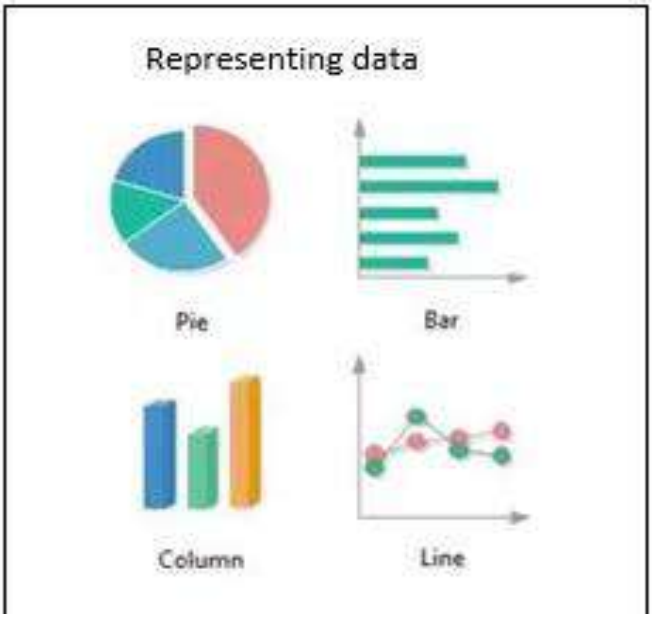
Year 9 Comp 1

	Key Term	Definition	Examples
Mobile App	Programming language	A formal language, that a computer can understand and execute to perform specific tasks	Python, JavaScript.
	Interactivity	How users engage with and influence an app's functionality and content	Clicking a button, selecting from a dropdown menu.
	Operating system	The software that manages a mobile's hardware and software	Android, IOS
	Security vulnerabilities	Weaknesses in systems, software, or hardware that can be exploited by attackers to gain unauthorized access, disrupt operations, or cause other harm	Weak passwords, social engineering, unpatched software
Data handling	Data	Unprocessed facts and statistics	40. Blue. Yes.
	Information	Data provided in context to provide meaning	40% of the class have blue eyes
	Data handling	The process of gathering, recording and presenting information	Tables, charts, graphs, storage
	User-friendly	Something that is easy to use and understand	Clear and specific titles, clear layout, etc.
Pre-production & Video	Pre-production	The process of planning a media production	Meetings, workplans, mindmap, moodboard, storyboard, etc.
	Storyboard	A sequence of drawings with directions representing shots planned for a film	Scene content, directions, dialogue, etc.
	Technical aspect	The directions and camerawork included on a storyboard to aid production	Timings, scene number, camera angle, camera movement, etc
	Export	Setting the properties of a media product so it is suitable for consumption	Resolution, DPI, aspect ratio, file format, etc.
	File format	The way that media is encoded so it can be read by a computing device	Audio-visual formats include: .mp4, .avi, .wma, etc.

