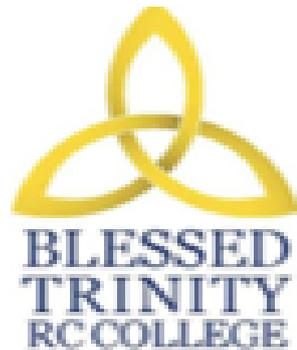# Year 9 Knowledge Organisers

Assessment Fortnight 1

Monday 10th – Friday 21st November 2025

Topic Overviews for
Assessment Fortnight 1

English	Of Mice and Men
Maths	Properties of number Percentages Area and volume Equations, inequalities and formulae
Science	Inheritance and evolution Light
RE	Crime and punishment OR Stewardship
History	Women's suffrage
Geography	Urbanisation
MFL	Spanish – Food and Drink French – Holidays
Computing	How computers work
Music	Blues music
Drama/ dance	Contemporary dance
Art	Pencil drawing skills
PE	Rotation – Basketball, badminton, football, Gymnastics, handball, health related fitness, hockey, rounder's rugby, table tennis, athletics, cricket

English

Year 9 'Of Mice and Men' Knowledge Organiser

PLOT

- 'Of Mice and Men' is centred around **two migrant workers**, George and Lennie, in California in the **1930s** as they start work on a **ranch** in a place called Soledad (a Spanish word meaning 'solitude').
- The story takes place over a period of **four days**
- While at the ranch, George and Lennie meet other characters, who emphasise the **loneliness and difficulty of life** for the people living and working in these places.
- Reflecting a period of economic devastation in the United States, 'Of Mice and Men' demonstrates the **damaging effects of the Great Depression** upon ordinary working men.

What are they like?

Key characters	
George	Itinerant worker: frustrated, devoted, a dreamer.
Lennie	Itinerant worker: childlike, physically powerful.
Candy	The Old Swamper: unloved, an outcast, ageing.
Curley	The Boss' son: insecure, unmerciful, jealous.
Curley's wife	The only female: objectified, lonely, nameless.
Crooks	The Stable Buck: cynical, proud, isolated, an outcast.
Slim	"Prince of the ranch": compassionate, wise, respected.
Carlson	Ranch hand: heartless, insensitive.

Themes:

Loneliness
Companionship
The American dream/dreams
Power
Discrimination
Weak versus strong
Human fragility
Poverty
Fate
Gender

Context

- John Steinbeck was born in **Salinas, California** in 1902. Although his family was wealthy, he was **interested in the lives of the farm labourers** and spent time working with them. He used his experiences as material for his writing.
- The **American Dream** involved the idea that **"life should be better and richer and fuller for everyone, with opportunity for each according to ability or achievement."** George and Lennie believe in the American Dream.
- On October 29 1929, millions of dollars were wiped out in the **Wall Street Crash.** It led to the people losing their life savings and 15 million people were **unemployed** with many moving out of the cities to look for work on ranches; these people were called itinerant workers.
- **The Great Depression** lasted from 1929 to 1939. The novella reflects how **difficult finding work** was for people like George and Lennie at this time. **The Dust Bowl** described the land in southern mid-western America after a drought led to failed harvests and **dried-up land.** Farmers were forced to move off their land. This made finding work difficult.
- **Racism/sexism** were common, especially in Southern states due to economic climate, & history of slavery. This is reflected in the treatment of characters like Crooks and Curley's Wife.

Key terms and skills:

American Dream
The Great Depression
Wall Street Crash
Mass Unemployment
Racism -a person is treated unfairly because of their race/ethnicity.
Sexism -a person is treated unfairly because of their gender.
Symbolism-something that represents something else.
Imagery -creates a picture in the reader's mind.
Inference-puzzling things out/reading between the lines.
Deduce -arrive at a conclusion by reasoning.
Characterisation-how a character is created by a writer.
Nomadic-travels from place to place instead of saying in one spot.
Metaphor-saying something is something else.
Simile – comparison using like or as.
Personification -giving something non-human, human traits.
Marginalisation-treating someone as if they are not important.
Discrimination-treating some people unfairly because of who they are (can be because of race, gender, disability).
Tension- a writer creates a feeling of suspense that something bad is going to happen.
Itinerant-people who travel around for work, working in places for short periods of time.
Foreshadowing –the writer hints at future events.
Patriarchy- male dominated society.
Foreboding –a feeling that something bad is going to happen.
Segregation–separation
Cyclical structure–story begins and ends in the same way.
DADS (description, action, dialogue, setting)
PETERC (point, evidence, technique, explain, reader response, context).

Tasks:

1. **Create character profiles for George and Lennie.**
2. **ASSESSMENT FORTNIGHT THREE ASSESSMENT. Write a PETERC response to the question, 'How does Steinbeck present Curley?' (teacher marked)**
3. **Write an article on segregation/civil rights. (peer assessed)**
4. **Write a different ending to the novel. (self - assessed)**

WHY THIS? Interleaves themes introduced in previous modules, for example: poverty in Blood Brothers and discrimination in Year 8 Multi-Cultural Poetry module. Cements skills of tracking character development and close textual analysis. Historical context-rich: links to race, gender, economic depression.
WHY NOW? Interleaves Blood Brother themes of friendship, hardship, fate. Reinforces analytical depth and empathy for marginalised voices (started in Year 8 Multi-Cultural Poetry)
WHAT NEXT? Non-Fiction interleaves with themes of racism, gender. Lays thematic foundation for Romeo and Juliet (social boundaries, fate, tragic ends). Builds historical and thematic knowledge for comparing unseen texts at KS4
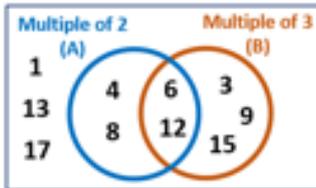
Maths
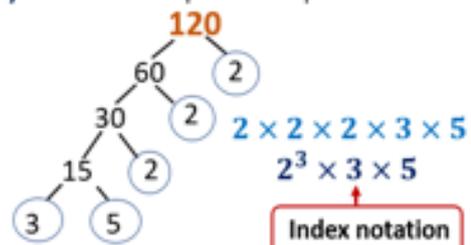
Y9 – Properties of number

KNOWLEDGE ORGANISER

Venn diagrams

A = { 4, 6, 8, 12 }

B = {3, 6, 9, 12, 15 }

A' = {1, 3, 9, 13, 15, 17 }

Not A

A and B = A ∩ B = {6, 12 }

A or B = A∪B = {3, 4, 6, 8, 9, 12, 15}

HCF/ LCM

HCF – Highest common factor	LCM – Lowest common multiple
HCF of 18 and 30 **= 6**	LCM of 9 and 12 **= 36**
18 — 1, 2, 3, 6, 9, 18	9 — 9, 18, 27, 36, 45, 54
30 — 1, 2, 3, 5, 6, 10, 15, 30	12 — 12, 24, 36, 48, 60

Product of prime factors

1) Write 120 as a product of prime numbers:

120

$2 \times 2 \times 2 \times 3 \times 5$

$2^3 \times 3 \times 5$

Index notation

2) Write 80 as a product of prime numbers:

80

$2 \times 2 \times 2 \times 2 \times 5$

$2^4 \times 5$

Factors, Multiples and Primes

MULTIPLES – numbers in a times table

a) What is the 5th multiple of 4? **20**

4, 8, 12, 16, ...

b) What is the 7th multiple of 6? **42**

6, 12, 18, 24, 30, 36, ...

