



**Need  
toKNOW**  
LOOE COMMUNITY ACADEMY

Year 9  
Autumn 2

Be the  
**BEST**  
you can be

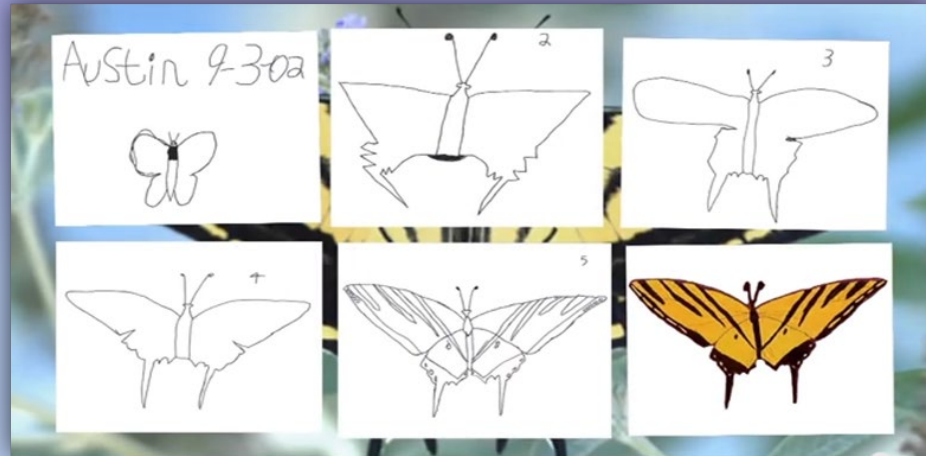




**Need  
toKNOW**  
LOOE COMMUNITY ACADEMY

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!

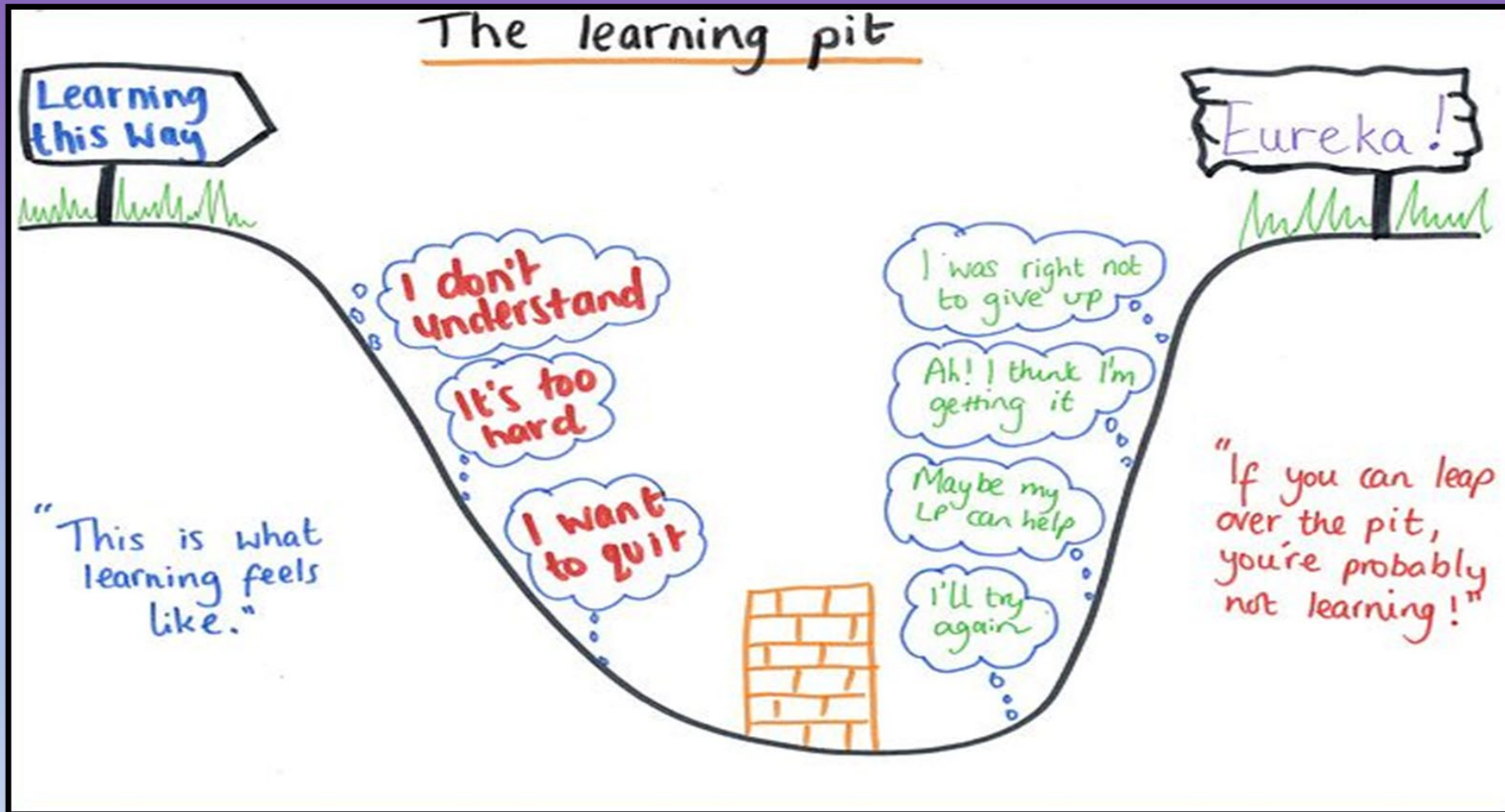






**Need  
toKNOW**  
LOOE COMMUNITY ACADEMY

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



1

### Magnificent 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 learner

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!



