Need to KNOW

LOOE COMMUNITY ACADEMY

Year 9
Spring 1

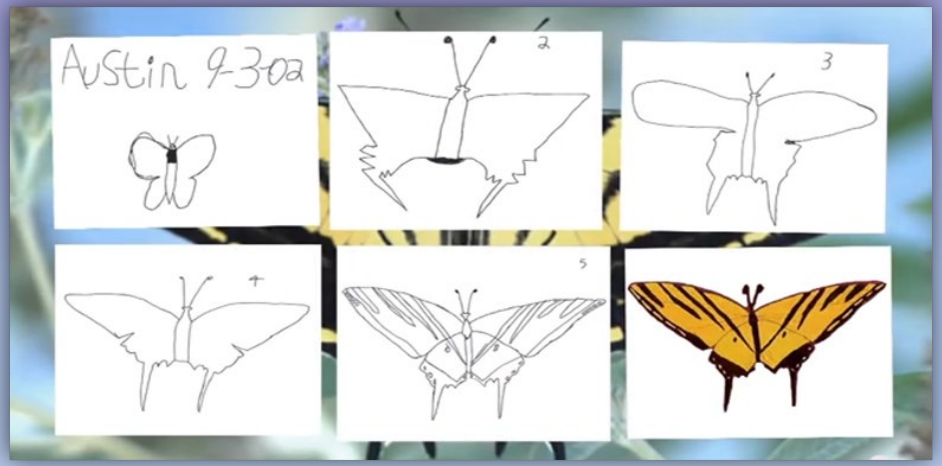
Be the BEST you can be

need to KNOW

LOOE COMMUNITY ACADEMY

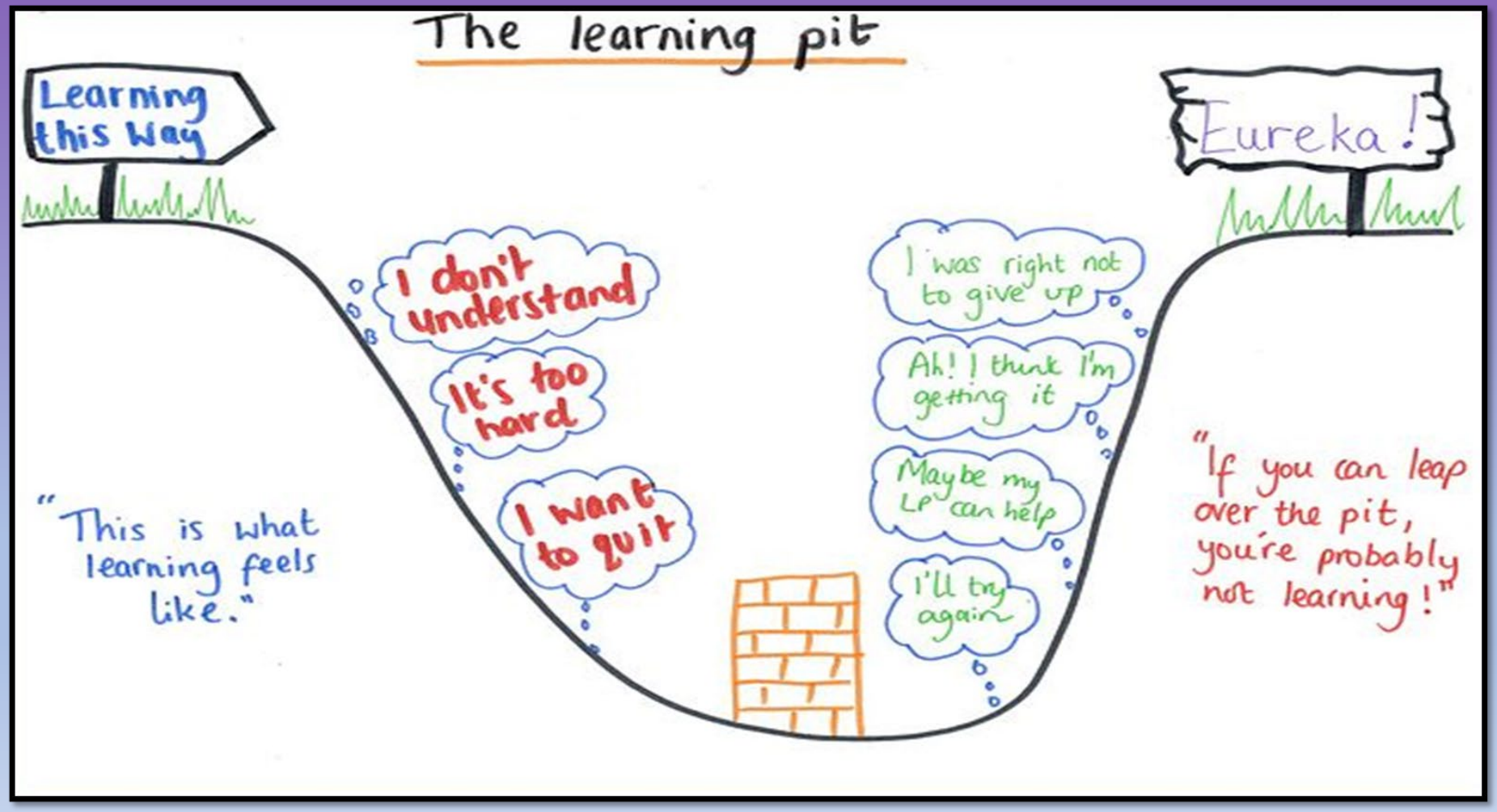
To become an **expert learner** you need to have the right mindset and understand the **'Power of YET'**!

Check out Austin's butterfly picture below and learn how he seeks feedback to improve his work to achieve the most amazing results!



need to KNOW
LOOE COMMUNITY ACADEMY

The Learning Pit is a picture to help you remember that you are constantly going to be challenged and confused when you learn something know, but it's about knowing what to do in order to overcome these challenges to get to the other side of the pit!



1 Magnificant Metacognition

Plan
Is this similar to a previous task?
What do I want to achieve?
What should I do first?

Monitor
Am I on the right track?
What can i do differently?
How can I ask for help?

Evaluate
What worked well?
What could I have done better?
Can I apply this to other situations?

2 Marvellous Memory

My memory and learning improves when I learn through spaced, retrieval, interleaved, elaborated, and use of concrete examples in practice.

I must use the best learning strategies above when using my 'Need to Know' to complete pre and post learning tasks.

During lessons I am a responsible Lead Learner, I teach my self and peers through mini tests, flashcards and look/cover/write/check/review, this help me and my peers learn quickly.

3 Love My Learning

I have a growth mindset and believe I can be as SMART as I want to be! My brain is a muscle and it will growth bigger with the amount of effort I put into practice.

I seek feedback and enjoy acting on it. I see 'EBI' and 'T' from my teachers / peers as opportunities to improve, by acting on feedback I experience success as a learne

I can be my own teacher and can articulate what I am learning and why. I know my mastery goals and I seek errors as opportunities. I aspire to challenges and have no fear of failure!