FACTORS – numbers that divide into a number **exactly**

E.g. What are the factors of 24?

1 x 24
2 x 12
3 x 8
4 x 6

1, 2, 3, 4, 6, 8, 12, 24

PRIME NUMBERS – numbers with just two factors, 1 and itself.

E.g. Is 17 prime?
Yes, two factors are 1 and 17

E.g. Is 12 prime?
No, factors are 1, 2, 3, 4, 6, 12
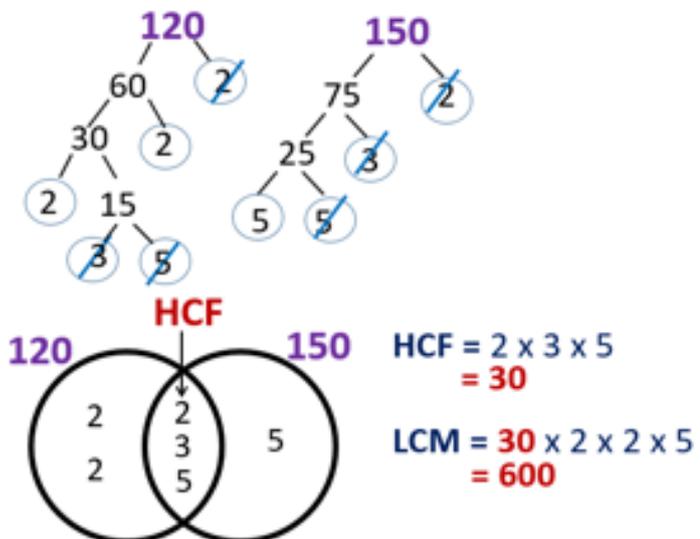

HCF and LCM with Venn diagrams

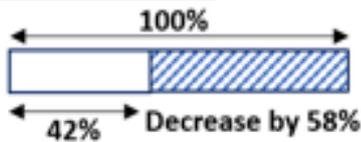**HCF** – multiply the **common** factors
LCM – multiply **all** factors

Find the HCF and LCM of 120 and 150.

120   150

HCF

HCF = 2 x 3 x 5
= 30

LCM = 30 x 2 x 2 x 5
= 600

Y9 – Percentages

KNOWLEDGE ORGANISER

Percentage Increase/ Decrease

Decrease by 58%

100%

42% Decrease by 58%

$1.00 - 0.58 = 0.42$

Multiplier

Increase by 12%

100%

Increase by 12%

$100\% + 12\% = 112\%$

$1.00 + 0.12 = 1.12$

Multiplier

Reverse Percentages

40% of my number is 16. What am I thinking of?

Original Number
(100%)

| 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |

16

$40\% = 16$
$10\% = 4$
$100\% = 40$

Try to scale down to 10% or 1% and then scale back up to 100%

140% of my number is 84. What is the original number?

Original Number
(100%)

| 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |

84

$140\% = 84$
$10\% - 6$
$100\% = 60$

Percentage change

I bought a phone for £200. A year later sold it for £125.

100%

£200
£125
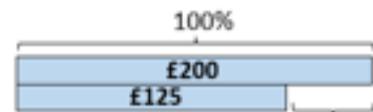
Percentage loss:

difference → $\dfrac{75}{200} \times 100 = 37.5\%$
original →

$$\dfrac{Difference\ in\ values}{Original\ value} \times 100$$

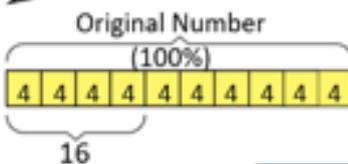I bought a house for £180,000. I later sold it for £216,000.

100%
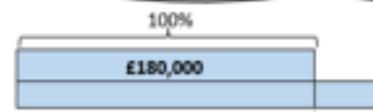
£180,000

Percentage profit:

difference → $\dfrac{36000}{180000} \times 100 = 20\%$
original →
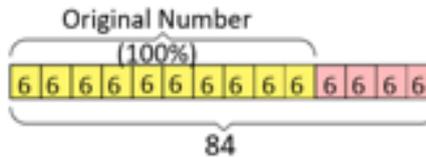
Simple Interest

For each year of investment the interest remains the same

E.g. Invest £100 at 30% simple interest for 4 years

30% 4 years
$100 \times 0.3 \times 4 = £120$

E.g. Invest £500 at 2.5% simple interest for 3 years

2.5% 3 years
$500 \times 0.025 \times 3 = £37.50$

Compound Interest

Interest charged on the original amount and additional interest payments.

Interest = £38.45

E.g. Invest £500 at 2.5% compound interest for 3 years

3 years
$500 \times 1.025^3 = £538.45$

Increase by 2.5%

Repeated percentage change

E.g. A television is priced at £800

The price is **reduced by 35%** and then **increases by 12%**

Calculate the price now.

$800 \times 0.65 \times 1.12 = £582.40$

Reduce   Increase
35%   12%

Y9 – Area and volume

KNOWLEDGE ORGANISER

Area and circumference

$$\text{Area} = \pi r^2$$

$$\text{Circumference} = \pi d$$

1) $A = \pi r^2 = \pi \times 3^2 = 9\pi \text{ cm}^2$
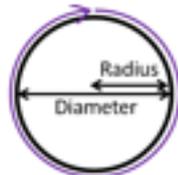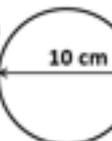 $C = \pi d = \pi \times 6 = 6\pi \text{ cm}$

2) $A = \pi r^2 = \pi \times 5^2 = 25\pi \text{ cm}^2$
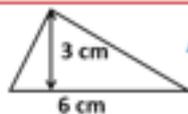 $C = \pi d = \pi \times 10 = 10\pi \text{ cm}$

Area of 2D shapes

Area of parallelogram = base x height

Area = $4 \times 6 = 24 \text{ cm}^2$

Area of triangle = $\frac{height \times base}{2}$

Area = $\frac{3 \times 6}{2} = 9 \text{ cm}^2$

Area of trapezium = $\frac{1}{2}(a+b)h$
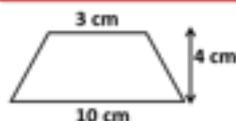
Area = $\frac{(10+3) \times 4}{2}$
     = 26 cm^2

Volume - cones

Volume = $\frac{1}{3}\pi r^2 h$
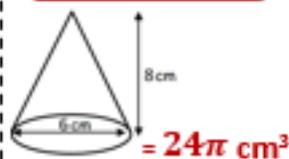
= $24\pi \text{ cm}^3$

Vol. = $\frac{1}{3} \times \pi \times 3^2 \times 8$

Volume - sphere

Volume = $\frac{4}{3}\pi r^3$

= $\frac{32}{3}\pi \text{ cm}^3$

Vol. = $\frac{4}{3} \times \pi \times 2^3$

Surface area of cuboids
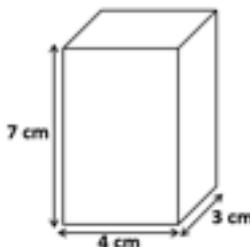
Area front = 7 x 4 = 28 cm²
Area back = 7 x 4 = 28 cm²
Area top = 4 x 3 = 12 cm²
Area bottom = 4 x 3 = 12 cm²
Area side = 7 x 3 = 21 cm²
Area side = 7 x 3 = 21 cm²