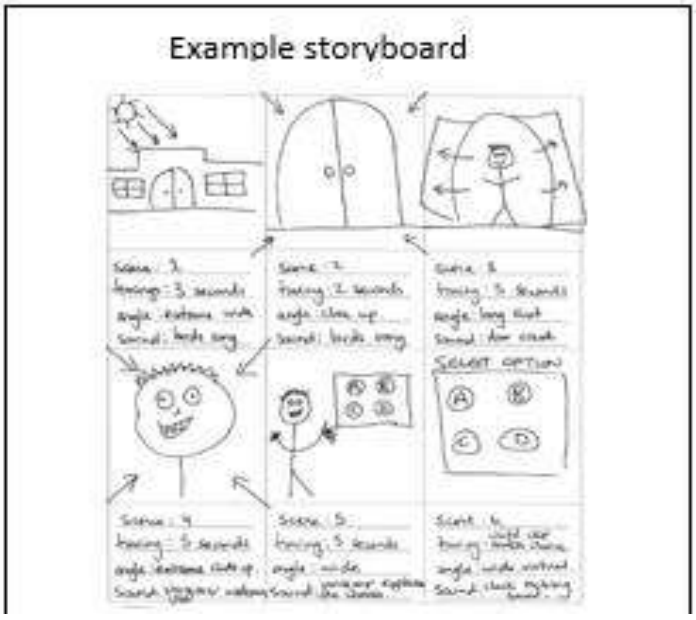
Homework 1

Homework 2

Homework 3



Homework 4: Representing Data



Homework 5: Storyboard design

Y9 - Orbit- photography

Surface pattern design

Surface Pattern Design is the act of creating art for the surfaces of mass-manufactured products.

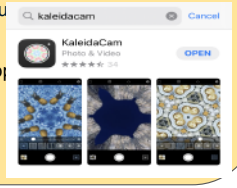
As the name suggests, in its most true form, surface pattern design is **primarily artwork that repeats in a pattern**. For example, wallpaper, wrapping paper, upholstery, quilting fabric, apparel fabric, and floor cove

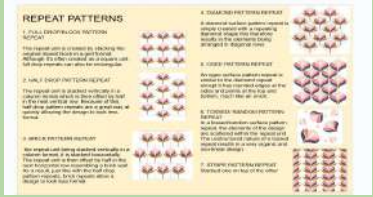


Digital edits

Digital edits, in the context of images and videos, refer to the alteration of those files using computer software. This can involve various techniques like retouching, compositing, color correction, and more. Digital edits are used for a variety of purposes, from simple enhancements to complex manipu

Example of digital editing 'Kaleidacam ap





Uploading photos

- download 'one -drive' on your phone
- Use your school email to create an account
- Upload from photo album

Accessing your photos on onedrive



Google slides editing tools



To freehand rotate

- Click on the image
- Click the blue dot at the top of the box
- Using your mouse drag the dot at a specific angle/degrees

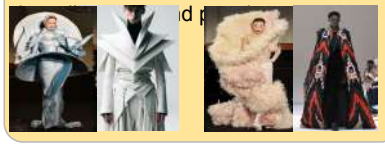


- Right click on the image
- 'Rotate'
- Select the flip/rotation you would like

Y9 - Orbit- textiles

Haute couture

Haute couture serves as a showcase for artistic expression and technical skill in fashion, pushing creative boundaries and setting trends. It's a platform for designers to experiment with innovative techniques and materials, while also elevating a



Croquis

A croquis is a quick sketch, often of a live model, used as a template for drawing clothing. In fashion design, it serves as a basic figure outline to quickly capture proportions and poses for designing garments. The word "croquis" originates from French and simply means "sketch".

Croquis are exaggerated designs, not reality.

The word "croquis" is pronounced "kroh-kee"



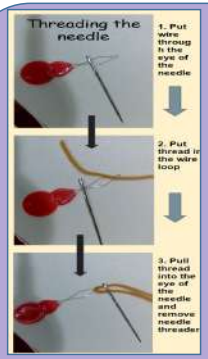


Craft knife use and safety

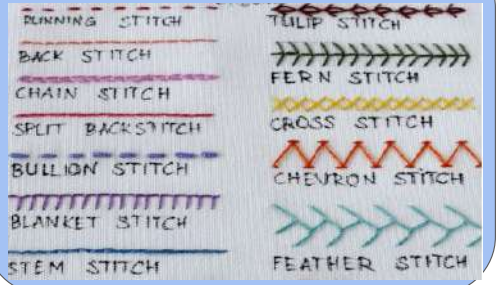
- Blade away when not in use
- Do not move around the classroom
- Cut away from you
- Hand grip on top of the knife
- Keep other hand away from your cutting path



How to thread a needle



Stitch types



YEAR 9 | MUSIC | HT1/2 - FILM MUSIC

HOMEWORK 1

Chord	A series of notes played together at the same time e.g. the James Bond Leitmotif .
Melody	The tune of a piece of music.
Pitch	How high or low a sound is
Rhythm	The recurrence of notes (of different lengths) and rests (silences) in time.

