



Year 8

Knowledge & Gwaith Cartref

Materials

Autumn Term

How Equal Are We Really?

2026-2027

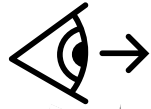
Name _____

Tutor group _____

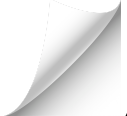
HOW DO I USE MY KNOWLEDGE BOOKLET?

4 simple strategies to memorise information:

LOOK, COVER, WRITE, CHECK



1) LOOK at a box of information, a diagram, or the definition of a word.



2) COVER it up



3) WRITE down the information/definition or draw the diagram from memory.



4) CHECK your work and use a different colour pen to correct any mistakes.

Keep doing this until you get it completely right

FLASHCARDS

- 1) To make a flashcard, write a question on one side of a piece of paper/card, and the answer on the other.
- 2) Mix up your flashcards from different subjects.
- 3) Use them to quiz yourself or a friend.

The best flashcards are simple, numerous and overlapping.

Q: What is an integer?

A: A whole number.

Q: What is the mathematical word for a whole number?

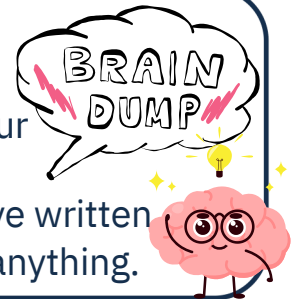
A: An integer.

FILL IN THE BLANKS

- 1) Copy out part of the Knowledge Booklet with key words, formula, dates, etc. missing.
- 2) Fill in the blanks without looking at the original.
e.g. 14th October ...10...6...6... : The Battle of ...H...a...sti...n.g.s

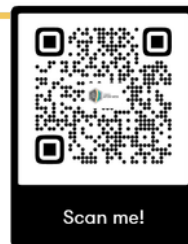
BRAIN DUMP

- 1) Without looking at it, write down everything you can remember from your Knowledge Booklet on a piece of paper.
- 2) When you're done, compare what you've written to the original to see if you've missed anything.



HOW TO USE QR CODES

- 1) Open the camera on your device.
- 2) Hold your device over a QR Code so that it's clearly visible within your screen.
- 3) The device will automatically scan the code and a pop-up will appear on your screen. Tap the pop up to open the link.



You will use your Knowledge Booklet consistently throughout the entire half term. It will play a crucial role in your lessons, homework, and revision. Your teachers will provide guidance on which sections to concentrate on at any given moment.

CWRE
RSE

If you see either of these acronyms (CWRE/RSE), this is what they mean:

CWRE: This task is giving you an opportunity to explore a job role or future career/job skill.

RSE: This task will be linked to relationships and sex education

CREATIVITY



YSGOL
AFON WEN
CREATIVITY
FACULTY



This page helps you understand the key skills and knowledge you will develop in this unit. Use it to support your work in lessons and Gwaith Cartref.

Key definitions and concepts

Term	Definition
Authorial Intent	The message or meaning the writer wants you to understand from their work.
Empathy	Understanding and sharing the feelings of characters in a story.
Language Features	Tools writers use to make their writing interesting, such as similes, metaphors, alliteration.
Structural Techniques	Ways texts are organised, like chapters, headings, or flashbacks, to create effects or guide the reader.
Tone	The writer's attitude or feeling expressed through their choice of words.
Continuous Texts	Texts that flow in sentences and paragraphs, like stories or articles.
Non-Continuous Texts	Texts that include charts, lists, or diagrams, often used to give information clearly.

Explicit information is stated clearly in the text. The writer tells you directly so you do not need to work it out. Think: "It's written there." Example: Sarah slammed the door and shouted, "Leave me alone!" Explicit information: Sarah slammed the door. Sarah shouted, "Leave me alone."

Implicit information is suggested rather than directly stated. The reader has to use clues from the text and their own knowledge to infer (work out) the meaning. Think: "I have to read between the lines." Example: Sarah slammed the door and shouted, "Leave me alone!" Implicit information: Sarah is probably angry, upset, or frustrated. She does not want to talk to someone at that moment. The writer never says, "Sarah was angry," but we can infer it from her actions and words.

Subject Specific Skills Developed

Account writing
Informative writing
Summarising key ideas
Explaining impressions and viewpoints
Technical accuracy
Comparing texts and ideas
Understanding word classes
Editing and proofreading skills
Group discussion
Clauses and sentence building
Poetry analysis
Inference and analysis skills
Vocabulary
Article writing

How to Spot the Difference

Explicit	Implicit
Directly stated	Suggested or hinted at
Found in the words of a text	Worked out using clues
No inference needed	Requires inference
"What does the text say?"	"What does the text suggest?"

Key words

Discrimination	Prejudice	Injustice
Equality	Empowerment	Inspiration



Below are a range of activities for you to complete independently whilst we are learning about equality. You will be set these tasks by your English teacher as part of the YAW Gwaith Cartref Cycle.

1

Write a short script for a TV news report about inequality in society. Include a reporter, at least one interview, and a clear explanation of the issue. End with a suggestion for how the situation could be improved.



2

Create a board game called "The Equality Challenge." Include at least 10 spaces, challenge cards, and rewards. Some challenges should show barriers people face, while others should show opportunities. Write a short explanation of how your game teaches players about equality and fairness.



3

Imagine you are in charge of creating the world's fairest school. Design five rules that would make sure everyone is treated equally and has the same opportunities to succeed. Explain why each rule is important and how it would help students feel included.



4

Interview a family member or friend about a time they felt treated fairly or unfairly. Summarise their experience in 50–75 words and explain what it teaches us about equality, respect, and opportunity in society today.



5

Create a poster titled "How Equal Are We Really?" Include three examples of equality or inequality in everyday life. For each example, explain its impact on people and suggest one action that could make society more equal. Use images, facts, and colour to present your ideas clearly.



6

Research an example of inequality in society today, such as education, income, gender, disability, or opportunity. Write a report explaining who is affected, what causes the inequality, and how individuals, communities, or governments could help create a fairer society.



Tick off and date the ones you have completed

1. TV News Report	2. The Equality Challenge	3. Fairest School
4. Interview	5. How Equal Are We Really?	6. Report



Cymraeg

Term 1

Uned: Fy ardal

Unit: My area



This page helps you understand the key skills and knowledge you will develop in the ardal unit. Use it to support your work in lessons and Gwaith Cartref.

Ardal

Cwestiynau ac atebion (Questions and answers)

C) Ble wyt ti'n byw?

A) *Dw i'n byw yn (place name)*

C) Beth sy yn yr ardal?

