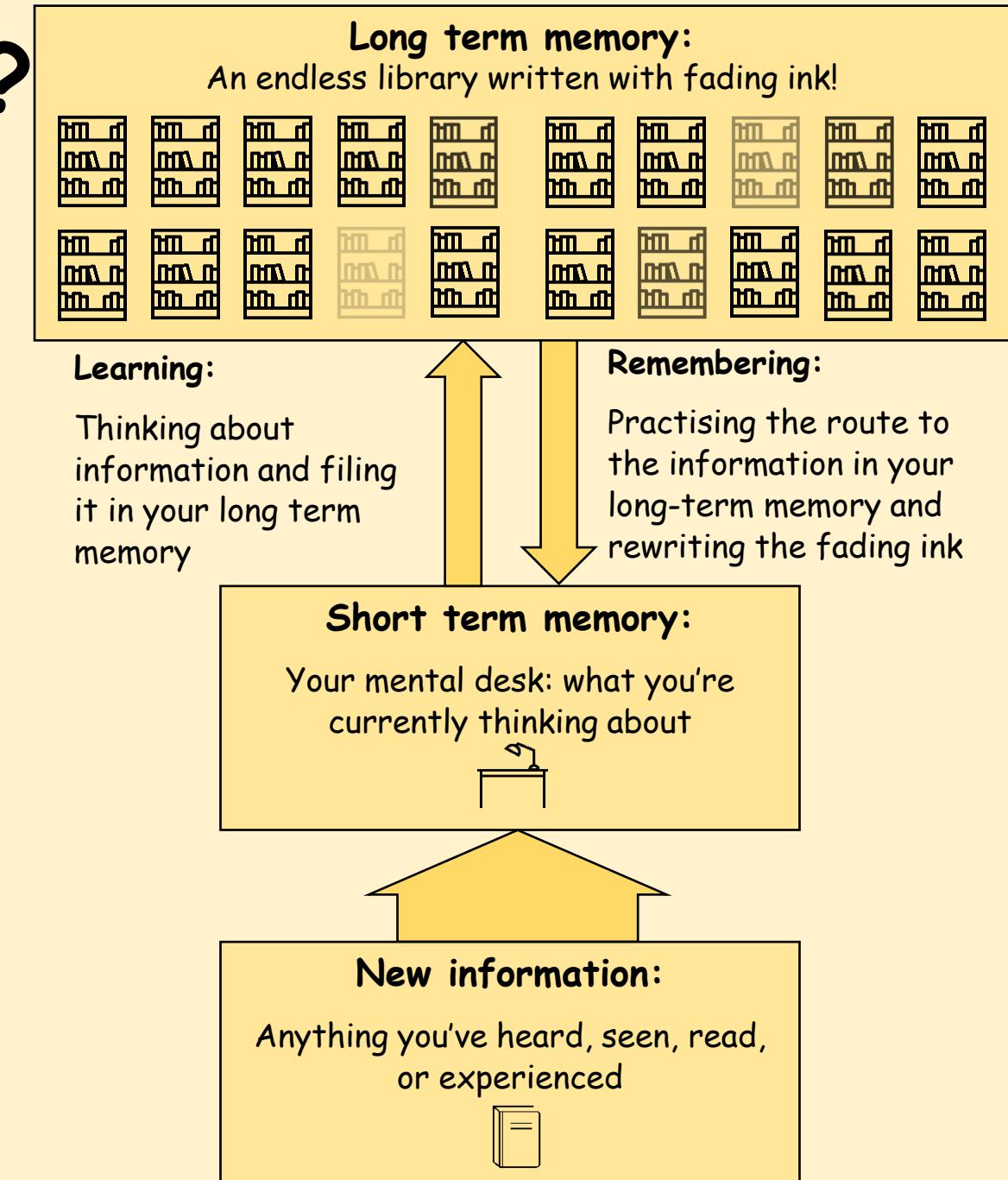


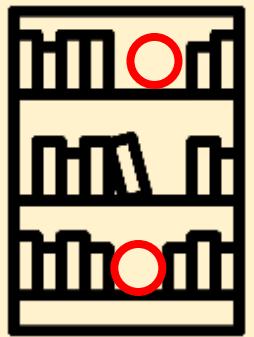
Yr9 - How do I practice?

In exams, you want to be able to remember a lot of knowledge quickly. This knowledge includes facts and methods which you can use to answer exam questions. To remember a lot of knowledge quickly, that knowledge needs to be securely stored in your long term memory.