Surface area = 122 cm²

Surface area of a triangular prism
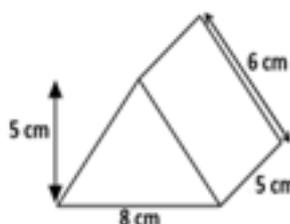
Area front = $\frac{8 \times 5}{2}$ = 20 cm²
Area back = $\frac{8 \times 5}{2}$ = 20 cm²
Area side = 6 x 5 = 30 cm²
Area side = 6 x 5 = 30 cm²
Area bottom = 8 x 5 = 40 cm²

Surface area = 140 cm²

Surface area of a cylinder

Surface Area of a cylinder =
$\pi r^2 + \pi r^2 + \pi dh$

Top circle   Bottom circle   Round surface

πr^2
πdh
πr^2
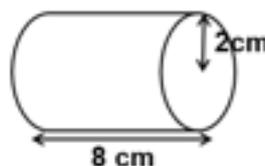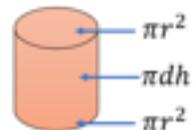
SA = $\pi r^2 + \pi r^2 + \pi dh$
   = $\pi \times 2^2 + \pi \times 2^2 + \pi \times 4 \times 8$
   = $4\pi + 4\pi + 32\pi$
   = $40\pi \text{ cm}^2$

Volume of prisms

Volume of prism = area of cross-section x length

Volume = $\frac{4 \times 3}{2} \times 6 = 36 \text{ m}^3$

Volume = $\pi \times 4^2 \times 10$
       = 502.65 cm^3

Y9 – Equations, inequalities and formulae

KNOWLEDGE ORGANISER

Solve equations with brackets

$3(2x + 4) = 30$

$6x + 12 = 30$
$\quad -12 \qquad -12$

$6x = 18$
$\quad \div 6 \qquad \div 6$

$x = 3$

Form and solve inequalities

Two more than treble my number is greater than 11

$3x + 2 > 11$
$\quad -2 \qquad -2$

$3x > 9$
$\quad \div 3 \qquad \div 3$

$x > 3$

Inequalities with negatives

Method 1:
Make x positive:

$2 - 3x > 17$
$\quad +3x \qquad +3x$

$2 > 17 + 3x$
$\quad -17 \qquad -17$

$-15 > 3x$
$\quad \div 3 \qquad \div 3$

$-5 > x$ — *x is less than -5*

CHECK IT!
$2 - 3(-6) = 20$
TRUE ✓

Method 2:
Keep the negative x:

$2 - 3x > 17$
$\quad -2 \qquad -2$

$-3x > 15$
$\quad \div -3 \qquad \div -3$

$x > -5$ — *x is greater than -5*

This cannot be true...

$x < -5$

When you multiply or divide x by a negative you need to reverse the inequality

Equations with unknown on both sides

$4x + 5 = 3x + 24$
$\quad -3x \qquad -3x$

$x + 5 = 24$
$\quad -5 \qquad -5$

$x = 19$

Inequalities with unknown on both sides

$5(x + 4) < 3(x + 2)$

$5x + 20 < 3x + 6$

$2x + 20 < 6$

$2x < -14$

$x < -7$

Check it!

$5(-8 + 4) < 3(-8 + 2)$

$5(-4) < 3(-6)$

$-20 < -18$ ✓

Rearranging Formulae (one step)

$x = y + z$

Rearrange to make y the subject:

$y = x - z$

$y \rightarrow +z \rightarrow x$
$y \leftarrow -z \leftarrow x$

Inverse operations help with rearranging formulae

Language of rearranging:

Make ...... the subject

Change the subject

Rearrange

Rearranging Formulae (two step)

Equation (find x):

$4x - 3 = 9$
$\quad +3 \qquad +3$

$4x = 12$
$\quad \div 4 \qquad \div 4$

$x = 3$

Formula (make x the subject)

$xy - s = a$
$\quad +s \qquad +s$

$xy = a + s$
$\quad \div y \qquad \div y$

$x = \dfrac{a + s}{y}$

The steps are the same for solving and rearranging

Rearranging equations of lines (y = mx + c)

e.g. Find the gradient of the line $2y - 4x = 9$

$2y = 9 + 4x$

Gradient $= \dfrac{4}{2} = 2$

$y = \dfrac{9}{2} + \dfrac{4}{2}x$

Y9 – Fractions

KNOWLEDGE ORGANISER

Fraction of a given amount

E.g. Find $\frac{2}{5}$ of £205

£205

| £41 | £41 | £41 | £41 | £41 |

The bar represents the whole amount
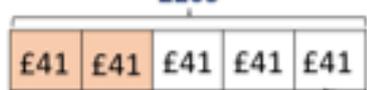
2 out of the 5 equal parts
£82

£205 ÷ 5 = **£41**
Each part of the bar model represents £41.

Use bar models for comparisons:

90

| 30 | 30 | 30 |

$\frac{1}{3}$ of 90 = 30

| 15 | 15 | 15 |

45
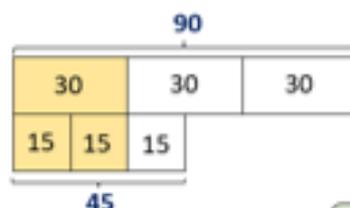
$\frac{2}{3}$ of 45 = 30

∴ $\frac{1}{3}$ of 90 = $\frac{2}{3}$ of 45

Add and subtract fractions

a) $\frac{1}{6} + \frac{3}{4}$

×2↓   ↓×3

$\frac{2}{12} + \frac{9}{12} = \frac{11}{12}$

b) $1\frac{1}{3} + 2\frac{4}{5} = \frac{4}{3} + \frac{14}{5}$

×5↓   ↓×3

$\frac{20}{15} + \frac{42}{15} = \frac{62}{15} = 4\frac{2}{15}$

c) $3\frac{3}{4} - 2\frac{1}{3} = \frac{15}{4} - \frac{7}{3}$

×3↓   ↓×4

$\frac{45}{12} - \frac{28}{12} = \frac{17}{12} = 1\frac{5}{12}$

Dividing fractions

Dividing two fractions is the same as:

Multiplying the **first fraction** by the **reciprocal** of the **second fraction**

a) $\frac{1}{5} \div \frac{2}{3} = \frac{1}{5} \times \frac{3}{2} = \frac{3}{10}$

reciprocal

b) $\frac{2}{7} \div \frac{5}{8} = \frac{2}{7} \times \frac{8}{5} = \frac{16}{35}$

reciprocal

c) $\frac{1}{2} \div 4 = \frac{1}{2} \times \frac{1}{4} = \frac{1}{8}$

reciprocal

d) $\frac{1}{3} \div 2 = \frac{1}{3} \times \frac{1}{2} = \frac{1}{6}$

reciprocal

Multiplying fractions

To **multiply fractions** ......
- Multiply the numerator
- Multiply the denominator

a) $\frac{2}{5} \times \frac{5}{6} = \frac{10}{30} = \frac{1}{3}$

b) $\frac{3}{4} \times \frac{2}{9} = \frac{6}{36} = \frac{1}{6}$

c) $\frac{4}{7} \times \frac{1}{2} = \frac{4}{14} = \frac{2}{7}$

1) $1\frac{1}{2} \times 2\frac{1}{4} = \frac{3}{2} \times \frac{9}{4}$

$= \frac{27}{8} = 3\frac{3}{8}$

2) $2\frac{1}{3} \times 1\frac{2}{5} = \frac{7}{3} \times \frac{7}{5}$

$= \frac{49}{15} = 3\frac{4}{15}$

Dividing mixed number fractions

1) $1\frac{1}{2} \div 2\frac{1}{4} = \frac{3}{2} \div \frac{9}{4} = \frac{3}{2} \times \frac{4}{9} = \frac{12}{18} = \frac{2}{3}$

reciprocal

2) $2\frac{1}{2} \div 1\frac{2}{3} = \frac{5}{2} \div \frac{5}{3} = \frac{5}{2} \times \frac{3}{5} = \frac{15}{10} = \frac{3}{2} = 1\frac{1}{2}$

reciprocal

Science

Knowledge organiser - Inheritance and evolution

Variation

Differences in characteristics are called variation.

Inherited variation

Characteristics are passed on from parents to offspring

genetic diseases
eye colour
blood group

Surroundings affects your characteristics

dyed hair
tattoos
accent

Environmental variation

Many characteristics, such as height, are affected by both inherited and environmental variation.

Discontinuous variation

can only result in certain values (e.g., blood group or eye colour)

Continuous variation

can take any value within a range (e.g., height or hair length)

Discontinuous variation should be plotted on a bar chart, and continuous variation should be plotted on a histogram.

Inheritance

Characteristics

Characteristics are inherited from your parents through genetic material stored in the nucleus of cells.

We inherit half of our DNA (deoxyribonucleic acid) from our mother and half from our father.

DNA

- contains all the information needed to make an organism
- is arranged into long strands called **chromosomes**.
- each chromosome is divided into sections of DNA
- sections of DNA that contain the information to produce a characteristic are called **genes**

Scientists Watson, Crick, Franklin, and Wilkins, worked together to produce a model of the structure of DNA.

Inheritance of genetic material:

sperm contains 23 chromosomes
egg contains 23 chromosomes

during fertilisation the genetic material joins together

cell division

each nucleus in an embryo contains 46 chromosomes

Natural selection

Process of natural selection

- All living organisms have **evolved** from a common ancestor, through the process of natural selection.
- Organisms change slowly over time.
- Those better adapted to their environment are more likely to survive.

Organisms in a species show variation caused by differences in their genes.

Organisms with the most useful characteristics survive and reproduce.

This is called 'survival of the fittest'.

Successful genes are passed on to the offspring.

This is repeated many times and over a long time can lead to a new species.

A fossil is the preserved remains or traces of a dead organism. The process by which a fossil is formed is called **fossilisation**.

It's very rare for living things to become fossilised. Usually after most animals die their bodies just rot away and nothing is left behind. However, under certain special conditions, a fossil can form.

After an animal dies, the soft parts of its body **decompose** leaving the hard parts, like the skeleton, behind. This becomes buried by small particles of rock called **sediment**.

As more layers of sediment build up on top, the sediment around the skeleton begins to compact and turn to rock. The bones then start to be dissolved by water seeping through the rock. Minerals in the water replace the bone, leaving a **rock** replica of the original bone called a fossil.

Extinction

If a species is not well-adapted to its environment it will not survive, and the organisms will die before reproducing. A species becomes **extinct** when there are no more individuals of that species left anywhere in the world. The **fossil record** shows that many species that once lived have become extinct.

Factors leading to extinction:

- changes to the organism's environment
- destruction of their habitat
- new diseases
- new predators
- increased competition.

Scientists are trying to prevent **endangered** species (at risk of extinction) from becoming extinct. For example, by using gene banks to store genetic samples from different species.
In the future these can be used for research, or to produce new individuals.

Knowledge organiser - Light

How does light travel?

Luminous objects are sources of light.

Non-luminous objects do not produce their own light.
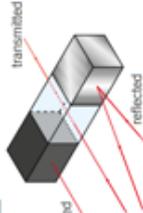
When light hits an object it can be **absorbed**, **reflected**, or **transmitted**.

If an object is:

transparent – most light is transmitted

translucent – light is scattered

opaque – no light is transmitted so a shadow is produced.

Light can travel through gases, some solids and liquids, and completely empty space (a vacuum).

The speed of light in a **vacuum** is about 300 000 km/s.

Distances in space are measured in **light-time**. Remember that light-time is a distance (not a measure of time).

A light-minute is the distance light travels in one minute.

A light-year is the distance light travels in one year.

Colours of light

A **prism** refracts different colours of light by different amounts. This disperses light into a continuous **spectrum** of colours.

The **primary colours** of light are red, green, and blue.

Secondary colours are produced when any two primary colours are mixed.

**Filters** subtract colours from white light, so that only one colour of light is transmitted.

Objects appear to be different colours because they reflect some colours of light and absorb others.

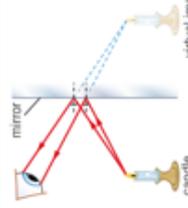Black objects absorb all colours and white objects reflect all colours.

Reflection and refraction of light
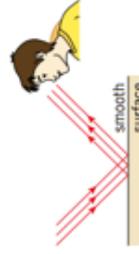
The **law of reflection** states that:

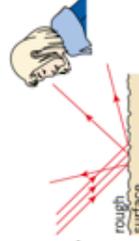The **angle of incidence** is equal to the **angle of reflection**.
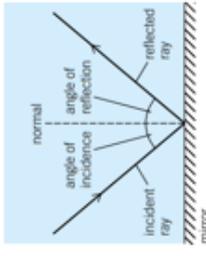
Images in mirrors are **virtual** – they look like they are behind the mirror.

Whether or not you can see a clear reflected image depends on how smooth the surface is:

specular reflection   diffuse scattering

Refraction is when light changes direction when it travels from one **medium** (material, such as air or water) to another.

Refraction happens because light travels at different speeds in different materials.

Rays of light will be refracted:

- towards the **normal** if they slow down, such as going from air to glass

- away from the normal if they speed up, such as going from water to air.
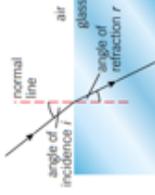
Lenses use refraction to spread out or **focus** light.

Convex (or **converging**) lenses (like the ones in your eyes) are shaped to focus the light to a point – called the **focal point**.

parallel rays   converging lens   focal point
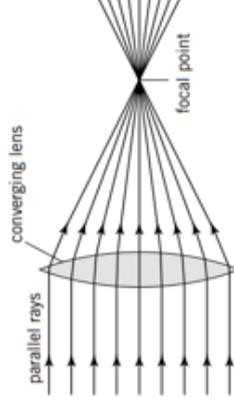
How do eyes and cameras work?

Light entering your eye is refracted by the **lens**, focusing it on the **retina** and creating an inverted image.

Photoreceptors detect the light hitting your retina and send an electrical impulse to your brain.

optic nerve   cornea   lens   pupil   iris   retina and image
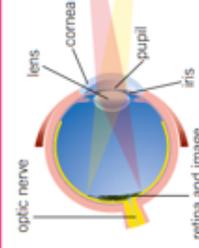
Cameras work in the same way as your eye – light passes through an opening and a **real image** is formed on a screen or film.