4 Literacy for Life

Every hour I read is an hour improving my writing. Time is worth investing in my books and Accelerated Reader.

I always check my grammar, spelling and punctuation, this will help me to achieve the highest SPAG marks in my GCSE exams.

Practicing my reading skills and literacy will improve choice in job/career prospects. Success is when preparation makes opportunity and when practice makes permanent!

Subject: PSHCE Year : 9

Knowledge organiser Curriculum Topic: Healthy Mind

Key Concept: Building Resilience

I NEED TO KNOW:

How to look after your mental health.
This includes different types of mental health and ways you can manage and improve it, how to reduce stress and the impact of excessive screen time and gambling

Mental heath – like physical health, a measure of how well a person is, just in their mind instead of their body

Stress – a state of mental or emotional strain resulting from difficult or demanding circumstances**.**

Anxiety – a feeling or state of worry, nervousness, or unease about something with an uncertain outcome.

Screen time – The amount of time spent in front of an electronic screen, this could be a phone, a laptop or a TV for example.

Electronic Screen Syndrome (ESS) – a term used to describe health issues related to excessive screen time

Melatonin – a chemical released by the brain to help us sleep.

Self-harm - deliberate injury to oneself, typically due to an overwhelming negative mental state.

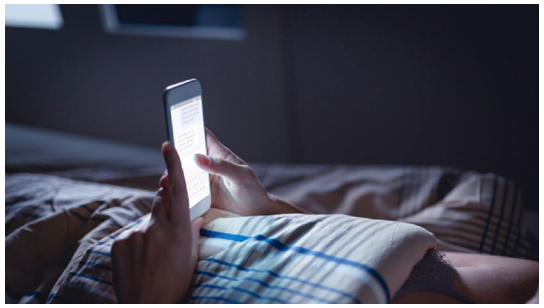
Dermatillomania – a psychological condition where people pick, scratch or harm themselves, not to feel pain but because of an addictive urge to do this.

Dopamine: The 'feel good' chemical our brain releases when we win a game, acquire money, take drugs and drink amongst other things.

High street gambling: Usually done through betting shops or machines in pubs.

Online gambling: Usually done through apps or chatrooms online.

Addiction: When we can't stop ourselves going back for more of that dopamine 'hit', whether through drink, drugs, porn, gambling or smoking.



Need to KNOW
LOOE COMMUNITY ACADEMY

Subject: English Year : 9
Knowledge organiser Curriculum Topic: Language Paper 2 Reading
Concept: Understanding

I NEED TO KNOW: How do I answer each question in the reading section of Language Paper 2?

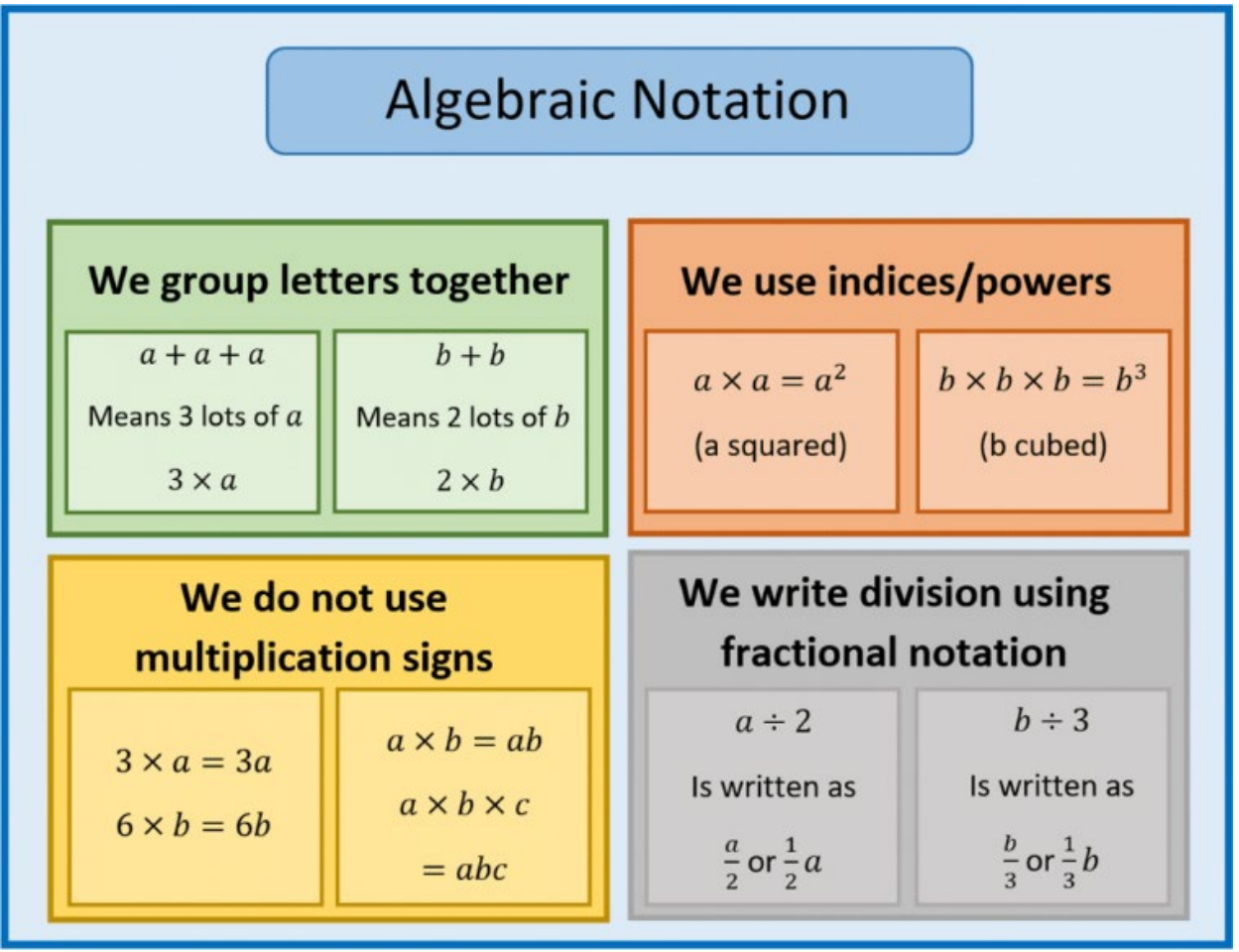
Question 1 (4 marks + 5 minutes)	Question 2 (8 marks + 10 minutes)	Question 3 (12 marks + 15 minutes)	Question 4 (16 marks + 20 minutes)
Refer to specified lines of the text only. **True / false statements** You need to be able to retrieve information from a specific part of the text. **You must:** - Draw a box around the correct section of the text. - Read the text carefully and decide if the statements provided are true or false. - Write a 'T' or 'F' next to each statement. - Once you have found 4 statements that are TRUE, shade in the appropriate boxes. - Only choose 4 statements	Refer to both texts. YOU DO NOT NEED TO NAME TECHNIQUES or ANALYSE LANUAGE. **Write a summary of the differences... (not just a summary)** Point (P) from Source A (E) quote (E and D). Infer and deduce – read between the lines. What does the quote show about…? Use a comparison connective. Point (P) from Source B (E) quote (E and D). Infer and deduce – read between the lines. What does the quote show about…? **You must:** - Underline the key words in the question. - Underline relevant information in both texts. - Read between the lines. - Use a connective to make a link between the texts: e.g. In contrast, whereas - Use relevant quotations from both texts.	This refers to the whole of one source. **How has the writer used language for effect?** PEEDL 2/3 times. Must be high quality PEEDLS where you explore the quote and key word in depth. Mention some of the following: - words / phrases - language features - sentences **You must:** - Underline the key words in the question. - Use language terminology e.g. adverb, verb, imagery, the word. - Select the best quotations. - Explain and analyse the effects of the writer's choices of language. - Develop your analysis by picking a key word in the quote and analysing it - still answering the question.	Refer to both texts. **Compare how the two writers convey their different attitudes...** Compare the writers' ideas and viewpoints and how they are shown. 4 PEEDLS. See saw approach. **You must:** - Underline the key words in the question. - Find and highlight differences in attitude. P = State the writer's attitude in the point. E= Select the best, relevant quotations from the text. E/D= identify the technique. Explain and analyse what this shows about the writer's attitudes/ideas.