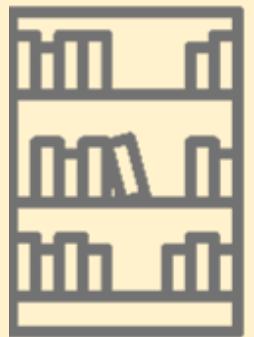
To make sure knowledge goes into your long term memory, stays there, and to make sure you can find it quickly, you need to spend time thinking hard about that knowledge in your short term memory.



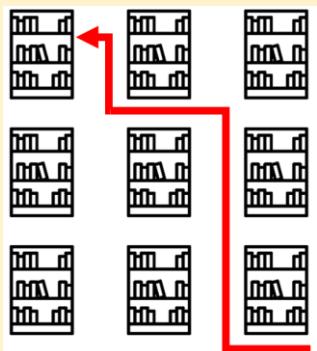
Whenever you revise, you are doing one of three things:



1. Finding and closing gaps in your knowledge.



2. Strengthening fading knowledge in your long term memory.



3. Practising recalling knowledge quickly.

Strategies to try:

Self-quizzing:

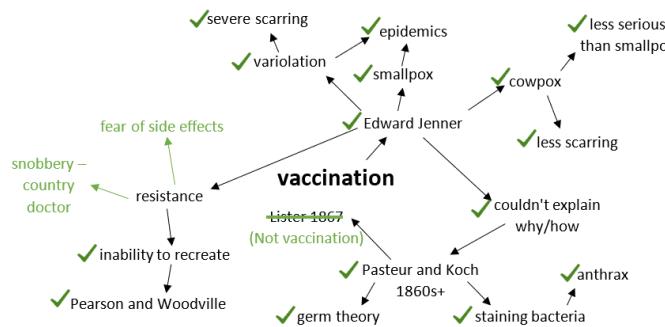
Topic	
Question 1	Answer 1
Question 2	Answer 2
Question 3	Answer 3
Question 4	Answer 4
Question 5	Answer 5
Question 6	Answer 6

Flashcards:

osmosis

Net movement of water from a high concentration to low concentration across a partially permeable membrane

Writing a concept map:

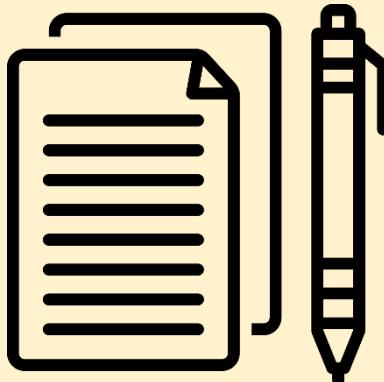


Use your exercise book to help create these revision resources.

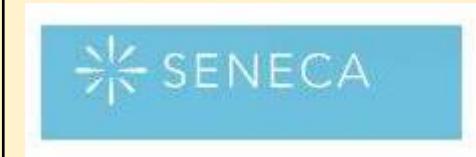
Watch videos:



Practising exam questions:



Online platforms:



BBC
Bitesize

Year 9 Key Assessment 1: An Inspector Calls

Key ideas to revise:

- 1) Responsibility and empathy. Which characters take accountability?
- 2) Titanic as a microcosm for society and the divide between social classes.
- 3) Dramatic irony and how it's used to form our impression of Mr. Birling.
- 4) The gap between gender and the older / younger generations.
- 5) 1912 vs 1945.
- 6) Preistley's warning to society and how he uses the characters to convey his message.
- 7) Capitalism vs Socialism.



- **Suggests...**
- **Implies...**
- **Leads me to believe...**

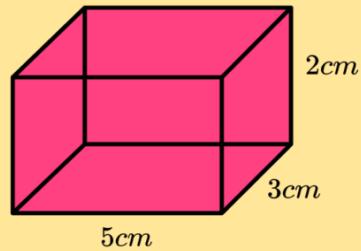
1. **"If men will not learn that lesson, they will be taught it in fire and blood and anguish"** (Inspector)
2. **"There are millions and millions of Eva Smiths and John Smiths"** (Inspector)
3. **"The Titanic...unsinkable.. absolutely unsinkable"** (Mr B)
4. **"Each of you helped to kill her"** (Inspector)
5. **"All mixed up like bees in a hive, community and all that nonsense"** (Mr B)
6. **"I am a hard-headed practical man of business"** (Mr B)
7. **"The younger generation who can't even take a joke"** (Mr B)
8. **"We don't live alone, we live as one body"** (Inspector)
9. **"She died in misery and agony hating life"** (Inspector)
10. **"It is better to ask for the Earth than to take it"** (Inspector)
11. **The lighting should be pink and intimate until the Inspector arrives where it should be brighter and harder.** (Stage directions)
12. **"But these girls aren't cheap labour- they're people"** (Sheila)

Preistley, as a socialist, criticises capitalist greed whilst promoting collective responsibility and equality.