A) *Yn yr ardal mae (facilities) ond does dim (facilities)*

C) Beth hoffet ti yn yr ardal?

A) *Yn yr ardal, hoffwn i (facilities)*

Disgrifia'r ardal/Describe the area

Tref ydy (Place)

C) Oes problemau yr yr ardal?

A) *Oes, yn yr ardal mae llawer o (problem)*

B) *Nac oes, does dim problemau yn yr ardal*

C) Pa fath o dŷ sy gyda ti?

A) *Dwi'n byw mewn (type of house)*

C) Pa mor Gymraeg ydy'r ardal?

A) *Mae'r ardal yn*

Ansoddeiriau

Adjectives

brysur busy
anghyfleus inconvenient
dawl quiet
dwl o le a dump
fodern modern
ddiflas boring
gyfeillgar friendly
frwnt dirty
gyfleus convenient

Henffasiwn old-fashion
gyffrous exciting
ofnadwy awful
hardd beautiful
sbwriel rubbish
hwyl fun
swnllyd noisy

Geirfa ychwanegol

llawer o = lots of
digon o = plenty of
diffyg = lack of
amrywiaeth o = a variety of
yn llai (o) = less (of)
mwy (o) = more (of)
gormod o = too much
gwastraff = a waste

Geirfa

Vocab

Pentref Village
Tref Town
Dinas City
Gogledd North
De South
Gorllewin West
Dwyrain East
Siop(au) Siops
Ysgol (ion) Schools
Llyfrgell Library
Canolfan hamdden
Leisure Centre
Sinema Cinema
Parc Park
Castell Castle
Ysbyty Hospital

Traeth(au) Beaches
Mynydd(oedd) Mountains
Theatr Theatre
Caffi Cafe

Problemau Problems
Fandaliaeth Vandalism
Sbwriel Rubbish
Llygredd pollution
Yfed alcohol Drinking alcohol
Ysmygu Smoking
Cymryd cyffuriau
Taking drugs
Trais Violence
Trosedd Crime

Berfau

Verbs

Mynd allan
Rhedeg
Cerdded
Chwarae
Bwyta allan
Gwyllo
Ymlacio
Bwyta



Brawddegau ffansi

Bob amser (always)
Nawr ac yn y man (now and again)
Heb os nac oni bai (without a doubt)
Ar un llaw (on one hand)
Ar y llaw arall (on the other hand)
Mae'n well gyda fi (I prefer)
I fod yn honest (to be honest)
Ar y cyfan (on the whole)

Mae na... = there is ...
Mae ... yn ... = ... is ...
Mae'n well 'da fi = I prefer

Hoffwn i = I would like
Hoffwn i ddim = I would not like to

Fy hoff le ydy ... = My favourite place is ...
Fy nghas le ydy ... = My worst place is ...

Y peth gorau ydy ... = The best thing is ...
Y peth gwaethaf ydy ... = The worst thing is

Does dim ... = there isn't
Mae'n gas gyda fi = I hate
Basai'n well 'da fi = I would prefer

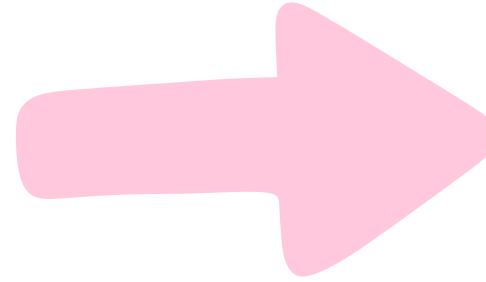
Cysyllteiriau Connectives

A / Ac and
Ond but
Neu or
Hefyd also
Fodd bynnag however
Felly so
Achos / oherwydd because
Weithiau sometimes

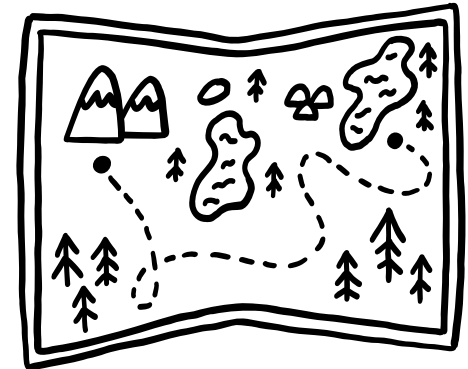


Below are a range of activities for you to complete independently whilst we are learning about areal. You will be set these tasks by your Welsh teacher as part of the YAW Gwaith Cartref Cycle.

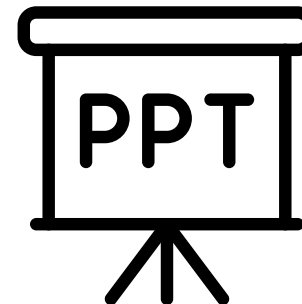
- 1 Please scan the QR code and use Quizlet to learn the vocabulary ready for a vocabulary test next lesson



- 2 Draw a simple map of your local area, label 5-8 places in Welsh (e.g. ysgol, parc, eglwys) and write 1 sentence describing each place.



- 3 Create a short powerpoint presentation on your area (3-5 slides) describing what is there, your opinion on the area etc. Then voice record yourself talking about your area.



Français Unité: C'est la rentrée!

Term 1 Thème - le collège



Les questions et les réponses – questions and answers

(Q) Quelle est ta matière préférée ?

What is your favourite subject?

(R) Ma matière préférée, c'est le français parce que c'est intéressant.

My favourite subject is French because it is interesting.

(Q) Aimes-tu les maths ?

Do you like maths?

(R) Oui, j'aime les maths parce que c'est facile.

Yes, I like maths because it is easy.



(Q) Pourquoi aimes-tu l'EPS ?

Why do you like PE?

(R) J'aime l'EPS parce que c'est amusant.

I like PE because it is fun.

(Q) Que portes-tu à l'école ?

What do you wear to school?

(R) Je porte un polo bleu, un pantalon noir et des chaussures noires.

I wear a blue polo shirt, black trousers and black shoes.

(Q) Aimes-tu ton uniforme scolaire ?

Do you like your school uniform?

(R) Oui, j'aime mon uniforme scolaire parce qu'il est confortable et chic.

Yes, I like my school uniform because it is comfortable and stylish.