HOMEWORK 2

Discord	A chord where the notes sound like they 'clash' together – often producing a 'tense' feel .
Dynamics	How loud or soft the music is played. It helps show emotion and energy in a song .
Dotted Rhythms	A rhythm where a dot adds half the value to a note, making it longer and giving the music a bouncy or uneven feel. .
Syncopated Rhythms	Rhythms that put emphasis on the weak or off-beats, making the music feel unexpected or more exciting. .

HOMEWORK 3

Stepwise	When a melody moves smoothly from one note to the next, like walking up or down a
Leap	When a melody jumps over notes to a much higher or lower one, like skipping steps on a staircase
Crescendo	When the music gradually gets louder, building up excitement or intensity.
Repeat Marks	A musical symbol made up of two dots and two bar lines, telling the performer to go back to the beginning (or to the previous repeat marks) and repeat the music

HOMEWORK 4

Cue Sheet	A detailed listing of musical cues matching the visual action of a film so that composers can time their music accurately to match the visual images.
Diagetic	Music that is part of the action: the characters in the film can hear it.
Non-Diegetic	Music that is not part of the action: the characters in the film cannot hear it. It is just for the audience.
Leitmotif	A short melody that is associated with a character or idea in a film. E.g., James Bond has his own leitmotif.

You could listen to some music written by the three composers below whilst doing your homework .



John Williams | Hans Zimmer | Danny Elfman

Drama: Year 9 HT1/2- Mobile Phone

A Drama Terms

Narrative	Also known as plot. The narrative of a play is the story.
Structure	The ordering and sequencing of the play/presentation. The structure of scenes affects the way the story is seen by the audience.
Impact	How something within the play is received by the audience. Ensuring that each scene has a purpose which the audience can see can affect the audiences engagement with a play/performance.
Transition	How the performance moves between scenes. Transitions can be simply moving from one scene to another or can be part of the overall atmosphere of the play involving movement, dialogue, music or sound effects.
Genre	The type of story being told with rules which govern that particular telling of it. i.e. Romance, Science Fiction, Horror etc.

B Play Terms

Playwright	The person/people who wrote the play. For 'Twisted' these are Andrew Fusek Peters and Polly Peters
Characters	Also known as 'roles' these are the people who are in the story. The actors play the characters to ensure the narrative is delivered.
Stage Directions	Often written in *italics* these are instructions to the director/actors as to where to be on stage or how to say a particular line. These are not intended to be read out for the audience.
Dialogue	Refers to the words spoken during a performance. These words will appear next to the character name and should be spoken by the character in performance.
Protagonist	This refers to the main/leading character of a play. The person opposite them is referred to as the Antagonist.

C Vocal Skills – How can they help?

Pause	The ability to not deliver all of your lines in one go. Pausing to add emphasis to certain lines can develop your character's depth.
Pitch	Ensuring that you are not too shrill or too low you are able to suggest something about your characters mood or attitude through your vocal pitch.
Accent	Using a different accent can allow your audience to see where your character is from. You could also manipulate the audience by using an accent which is associated with a specific stereotype.
Tone	You vocal tone indicates to the audience the subtext of what you're saying. It allows them to understand more than just the words that are spoken.
Fluency	This refers to how well you know your lines. There is a difference between knowing the words and being so familiar with them that they feel very natural when spoken.
Cadence	This refers to the natural highs and lows of your vocal tone and is the difference between sounding natural and sounding like a robot or simply reading lines.