PESAA:
Point
Evidence
Sub-quote
Analysis
Authorial Intent



Mathematics Year 9



Face	Area
Bottom	$5 \times 3 = 15$
Top	15
Front	$5 \times 2 = 10$
Back	10
Right side	$2 \times 3 = 6$
Left side	6

$$\begin{aligned}\text{Total surface area} &= 15 + 15 + 10 + 10 + 6 + 6 \\ &= 62\text{cm}^2\end{aligned}$$

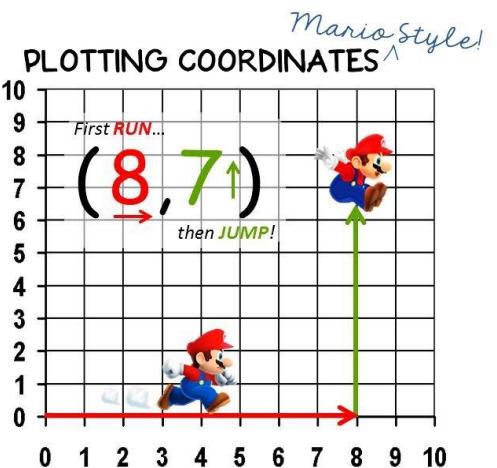
Some topics to revise (Sparx code)

Volume of a cube (M765)

Solve one step equations (M707)

Find equation from the graph (M544)

Plotting straight line graphs (M932)



Prime numbers:

- Have exactly two factors
- 2, 3, 5, 7, 11, 13,...
- 2 is the only even prime number



Workings

Show each stage of your working, try not to do too much calculating in your head, we can't mark what isn't written!!

Show off what you know!

Presentation

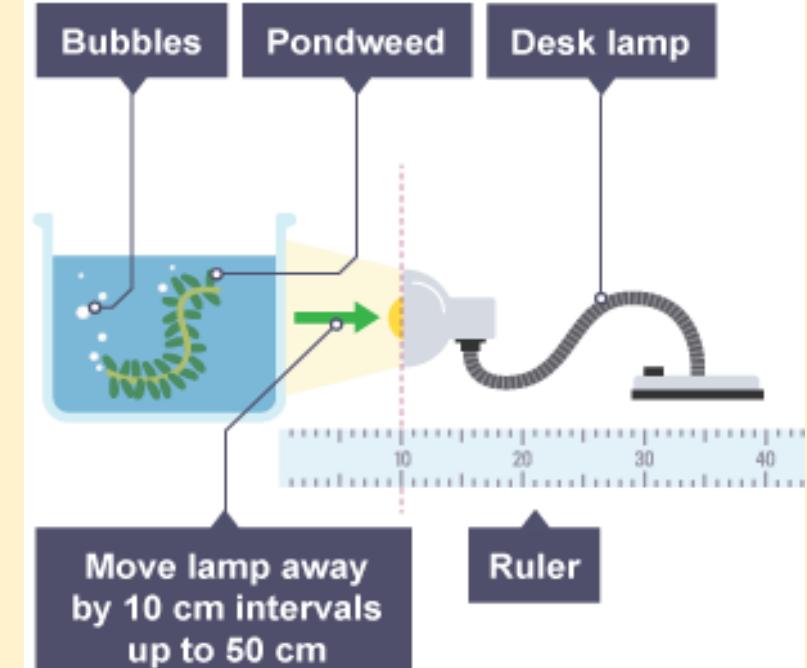
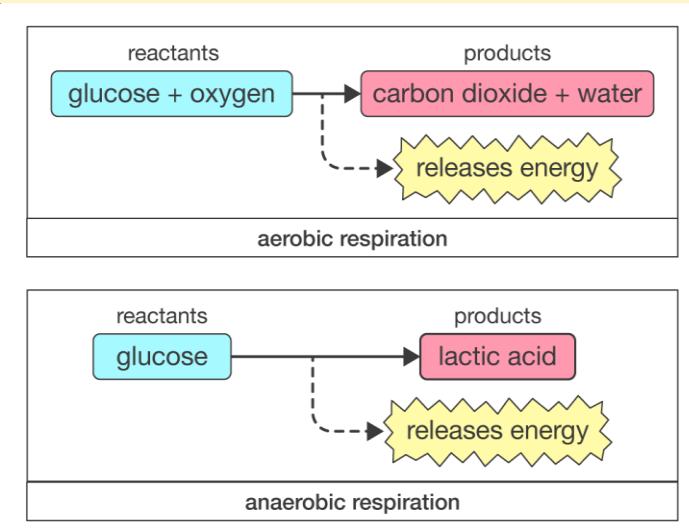
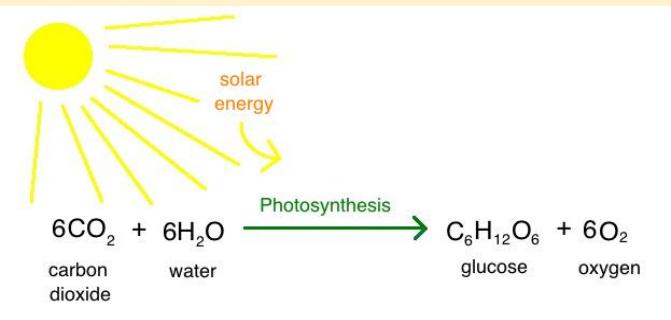
Present your work logically and in an organized way on the page, sufficient that the order of the process of solution is clear and unambiguous. **Work down the page and use bullet points or steps.**