Digital cameras now have a **charge-coupled device (CCD)** instead of film – when light hits a **pixel** it produces an electrical charge.

Key terms

Make sure you can write definitions for these key terms.

absorb   angle of incidence   change-coupled device   colour   converging   convex   diffuse scattering   filter   focus   incident ray   law of reflection   lens

light-time   luminous   normal   opaque   photoreceptor   pixel   primary colour   prism   real image   refraction   retina   secondary transmit   spectrum   specular reflection

reflection   translucent   transmit   transparent   virtual image

RE

STEWARDSHIP: Can we treat the earth as we like?

Key ideas	Essential knowledge	Useful terms	Definition	Sources of authority
1 Catholic beliefs about stewardship & environment	• both stories of creation in Genesis show that human beings are the most important part of creation. • God made humans superior to the rest of creation by giving them reason and free will. • This is why God made humans stewards of the world. • Catholics should be concerned about looking after the environment and the planet. • need to protect the planet, cutting down on pollution, caring for animals & making sure that the world is in good shape to pass on to future generations. • Pope Francis' Encyclical letter, "Laudato si', 'Care for our Common Home', inspires Catholics to protect the earth and take part in Catholic Social Teaching. • The two greatest commandments are to love God and to love our neighbour. • 'neighbour' means not just those close to us, but people in different countries. • Catholics are concerned about those who suffer from climate change ie the poorest people	**Dominion**	Having power or control over nature	A. God blessed them and said to them, "Rule over the fish in the sea and the birds in the sky and over every living creature that moves on the ground." *Genesis 1:28*
		Ecology	The study of the relationships between living organisms, including humans, and their physical environment	B. "The LORD God took the man and put him in the Garden of Eden to work it and take care of it." *Genesis 2:15*
		Encyclical	Letter from the Pope	C. "Each community...has the duty to protect the earth and ensure its fruitfulness for coming generations" *Laudato si*
		Environment	The natural world, especially as affected by human activity.	D. "...the world is a gift which we have freely received and must share with others." *Laudato Si'*
2 Jewish beliefs about stewardship & environment	• Genesis (the first book of the Torah) states that God created the universe and everything in it. • God is both a lawgiver and a judge. • The Torah gives rules on being stewards of the earth • Jews believe God will judge them on how well they follow the Torah. • As part of the covenant Moses made with God at Mt Sinai, Jews aim to follow the 613 mitzvot. • A covenant is a promise or an agreement • Jews must never destroy things on the land that are useful and give the land a rest from growing crops every 5 years.	**Evolution**	The gradual change and development of species over time. Associated with Charles Darwin.	E. "You shall not steal" *Exodus 20:15*
		Imago Dei	The belief that humans were created in the image of God.	F. "The seventh commandment forbids unjustly taking or keeping the goods of one's neighbour ....For the sake of the common good, it requires respect for the universal destination of goods." *Catechism of the Catholic Church*
		Stewardship	The belief that humans should protect and preserve the environment and hand more on to the next generation.	
3 Humanist beliefs about stewardship & environment	• Humanists agree with Catholics and Jews that we should look after the environment. • However, the universe was created by the Big Bang and has developed through evolution with no God. Humanists reject belief in God and do not believe that God created the universe. • Humanists like Peter Singer believe we have to protect and preserve the environment and that includes all life including animal life. • Humanists believe we should control population through the use of contraception which is in direct contrast to Catholic beliefs.	**Speciesism**	The belief that human life is more important than any other	G. "Blessed be he who spoke and the world came into being" *Barukh She'amar prayer*
		sustainable	Using natural resources responsibly to ensure they do not run out	

Is punishment compatible with Christianity?

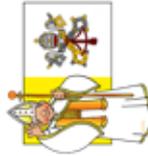| Key ideas	Essential knowledge	Useful terms	Definition	Sources of Authority
1 Christian teaching on the aim of punishment	• Christians support the idea that those who break the law should be punished so that justice is served and as a deterrent to others. • However criminals should have the opportunity to reform and re-join society. • This follows the teachings of Jesus who forgave sinners	Absolutism	The belief that there are certain actions that are always right or always wrong	A. "... we pity the person, but hate the offence or transgression." (hate the sin but love the sinner) St Augustine
		Capital Punishment	The death penalty	
		Deterrence	To deter/ put someone off committing a crime. Effective punishment should act as a deterrent	B. "The primary purpose of the punishment which society inflicts is 'to redress the disorder caused by the offence.'" Pope John Paul II *Evangelium Vitae*
2 Catholic teaching on Capital Punishment	• Pope John Paul II taught that Capital punishment should be avoided but is acceptable if it is to save lives and there is no doubt the murderer is guilty. • In 2018 the Catechism of the Catholic Church was revised to state that the Church teaches that the death penalty is not allowed because it is an attack on human dignity.	Punishment	A penalty imposed by a person in authority on the person who has committed wrongdoing	C. Jesus says, "You have heard that it USED to be said, 'Eye for eye, and tooth for tooth.' But I tell you, do not resist an evil person. If anyone slaps you on the right cheek, turn to them the other cheek also." Matthew 5:38
		Rehabilitation (reform)	The idea that criminals should be helped to change so that they do not commit crime again.	
3 Arguments FOR Capital Punishment	• Jesus never taught that the death penalty was wrong • It can save lives (if a mass murderer is executed) • The O.T says 'he who sheds a person's blood, shall have his blood shed' (Gen 9:6) and 'an eye for an eye' (Exodus) • St. Paul taught that Christians should obey the law and Capital Punishment is legal in many countries	Relativism	The belief that there is no moral law and that rules change from place to place and from age to age	D. "'Do not kill.'" Ten Commandments
4 Arguments AGAINST Capital Punishment	• The Ten Commandments say 'do not kill' • We cannot teach that killing is wrong by killing • Only God can take a life • Catholic Social teaching says we need to treat everyone with respect and care for the most vulnerable (option for the poor) • risk that the person is innocent • The dead cannot be reformed (Augustine) • Christianity tells us to love our neighbour and forgive our enemies.	Retribution (revenge)	The idea that a criminal should pay for their crime, or 'an eye for an eye'	E. "the death penalty is inadmissible because it is an attack on the inviolability and dignity of the person" Pope Francis
		Sin	Acting against the will or laws of God	F. "regardless of how it is carried out", the death penalty is contrary to the gospel," . Pope Francis

History

Unit 1: Women's Suffrage

Timeline

Year	Event
1897	The NUWSS was formed combining Suffrage movements from across Britain.
1903	The WSPU was formed.
1913	The Great Pilgrimage to Hyde Park.
1913	The Cat and Mouse Act was passed into law.
1914	Outbreak of the First World War.
1918	End of the First World War and passing of Representation of the People Act.

Key Figures

Name	Description
Millicent Garrett Fawcett	The founder of the NUWSS and leader for more than 20 years. She practiced a non-violent approach to protest.
Emmeline Pankhurst	The founder and leader of the WSPU. She was imprisoned on several occasions & violently force fed when she went on hunger strike. She practiced a more militant approach to protesting.
Emily Davison	Emily Davison was a member of the WSPU/Suffragettes. She is known as the only martyr of the women's suffrage cause when she jumped in front of the King's horse at the Epsom Derby in June 1913.
Herbert Asquith	Asquith served as Prime Minister of the United Kingdom between 1908 - 1916 and was firmly against women being able to have the right to vote.