Subject: Maths Year: 9

Knowledge organiser Curriculum Topic: Fluency (A01)

Concept: Understand the system for writing mathematical expressions using letters, symbols, and operations.

I NEED TO KNOW: Accurately recall facts, terminology and definitions.



To better understand the topic of algebra, it's essential to become familiar with a few key terms:

- **Constant** – A value or number that never changes in an equation, e.g., 4 is a constant because it is a value that doesn't change.
- **Equation** – A combination of terms or values that uses an equal sign to show a balanced relationship, e.g., $69ab = 69$ is an equation.
- **Index**– A small number written on the upper right-hand side of a number or variable, often referred to as an exponent or power. It can also be written as a^b, where b is the exponent, e.g., in the term 5^2, 2 is the exponent.
- **Expression** – A combination of values and operations that can be used to show relationships and comparisons between elements, e.g., $80ef + 4g$ is an expression. Remember, expressions do not have an equal sign.
- **Factor** – To consolidate two or more terms into a single term to perform further operations, e.g., $20a + 6b + 50c = 2(10a + 3b + 25c)$.
- **Operation** – An action performed on one or two numbers to produce a resulting number, e.g., multiplication, addition, subtraction, division, square root, and more.
- **Simplify** – To combine all that can be combined by collecting like-terms, reducing the equation to its simplest form, e.g., $11a + 3a + 6a + 3b = 20a + 3b$.
- **Solve** – To work out or find the answer to a problem or equation.
- **Term** – A combination of one or more factors, which can include numbers and/or variables, e.g., $5tu$ is a term, and the expression $5tu + 9$ has 2 terms.
- **Variable** – Often represented by letters that stand for unknown numbers, e.g., in the term $24t$, t is the variable, as it is a value that does not have a fixed value.

Need to KNOW
LOOE COMMUNITY ACADEMY

Subject: **SCIENCE** Year : **9**

Knowledge organiser Curriculum Topic: Organisation and digestion

Key Concept: **Cells**

BBC Bitesize

I NEED TO KNOW:

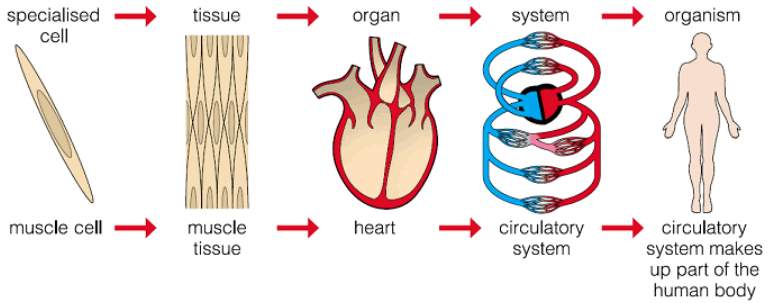
- Understand the hierarchy of organization
- Describe and explain the role of different tissues and organs in the digestive system
- Describe and explain the role of different tissues and organs in transport systems in plants and animals

https://www.bbc.co.uk/bitesize/articles/zk9t6g8

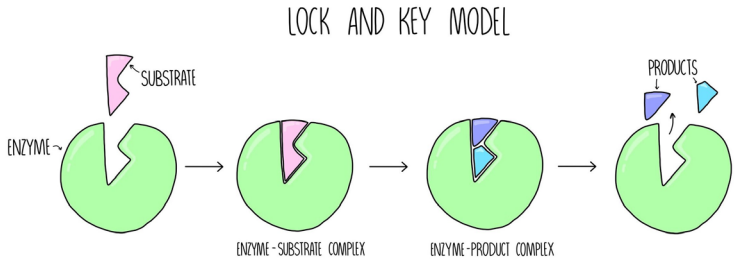
https://www.bbc.co.uk/bitesize/guides/z89mk2p/revision/5

https://www.bbc.co.uk/bitesize/guides/z9kx8mn/revision/2

1. Describe the hierarchy of organisation

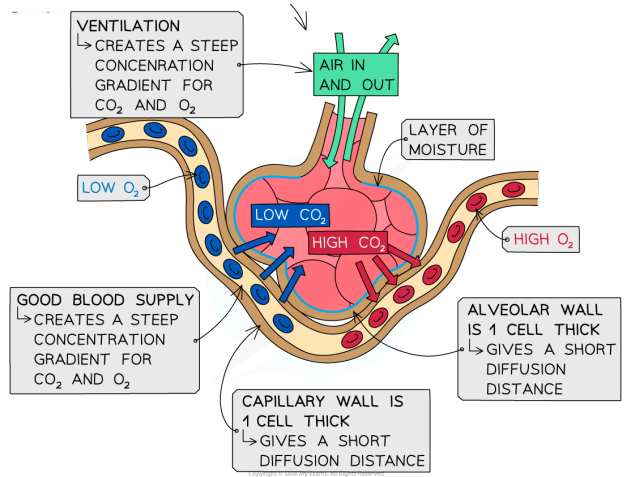


2 The role of enzymes in digestion

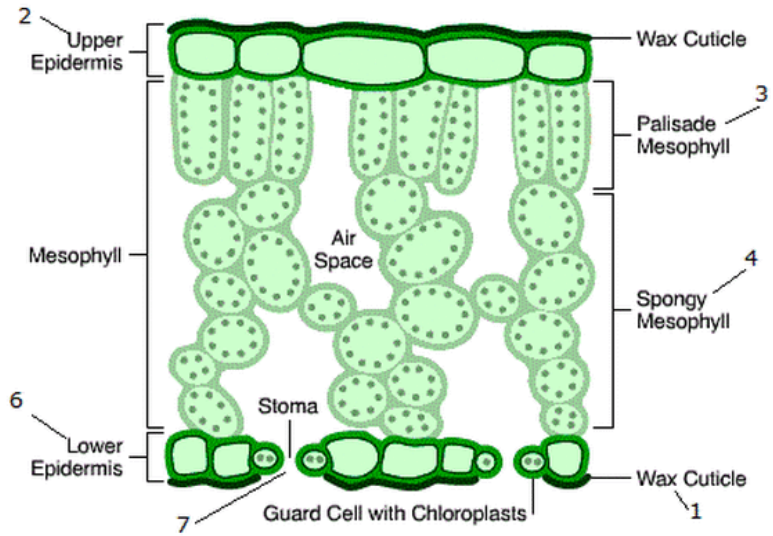


3. Blood, the heart and gas exchange

Component	Picture	Description	Function
Red Blood Cell		Disc shaped cell with a dimple in	Carries oxygen
White Blood Cell		Irregular shaped cell with a nucleus	Forms the immune response by engulfing pathogens & making antibodies
Platelets		Disc shaped cell fragments	Stick together to form a clot
Plasma		Straw coloured liquid	Carries dissolved nutrients