Year 9 - Science

Key Areas:

- Photosynthesis
- Respiration (Aerobic)
- Respiration (Anerobic)

Watch the video clips:



1. Set up a boiling tube containing 45 cm³ of sodium hydrogencarbonate solution (1%). Allow the tube to stand for a few minutes and shake to disperse any air bubbles that might form.
2. Cut a piece of the pondweed, *Cabomba*. The pondweed should be 8 cm long.
3. Use forceps to place the pondweed in the boiling tube carefully. Make sure that you don't damage the pondweed, or cause the liquid to overflow.
4. Position the boiling tube so that the pondweed is 10 cm away from the light source. Allow the boiling tube to stand for five minutes. Count the number of bubbles emerging from the cut end of the stems in one minute. Repeat the count five times and record your results.
5. Calculate the average number of bubbles produced per minute. Repeat the experiment at different distances away from the light source.

Variables

- Independent variable – distance from the light source/light intensity.
- Dependent variable – the number of bubbles produced per minute.
- Control variables – concentration of sodium hydrogencarbonate solution, temperature, using the same piece of *Cabomba* pondweed each time.



Key Topics:

- Philosophy
- Metaphysics
- Epistemology
- Ethics

From last term

- Guru
- Khalsa
- Sewa

RE

What you will be asked to do:

- Complete a multiple choice test across all of these topics
- Complete a written task from a choice of options across these topics



At Communicate	... respond creatively as well as offer more detailed explanations for their own responses to their experiences of the concepts/words introduced.
At Apply	... explain examples of how their responses relate to events in their own and other people's lives.
At Inquire and Contextualise	... accurately explain meanings of concepts/words in the traditions encountered and studied (taught at the Inquire step). ... accurately explain the way the concepts/words in the traditions encountered and studied, impact the lives of those in the traditions with examples (taught at the Contextualise step). ... appreciate and begin to explain how the concepts/words may interact together to influence the way people think and speak and act in the world.
At Evaluate	... discern value of these concepts/words in the lives of those living in the traditions encountered and studied, as well as recognising some of the issues this might raise articulating the value of their interconnections. ... discern possible value for their own lives and communities and how this might influence how they speak, think and act in the world (not usually assessed through summative assessment).



Where to find information:

- Your book- this should contain everything you need
- BBC Bitesize Christianity
- BBC Bitesize Buddhism
- Text books- speak to Mr May for the loan of a text book if you would like further information
- Your class teacher- if you are unsure about anything speak to your teacher

Y9 Geography

Key Questions:

How are resources distributed across the world?