## I NEED TO KNOW:

### **What it means to be a British citizen.**

How we can become more sustainable and reduce climate change and how we can help others in crisis around the world

**UNICEF** - The United Nations International Children's Emergency Fund. A charitable organisation to help children around the world.

**Foreign aid:** money, food, or other resources given or lent by one country to another.

**HIV/AIDS** - a disease that can spread easily and often causes death. Has had the biggest impact in Africa.

**Right to education** – one of the 30 Human Rights to which we are all entitled.

**Environment** – The world around us. The quality of our environment can rise or fall, depending on both natural and human-made causes.

**Climate Change** – When the temperature of the world around us changes, including the temperature of the sea.

**Greenhouse gases** – harmful or poisonous gases which contribute to a 'greenhouse effect' and warm up the earth's atmosphere.

**Carbon Footprint** - the amount of carbon dioxide released into the atmosphere as a result of the activities of a particular individual, organization, or community.

**Sustainability** – The avoidance of the depletion of natural resources in order to maintain an ecological balance in our global environment.

**Pollution** – the presence in or introduction into the environment of a substance which has harmful or poisonous effects.

**Waste minimisation** - processes and practices intended to reduce the amount of waste produced.

**Biodegradability** - the capacity of a material to decompose as a result of biological activity.

**Animal Rights** - Rights of animals, as set by the UN (but optional for countries).

**Sustainability** – maintaining an ecological balance through avoiding depletion of natural resources.

**Vegan** – someone who does not consume any animal products.

**Flexitarian** – someone who rarely eats meat and when they do, purchase sustainable produce.



Subject: English

Year : 9

Knowledge organiser Curriculum Topic: 'A Christmas Carol'

Concepts: Understanding and Context

## I NEED TO KNOW:

What happens in the novella? What is the Dickens' message to his readers? How does he convey this message?  
How does the novella link to the Victorian period?

Characters	
Ebenezer Scrooge	Selfish business man
Fred	Scrooge's nephew
Jacob Marley	Scrooge's dead business partner
Bob Cratchit	Scrooge's clerk
Tiny Tim	Bob's poorly son
Mrs Cratchit	Bob's wife
Ghost of Christmas Past	Both young and old winter and summer with a light coming from its head
Ghost of Christmas Present	A jolly giant
Ghost of Christmas Yet to Come	A dark figure who looks like the Grim Reaper
Fezziwig	Scrooge's ex-employer
Belle	Scrooge's fiancée
Fan	Scrooge's sister

The Plot	
Stave 1 Marley's ghost	Scrooge is visited by the ghost of his dead business partner, Jacob Marley. He tells Scrooge that he will be visited by three spirits.
Stave 2 The first of the three spirits	The first of the three spirits visits him. They journey into Scrooge's past. They visit his school, his old employer, Fezziwig, and his fiancée Belle. Belle and Scrooge's engagement is broken off as Scrooge loved money more than any person. Scrooge sheds tears of regret before going to bed.
Stave 3 The second of the three spirits	The Ghost of Christmas Present visits Scrooge and takes him to see the Cratchit family. At the end of this visit a dark, hooded figure appears.
Stave 4 The first of the three spirits	The Ghost of Christmas to come shows Scrooge a series of scenes about a man who has died. Finally, Scrooge is taken to a grave and realises the dead man is himself.
Stave 5 The end of it	Scrooge is completely transformed. He looks after Tiny Tim, gives money to the poor and is now kind and generous.

### Vocabulary

**Look up the meanings of these words:**

allegory	simile
contrast	symbolism
personification	supernatural
poverty	transformation

### Context

**Answer these questions:**

When was the Victorian period?  
What was life like in the Victorian period?  
What was the workhouse?  
What can we discover about Dickens' life?

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

## Algebraic Notation

### We group letters together

$$a + a + a$$

Means 3 lots of  $a$

$$3 \times a$$

$$b + b$$

Means 2 lots of  $b$

$$2 \times b$$

### We use indices/powers

$$a \times a = a^2$$

(a squared)

$$b \times b \times b = b^3$$

(b cubed)

### We do not use multiplication signs

$$3 \times a = 3a$$

$$6 \times b = 6b$$

$$a \times b = ab$$

$$a \times b \times c = abc$$

### We write division using fractional notation

$$a \div 2$$

Is written as

$$\frac{a}{2} \text{ or } \frac{1}{2}a$$

$$b \div 3$$

Is written as

$$\frac{b}{3} \text{ or } \frac{1}{3}b$$

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.