EXTRA VOCABULARY

très – very top – too assez – quite un peu – a bit
et – and mais – but aussi – also

Vocabulaire – Year 8

Mon uniforme scolaire – my school uniform

un polo – a polo shirt
un pantalon – a pair of trousers
une jupe – a skirt
une veste – a blazer (1)
un blazer – a blazer (2)
un pull – a jumper
des chaussures – (some) shoes
des chaussettes – (some) socks
une cravate – a tie
un collant – a pair of tights
une chemise – a shirt
un sweat – a sweatshirt
une cravate – a tie

VERBES CLÉS – KEY VERBS

Je porte – I wear
il porte – he wears
elle porte – she wears
on porte – we wear



Les opinions

j'aime – I like
Je n'aime pas – I don't like
j'adore – I love
je déteste – I hate
je préfère – I prefer
je pense que... – I think that...
parce que – because
c'est... – it's / it is



Les matières – school subjects

le français – French
le gallois – Welsh
l'anglais – English
les maths – Maths
les sciences – science
l'EPS – PE
la technologie – Technology
la géographie – Geography
l'histoire – History
le théâtre – Drama
le dessin – Art
l'informatique – IT



WOW PHRASES

C'est ma passion – it's my passion

C'est ma matière préférée! – It's my favourite subject!

Le prof est (très) sympa – the teacher is (very) nice

Le prof est (trop) sévère – the teacher is (too) strict.

Les couleurs – the colours

Rouge – Red
Jaune – Yellow
Marron – Brown
Rose – Pink
Blanc / blanche – White (m/f)
Noir / noire – Black (m/f)
Gris / grise – Grey (m/f)
Bleu / bleue – Blue (m/f)
Vert / verte – Green (m/f)
Violet / violette – Purple (m/f)



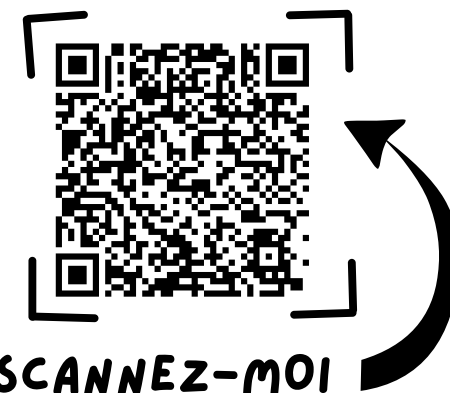
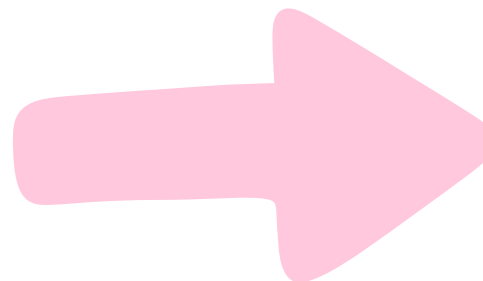
Les adjectifs

intéressant – interesting
ennuyeux – boring
facile – easy
difficile – difficult
génial – great
nul – rubbish (bad)
créatif – creative
amusant – fun
fatigant – tiring
chic – stylish
démodé – old-fashioned
confortable – comfortable
laid – ugly

Below are a range of activities for you to complete independently whilst we are learning about le collège. You will be set these tasks by your French teacher as part of the YAW Gwaith Cartref Cycle.

1

Please scan the QR code and use Quizlet to learn the vocabulary ready for a vocabulary test next lesson



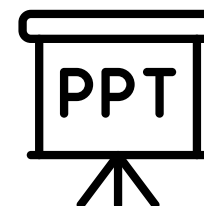
2

Draw a mannequin wearing your ideal school uniform and label it in French. Don't forget to include the colours!



3

Create a short powerpoint presentation about at least 4 different school subjects. Provide an opinion about each subject and use at least 2 adjectives. EBI if you can use some of the WOW phrases. Then voice record yourself talking about those subjects.



Expressive Arts

Term 1

Unit: What is the 'when' and 'what' in life?

Theme: Adventures through Time



This page helps you understand the key skills and knowledge you will develop in the 'Adventures through Time' unit. Use it to support your work in lessons and Gwaith Cartref.

Key Definitions and Concepts

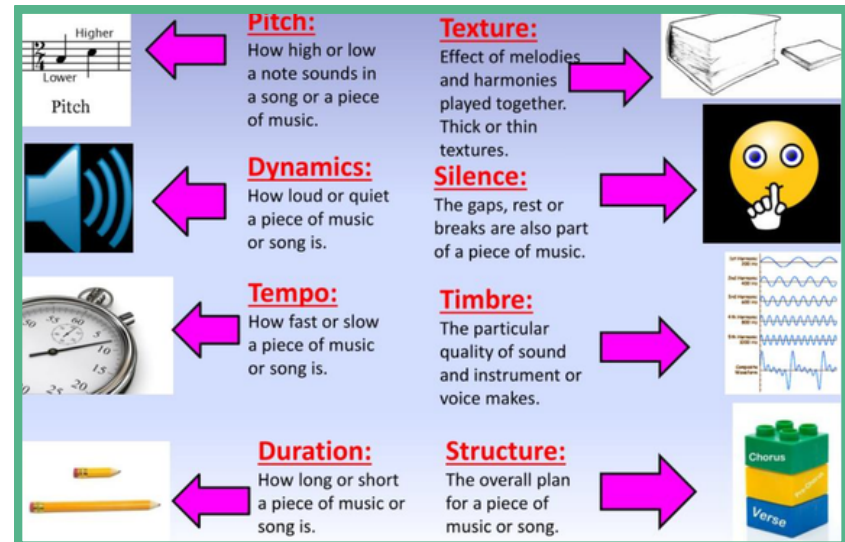
Term	Definition
Folk music	Traditional music of the people, typically learned through listening and passed on orally.
Sea Shanty	A traditional folk song that was once commonly sung as a work song on board ships.
Dorian Mode	A musical scale beginning and ending on the note D, which only uses white keys on the keyboard.
Stereotype	An unfair or untrue idea that many people have about a group of people
Narative Structure	The framework that shapes how a story unfolds
Artist	Anyone who create art e.g. drawing, painting, sculpture, ceramics.
Portrait	A picture that shows a likeness.
Evaluate	To carefully judge the value, importance, or quality of something.

Google Classroom
Code: chz5m7w

Narrative Structure



The History of Portraits



Expressive Arts

Term 1

Adventures through Time - Gwaith Cartref Tasks



Below are a range of activities for you to complete independently this term.
You will be set these tasks by your expressive arts teachers as part of the YAW Gwaith Cartref Cycle.

1

Complete the google form on the Year 8 Expressive Arts 2026-2027 google classroom called: Elements of Music Revisited.



2



What is a narrative structure? What does the word 'Global' mean in relation to the context of films? Further instructions are on your google classroom.