D Dramatic Techniques

Flashback	A scene which is set back in time from the other scenes to view events which may have gone on before the play started.
Tableau	A still image which tells the audience a story or message. The plural of tableau is tableaux. (pronounced the same)
Choral Speaking	Where two or more people say dialogue at the same time. Can add a strangeness to a scene as it doesn't occur naturally.
Cross Cutting	Cutting between two scenes for a dramatic effect. Highlighting similarities and differences between place / character / time.
Monologue	An extended length of dialogue performed by a single character.
Duologue	An extended length of dialogue performed by two characters. Often a conversation.

John Port Spencer Academy PE Department
Knowledge Organiser – YR 9 BADMINTON

Key Skills:

SERVING –There are several types of serve – short/backhand, long ,flick. A backhand serve should land close to the service line on your opponents side of the net. The racket head must start from below the waist.

UNDERARM CLEAR (long serve) **–** This shot is played high to the back of your opponents court. Start sideways on and use a whip action with the wrist to create power.

OVERHEAD CLEAR – Played to the back of your opponents' court and is a defensive shot. Start sideways on, racket up and behind you, focus on making contact with the shuttle in front of you.

DROP SHOT (underarm and overarm)- a shot played with finesse to land the shuttle as close as possible to the net on your opponent's side.

SMASH/JUMP SMASH SHOT – This is the main attacking shot in badminton. It is an overhead shot, hit in front of the body, that aims to get the shuttle down on the floor at a sharp angle. The wrist needs to "snap" to get it down. Jumping to hit the shot gives it more power.

TACTICS - Hitting into space – keep your opposition moving around the court

- Shot selection – selecting the right shot for the right situation
- Targeting opponents weaknesses
- Disguised shots – trying to make it look like you are going to play a particular shot but then play a different shot to fool an opponent.
- Doubles play – role of players in doubles. Front/back formations or side to side.

Rules

Game starts with a diagonal serve- right hand side service box to right hand side service box.

Serve must land over the service line

Play to 21 points – but must win by 2 clear points.

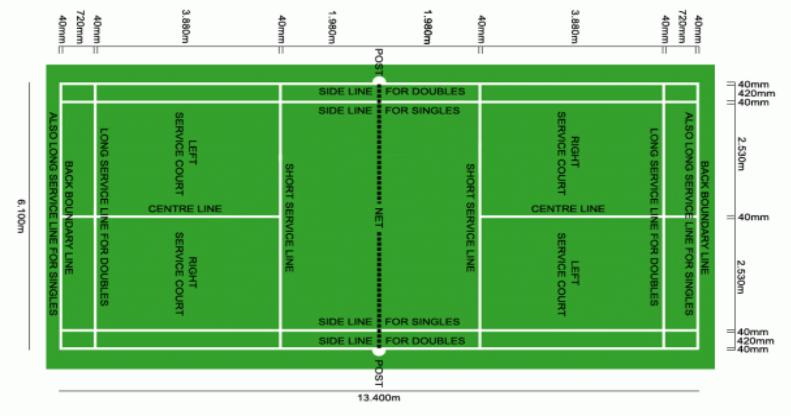
A point is won every rally

Whoever wins the point serves next

When score is even, serve from right, when score is odd, serve from left

Court is long and thin for singles, short and wide for doubles

You cannot hit the net with your racket or body



Stretch and Challenge Task:

-watch some professional match play online.

- try and score a game in lesson or by watching online.

- Find out what happens when the wrong doubles player hits the serve. Who wins the point? The server or returner?

Key Terms to learn:

Grip and ready position
Rally
Serve –backhand/short, long, flick
Ready position
Overarm clear
Drop shot
Disguised shot
Smash
Underarm clear
Scoring

John Port Spencer Academy PE Department Organiser Year 9 Fitness

Knowledge

Key Skills:

Aerobic means "with oxygen and anaerobic means "without oxygen."

Aerobic Exercise: This occurs when blood is carried through your vessels to deliver oxygen to the muscles to keep you moving, and you sustain the activity for more than just a few minutes.

Anaerobic Exercise: short, high intensity exercise. At the point in time where the energy you are using does not allow the body to create enough oxygen.