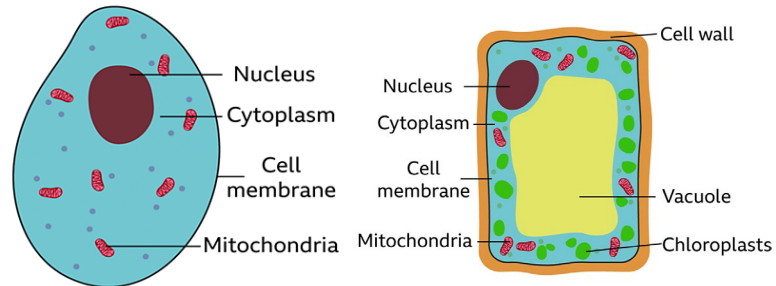
## I NEED TO KNOW:

- The structure and function of animal, plant cells including specialized cells and stem cells
- To compare and contrast different modes of cellular transport
- Summaries Mitosis



<https://www.bbc.co.uk/bitesize/topics/z2mttv4>

1. Learn the function of the parts of an animal and plant cell



2 Link the structure to the function of the different specialised cells

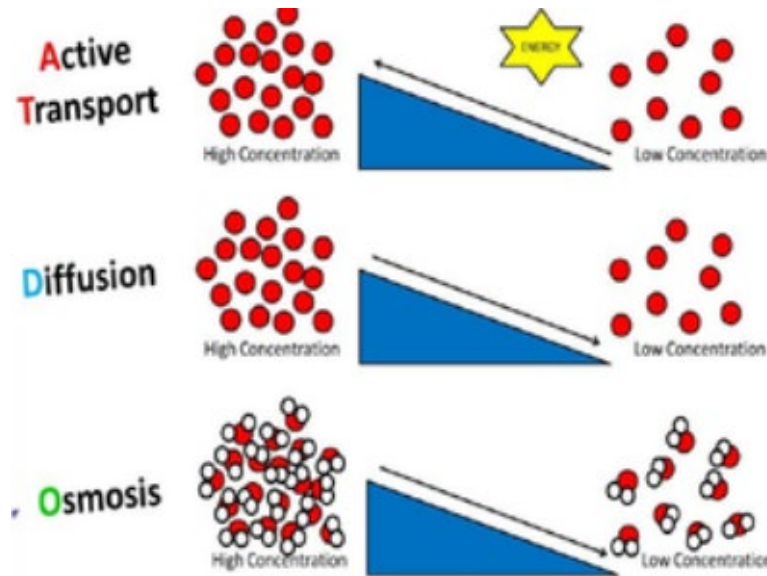
### Animal

Muscle cell  
Nerve cell  
White blood cell  
Red blood cell  
Ovum (egg cell)  
Fat cell  
Sperm

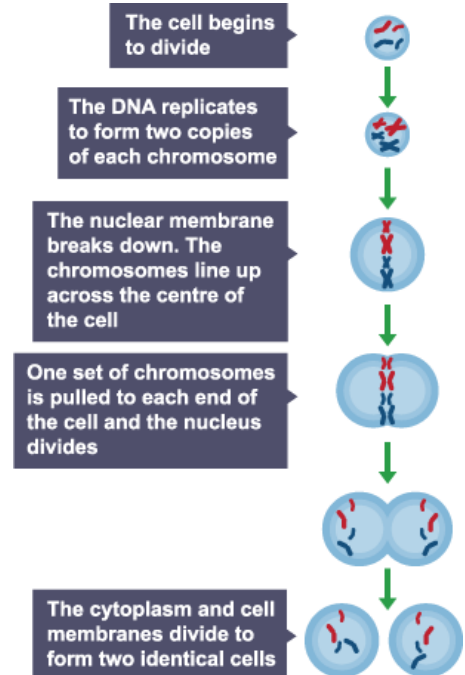
### Plant

Leaf palisade cell  
Root hair cell  
Guard cell  
Xylem cell

3. Learn the different applications of diffusion, osmosis and active transport



4. Learn what mitosis is. What are the steps involved





## 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('!')
```

Repeat a block over list (or string) indices

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

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)
```



**Corrugated Cardboard**

## I NEED TO KNOW:

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.

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.

**Subject:** Graphics

**Year :** 9

**Knowledge organiser Curriculum Topic:** Hometown Sign Project

**Key Concept:** Advanced Graphical Skills

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.

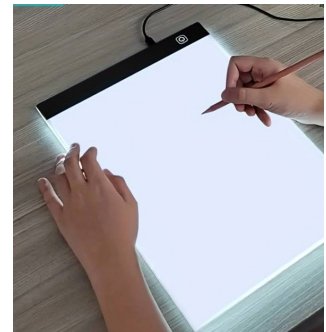


**Watercolour felt pens**



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.