4. Plant tissues



Subject: Computer Science **Year**: 9
Knowledge organiser Curriculum Topic: Python Programming
Key Concept: Programming - Sequence, Selection and Iteration

I NEED TO KNOW:

How to code using Python. Use the crib sheets below to help you remember the key syntax.

Interact with the user (*input* and *output*)

Print a message

```
print('Hello, world!')
```

Print multiple values (of different types)

```
ndays = 365
print('There are', ndays, 'in a year')
```

Asking the user for a string

```
name = input('What is your name? ')
```

Asking the user for a whole number (an integer)

```
num = int(input('Enter a number: '))
```

Decide between options

Decide to run a block (or not)

```
x = 3
if x == 3:
  print('x is 3')
```

Decide between two blocks

```
mark = 80
if mark >= 50:
  print('pass')
else:
  print('fail')
```

Decide between many blocks

```
mark = 80
if mark >= 65:
  print('credit')
elif mark >= 50:
  print('pass')
else:
  print('fail')
```

- `elif` can be used without `else`
- `elif` can be used many times

Are two values equal?

```
x == 3
```

⚠ two equals signs, not one

Are two values not equal?

```
x != 3
```

Less than another?

```
x < 3
```

Greater than another?

```
x > 3
```

Less than or equal to?

```
x <= 3
```

Greater than or equal to?

```
x >= 3
```

The answer is a *Boolean*: `True` or `False`

Repeat a block (a fixed number of times)

Repeat a block 10 times

```
for i in range(10):
  print(i)
```

Sum the numbers 0 to 9

```
total = 0
for i in range(10):
  total = total + i
print(total)
```

Repeat a block over a string

```
for c in 'Hello':
  print(c)
```

Keep printing on one line

```
for c in 'Hello':
  print(c, end=' ')
print('!')
```

Count from 0 to 9

```
range(10)
```

⚠ range starts from 0 and goes up to, *but not including*, 10

Count from 1 to 10

```
range(1, 11)
```

Count from 10 down to 1

```
range(10, 0, -1)
```

Count 2 at a time to 10

```
range(0, 11, 2)
```

Count down 2 at a time

```
range(10, 0, -2)
```

Repeat a block over list (or string) indices

```
msg = 'I grok Python!'
for i in range(len(msg)):
  print(i, msg[i])
```

Need to KNOW

LOOE COMMUNITY ACADEMY

Subject: Graphics **Year :** 9

Knowledge organiser Curriculum Topic: Hometown Sign Project

Key Concept: Advanced Graphical Skills

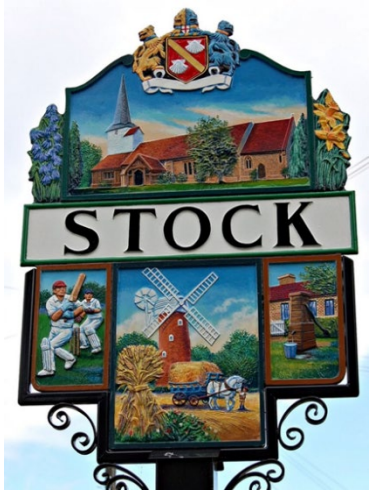
Corrugated Cardboard

I NEED TO KNOW:

How to create a road sign to promote my local village/town.
How to make this illustrated image appear 3D.
How to create a laser cut post on which to display the sign.

Watercolour felt pens

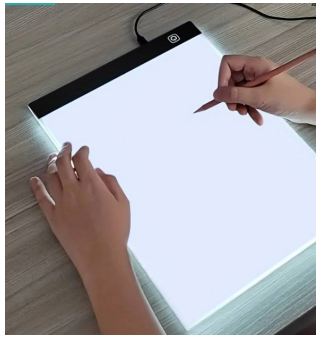
KEY WORD	DEFINITION
Line	A long, narrow mark or band.
Form	The visible shape or configuration of something.
Typeface	Name of a specific collection of related fonts.
Illustration	A decoration, interpretation, or visual explanation of a text, concept, or process.
Prototype	A first or preliminary version of a product from which other forms are developed
Stylisation	Being drawn in a way that is not natural or realistic.
Composition	The way in which all the elements of an image work together to produce an overall effect.
Net	How a 3D shape would look if it was unfolded.



MATERIALS	DEFINITION
A3 paper	420mm wide x 297mm high if landscape.
Corrugated cardboard	Cardboard that features a unique, corrugated construction for strength and impact resistance.
Blendable felt tip pens	Pens that can be applied to paper or card, then water added with a paintbrush to use as watercolours.
Glue stick	Glue used for sticking paper and card to each other.
Coloured pencils	Wax- or oil-based containing varying proportions of pigments, additives and binding agents.
Double-sided sticky tape	Tape with adhesive on both sides.

TERM	MEANING
Graphic Communication	Designing visual material to convey information, ideas, meaning & emotion in response to a brief.
Target Audience	Specific group of consumers most likely to want your product or service.
Component Part	A small part that can be considered separately from the whole. Unit.

TOOLS	DEFINITION
Craft knife	Used to cut & score thin sheet material
Cutting mat	Self-healing rubber mat for use with sharp blade used to cut sheet material accurately & safely.
Light box	An illuminated flat workspace used to trace images or patterns from one source to another.
Laser cutter	CAM machines use a laser beam to cut through materials to create designs
2D Design Software	School-based design programme enabling students to create artefacts on a range of CAM machines



Light box

LOOE COMMUNITY ACADEMY

Subject: Fashion & Textiles Year : 9

Knowledge organiser Curriculum Topic: Skills

Concepts: Designer exploration

I NEED TO KNOW:

Different techniques used within Fashion & Textiles

Henri Matisse

In the late 1940s, Henri Matisse turned almost exclusively to cut paper as his primary medium, and scissors as his chief implement, introducing a radically new operation that came to be called a cut-out.

Matisse would cut painted sheets into forms of varying shapes and sizes—from the vegetal to the abstract—which he then arranged into lively compositions, striking for their play with colour and contrast and their exploitation of decorative strategies.