Key Terms

Term	Definition
Gender Roles	Gender roles in society means how we're expected to act, speak, dress, groom, and conduct ourselves based upon our assigned sex.
Stereotypical	Widely held views on how someone should typically behave or act.
Suffragist	A person peacefully advocating that the right to vote be extended to more people, especially to women.
Suffragette	A person who was a member of the WSPU in the early 20th century.
Suffrage	The right to vote in political elections.
Martyr	A person who sacrifices their life for something they believe in.
Militant	Favouring confrontational or violent methods in support of a political or social cause
Gradualist	supporting or following a policy of slow steady change in society rather than sudden change or revolution.
Equality	The state of being equal, especially in status, rights, or opportunities.
An Act	An act is the passing of a new law or a change to an existing law.
Protest	A statement or action expressing disapproval of or objection to something.

Key Themes

Victorian Gender Roles

Men and women did not get equal pay even for doing the exact same job.

Men were taught traditional subjects like Maths, English and Science whilst women learned to cook, clean and raise children.

It was expected that women stayed at home as 'housewives' whilst the men went to work. This made women reliant on their husbands for money.

Suffragists vs Suffragettes

Suffragists methods of protesting involved writing letters to MP's, carrying out peaceful marches.

Suffragettes had a much more militant approach. They would smash windows, set buildings on fire and even go as far as to attack MP's.

Which one was the most effective? The Suffragists never broke the law which made them look good in the eyes of government. However, Suffragettes made themselves well known and the government could not ignore them.

Cat and Mouse Act (1913)

The Cat and Mouse Act aimed to deal with the problem of women hunger striking in prison.

Force feeding had been used but people started to feel sympathetic towards the Suffragettes.

The Cat and Mouse Act meant if women got too ill for prison. They could be sent home to recover.

Once recovered they would be brought back to prison to complete their sentence.

The First World War

- Women played a crucial role in creating armaments during the First World War working in factories.
- At the end of the war some women got the vote making people believe it was their role in the war that helped them win the right to vote.

Geography

Year 9 Urbanisation Knowledge Organiser

Key Term Definitions:

Densely populated: A location with a high population per Sq/km

Sparsely populated: A location with a low population per Sq/km

Urbanisation: The shift of people from living in rural areas to urban areas.

Migration: The movement of people from one place to another to live or work

Push factor: A reason that forces someone to leave an area

Pull factor: A reason that encourages someone to move to an area

Megacity: A city with over 10 million people.

Slum: A neighbourhood within a city made of poor quality self-built houses, usually with extreme poverty and a lack of access to basic services (E.G. running water, sanitation).

Push & Pull Factors

Push Factor	Pull Factor
• Danger (E.G. War/Conflict) • Country damaged by natural disaster • Drought/famine • Political persecution	• Well paid jobs • Higher quality healthcare • Better chance for education • To be closer to family

Background to Lagos, Nigeria

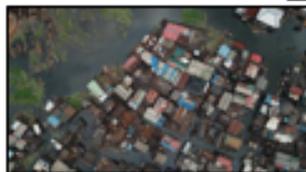Population: 15.3 million

Population density: 24,182 (Island)

16,322 (mainland)

GDP: 4333 (US$) per head

Waste per day:13,0000 metric tonnes

Challenges in Lagos:

• Expensive healthcare

• Lack of public schools

• Lack of safe drinking water

• Regular electricity blackouts in the city

• Overpopulation

Developments to Makoko Slum

Strategy	What will this improve?	Issue(s)
Floating Schools	It will help the children of Makoko get an education which will increase the employment prospects in the future.	Due to a lack of education opportunities in Makoko.
Healthcare Project	Decrease infant mortality, increase people's ability to stay healthy and work	Many people lack basic healthcare, particularly pregnant women and young children.
Mapping Project	To map out all the features, businesses and workings of the slum to show it is a working part of Lagos.	The slum is under threat due to the Mayor of Lagos believing it is not a useful part of the city.

MFL

Food —Y9 HT1

IMPORTANT VOCAB

¿Qué comes? - What do you eat?

Porque es... - because it is

Me gusta / no me gusta... - I like / I don't like...

Me gustaría comer... - I would like to eat...

Present :

Como—I eat

Bebo—I drink

Desayuno—I eat ____ for breakfast

Ceno—I eat ____ for tea

NOW

Past :

Comí—I ate

Bebí—I drank

Desayuné—I ate ____ for break-fast

Cené—I ate ____ for tea

Fue—it was

PAST

Adjectives:

sano/a ____

delicioso/a ____

rico/a ____

nutritivo/a ____

sabroso/a ____

grasiento/a ____

dulce ____

repugnante ____

Food / la comida :

Pescado

Verduras

Pollo

Ensalada

Carne

Bocadillo

Patatas fritas

Magdalenas

Galleta

Zumo

Té

Leche
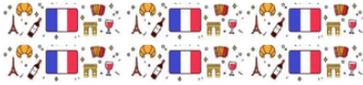
Grade		WAGOLLs	
Show What You Know		What a good one looks like	

YEAR 9 French Term 1 Holidays- Les Vacances

5+

15	Infinitive structures	I **intend** to return next year.
14	Complex opinion phrases	I **would say** that it is pretty I **think that** it is too far I **would have preferred** to go to Greece
13	Near future tense verbs	I **am going** to **travel** by plane

4

12	Past and future structures together.	I **used** to **like** family holidays, but **in the future, I am going to go** on holiday with my friends.
9	Intensifiers with the conditional tense.	I **would prefer** to stay in a 5 star hotel **but it's too** expensive.

3

10	Imperfect tense	I **used** to **sunbathe** on the beach I **used** to **like** active holidays
8	Modal Verbs	You **can** visit monuments You **can't** swim in the sea You **should** put on sun cream You **could** eat in a restaurant at night

2

7	Je voudrais + infinitive	I **would like** to go to the United States
6	Contrasting opinions	I **like** to go to the beach **but it's too** hot. Italy is **more** beautiful than Spain
5	Justified opinions.	I **don't like** the journey **because** it's tiring. I **prefer** Spanish food **because** it's tasty.

1

4	Asking questions	Do you like going on holiday abroad ?
3	Connectives	**And, but, especially, also, however, however, then, after.**
2	Opinions	I **like** snow. I **don't like** rain.
1	Present tense, frequency words & negatives.	**We stay** in an appartment I **don't go** abroad I don't do **enough** sport. **Usually, last year, this summer**

5+

15	Infinitive structures	**J'ai l'intention de** retourner l'année prochaine
14	Complex opinion phrases	**Je dirais que** c'est joli **Je pense que** c'est trop loin **J'aurais préféré** aller en Grèce
13	Near future tense verbs	**Je vais voyager** en avion

4

12	Past and future structures together.	**J'aimais** les vacances en famille, **mais à l'avenir, je vais partir** en vacances avec mes copains
9	Intensifiers with the conditional tense.	**Je préférerais** rester dans un hôtel cinq étoiles **mais c'est trop** cher.