3

Find the names of four famous Portrait Artists. (Artists who are good at painting or drawing faces)



Tick off and date the ones you have completed

1	2	3
4	5	6

4

Practise singing by continuing to work on 'The Elements' 'Wellerman' and 'Drunken Sailor' songs. Consider your pitch, projection and timing.



5

Watch the video and consider ways in which stereotypes can have a positive or negative impact. Be prepared to discuss your thoughts next lesson.



6

Use the QR code to study the 12 most famous portraits. Which is your favourite? Give 3 reasons for your choice.



INNOVATION



**FACULTY OF
INNOVATION**

Types of waves

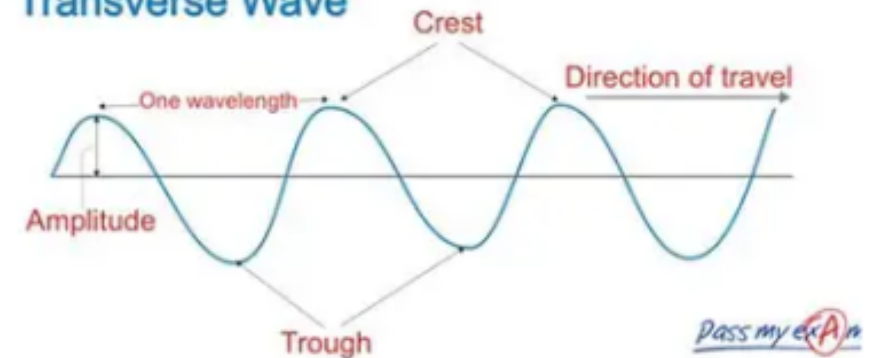
Longitudinal	Transverse
Sound waves	Light waves
Ultrasound waves	Ripples on the surface of water
Seismic P-waves	A Mexican wave in a sports stadium

Useful links

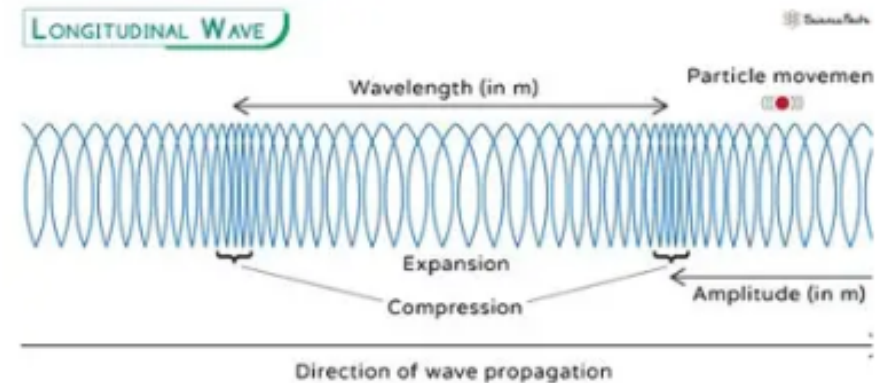


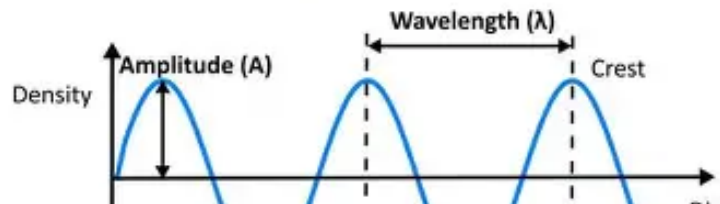
Wave diagrams

Transverse Wave



LONGITUDINAL WAVE





Gwaith cartref

1. Draw and label an example of both a transverse and longitudinal wave.

Transverse wave

- Peak
- Trough
- Wavelength
- Amplitude

Longitudinal

- Compression
- Direction of wave travel
- Direction of particle vibration

Challenge- Explain why sound can not travel through space.

Gwaith catref

2. Many animals use sound waves for echolocation to enable them to navigate and hunt in pitch darkness these animals include bats, dolphins, shrews, tenrecs, hedgehogs and swiftlets. Your task is to create a one page profile highlighting how these animals use sound waves.

Must include

- A detailed explanation as to why each animal uses echolocation
- A labelled wave diagram of a sound wave
- At least three interesting facts about each animal



Information sheet

General word equations

Acid + Metal = Salt + hydrogen

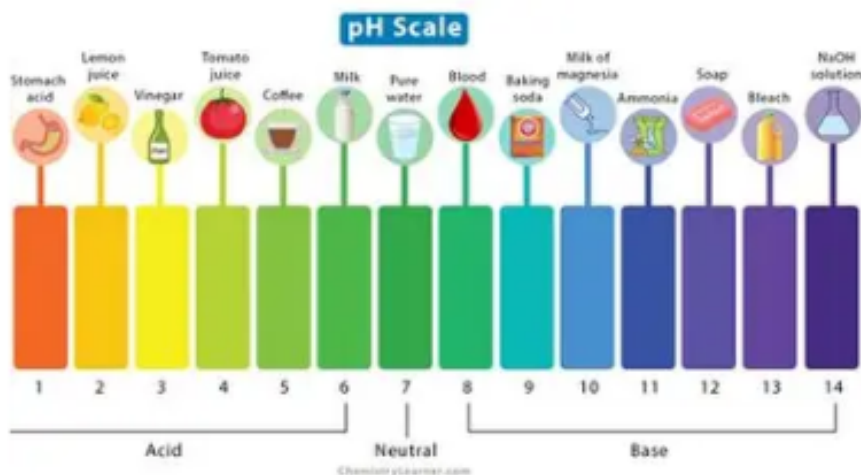
Acid + Alkali = Salt + Water

Key rules to remember: The first half of the salts name comes from the metal the second half of the salts name comes from the acid used

Examples

1. Calcium + Hydrochloric acid = Calcium Chloride + Hydrogen
2. Lithium + Sulfuric acid = Lithium Sulfate
3. Magnesium + Nitric acid = Magnesium Nitrate

Useful links



Gwaith cartref

Create an information poster titled:
"The Deadly Lake That Turns Animals to Stone!"

Research:

Where Lake Natron is located.

Why the lake is so alkaline (high pH).

Why many animals struggle to survive in the water.

Which animals can live there.

Include:

- ✓ At least 5 facts
- ✓ One labelled map or picture
- ✓ A fun fact box
- ✓ An explanation of why the lake is considered highly corrosive



Gwaith cartref

Mission

Design a menu for a restaurant called "The Acid Café."

Task

Find five foods or drinks that contain acids.

For each item:

Name the food or drink.

Identify the acid present.