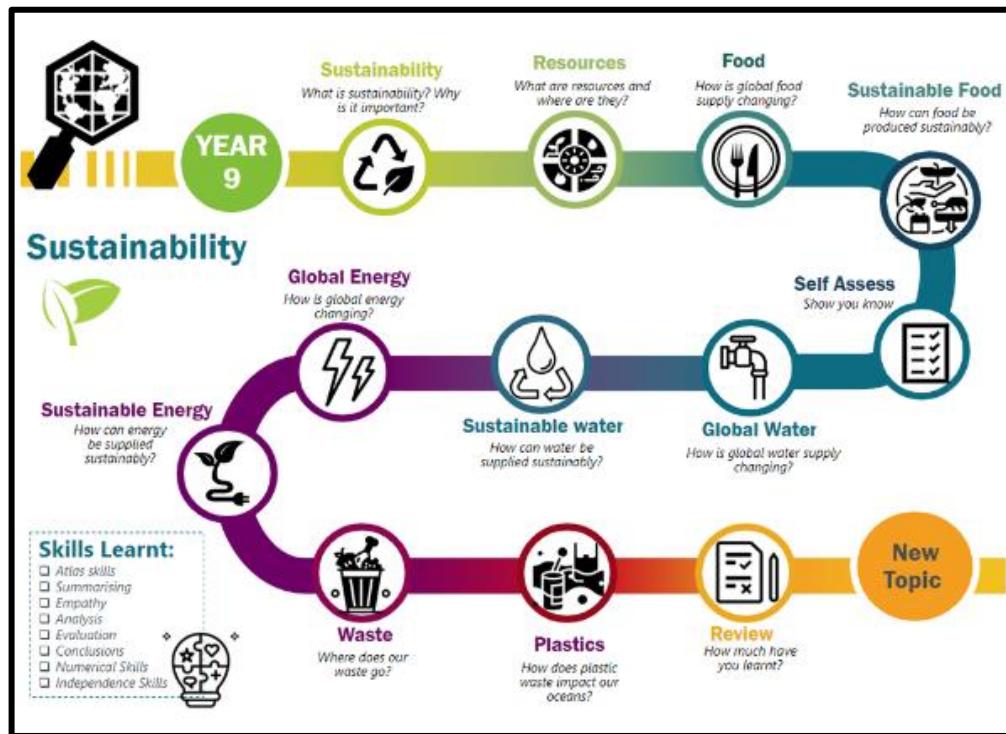
Can I describe the patterns using TEA

How can food supplies become more sustainable?

Water stress, what are the impacts and the solutions?

**Use the student area
to recap and review
all our lessons**

[Y9 - Sustainability
\(sharepoint.com\)](https://sharepoint.com)



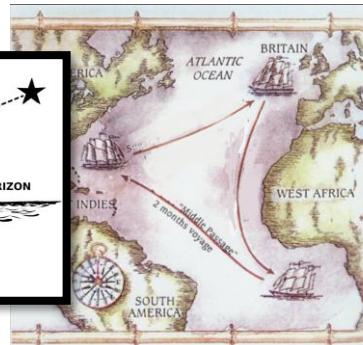
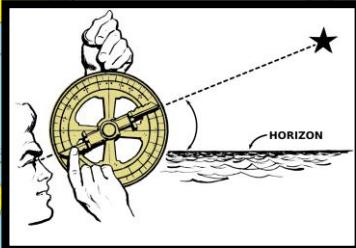
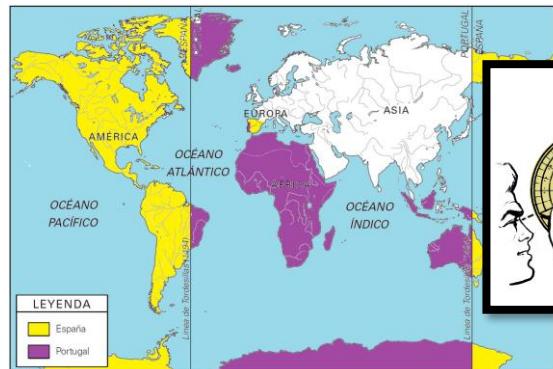
Year 9 History - Key Assessment 1

Topics we have studied in Year 7 and 8 that will come up on the test:

- Norman Conquest and Battle of Hastings
- Henry VIII and the Reformation
- European Empires

Tips for success:

- Revise the 'big stories', what is the theme in each of the topics?
- Remember some specific historical facts for each topic.
- History is not just about learning dates!



Topics we have studied in Year 9 that will come up on the test:

Student Page for History

- Causes of World War II
- The end of World War II
- The Holocaust



Key Revision Questions

1. How did King William I change England?
2. Why did Henry VIII set up the Church of England?
3. What is anti-Semitism and persecution?
4. Why did World War II begin?
5. What was the significance of Operation Barbarossa?
6. How did persecution of Jewish people change in the 1930s?