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**



## 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

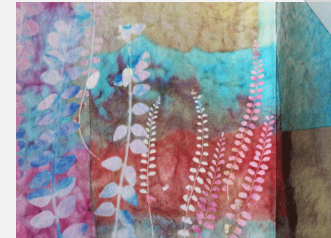


Mono Printing

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.



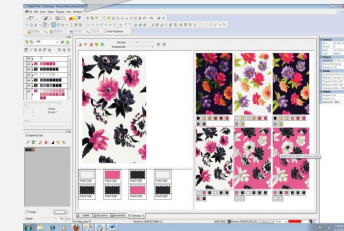
Transfer Printing

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



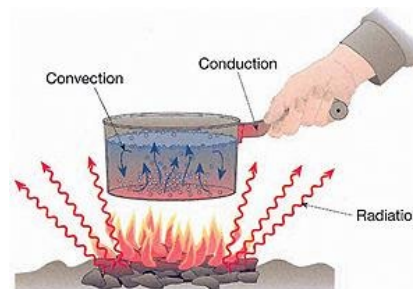
**Radiation**

Heat transfer through

of electromagnetic waves.

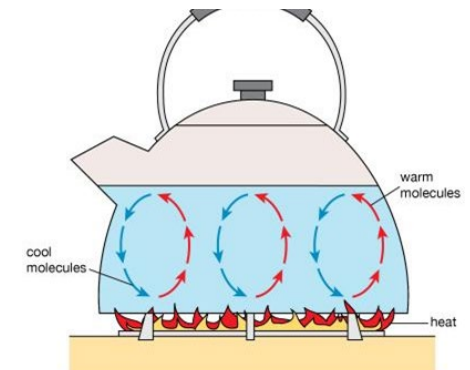
**Conduction**

Heat is transferred through direct contact with a substance.



**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.



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).

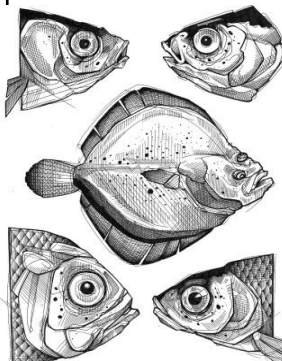
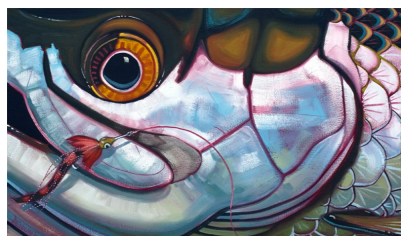
Fat Soluble: Stored in our bodies fat and can serve us for several months (vits A,K,D and E).

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.

## 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
<b>DEREK YOUNG</b>	American contemporary fish painter working in acrylic . Using bold patterns and bright colours
<b>Lea Nahon</b>	Contemporary tattoo artist . Focussing on line and mark making
Claudia Hocking	Cornish fish artist working in mix media – painting and sculpture work
KEY WORD/CONCEPT	DEFINITION
<b>Layer</b>	letting one application of paint or material dry before adding another on top of it
<b>Bas-relief</b>	A bas-relief is a sculpture carved on a surface so that it stands out from the background.
<b>Transcribe</b>	In art, to transcribe is to copy or record information in a different form than the original. To transcribe a painting or drawing is not to copy the artwork exactly, but instead to record observations in a different form.
<b>collage</b>	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
<b>Technique</b>	the manner and ability with which an artist, writer, dancer, athlete, or the like employs the technical skills of a particular art or field of endeavor. 2. the body of specialized procedures and methods used in any specific field
<b>Depiction</b>	Depiction is reference conveyed through pictures- an image that expresses that word or meaning

Week	Preparation and helpful links
1	<a href="https://www.derekdeyoung.com/about-derek/dereks-art">https://www.derekdeyoung.com/about-derek/dereks-art</a> watch a video about the artist
2	<b>research fish artists in a range of medias and styles</b>
3	<a href="http://www.leanahon.com/flashes/sea1/">http://www.leanahon.com/flashes/sea1/</a> explore the work of Lea Nahon . Try to draw a jelly fish in biro focussing on mark making skills similar to the artist=t
6	<a href="https://claudiahocking.co.uk/">https://claudiahocking.co.uk/</a> visit the artist website and watch a video of her working
7	<a href="https://www.youtube.com/watch?v=JzLmh-QrPs">https://www.youtube.com/watch?v=JzLmh-QrPs</a> practice drawing fish – follow the step by step video and try to include shading



**I NEED TO KNOW:**

Exploring other ways of creative movement material other than

**WEEK  
1 & 2**

Technique

Explore the stylistic features of contemporary technique and learn where it originates from. Spend time exploring both the Technical and Expressive skills and track how we progress throughout the term