Initially, these compositions were of modest size but, over time, their scale grew along with Matisse's ambitions for them, expanding into

Mono Printing

Monoprinting is a printmaking technique that produces unique prints. Unlike traditional printmaking methods where multiple identical copies are made, monoprints are one-off prints. Each print is distinct and cannot be precisely replicated.

Monoprinting allows for a wide range of artistic expression and experimentation. Artists can explore various materials, textures, and techniques to create different effects. It offers flexibility in combining printmaking, painting, drawing, and mixed media approaches.

Monoprinting can be done by hand-printing or using a printmaking press.

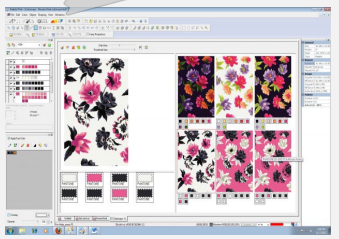
Transfer Printing

Transfer dye is a type of 'sublimation ink' which can be painted on to paper and then transferred to fabric using heat.

The inks/dyes that are used turn into gas when brought under heat, then combine with the fabric and permanently print onto the fabric.

The effects are permanent and less prone to fading, as the ink is embedded in the fabric or substrate rather than simply laying on top like a normal print.

The heat opens up the pores of the fabric, then with the applied pressure the ink cools and returns to a solid form.



Computer Aided Design

Positives :

- Save time and money
- Allow designers to be more creative because there is more variety
- Designers can have pre-made designs and adapt them easily – save time instead of re drawing them by hand
- Experimental work can be done digitally, saving time and money
- Designers can send their designs to other designers quickly by email – globally.

Negatives :

- Training is required to use all the features of a software
- All designers have to have compatible software when sending and receiving designs

Subject: Food Tech **Year** : 9

Knowledge organiser Curriculum Topic: Science of cooking

Key Concept: The science of cooking

I NEED TO KNOW:

Why and how we cook food. The importance of different nutrients

Why do we cook food?

- To kill pathogenic bacteria
- To soften food
- To make food more digestible
- To improve flavour
- To make it look more appealing
- To enable certain ingredients to work together
- To keep warm in colder weather

Convection

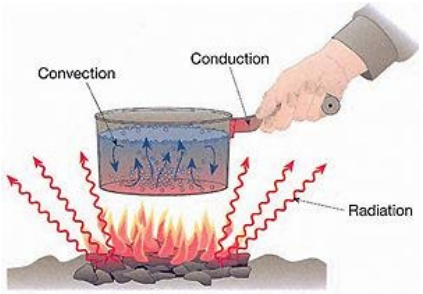
Convection refers to a method of heat transfer where food is heated by a moving heat source such as hot air inside an oven that is circulated by a fan.

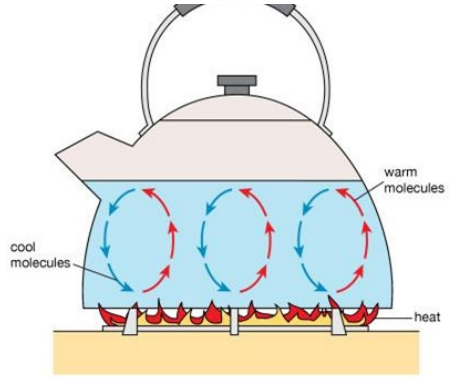
Conduction

Heat is transferred through direct contact with a substance.

Radiation

Heat transfer through radiation takes place in form of electromagnetic waves.





Micronutrients (y9 need to know)

Vitamins Minerals

Minerals

A range of minerals are required by our bodies on a regular basis.

Minerals help our bodies to grow and keep our metabolism going.

Iron

Iron helps improve the transport of oxygen in blood around

Calcium

Helps keep our bones and teeth strong.

Iodine

Helps regulate our bodies temperature.

Vitamins

Water Soluble: Not stored in the body and must be eaten in the daily diet (vits B and C).

Fat Soluble: Stored in our bodies fat and can serve us for several months (vits A,K,D and E).

Vitamin A	Keeps the skin healthy and helps maintain good eyesight.
Vitamin K	Needed for clotting blood.
Vitamin D	Keeps bones and teeth strong.
Vitamin B12	Formation of new red blood cells.
Vitamin C	Protects against diseases.

Need to KNOW
LOOE COMMUNITY ACADEMY

Subject: Art Year : 9

Knowledge organiser Curriculum Topic: Fish and 3D

Key Concept: Visual Analysis and Visual Accuracy

I NEED TO KNOW:

Use this sheet to prepare for each lesson and understand the key terminology that you will be learning throughout this topic beforehand. It is recommended that you prepare yourself for each lesson by looking over the information below and develop your skills beforehand so you're prepared. You can also read about the inspirations and influences for this topic to get more information. The project will develop your skills in the 4 assessment objective areas – research, observe, experiment and present.

CONCEPT OR DIAGRAM

Artists	BASIC INFO
Aleksandra Buyanova	Russian Artists who creates delicate and intricate sea creatures. Well know for her whale figurines . Explores glazing techniques and colour mixing
Mark Smith	Ceramic artist who creates fun representations of fish, sea creatures and fishermen. Includes fishing paraphernalia , washed up items and seaweed into his pieces. Fun and cartoon style fish 3dimensional sculpture pieces
KEY WORD/CONCEPT	**DEFINITION**
Layer	letting one application of paint or material dry before adding another on top of it
Bas-relief	sculptural relief in which the projection from the surrounding surface is slight and no part of the modeled form is undercut. Sculpture built up from a base.
Paper Mache	a malleable mixture of paper and glue, or paper, flour, and water, that becomes hard when dry, used to make boxes, trays, or ornaments
collage	Collage describes both the technique and the resulting work of art in which pieces of paper, photographs, fabric and other ephemera are arranged and stuck down onto a supporting surface
Sculpture	the art of making three-dimension representative or abstract forms, especially by carving stone or wood or by casting metal or plaster.
Create	bring something into existence.

	Preparation and helpful links
1	https://www.marksmithceramics.com/index.html Research Artist Mark Smith
2	**research fish sculptures**
3	Using Instagram follow the accounts of both artists ; @_alesksandra_buyanova_ & @marksmithceramics
6	Look at the fish cartoons by Matt Kotch – design your own https://read.nxtbook.com/american_outdoor_news/aon_mag/spring_2021/outdoor_reflections_monster_f.html
7	Storyboard a fish cartoon – be inspired by Finding Nemo

LOOE COMMUNITY ACADEMY

Subject: Dance
Year: 9
Knowledge Organiser Curriculum Topic: Musical Theatre

I NEED TO KNOW: Exploring other ways of creative movement material other than

WEEK 1 & 2	Musical Theatre We are going to explore the stylistic features of Musical Theatre technique and learn where it originates from. You will learn set choreography from a variety of musical theatre shows including, Matilda, Chicago and Grease plus
WEEK 3 & 4	Creating You will be taken through a variety of choreographic tasks to develop and amend set movement material and to slowly start to build a whole class piece. This experience will provide you with an opportunity to see how a large group ensemble piece comes together whilst learning to work with a variety of people in different formats.
WEEK 5 & 6	Polish and Perform You will be polishing the whole class piece and performing it to a small audience, where you will be able to reflect on how far you have you have come as a dancer, performer and choreographer.