State whether it is weak or relatively strong.

Explain how the acid affects the taste.

Example:

Food	Type of acid /pH	Effect on taste
Lemon	Citric acid pH = 2-3	Sour taste

Multiples and Lowest Common Multiple

Find the **Lowest Common Multiple** of 6 & 8.

smallest  shared 

We can **list** the multiples of each number
& find the **smallest** number in both lists.

Multiples of 6: 6, 12, 18, **24**, 30,

Multiples of 8: 8, 16, **24**,

Lowest Common Multiple = 24

Factors and Highest Common Factors

Find the **Highest Common Factor** of 18 & 12.

largest  shared 

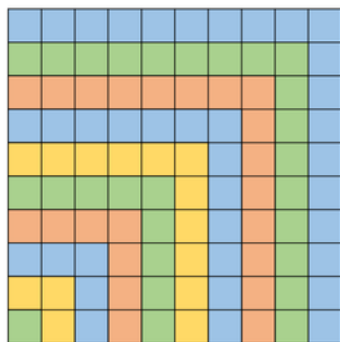
We can **list** the factors of each number
& find the **largest** factor in both lists.

Factors of 18: 1 & 18, 2 & 9, **3 & 6**,

Factors of 12: 1 & 12, **2 & 6**, 3 & 4,

Highest Common Factor = 6

Square Numbers



Square Numbers

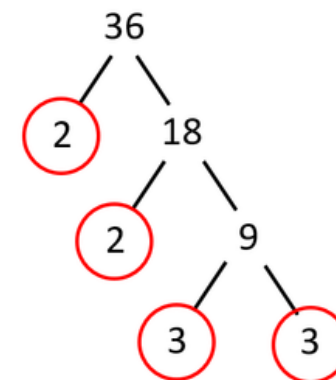
A number multiplied by itself creates a square number.

1 4 9 16 25 36 49 64 81 100

Product of Prime Factors

Express this number as a product of
its prime factors, in index form.

We will divide the number by
prime numbers until we
can't divide any further.



$$36 = 2 \times 2 \times 3 \times 3$$

Prime factorisation

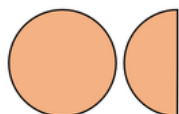
$$36 = 2^2 \times 3^2$$

Prime factorisation in index form

Converting Mixed Numbers and Improper Fractions



Jason has two pizzas for dinner!
But, he only eats **one and a half**.
How can we describe this as a number?

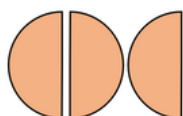


$$1 + \frac{1}{2} =$$

$$1\frac{1}{2}$$

Mixed Number:
an integer with a fraction

How many half-slices did Jason eat?



$$\frac{1}{2} + \frac{1}{2} + \frac{1}{2} =$$

$$\frac{3}{2}$$

Improper Fraction:
a fraction with a numerator larger than the denominator

Adding and Subtracting Fractions

When we add or subtract fractions we must have a common denominator.

What common denominator could we use?

Numerator & Denominator $\times 2$

$$\frac{1}{3} + \frac{1}{2} = \frac{2}{6} + \frac{3}{6} = \frac{5}{6}$$

Numerator & Denominator $\times 3$

Multiplying Fractions

(1 $\times$ 2)

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

(3 $\times$ 3)

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

Dividing Fractions

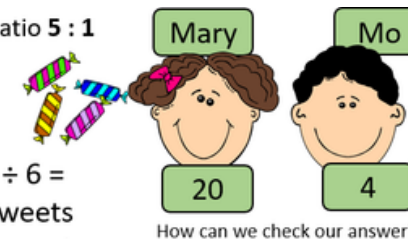
$$\frac{1}{5} \div \frac{1}{4} =$$

KEEP CHANGE FLIP

$$\frac{1}{5} \times \frac{4}{1} = \frac{4}{5}$$

Sharing an Amount in a Given Ratio

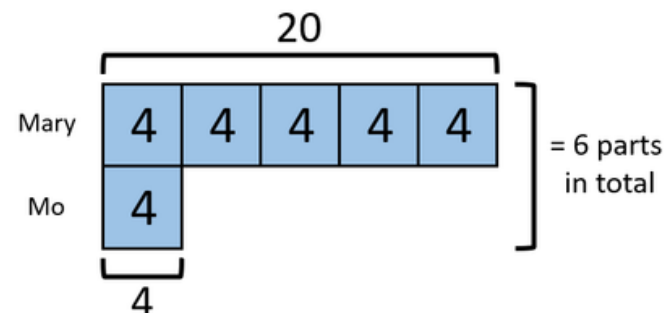
Mary and Mo shared **24 sweets** in the ratio **5 : 1**
How many sweets did they each get?



How can we check our answer?

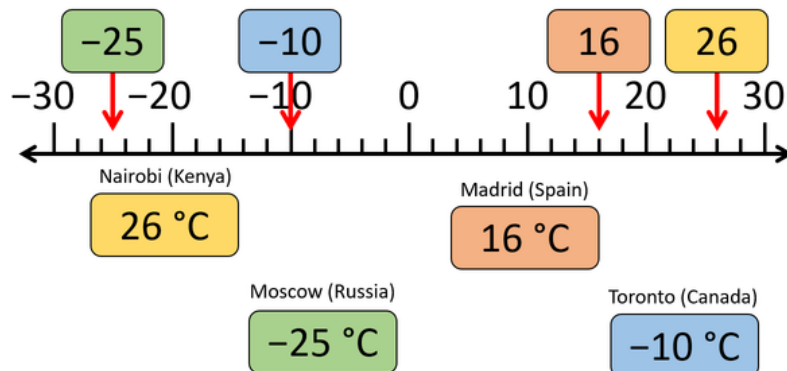
Draw a **Bar Model** to calculate how much **one part** is worth.

$$24 \div 6 = 4 \text{ sweets per part}$$



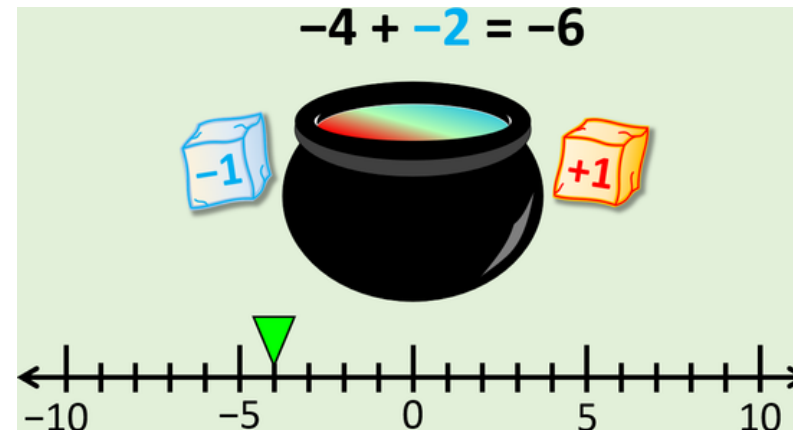
Ordering Directed Numbers

Here are the temperatures in 4 cities.
Where would you prefer to be?