YEAR 9 - HALF TERM 1 – Learning Log

What you need to know to do well in Key Assessment 1:

STEP 3 **STEP 4** **STEP 5** **STEP 6**

FAMILY – Use and understand a variety of family vocabulary in Spanish.

DESCRIPTIONS – Describe and understand descriptions (hair / eyes / personality).

ADJECTIVES – Use a wide range of adjectives applying the correct adjectival agreement for masculine / feminine / singular / plural.

OPINIONS – Give a range of opinions about family members and explain why. + Talk about your ideal family and explain why.

VERBS & TENSES – Use reflexive verbs accurately in the context of relationships. + Use SER / ESTAR accurately.

Use the conditional to talk about ideal family.

Use future tense to talk about future plans with family.

Use the past tense to talk about past activities with family

JOBS & CHORES – Use a variety of jobs to talk about jobs in the family.

Give information about jobs you would like / dislike and why.

Say what you do to help at home and give developed opinions about it.

GCSE – Describe a photo using the PLAN technique (CHECK PAGE 64)

Apply knowledge of key Spanish phonics.

Tiene (He / She has)	el pelo	• corto • medio largo • largo	• liso • ondulado • rizado	• rubio • castaño • moreno • negro • pelirrojo • blanco/ canoso
Tienen (They have)				

HAIR

Es calvo/a	mi tía = my auntie
Es gordo/a	mi madre = my mama
Es delgado/a	el bebé = the baby
Es musculoso/a	los miembros de la familia = the family members
Es viejo/a	los adultos = the adults
Es joven	los ancianos = the elderly
Es feo/a	los hijos = the children
Es guapo/a	mi abuelo = my grandfather
Es alto/a	mi abuela = my grandmother
Es bajo/a	mi hermano = my brother
Tiene pecas	mi prima = my cousin
Lleva gafas	mi primo = my brother
Lleva un hiyab	mi hermana = my sister

APPEARANCE

FAMILY	
es calvo/a	mi tía = my auntie
es gordo/a	mi madre = my mama
es delgado/a	el bebé = the baby
es musculoso/a	los miembros de la familia = the family members
es viejo/a	los adultos = the adults
es joven	los ancianos = the elderly
es feo/a	los hijos = the children
es guapo/a	mi abuelo = my grandfather
es alto/a	mi abuela = my grandmother
es bajo/a	mi hermano = my brother
Tiene pecas	mi prima = my cousin
Lleva gafas	mi primo = my brother
Lleva un hiyab	mi hermana = my sister

RELATIONSHIPS

Tiene (He / She has)	los ojos	• azules • marrones • verdes
Tienen (They have)		

EYES

SPANISH PRONUNCIATION					
A	B	C	D	E	F
ah	bay	say	day	ay	effay
hay	ah-ay	ee	ha-ha	ka	ah-lay
sh-may	sh-may	em-vay	o	pey	koo
er-ay	er-ay	ta	uh	vay	do-blis-ay-vay
ay-hees	e-gree-ay-ga	ya			

PRESENT

AR	ER	IR	
+o	+o	+o	I
+a	+e	+e	(s)he
+amos	+emos	+imos	we
+an	+en	+en	they

voy a + INF	I am going to
va a + INF	(s)he is going to
vamos a + INF	we are going to
será	it will be
me gustaría	I would like to
sería	it would be

FUTURE

AR	ER	IR	
+é	+í	+í	I
+ó	+ío	+ío	(s)he
+amos	+imos	+imos	we

fue / era	it was
president, chairperson	presidente/a
work, job	trabajo (m)
company, firm	empresa (f)
market	mercado (m)
teacher, professor	profesor (m), profesora (f)
boss, headteacher	director (m), directora (f)
police, police officer	policía (mf)
company, firm	compañía (f)
doctor	doctor (m), doctora (f)
boss, manager	jefe (mf)
student	estudiante (mf)
artist	artista (mf)
writer	escritor (m), escritora (f)
actor	actor (m)

WORK
me dejo salir los fines (he/she lets me go out on the weekends)
me dejan salir los fines (they let me go out on the weekends)
es relajado / relajada (he/she is relaxed)
sorprendente / sorprendente (she/he is surprised)
confuso / confusa (he/she is confused)
tenemos mucha comuna (we have a lot in common)
no discutimos (we do not argue)
me gusta como un bebé (he/she treats me like a baby)
me hizan como un bebé (they treat me like a baby)
es severo / severa (he/she is strict)
es estricto / estricta (she/he is strict)
no pude salir con mi amigo (I can't go out with my friend)
discutimos mucho (we argue a lot)
Estoy en eras (they are seven)

How to be successful in Spanish?