**WEEK  
3 & 4**

Creating

You will be lead 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

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
<b>Technical rehearsal</b>	Rehearsal where music, lighting, set
<b>Dress rehearsal</b>	A rehearsal where costumes are used to ensure they are suitable for the character and overall feel of the dance.
<b>Start stop rewind rehearsal</b>	Perform a short section of the dance, rewind it, receive feedback, amend, perform again with adjustments.
<b>Audience in the round</b>	The audience are sat around the dancer
<b>Motif</b>	A short section of a dance that can be repeated
<b>Choreographer</b>	Someone that creates a dance

**KEY CONCEPTS**

- Technique
- Choreographic

**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 <b>cannot</b> 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 <a href="https://youtu.be/TZ6k_9T482g">https://youtu.be/TZ6k_9T482g</a>

**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/yPjICza7JHI>



John Williams

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



Hans Zimmer

<https://www.youtube.com/watch?v=S2GBP3iWqHY>

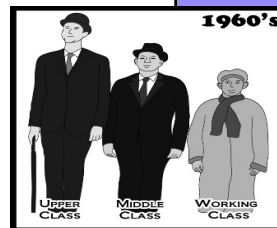
Use this sheet to understand the key terminology that you will be learning. It is recommended that you prepare yourself for each lesson by looking over the information below. The project will develop your skills in the 3 assessment objective areas – EXPLORE, EXPRESS and EVALUATE

## I NEED TO KNOW:

KEY WORDS AND CONCEPTS	
<b>CLASS</b>	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.
<b>STATUS</b>	In life buildings, clothes, books, things, and people have a different status. How important they are compared to others.
<b>SUPERSTITION</b>	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.
<b>POSTURE</b>	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.
<b>FLASHBACK</b>	When you go to scene in a character's past.
<b>FLASHFORWARD</b>	When you go to scene in a character's future.

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

“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





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	<i>Speaking to others</i>
	Communication	<i>Listening to others</i>
	Demonstrating	<i>Showing skills to the class</i>
	Planning	<i>A skill/practice</i>

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

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

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

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

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

## I NEED TO KNOW:

What global warming is, how it is caused, and what the impacts are. I will also need to know what can be done to manage climate change, and adapt to new climatic conditions.

### WHAT IS CLIMATE?

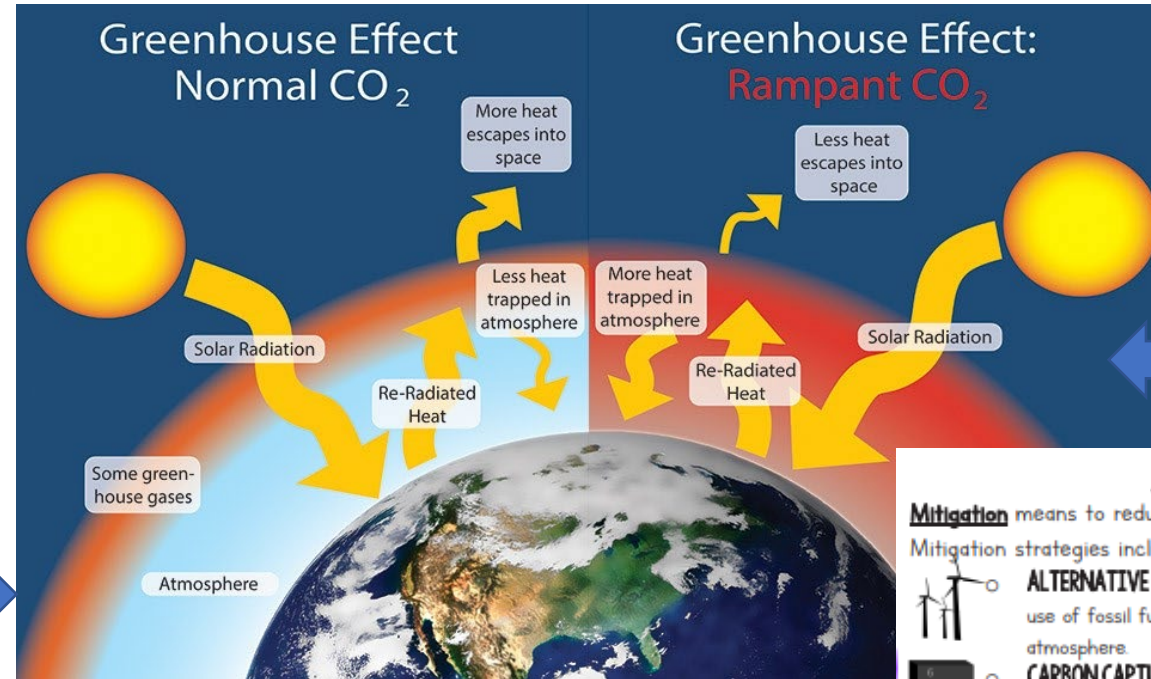
- Climate is the average weather in a place. It tells us what the weather is usually like.
- Climate is worked out by taking weather measurements over a long period of time (usually 30 years) and then calculating the average i.e. of temperature and rainfall.
- Weather is what you get on a day-to-day basis!

### WHAT IS CLIMATE CHANGE?

A change in global or regional climate patterns, in particular a change apparent from the mid to late 20th century onwards and attributed largely to the increased levels of atmospheric carbon dioxide produced by the use of fossil fuels!