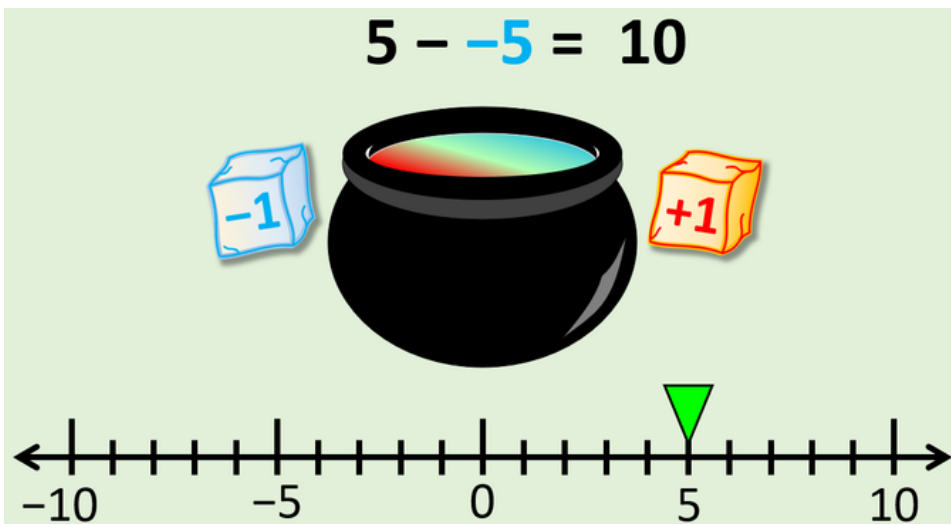
Adding Directed Numbers

$$-4 + -2 = -6$$



Subtracting Directed Number

$$5 - -5 = 10$$



Multiplying and Dividing Directed Number

$$-5 \times \underline{(+3)} = -15$$

$$-20 \div \underline{(-4)} = 5$$

Gwaith Cartref Tasks

Below are a range of activities for you to complete independently whilst we are in the summer term. You will be set these tasks by your mathematics teacher as part of the YAW Gwaith Cartref Cycle.

1

Number

Please Complete your **paper homework** which your teacher will hand to you in class.

2

Number

Please complete the **MathsWatch homework** which your teacher will set for you.

3

Calculations with Fractions and Ratio

Please Complete your **paper homework** which your teacher will hand to you in class.

4

Calculations with Fractions and Ratio

Please complete any 10 questions from the attached QR code Corbettmaths worksheet.

5

Directed Number

Please complete any 10 questions from the attached QR code Corbettmaths worksheet.

6

Directed Number

Please complete the **MathsWatch homework** which your teacher will set for you.

SCAN ME

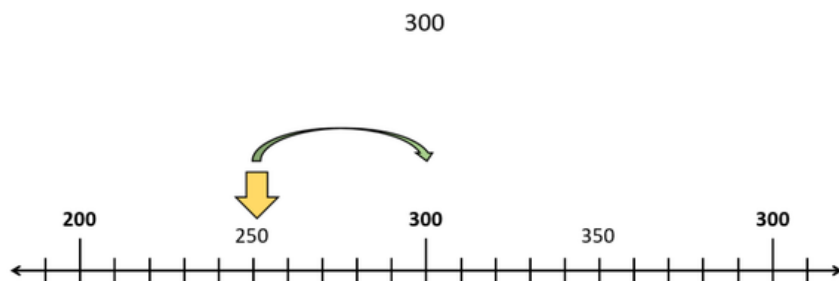


SCAN ME



Rounding to the Nearest 10, 100 or 1000

Round 252 to the nearest 100.



Rounding to a Given Number of Decimal Places

Round this number to 2 decimal places.

Stay or round up?

3.927

3.93

$3.927 \text{ (2dp)} = 3.93$

CHECK

- 1) 'Cut' the number.
- 2) Use the first cut digit to check whether to round UP.
(Remember: a 5 means the last digit is rounded up)

Rounding to a Given Number of Significant Figures

Round this number to 1 significant figure.

Stay or round up?

0.0463

0.05

CHECK

Estimation

$$109 \times 52 \approx 5000$$



$$100 \times 50$$

Averages: One value to represent the group.

	7, 1, 4, 1, 2	4, 5, 0, 2, 9, 1
Mean Sum of values divided by quantity	$\frac{7+1+4+1+2}{5} = 3$	$\frac{4+5+0+2+9+1}{6} = 3.5$
Median The middle value. 2 middle values = take the mean of those.	7, 1, 4, 1, 2 1, 1, <u>2</u> , 4, 7 = 2	4, 5, 0, 2, 9, 1 0, 1, <u>2</u> , 4, 5, 9 = 3
Mode The most common value.	7, 1, 4, 1, 2 1, 1, 2, 4, 7 = 1	4, 5, 0, 3, 9, 1 0, 1, 2, 4, 5, 9 = No Mode

Mean from a Frequency Table

John recorded the amount of goals his football team scored each match.

How can we easily find the Mean, Mode and Median from this data?