3

10	Imperfect tense	**Je me bronzeais** sur la plage **J'aimais** les vacances actives
8	Modal Verbs	**On peut** visiter les monuments **On ne peut pas** nager dans la mer **Il faut** mettre la crème solaire. **On pourrait** manger dans un restaurant le soir

2

7	Je voudrais + infinitive	**Je voudrais aller** aux États-Unis
6	Contrasting opinions	**J'aime aller** à la plage, **mais** il fait trop chaud. Italie est **plus belle** que l'Espagne
5	Justified opinions.	Je n'aime pas le voyage **parce que** c'est fatigant. **Je préfère** la cuisine espagnole **car** c'est savoureux.

1

4	Asking questions	Tu aimes aller en vacances à l'étranger?
3	Connectives	**Et, mais, surtout, aussi, cependant, pourtant, puis, après**
2	Opinions	**J'aime** la neige. **Je n'aime pas** la pluie.
1	Present tense, frequency words & negatives.	**On reste** dans un appartement **Je ne vais** pas à l'étranger **Je ne fais pas** assez de sport. Je ne fais pas **assez de** sport. **D'habitude, l'année dernière, cet été**

Year 9 French Half Term 1
Les Vacances

BLESSED TRINITY RC COLLEGE

Year 9 LEARNING OUTCOMES Half Term 1

I will be able to:

- Discuss holiday destinations; countries, places, accommodation.
- Describe types of holidays.
- Understand and use vocabulary relating to weather
- Understand and use vocabulary relating to travel and transport
- Say where you usually go on holiday
- Say what you take with you
- Describe what you do on holiday
- Describe a past holiday
- Talk about something that went wrong on holiday
- Talk about future holiday plans
- Give opinions
- Use at least three tenses.

KEY VOCABULARY

Scan the QR code on your phone's camera or 'Scan QR code' option to go to the Quizlet link with the vocabulary.
https://quizlet.com/595876433/studio-3-module-4-special-vacances-flash-cards/?i=hc9w3&x=1jqt

Scan me!

KNOWLEDGE ORGANISER

Computing

Denary	Binary
0	0
1	1
2	10
3	11
4	100
5	101
6	110
7	111
8	1000
9	1001
10	1010
11	1011
12	1100
13	1101
14	1110
15	1111

Binary to denary conversion

128	64	32	16	8	4	2	1
1	0	1	1	0	1	1	0

If in the column there is a 1 use the number if a 0 don't use the number
128+32+16+4+2 = 182

Binary addition rules

0 + 0 = 0
1 + 0 = 1
1 + 1 = 0 carry 1 (10)
1 + 1 + 1 = 1 carry 1 (11)

→ carry

```
     1 1 1
     1 1 1 0 1
(+)  1 1 0 1 1
-----------
   1 1 1 0 0 0
```

HOW COMPUTERS WORK - binary
Year 9 Autumn Term

Keywords

Keyword	Definition
Binary	A number system that only uses two numbers (0 and 1). It is used to represent on and off for computer circuits
Denary	The normal number system that uses number (0 to 9)
Transistor	The electronic device that can be on or off in a computer
Embedded System	A computer that is built into another machine to perform a simple task (e.g. control central heating)
Alan Turing/Tommy Flowers	The scientists who built colossus and broke the Enigma code
Colossus	The computer built during WW2. The first significant computer
Combinations per bit	2^{bits} e.g. 5 bits is 2^5 giving 32 binary patterns

I will be able to

- Describe an embedded system and where they are used
- Convert binary to Denary and denary to binary
- Add binary numbers
- Describe a brief history of computers
- Describe what a computer is

PRIOR LEARNING

Algorithms using flowcharts
Introduction to Programming
Modelling with spreadsheets
Computer hardware and software

CURRENT TOPIC

HOW COMPUTERS WORK
Year 9 Autumn Term

NEXT TOPIC

Boolean Logic – using binary in truth tables

Music

Music Knowledge Organiser

Year 9 Blues Music

Context

Blues Music evolved in America but had lots of African influences due to African slaves bringing their musical traditions with them.

Blues Music was based on:
1. Spirituals (religious songs)
2. African rhythms-Syncopation
3. Call and response

Chords

Primary chords – Most common chords used in music.
Chords I IV and V

Primary Chords

Flats

12 Bar Blues

Pentatonic Blues Scale

History	Primary Chords	12 Bar Blues	Improvisation	Walking Bass	Black or White

Drama/ Dance

Year 9 Dance - Knowledge Organiser

Parallel Position of the feet

Includes lots of Floor Work

Key Features of Contemporary Dance

Use of the Spine

Contact Work
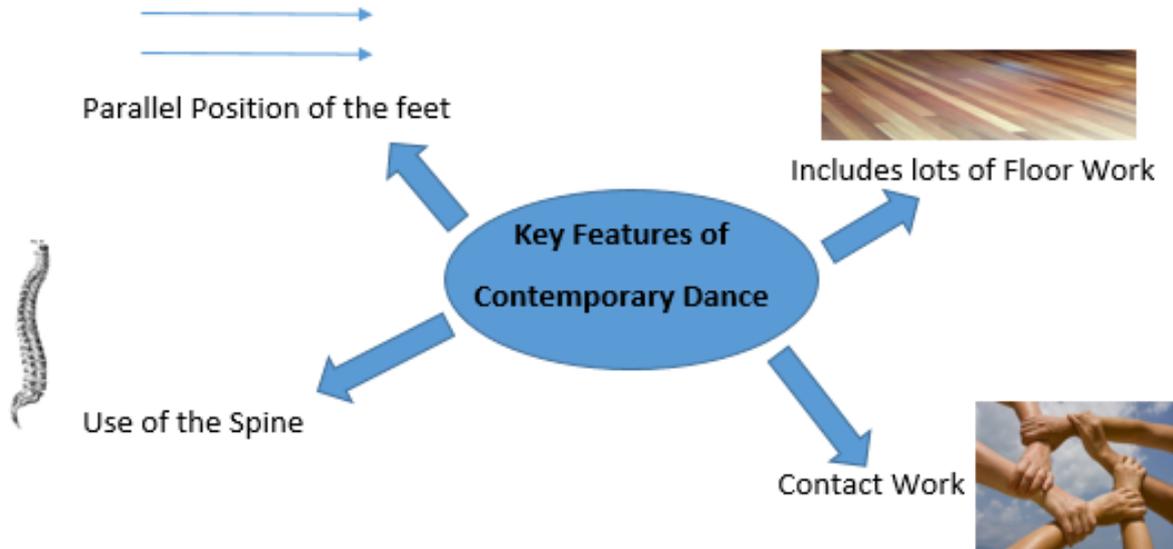
The name "Contemporary Dance" describes a range of techniques and styles used in classes, workshops and dance choreography.

Contemporary dance was developed in the early 20th century as a reaction against the rigid techniques of ballet.
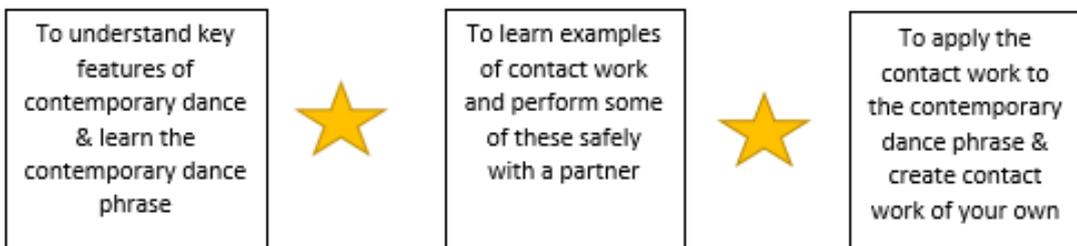
Dancers such as Isadora Duncan and Martha Graham searched for ease of movement using the body's natural lines and energy.