KEY WORD/CONCEPT	DEFINITION/EXPLANATION
Stylist features	Ways of moving that link to the style of dance
Technical Skills	Skills required for a dance to be able to demonstrate
Expressive	Skills that add extra quality to the dance to make it a performance.
Choreographic devices	A range of toosl to develop a motif
Contemporary	A Technique that uses a large range of movements qualities from ballet to Break dancings.
Auditing	Being able to monitor progress and tracking skills

KEY CONCEPTS

- Appreciation
- Technique
- Choreographic

LOOE COMMUNITY ACADEMY

Subject: Music Year : 9

Knowledge organiser Curriculum Topic: Music for Film

Key Concept: Listening- Creating-Performing

I NEED TO KNOW:

An exploration and analysis of music used in FILM. Looking at great influential composers and creating our own pieces.

Key term	Definition	Example
Diegetic	Diegetic sound is any sound that the character or characters on screen can hear.	Dialogue, live music in the film, sound effects e.g., rain, banging a drum etc
Non-diegetic	Non-diegetic sound is any sound that the character or characters on screen **cannot** hear but the audience can.	Narration, background music etc
Dissonance	A combination of two (or more) tones/notes of different pitches that clash or sound jarring. Chromaticism creates dissonance.	Middle C and the C sharp above (a minor second).
Consonance	A combination of two (or more) tones of different pitches that results in a musically pleasing sound.	Playing a major C chord would sound consonant as the notes fit together to make a nice sound.
Soundtrack	A soundtrack is recorded music accompanying and synchronised to the images of a motion picture	Any music that accompanies a film or image on screen is a soundtrack
Underscore	An underscore is a soft soundtrack theme that accompanies the action in a performance.	Any music that is in the background of a film, generally non-diegetic music to create atmosphere.
Mickey-mousing	A technique that synchronises the accompanying music with the actions on screen. Matching movement to music.	Tom & Jerry actions and sound synchronised.
Leitmotif	A short, recurring musical phrase associated with a particular character, place, or idea.	Jaws' leitmotif plays when the shark is nearby.
Atonal	Atonality is simply the absence of tonality or key signature. The opposite of tonal music that has a key	Sci-fi films often use atonal music for outer-space scenes or magical scenes.
Montage	Different scenes or images put together in quick succession to portray a story or scene changes in a film or to look back on the past.	Scene from the film Up where clips are shown of Ellie and Carl's life together https://youtu.be/F2bk_9T482g

WEEK 1 & 2	**Listening to Film Themes** **Listening to film underscore** Try listening to some film scores whilst doing your homework. What mood is the piece? How would it fit the scene or film genre?
WEEK 3 & 4	**Key contributors to FILM music** We look at the work of John Williams, Hans Zimmer, Danny Elfman to gain insights and influence for our own projects Recap on MIXCRAFT and how to embed MP4 in order to sync your created film music.
WEEK 5 & 6	**Assessment** **Using live instruments and DAW you will create music to a given silent film scene and perform play to class for peer feedback and self development.**

Danny Elfman

https://youtu.be/yPjlCza7JHI

John Williams

https://www.youtube.com/watch?v=vsMWVW4xtwI

Hans Zimmer
https://www.youtube.com/watch?v=S2GBP3iWqHY

LOOE COMMUNITY ACADEMY

Concepts:
Exploring class shown as status in Drama.

Subject: Drama & Communication Skills Year : 9

Knowledge organiser Curriculum Topic: Prep for English GCSE

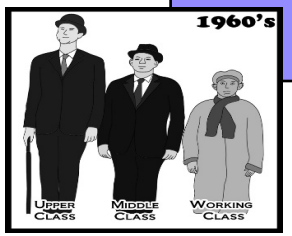
I NEED TO KNOW:

Use this sheet to understand the key terminology that you will be learning. It is recommended that you prepare yourself for each lesson by looking over the information below. The project will develop your skills in the 3 assessment objective areas – EXPLORE, EXPRESS and EVALUATE

KEY WORDS AND CONCEPTS	
CLASS	**There used to be a much more obvious divide in Britain between the working class, middle class and upper class. Lots of working-class parents struggled financially. Many found it difficult to afford even basic things such as food, clothes and heating.**
STATUS	**In life buildings, clothes, books, things, and people have a different status. How important they are compared to others.**
SUPERSTITION	**A belief or way of behaving that is based on fear of the unknown and faith in magic or luck : a belief that certain events or things will bring good or bad luck.**
POSTURE	**How a person stands can show their status or mood. Hunched over for sad and lower status, and shoulders back and head held high for confident and higher status.**
FLASHBACK	**When you go to scene in a character's past.**
FLASHFORWARD	When you go to scene in a character's future.

WEEKS	PREPARATION TASKs & HELPFUL LINKS
WEEK 1 & 2	Explore what class is: **https://shorturl.at/bwOV3**
	Learn more about how to show a character's status: https://shorturl.at/HILW2
WEEK 3 & 4	Superstitions explained: https://shorturl.at/tCQ67
WEEK 5 & 6	Flashback: https://shorturl.at/auwB6 Flashforward: https://shorturl.at/ijmP2

"Why is a job so important?'
You don't understand anythin' do y? I don't wear a hat that I can tilt at the world". Mickey



LOOE COMMUNITY ACADEMY

Subject: PE Year : 9

Knowledge organiser Curriculum Topic: Learning to Lead and healthy Lifestyles

Key concepts: Games sense

I NEED TO KNOW:

By the end of this term, you will develop an understanding of strategies and tactics, and how positive attitudes can improve performance and wellbeing.

Effective Teams and sportsmanship		
Through netball rugby and handball	Develop leadership skills	
Leadership skills	**Communication**	*Speaking to others*
	Communication	*Listening to others*
	Demonstrating	*Showing skills to the class*
	Planning	*A skill/practice*

Effective teams and sportsmanship	
Through netball rugby and handball	Understand what makes a good leader
Organised, good planning, safety aware, good voice, understand rules and tactics, motivating,	

Techniques and fluency		
Through Volleyball	Able to link fundamental skills	
Understand	**Volley**	*Using finger tips*
	Service	*Under and overarm*
	Dig	*Correct hand placement*
	Spike	*Hitting the ball downwards*

Fit For Life		
Training	How to improve fitness	
Methods of Training	**Circuit training**	*Plan and carry out own circuits*
	Weight training	*Understand sets and reps*
	Interval Training	*Sprints and rest/recovery*
	Continuous training	*Working for a long time*

Fit for life		
Heart Rates	Thresholds of training	
Training Zones	**Resting Heart Rate**	*How and when to take it*
	Maximum heart rate	*220- age + MHR*
	Aerobic	*60 – 80% MHR*
	Anaerobic	*80% and above of MHR*

Fit for life		
Muscles	Locate the skeletal muscles	
Muscles for movement in sport	**Arm muscles**	*Biceps Triceps*
	Leg muscles	*Hamstrings quadriceps gastrocnemius*
	Back muscles	*Trapezius Latissimus dorsi*
	Stomach muscle	*Abdominals*

Need to KNOW
LOOE COMMUNITY ACADEMY

Subject: Geography Year : 9
Knowledge organiser Curriculum Topic: Ecosystems
I NEED TO KNOW: Key Concept: Interconnectivity

How the natural world supports incredible life-systems, and how humans interact with it.