0	1	0	2	3
0	0	2	3	0
1	2	4	3	3
2	1	1	0	0
1	2	1	0	1

Goals	Tally	Frequency	Total
0		8	0
1		7	7
2		5	10
3		4	12
4		1	4
Totals:		25	33

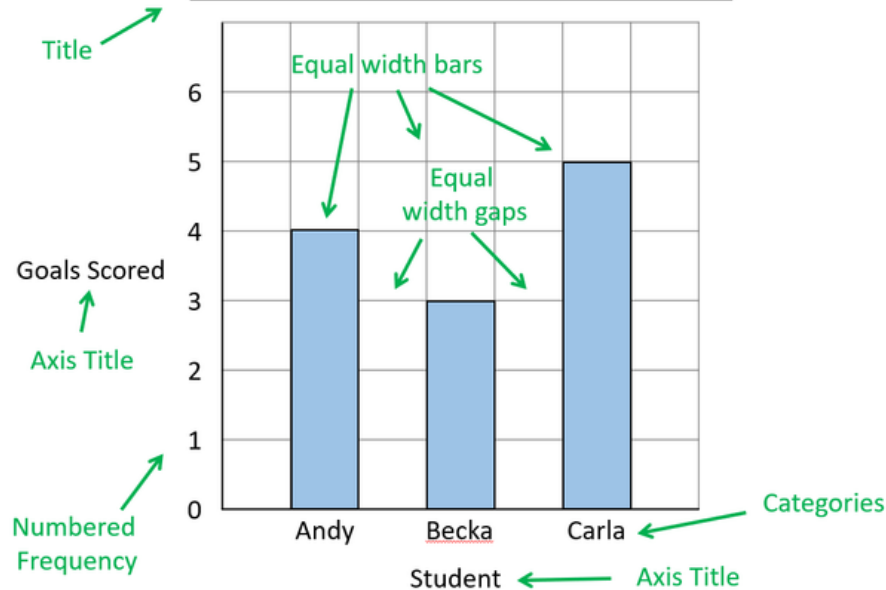
$$\text{Mean} = \frac{33}{25} = 1.3 \text{ goals}$$

Mode = 0 goals

Median = 1 goal
13th match

Bar Charts

Goals scored in the March football tournament



Scatter Graphs

Ms Wilson records the temperature each day and the amount of ice cream she sells in her shop.

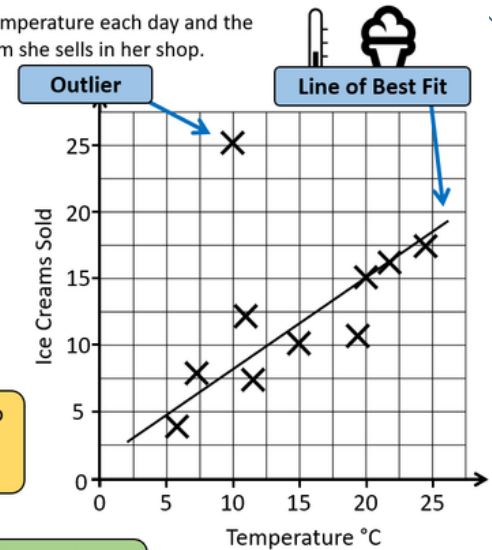
She plots each day on a graph.

Temperature (x)	Ice Creams Sold (y)
20	15
15	10
23	16

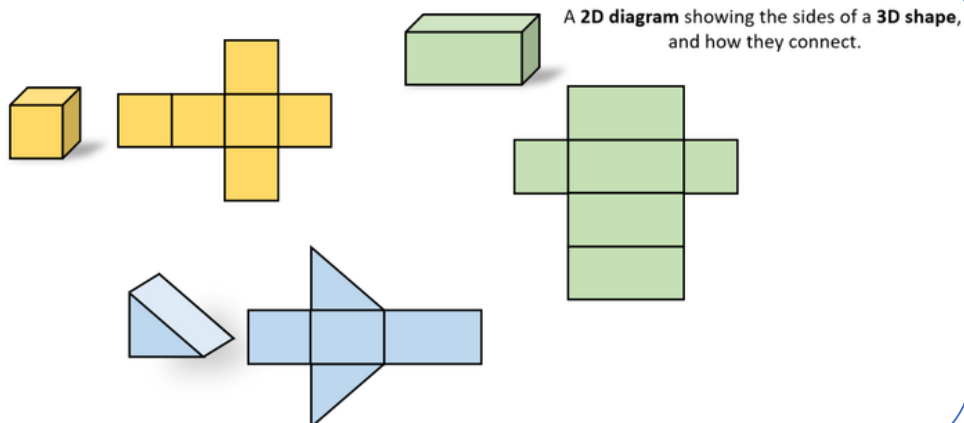
Can we expect a pattern in the data?
Ms Wilson plots more points.

A **scatter graph** compares two variables to analyse whether there is a **relationship** between them.

We can see more ice creams are sold on hotter days.
As one variable increases so does the other:
there is a **positive correlation** between the variables.

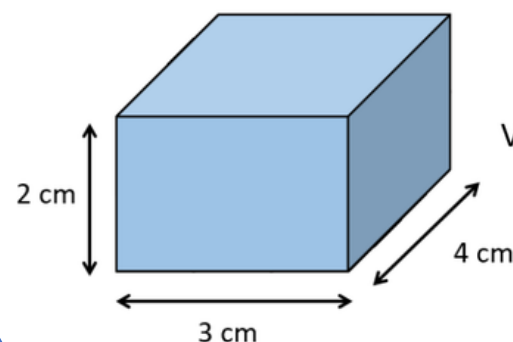


Nets



Volume of Cuboids

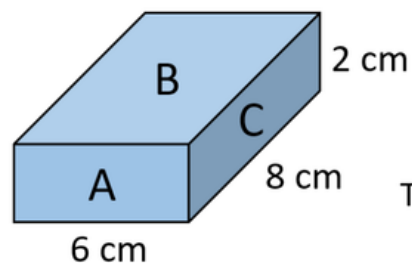
To calculate the volume of a cuboid we multiply the **length** by the **width** by the **height**.



$$2 \times 3 \times 4 = 24 \text{ cm}^3$$

Volume = length $\times$ width $\times$ height

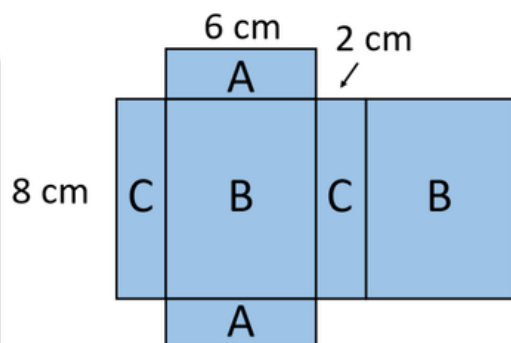
Surface Area of Cubes and Cuboids



Calculating area with a net.