#### THE GREENHOUSE EFFECT

- A natural function of the Earth's atmosphere is to keep in some of the heat that is lost from the Earth.
- The atmosphere allows the heat from the Sun (short-wave radiation) to pass through to heat the Earth's surface.
- The Earth's surface then gives off heat (long-wave radiation).
- This heat is trapped by **greenhouse gases** (eg methane, carbon dioxide and nitrous oxide), which radiate the heat back towards Earth.
- This process heats up the Earth.
- Carbon dioxide (CO<sub>2</sub>) is a greenhouse gas.
- As technology has developed and the population on earth has increased, the amount of CO<sub>2</sub> has increased since 1860.
- Data clearly shows that although temperatures have fluctuated since 1960, the general pattern is that global temperatures have increased as CO<sub>2</sub> levels rise



#### HUMAN FACTORS INCREASING WARMING

- Burning fossil fuels, eg coal, gas and oil - these release carbon dioxide into the atmosphere.
- Deforestation - trees absorb carbon dioxide during photosynthesis. If they are cut down, there will be higher amounts of carbon dioxide in the atmosphere.
- Dumping waste in landfill - when the waste decomposes it produces methane.
- Agriculture - agricultural practices lead to the release of nitrogen oxides into the atmosphere.

#### MITIGATING TO CLIMATE CHANGE

**Mitigation** means to reduce or prevent the effects of something from happening.

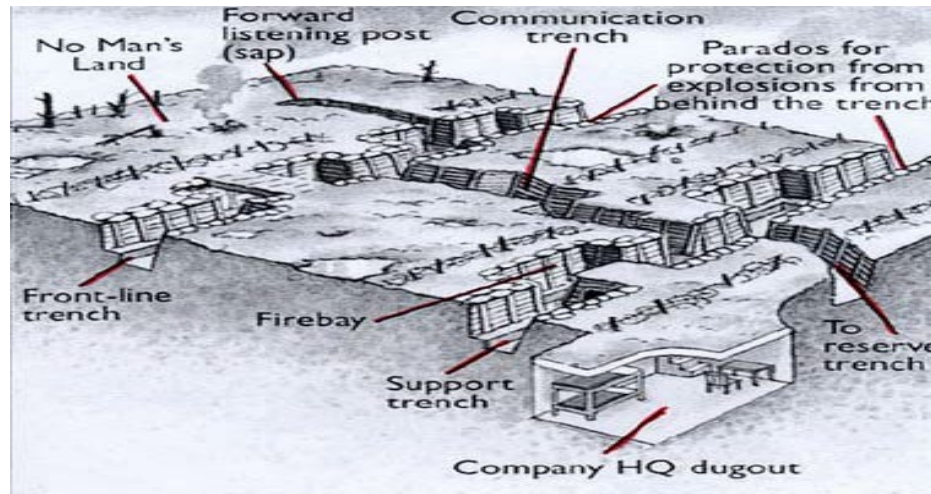
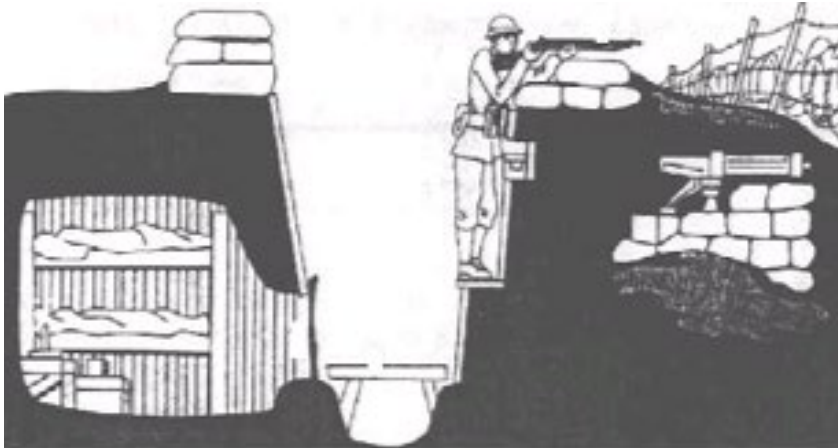
Mitigation strategies include:

- ALTERNATIVE ENERGY** - using alternative energy such as solar, wind or tidal can reduce the use of fossil fuels. This will reduce the amount of carbon dioxide released into the atmosphere.
- CARBON CAPTURE** - this is the removal of carbon dioxide from waste gases from power stations and then storing it in old oil and gas fields or coal mines underground. This reduces the amount of emissions into the atmosphere.
- PLANTING TREES** - encouraging **afforestation**, means that there will be more trees to absorb the carbon dioxide in the atmosphere during the process of photosynthesis.
- INTERNATIONAL AGREEMENTS** - in 2005 the Kyoto Protocol became international law. The countries that signed up to the treaty pledged to reduce their carbon emissions by 5 per cent. However, this ran out in 2012 and its overall impact has been small. The US refused to join and major developing countries like China and India were not required to make any reductions.