Training Methods:-

Interval -Athletes training with periods of work followed by periods of rest

Continuous -Training for a specific period of time with no rest

Fartlek -A combination of slow and fast running over a variety of distances and terrains

Cross -A mixture of training

Circuit -A number of exercises, set out at 'stations' to avoid exercising the same muscle group consecutively

Weight -Using progressive resistance, either in the form of actual weight lifted or in terms of the number of times the weight is lifted

Flexibility – Either Ballistic; Static or PNF.

Plyometric – Involves jumping and immediately Jumping again.

Speed Training – Could include Hollow Sprints ; Acceleration and Interval Training



Stretch and Challenge Task:

Devise a Training Programme for a Specific Sport

Key Content and Terms to learn:

John Port Spencer Academy PE Department Knowledge Organiser

Activity: Rugby

Year: 9

Key Skills:

Rucking- a phase of the game where the ball goes to ground and one or more players from each team close around the ground.

Jackling- This is where defending players contest the ball at a ruck and win the ball.

Scrummaging- A type of restart in rugby where players interlock heads and push against opposition players.

Line-outs- A type of restarting in rugby when the ball leaves either side-line of the pitch. Like in football, the team who didn't kick/throw the ball out usually gains control of a line-out (unless there was a penalty advantage).

Kicking- A way of moving the ball in rugby. The ball can be kicked forwards and there are different types of kicking which, if used effectively, can aid in attacking and defending.



Stretch and Challenge Task:

- Watch a premiership or international rugby game with focus on the kicking. When do players kick the ball? Why do they kick the ball? What types of kick do they use and what are the laws involved?

Key Content and Terms to learn:

- Scrummaging
- Line-outs
- Binding
- Grubber kick
- Box kick

John Port Spencer Academy PE Department
Knowledge Organiser

Activity: Football

Year: 9

Key Skills:

- Controlling the ball – using different parts of the body – this could be the feet, thigh, chest and head. Use both feet. Remember to cushion the ball.
- Passing – there are 3 types of passes. Side foot pass, driven pass with the laces and a lofted pass. Using the side of the foot allows you to pass accurately over a short distance; a driven pass allows you to pass the ball on the floor, but a greater distance. Finally, a lofted pass allows you to lift the ball in the air over players and change direction. Remember to keep your standing foot next to the ball when you make the pass.
- Dribbling – dribbling allows you to move the ball quickly around the pitch using the inside and outside of your feet and keeping, the ball close to your feet and your head up.
- Turning with the ball and outwitting a defender – turning with the ball allows you to change direction using different techniques, such as dragging the ball back with the sole of your boot. Outwitting and opponent allows you to beat a defender using different techniques such as a step over.
- Shooting – there are different types of shots that allows you to score goals. You instep can be used to control and place the ball into the goal. If you use your laces then this allows more power to be produced. Try and use your non-dominant foot.
- Heading – you can use an attacker header, a defensive header or a controlled header, which might be passing the ball back to someone with your head.
- Attacking – keeping possession – making a number of passes allows your team to keep possession and advance up the field.
- Tackling techniques – tackling, jockeying and forcing the player onto their weaker foot.



Strategies and Tactics:

Attacking – using the width is very important when attacking. It is important teams keep possession and play one and two touch to move the ball quickly. Also, another effective strategy is to 'switch' the play using a lofted pass. To keep possession some teams may use the depth of the pitch to keep possession and build an attack.

Defending – players are normally marked man to man, but can be marked zonal from corners. It is also important that defenders keep a good line, which may allow them to play the opposition offside. This also means the defending team isn't too deep near their goal.

Stretch and Challenge Task:

- Why is it important to move the ball quickly when keeping possession?
- How can width be provided in different formations like 4-4-2, 4-3-3 or 5-3-2?
- What is zonal marking?

Key Content and Terms to learn:

Passing, dribbling, shooting, heading, attacking, defending, possession, width, depth, different formations, offside rule, 'switching' play