- Take neat notes in your exercise book – treat your book with pride!
- Complete all the work to the best of your ability in lessons.
- Bring your equipment for every lesson.
- Complete the independent practice tasks – MCQ and homework booklets – on time.
- Use MEMRISE to learn / revise vocabulary (*password: Park2023*).
- Use the student website and Google Classroom to revise / catch up on work missed.
- Ensure you read the feedback and act upon it.
- Create flashcards / mind maps / revision resources to use to revise.
- Write a paragraph and ask your teacher to mark it and give you feedback.

STEP 1
Start by introducing yourself – give your name, age. Say where you live and who with.

STEP 2
Describe your family – include names / ages / descriptions. You could also include jobs people do.

STEP 3
Use a variety of adjectives and verbs to describe relationships within your family. You can include opinions, reasons & what you do together.

STEP 4
Next, support each opinion with a reason – say why you like or dislike certain people. Use the conditional to talk about your ideal family and future including jobs.

STEP 5
Then say what plans you have for the future with your family, for your personal and professional life. Include future opinions and reasons.

STEP 6
Conclude with an account of a past trip/activity/holiday you did with your family. Include opinions and reasons in the past.

Hola. Buenos días. Me llamo María. Tengo trece años. Vivo en una casa grande en Havant con mi madre.

En mi familia, hay tres personas. Mi madre se llama Clara y tiene treinta años. Tiene los ojos verdes y el pelo largo. Es simpática y divertida.

Me parezco mucho a mi padre que se llama Tómas. Tiene el pelo corto, castaño y rizado y tiene los ojos azules. Es muy alto como yo. Me llevo bien con mi padre ya que jugamos al fútbol juntos y es guay. Mi padre es doctor en un hospital pero en el futuro me gustaría más ser profesor de historia. Por otro lado, me molesta mi abuela Carmen dado que es muy estricta. Era jefa en una empresa cuando era joven.

Mañana, voy a pasar el día con mis primos y vamos a ir al parque y al cine. Nos llevamos muy bien. En el futuro, me gustaría tener una familia muy grande con muchos hijos.

Ayer, jugué al tenis con mi tío y fue gracioso porque gané el partido. También, ayudé a mi madre en casa: lavé los platos y en mi opinión fue aburrido.

Year 9 - Computer Science

Cybersecurity

In this unit we went on an eye-opening journey of discovery about techniques used by cybercriminals to steal data, disrupt systems, and infiltrate networks. Then we considered the value of your data to organisations and what they might use it for. We then explored social engineering techniques used by cybercriminals to try to trick users into giving away their personal data and then investigated cyber crimes such as hacking, DDoS attacks, and malware, as well as looking at methods to protect ourselves and our networks against these attacks.

Keywords:

Data	User behaviour	Malware	Name generator
Information	Privacy policies	Social engineering	Scam
Cybersecurity	Data protection	Phishing	Cyberthreats
Cybercriminals	Data subject	Blagging	hacking
Ethical hacking	Penetration testing	Brute force attacks	DoS
profiling	Data portability	Shouldering	DDoS
Anti-malware	Firewall	Authentication	Botnet
Trojans	Biometrics	2FA	CAPTCHA
Ransomware	Virus	ISP	

Social engineering

There are lots of technical ways to try and keep data safe and secure.

Human error arguably creates the largest risk of the data being compromised.

Social engineering is a set of methods used by cybercriminals to deceive individuals into handing over information that they can use for fraudulent purposes.



Malware

Malware (malicious software) is software that is designed to gain access to your computer with malicious intent.

- Disabling hardware
- Data theft
- Forced advertising
- Sending email spam
- Extorting money



Data Science

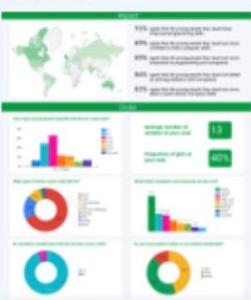
In this unit we were introduced to data science, and by the end of the unit you will be empowered by knowing how to use data to investigate problems and make changes to the world around you. You have been exposed to both global and local data sets and gained an understanding of how visualising data can help with the process of identifying patterns and trends. Towards the end of the unit, you will go through the steps of the investigative cycle to try to solve a problem in the school using data.