## I NEED TO KNOW:

What it was like to be a soldier in WW1. The pictures help to show conditions so think about what you might be thinking about or feeling in each picture.



The nature of wounds:

Rifles and explosives

Shrapnel, wound infection and head injuries

The effects of gas attacks



## I NEED TO KNOW:

### What do Christians believe about God, the Trinity and the person of Jesus?



Trinity



Resurrection

**TRINITY** – Father , Son, Holy Spirit  
The belief that God is one and that there are three persons of God: Father, Son and Holy Spirit. God the Father, God the Son Jesus Christ and God the Holy Spirit; the three persons of God are one. The belief in the Trinity is expressed in the Apostles' Creed, where God the Father is in heaven, Jesus Christ is the Son of God in human form on earth and the Holy Spirit, or the Paraclete, is at work in the world.  
**Unitarians do not accept the idea of the Trinity.**

<b>ULTIMATE QUESTIONS</b>	Did God create the world? Was Jesus the Son of God? How can God exist with evil in the world?
---------------------------	---

<b>IDENTITY AND COMMUNITY</b>	What Christians believe- the central beliefs of Christianity.
-------------------------------	---

Creation	The belief that God created the world
Gospels	The gospels of Matthew and Luke record the birth, life and death of Jesus
Incarnation	God becoming man in the form. of Jesus
Inconsistent triad	How can there be a God who is all-loving and all-powerful and good- if evil exists ?
Omnibenevolent	– all loving and infinitely good
Omnipotent	- all-powerful
Omniscient	- all-knowing
Resurrection	The idea that Christians RISE FROM THE DEAD in either a physical or spiritual form.

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

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.

Jesus was arrested in the Garden of Gethsemane and sentenced to death by Pontius Pilate, a Roman governor. He was crucified on Good Friday

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 means rising from the dead and Christians believe Jesus rose from the dead on Easter Sunday, 'I am the resurrection and the life'.

1 Corinthians 13:15 means a book in the Bible called (Paul's 1<sup>st</sup> letter to the )Corinthians. Chapter 13 and then verse 15.

**I NEED TO KNOW:**

How to describe yourself, invite someone out, Talk about social media, describe a date and a music event

Les parties du corps	Parts of the body
La bouche	mouth
Le corps	body
Le bras	arm
Le dos	back
L'épaule	shoulder
Les fesses	buttocks
Le front	forehead
Le genou	knee
La jambe	leg
La main	hand
Le nez	nose
L'oeil	arm
L'oreille	ear
Le pied	foot
La tête	head
Le visage	face
Les yeux	eyes

Le sport et le fitness	Sport and Fitness
Pour être un bon sportif,...	To be a good sports person...
Il faut avoir..	you must...
un bon programme d'entraînement	have a good training programme
bien mangé	eat well
bien dormir	sleep well
être motivé(e)	To be motivated
aimer la compétition	to like competition

Tu aimes le sport?	Do you like sport?
J'aime....	I like...
Je n'aime pas....	I don't like...
jouer dans une équipe	to play in a team
Ça booste le moral	It boosts moral
C'est fatigant	It is tiring
C'est ennuyeux	It is boring

On joue au Paintball	We go paintballing
Où est-ce que tu es touché(e)?	Where have you been hit?
Blessé(e)	injured
éliminé(e)	eliminated
gagner	to win
Le membre	member
Le matériel	equipment
Le fairplay	fairplay

Les opinions	Opinions
Je pense que...	I think that..
Je suis d'accord avec...	I agree with...
Je ne suis pas d'accord avec...	I don't agree with..
À mon avis,...	In my opinion...

La routine	Routine
l'entraînement	training
faire de l'activité physique	to do physical activity
jouer au match	to play a match
travailler avec son coach	to work with your coach

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

<b>Les mots essentiels</b>	<b>High-frequency words</b>
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!

<b>Je vais changer ma vie</b>	<b>I am going to change my life</b>
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

<b>La forme</b>	<b>Fitness</b>
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



**I NEED TO KNOW:**

How to describe yourself, invite someone out, Talk about social media, describe a date and a music event



## Stratégie 2

### False friends

These are known as *faux amis* in French. You learnt about them in *Studio 2*. They are French words spelt the same as English words that mean something different. More of them crop up in *Studio 3*. Look at the word lists on these pages. What do these French words mean in English?

<i>main</i>	You should have two of these – of equal value.
<i>foot</i>	Your feet are involved in this activity.
<i>front</i>	Yours might be furrowed as you get to grips with <i>faux amis</i> .
<i>bras</i>	This has nothing to do with breasts!
<i>pain</i>	This doesn't hurt.