This allowed a greater range and fluidity of movement than conventional dance techniques.

Contemporary dance can be danced to almost any style of music, or united with other dance forms to create new styles of movement.

| KEY WORDS	Definition
Contact Work	Lifts, supports or balances with a partner
Counter Balance	To equally push towards your partner
Counter Tension	To equally lean/pull away from partner

The Journey from Lesson 1 to Assessment

To understand key features of contemporary dance & learn the contemporary dance phrase	⭐	To learn examples of contact work and perform some of these safely with a partner	⭐	To apply the contact work to the contemporary dance phrase & create contact work of your own

Art

D&T/Art Knowledge Organiser   Year: *All years*   Pencil drawing techniques for drawing tests
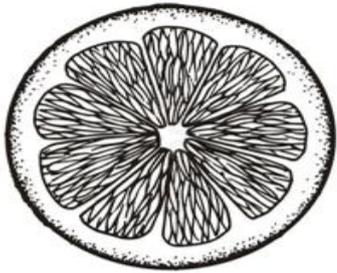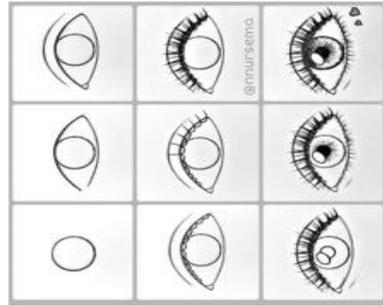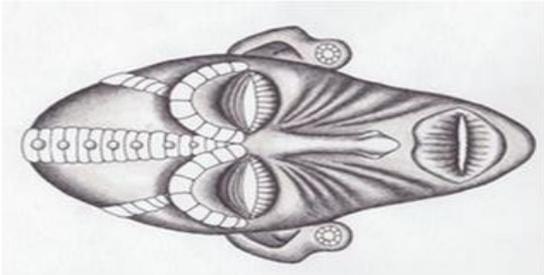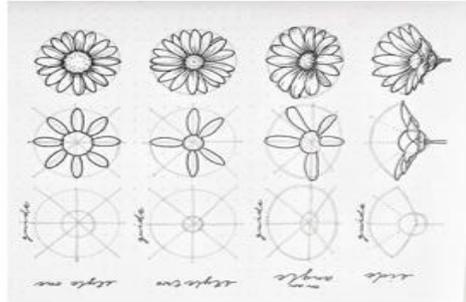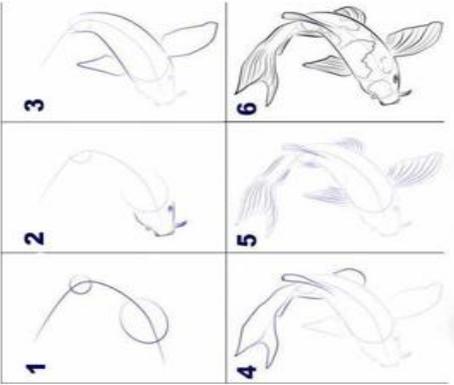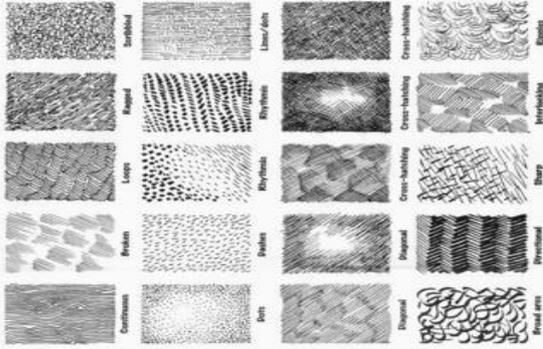
Step by step drawing

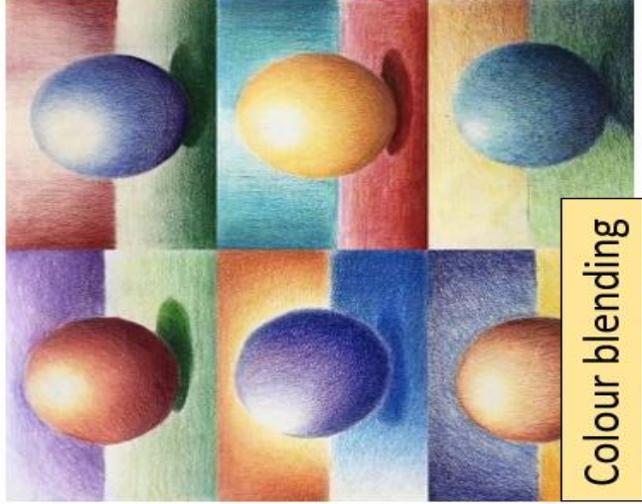1. Start by sketching the outline and shape of the object LIGHTLY with a pencil using guidelines where necessary.
2. Softer lines can be erased more easily
3. Check the proportions and scale
4. Work into the details of the object
5. Sketch the shapes of the shadows and highlights
6. Start to build up the tone gradually with the lighter tones first
7. Increase tone to create contrast and shape
8. Ensure you have left highlights (no tone)

Key vocabulary

Still life
Layers
Depth
Focal point
Contrast
Tone
Viewpoints
Tonal values
Mark-making
Shading
Highlights
Proportion
Scale
Outline
Shape
Form
Line

Line and linear drawing

Colour blending

African mask

Koy fish drawing

Bottle drawing

Flower drawing

Orange slice

Eye drawing
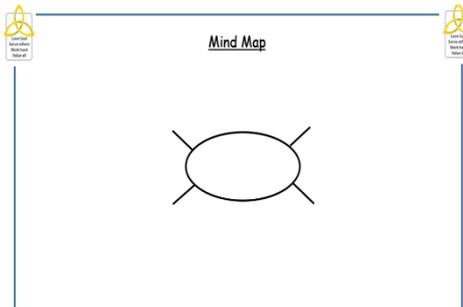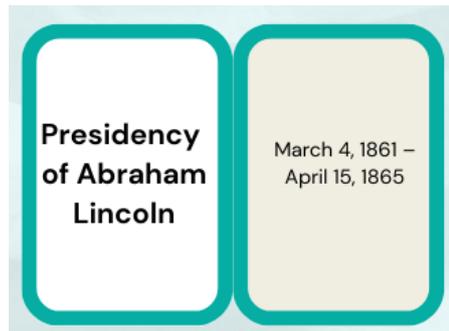
Top Tips!

How to use these KO's to revise

- Highlight the key words
- *Make a mind map*

- *Make some flash cards* – Put the key word on one side and the facts/ important information on the back (just the key info!) – use the Leitner system shown to you in forms.

- *Self-test* – memorise the KO organiser, turn it over and then see how much you can remember
- *Peer test* – memorise the KO organiser then get someone else to test you (friend, family etc)