Keywords:

Data science	Prediction	PPDAC	Conclusion
Visualisation	Criteria	Investigative cycle	Evaluation
Insight	Outliers	Data cleansing	Comparison
Infographic	Correlation	Analysis	Contrast

Infographics versus data visualisations

Data visualisations are visual representation of data (such as charts and graphs) intended to help an audience process the information more easily and get a clear idea about the data at a glance.



Infographics are visual representations of data, often involving pictures that reflect patterns and help tell a story.

Infographics can include visualisations.

Where are the anomalies in the data?

Until 1949, most of the data follows a slow upward trend, but there are a few odd blips.



Data that sits outside a trend is known as an outlier.

Outliers can cause problems when working out statistics such as the mean, but they shouldn't be removed from the data set without investigating the reason for them.

Y9 PE Test 1 - Revision

Components of skill related fitness

P-Crab



Aerobic Endurance

Power	Coordination	Reaction Time	Agility	Balance
"The product of speed and strength to allow for explosive movements"	"The ability to move two or more body parts at the same time smoothly and effectively to allow effective application of technique"	"The time taken to respond to a stimulus"	"The ability to change direction quickly to allow performers to out manoeuvre an opponent"	"The ability to maintain centre of mass over a base of support"
Fitness Test	Fitness Test	Fitness Test	Fitness Test	Fitness Test
<ul style="list-style-type: none"> Vertical standing jump test Standing long jump Margaria-Kalamen power test 	<ul style="list-style-type: none"> Alternate-Hand wall-Toss test Stick flip coordination test 	<ul style="list-style-type: none"> Ruler drop test Online reaction test (reaction timer test) 	<ul style="list-style-type: none"> Illinois agility run test T Test 	<ul style="list-style-type: none"> Stork stand test Y balance test

Components of Physical related fitness

Mary Must care For Bill Smith



Muscular Strength

Muscular Strength	Muscular Endurance	Aerobic Endurance	Flexibility	Body composition	Speed
"the maximum force that can be generated by a muscle or muscle group to improve forceful movements within an activity"	"The ability of a muscle group to undergo repeated contractions avoiding fatigue"	"The ability of the heart and lungs to supply oxygen to the working muscles for long periods of time"	"The range of motion possible at a joint to allow improvements in technique"	"The relative ratio of fat mass to fat-free mass in the body"	"Distance divided by time to reduce time taken to move the body or body part in a game or event"
Fitness Test	Fitness Test	Fitness Test	Fitness Test	Fitness test	Fitness Test
<ul style="list-style-type: none"> Grip dynamometer 1 Rep Max 	<ul style="list-style-type: none"> One-minute press up test One-minute sit-up test Timed plank test 	<ul style="list-style-type: none"> Multi-stage fitness test (bleep test) Harvard step test 12-minute Cooper run Yo-Yo test 	<ul style="list-style-type: none"> Sit and reach test Calf muscle flexibility test Shoulder flexibility test 	<ul style="list-style-type: none"> Body Mass Index (BMI) Bioelectrical Impedance Analysis (BIA) Waist to hip ratio 	<ul style="list-style-type: none"> 30 metre sprint test 30 metre flying sprint

Training Methods

Continuous Training	Fartlek Training	Circuit Training	Interval Training	Plyometric Training	Weight Training	Static Stretching
Is submaximal aerobic exercise that has no breaks or rest. It lasts for a minimum of 20 minutes and can improve aerobic endurance and muscular endurance	Form of continuous training that varies in pace and terrain. It is both aerobic and anaerobic and can improve aerobic and muscular endurance	Contains stations organised in a circuit. They can be skill or fitness based, aerobic or anaerobic. Intensity is measured by circuits, time or repetitions. Can be adapted to improve all types of fitness.	High intense exercise if followed by periods of rest to recover. Usually, anaerobic can be used in a variety of locations. Improves speed but can improve strength and aerobic endurance.	Maximal intensity involving jumping/bounding. It works on an eccentric contraction (muscle lengthens) immediately followed by a concentric contraction (muscle shortens). Improves power (speed & strength)	Form of interval training which involves reps and sets. The weight provides the resistance. Can be done using free or fixed weights. It improves strength, power and muscular endurance.	Stretch as far as you can. The stretch is held (isometric) for up to 30 seconds. It can be done on your own, with apparatus or with a partner. Improves flexibility.



Flexibility