Ecosystems and biomes.

An **ecosystem** is an environment in which a community of plants and animals (**biotic**) that share an environment with non-living things (**abiotic**) such as soil.
- Climate is the weather in an area over a long period of time.
- The plants and animals within ecosystems adapt so that they
are able to survive in that area.
- Ecosystems are not one size: they can be as small as a hedgerow or as large as a rainforest.
- Large ecosystems are called **biomes**.

Examples of biomes include:
- tundra (cold desert)
- tropical rainforest
- hot desert

Energy flows.

Organisms within an ecosystem can be classed as producers, consumers or decomposers. Energy flows through these organisms within the ecosystem.

Producers, such as a trees, produce their own food and begin this cycle. Using energy from the sun they produce food. They do this by photosynthesis. Most producers are plants, but there are some small organisms that produce food through photosynthesis as well.

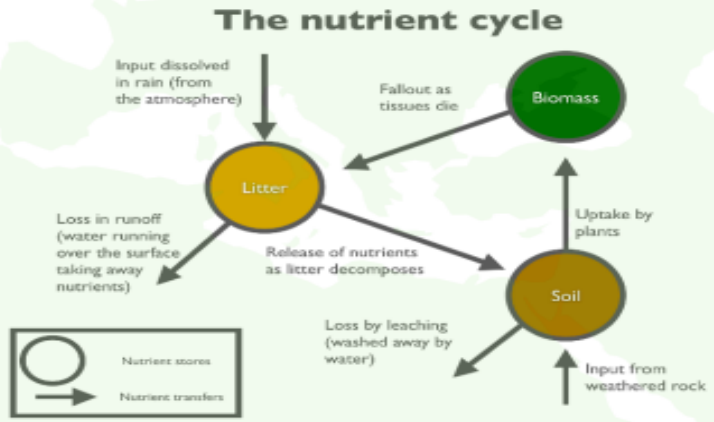
The producers are eaten by primary consumers that cannot produce their own food, such as a giraffe. Primary consumers are herbivores which means they only eat plants. Secondary consumers are carnivores such as lions. In a simple food chain secondary consumers eat primary consumers.

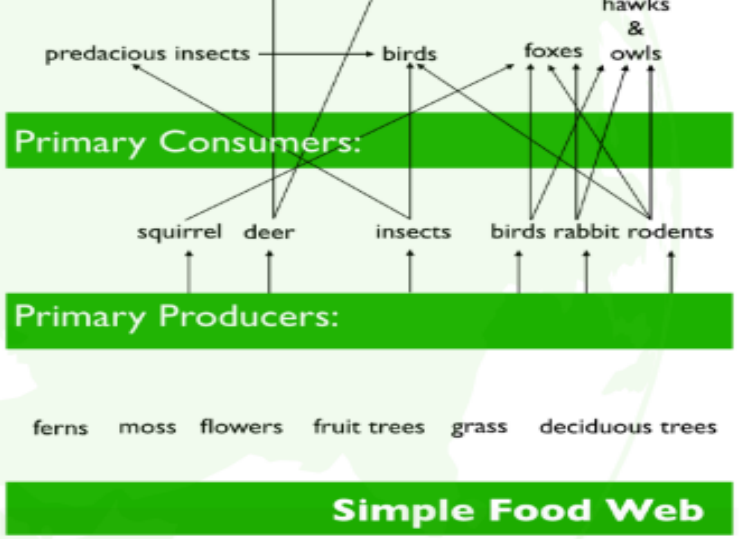
Decomposers and break down dead plants and animals. They also break down the waste of other organisms. Examples of decomposers include bacteria and fungi. Decomposers get their energy from breaking down dead material e.g. dead producers, dead consumers or fallen leaves. When dead material is decomposed nutrients are released into the soil. These nutrients are then taken up from the soil by plants. Decomposers are very important for any ecosystem. If they weren't in the ecosystem the plants would not get essential nutrients and dead matter and waste would gather.

Food webs and chains.

A **food chain** only follows one path as animals find food. eg: A hawk eats a snake, which has eaten a frog, which has eaten a grasshopper, which has eaten grass. A **food web** consists of many food chains. It shows the many different paths plants and animals are connected.

The nutrient cycle.





Simple Food Web

Keywords.

ecosystem, biotic, abiotic, biomes, habitat, food chain, nutrient cycle, food web, consumers, biomass, decomposers, herbivore, omnivore, carnivore.

internetgeography.net

Need to KNOW
LOOE COMMUNITY ACADEMY

Subject: History Year : 9
Knowledge organiser Curriculum Topic: Post WW1
Concept: Cause and Consequence

I NEED TO KNOW: The Treaty of Versailles

Aims and motives of the Big Three at Versailles

Woodrow Wilson - USA
To end secret diplomacy. He wanted countries to discuss their problems and disputes publicly, instead of going to war, by setting up a League of Nations
To enable self-determination. He wanted to let the people of Eastern Europe and the Middle East to have freedom to choose their own political futures.

David Lloyd George UK
To keep Germany stable. Shortly after the war there was an attempted communist revolution there and he wanted to stop Communism's spread
To enable Germany to recover economically. Germany was one of Britain's main trading partners.

Georges Clemenceau – France
To ensure Germany could never threaten France again. Germany had invaded France in 1914 at the start of the war
To secure reparations from Germany. The war had destroyed a large part of North East France, which now needed to be rebuilt.

Blame GERMANY HAD TO ACCEPT BLAME FOR STARTING THE WAR

Money GERMANY HAD TO PAY £6,600m IN REPARATIONS FOR THE DAMAGE CAUSED DURING THE WAR

Army GERMANY'S ARMY AND NAVY WERE MASSIVELY REDUCED IN SIZE

Land GERMANY LOST TERRITORY ON ALL SIDES, AND ITS COLONIES IN AFRICA

<u>Questions to consider</u>
Why punish Germany?
Why was France out for revenge?
How did Germans feel?
How did Hitler exploit the situation in Germany?

Need to KNOW
LOOE COMMUNITY ACADEMY

Subject: Religion and Worldviews Year : 9
Knowledge organiser Curriculum Topic: Christian Beliefs
Key Concept: Identity and Community, Ultimate Questions

I NEED TO KNOW: How is Jesus related to God? What are the key events in his life? Did Jesus save people?.