**I NEED TO KNOW:**

how to describe things you like, your week, films and birthday celebrations

Los trabajos en el hotel	Hotel jobs
Soy...	I am...
camarero/a	a waiter
cocinero/a	a cook
dependiente/a	a shop assistant
esteticista	a beautician
jardinero/a	a gardener
limpiador(a)	a cleaner
peluquero/a	a hairdresser
repcionista	a receptionist

¿En qué consiste tu trabajo?	What does your job involve?
Tengo que...	I have to...
contestar al teléfono y ayudar a los clientes	answer the phone and help customers
cortar el pelo a los clientes	cut customers' hair
cuidar las plantas	look after the plants
hacer manicuras	do manicures
limpiar habitaciones	clean rooms
preparar comida	prepare food
servir la comida en el restaurante	serve food in the restaurant
vender productos en la tienda	sell products in the shop



**I NEED TO KNOW:**

how to describe things you like, your week, films and birthday celebrations

Opiniones	Opinions
¿Te gusta tu trabajo?	Do you like your job?
(No) Me gusta (nada)	I (don't) like my job (at all)
mi trabajo porque es...	because it is...
difícil	difficult
duro	hard
estimulante	stimulating
estresante	stressful
interesante	interesting
monótono	monotonous
repetitivo	repetitive

¿Cómo es tu jefe? What is your boss like?

Mi jefe/a (no) es muy  
educado/a. My boss is (not) very  
polite.

¿Cómo son los clientes? What are the customers  
like?

Los clientes son exigentes The customers are  
/ maleducados. demanding / rude.

Mis compañeros son My colleagues are  
simpáticos. nice.

**¿Cómo eres? What are you like?**

En mi opinión, soy... In my opinion, I am...

Creo / Pienso que soy... I think I am...

Soy muy / bastante... I am very / quite...

ambicioso/a ambitious

creativo/a creative

independiente independent

inteligente intelligent

organizado/a organised

paciente patient

práctico/a practical

responsable responsible

serio/a serious

sociable sociable





**I NEED TO  
KNOW:t**

how to describe things you like, your week, films and birthday celebrations

**¿En qué te gustaría trabajar? What job would you like to do?**

Me gustaría ser...	I would like to be...
Quiero ser...	I want to be...
abogado/a	a lawyer
cantante	a singer
diseñador(a)	a designer
enfermero/a	a nurse
mecánico/a	a mechanic
periodista	a journalist
policía	a police officer
taxista	a taxi driver

Me gustaría...	I would like...
No me gustaría (nada)...	I wouldn't like... (at all)
trabajar al aire libre	to work in the open air
trabajar con animales	to work with animals
trabajar con niños	to work with children
trabajar en equipo	to work in a team
trabajar en una oficina	to work in an office
trabajar solo/a	to work alone
hacer un trabajo creativo	to do a creative job
hacer un trabajo manual	to do a manual job

**¿Cómo va a ser tu futuro? What is your future going to be like?**

En el futuro...	In the future...
Voy a...	I am going to...
ganar mucho dinero	earn lots of money
hacer un trabajo interesante	do an interesting job
ir a la universidad	go to university
ser famoso/a	be famous

ser voluntario/a	be a volunteer
tener hijos	have children
viajar (mucho)	travel (a lot)
vivir en el extranjero	live abroad
Va a ser (muy) interesante.	It is going to be (very) interesting.

**I NEED TO  
KNOW:t**

how to describe things you like, your week, films and birthday celebrations

**Describe tu trabajo Describe your job**

¿En qué trabajas?	What do you do for a living?
¿Por qué decidiste ser...?	Why did you decide to be a...?
Me gusta mucho... y por eso decidí ser...	I really like... and so I decided to be a...
Estudié... y me encantó.	I studied... and I loved it.
¿Cómo es un día de trabajo típico?	What is a typical working day like?
Hablo con clientes.	I talk to customers.
Leo mi agenda.	I read my diary.
Preparo mis cosas.	I prepare my things.
Trabajo con mi equipo.	I work with my team.
Voy a la oficina.	I go to the office.

¿Qué cualidades tienes que tener?	What qualities do you need to have?
Tienes que ser...	You need to be...
En mi trabajo, los idiomas son muy importantes.	In my job, languages are very important.
Hablo español, alemán e inglés.	I speak Spanish, German and English.
¿Cuáles son tus ambiciones para el futuro?	What are your future ambitions?
Voy a estudiar / trabajar en...	I am going to study / work in...
¡Va a ser guay / fenomenal / flipante!	It is going to be cool / fantastic / awesome!

**I NEED TO  
KNOW:t**

how to describe things you like, your week, films and birthday celebrations

**Palabras muy frecuentes**

**High-frequency words**

mi/mis	my	a ver / bueno / pues	well
tu/tus	your	por eso	so / therefore
además	what's more	así que	so / therefore
más	more	primero	first
a veces	at times	luego	then
también	also		

**Estrategia 2**

**Opinions and agreement**

- Add emphasis to your opinions:  
**A mí no me gusta nada mi jefe.**
- Personalise your answers:  
**Para mí, trabajar con animales es interesante.**
- Make it a habit to ask yourself **¿por qué?** and to explain your opinion:  
**Me gustaría ser enfermera porque soy paciente.**
- Take time to say whether you agree or disagree with someone and why:  
**(No) Estoy de acuerdo porque...**