Key Beliefs:

Incarnation	Incarnation is the belief that God was made **'flesh'** or truly **human** in the person of **Jesus Christ** on earth. Christians believe Jesus was born of the **Virgin Mary** and conceived by the **Holy Spirit**. For Christians, this belief is a **miracle** which demonstrates the power of God and the **divinity** of Jesus.
Crucifixion	Jesus was arrested in the Garden of Gethsemane and **sentenced to death** by Pontius Pilate, a Roman governor. He was crucified on **Good Friday**. During the crucifixion he spoke **seven** times. After his death, he was taken down from the **cross** before the beginning of the **Jewish Sabbath** and buried in the **tomb** of Joseph of Arimathea.
Salvation and Atonement	Christians believe salvation from **sin** is possible because **Jesus** died on the cross to **atone** for the sins of all of humankind. His death is considered an **act of atonement** to bridge the rift, caused by sin, between humans and God.
Resurrection	Resurrection means **rising from the dead** and Christians believe **Jesus** rose from the dead on **Easter Sunday**, 'I am the resurrection and the life'.
Ascension	Christians believe Jesus **ascended to Heaven** forty days after the resurrection.

Key Beliefs:

Nature of God 'omni'	Christians believe in one God **(monotheism)**. The teaching of the Bible is that God is all powerful **(omnipotent)** and all-good **(omnibenevolent)**. Christians believe God is the **creator** of all things and is **eternal**. These beliefs are found in the **Bible**, one of the most important **sacred sources of authority** for all Christians.
Evil and Suffering	Christians believe suffering is a result of **human sin** and a **turning away** from God. It becomes a **test of faith** and suffering is often a result of the misuse of **free will**. Many people find it difficult to **believe** in a kind and all powerful God who allows so much suffering and the existence of **evil**.
The Trinity	The belief that God is one and that there are **three persons** of God: Father, Son and Holy Spirit.

IDENTITY AND COMMUNITY	Incarnation The Fall Authority Baptism Holy Communion
ULTIMATE QUESTIONS	Salvation Messiah

Key Terms:

Bethlehem	Place of Jesus' birth	**Jerusalem**	Place of Jesus' death
Gospels	The gospels of Matthew and Luke record the birth of Jesus	**Good Friday**	The name given to the day on which Jesus was crucified
Virgin Mary	Name given by Christians to the mother of Jesus	**Golgotha**	The place where Jesus was crucified
Ascension	Belief Jesus ascended to Heaven forty days after Easter	**Disciples**	The twelve chosen followers of Jesus

Need to KNOW
LOOE COMMUNITY ACADEMY

Subject: French Year : 9

Knowledge organiser Curriculum Topic: Studio 3 Vert Modue A l'horizon

I NEED TO KNOW: How to describe yourself, invite someone out, Talk about social media, describe a date and a music event

Manger sain	***Healty Eating***
les boissons gazeuses	*fizzy drinks*
les céréales	*ceral*
les chips	*crisps*
l'eau	*water*
les fruits	*fruit*
les légumes	*vegetables*
les oeufs	*eggs*
le pain	*bread*
le poisson	*fish*
les produits laitiers	*dairy products*
les sucreries	*sweet things*
la vainde	*meat*
Je mange sain	*I eat healthily*
Je ne mange pas sain	*I don't eat healthily*
Je mange des…	*I eat…*
Je ne mange pas de…	*I don't eat…*
Je ne mange jamais de	*I never eat…*

Les mots essentiels	***High-frequency words***
à l'avenir	in the future
alors	so
c'est	it is
ce sont	they are
d'abord	first
deux fois par semaine	twice a week
en général	en general
en plus	as well as that
ensuite	next
finalement	finally
où	where
parce que	because
quand	when
tous les jours	every day
Voilà!	That;'s that! Here you go!

La forme	***Fitness***
actif/active	Active
Ça ne m'intéresse pas	That doesn't interest me
J'ai un problème	I have a problem
Je joue à des jeux vidéos	I play video games

Je vais changer ma vie	***I am going to change my life***
Je vais faire du sport régulièrement	I am going to do sport regularly
Je vais manger sain	I am going to eat healthily
Je vais prendre des cours d'arts martiaux	I am going to take martial-arts classes
Je vais aller au collège à pied	I am going to walk to school
Je vais faire trente minutes d'exercice par jour	I am going to do 30 minutes of exercises per day
Je vais aller au collège à vélo	I am going to cycle to school

Mon avenir	***Parts My future***
Dans deux/quatre ans	In two/four years
Un jour…	One day,…
Je vais…	I am going to…
aller au lycée	go to sixth-form college
avoir un employ bien payé	have a well-paid job
faire un apprentissage	do an apprenticeship
faire des études à la fac	study at university
quitter le college	leave secondary school
travailler	work
voyager	travel

LOOE COMMUNITY ACADEMY

Subject: Spanish Year : 9

Knowledge organiser Curriculum Topic: Viva 3 Module 3 En forma

I NEED TO KNOW: Describing your daily routine, your diet, what you do to keep fit and aches and pains

¿Llevas una dieta sana?	Do you have a healthy diet?
Llevo una dieta sana.	I have a healthy diet.
Es sano/a.	It's healthy.
Soy vegetariano/a.	I'm a vegetarian.
Soy alérgico/a.	I'm allergic.
Soy musulmán/musulmana.	I am a Muslim.
¿Qué tal estás?	How are you?
Estoy cansado/a.	I am tired.
Estoy enfermo/a.	I am ill.
Tengo catarro.	I have a cold.
Tengo tos.	I have a cough.
Describe tu rutina diaria.	Describe your daily routine.
Me despierto/me acuesto.	I wake up/I go to bed.
Me levanto (enseguida).	I get up (straight away)
Me lavo los dientes.	I brush my teeth.
Me ducho.	I shower.
Me visto.	I get dressed.
Voy al gimnasio.	I go to the gym.
Entreno.	I exercise/train.

High frequency words:

casi	almost/nearly
cada	each/every
todo/a/os/as	all
mucho/a/os/as	a lot (of)
primero	first
luego	then
después	after
finalmente	finally
por lo general	in general
hasta	until
ahora	now
hoy	today
ayer	yesterday
anoche	last night
para	(in order) to
creo que	I believe that
por eso	so/therefore
sin embargo	however
donde	where

¿Qué te duele?	What hurts (you)?
Me duele(n) … .	My … hurts.
el brazo/el estómago	arm/stomach
el pie/la garganta	foot/throat
la cabeza/la espalda	head/back
los oídos/los ojos	ears/eyes
Consejos para estar en forma.	Advice for keeping fit.
Para estar en forma…	To keep fit…
se debe…	you/one must/should
beber bastante agua.	drink enough water.
comer fruta y verduras.	eat fruit and vegetables.
dormir ocho horas al día.	sleep eight hours a day.
entrenar una hora al día.	exercise for one hour a day.

Estrategia 3

Learning new vocabulary

- Make your own word games. For example, write down the Spanish words you need to learn in one column and their English translations in another. Cut them up and play a game of pairs. Say each Spanish word to yourself as you pick it up.

la mano	hand
la pierna	leg
el pie	foot

- Next, take your learning further. In your vocabulary lists, highlight the words you definitely know in green. Highlight the ones that you don't know in red. Work harder at learning the red words. When you think you know a red word, draw a star by it.