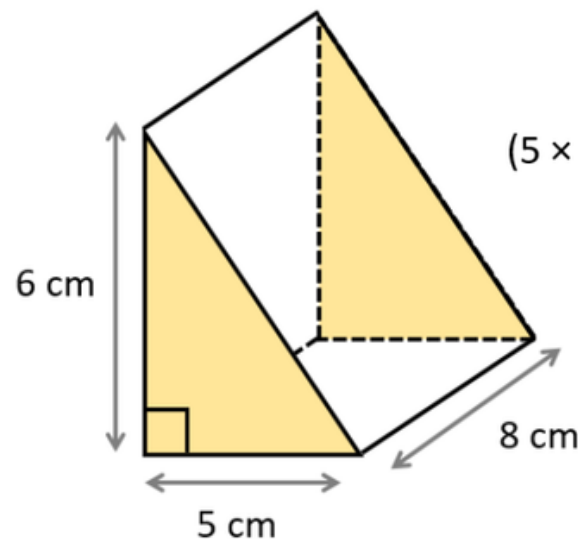
Total Surface Area = 152 cm^2

$$\begin{aligned} \text{A: } 6 \times 2 &= 12 \\ &\times 2 = 24 \\ \text{B: } 6 \times 8 &= 48 \\ &\times 2 = 96 \\ \text{C: } 2 \times 8 &= 16 \\ &\times 2 = 32 \end{aligned}$$



Volume of Prisms

Volume of a prism = Cross-Section $\times$ Length



$$(5 \times 6 \div 2) \times 8 = 120 \text{ cm}^3$$

Below are a range of activities for you to complete independently whilst we are in the summer term. You will be set these tasks by your mathematics teacher as part of the YAW Gwaith Cartref Cycle.

1

Rounding and Estimation

Please Complete your **paper homework** which your teacher will hand to you in class.

2

Rounding and Estimation

Please complete the **MathsWatch homework** which your teacher will set for you.

3

Statistics

Please Complete your **paper homework** which your teacher will hand to you in class.

4

Statistics

Please complete any 6 questions from the attached Corbettmaths worksheet



SCAN ME



5

3D Shapes

Please complete any 6 questions from the attached Corbettmaths worksheet.



SCAN ME



6

3D Shapes

Please complete the **MathsWatch homework** which your teacher will set for you.

Food Technology

Term 1



Homework

Submit tasks via Google Classroom

Task A:

Using the word bank and success criteria, evaluate your practical lessons to identify areas of weakness and success.

Use the resources linked to support your written task and cooking skills.

Task B:

Test your lesson recall by naming at least 3 facts you learnt in the lesson.

Food Technology

Term 1

Success Criteria

When evaluating you should consider:

- Can you follow the recipe steps in the correct order.
- Can you use kitchen tools and equipment safely.
- Can you keep your workspace clean and organised.
- Can you work well with others and communicate respectfully.
- How would you describe your dish?

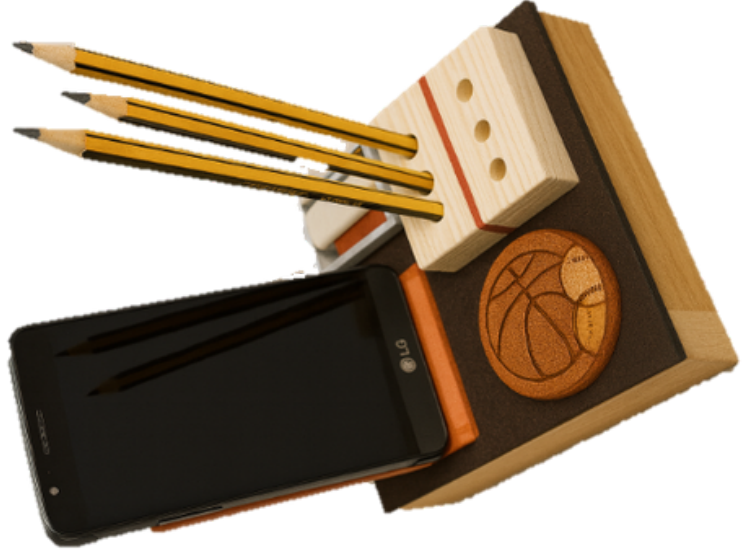
Optional sentence starters:

I believe my dish was '*successful / unsuccessful*' because.....

Next time, to improve my dish I will.....

The three key words I would use to describe my dish are:





Desk Tidy Project

Homework

1.Product Analysis:

Carry out a product analysis using ACCESS FM for the desk tidy on page 2. Use the resource attached to help build up responses for each ACCESS FM point. Include your personal opinions and give reasons for your answers.

2.Initial Idea

Using the template on page 5. Create an initial sketch of what you would like your desk tidy to look like. Consider the colour and themes you would select. You may want to personalise it, text, images and patterns could all be used. Shade the idea using coloured pencils. Annotate the idea using the guidance on the page.

Technology- Desk Tidy Project

Term 1



Product Analysis

Product Information:

This product is a Lego inspired desk tidy that costs £20 and can be bought on amazon. There are 4 areas to store items and the product uses lots of colours which links with the Lego brand. The compartments can be removed if needed. The product is made through injection moulding with a plastic called polypropylene because its low costing and it can produce.

Aesthetics

Safety

Cost

Function

Customer

Materials

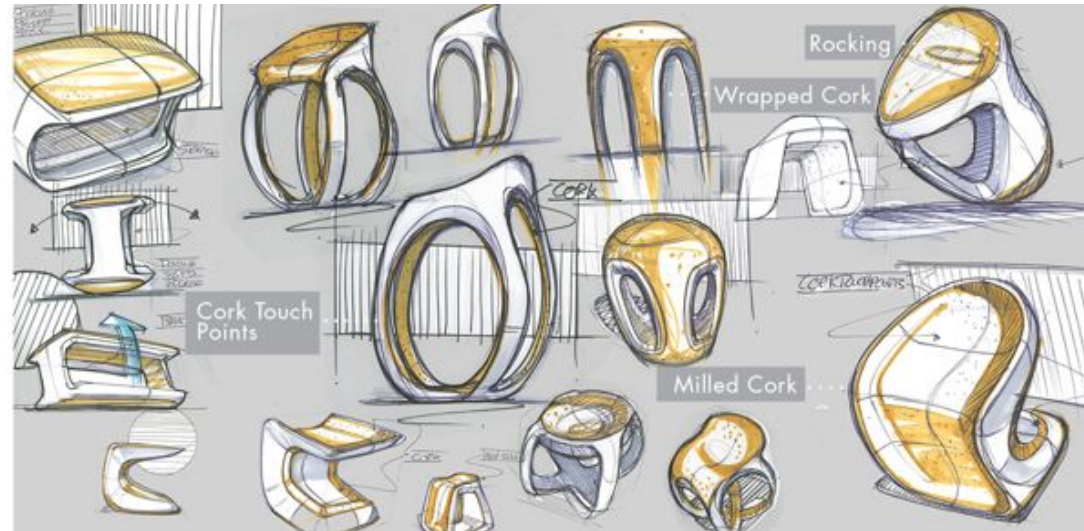
Size

Personal Opinions

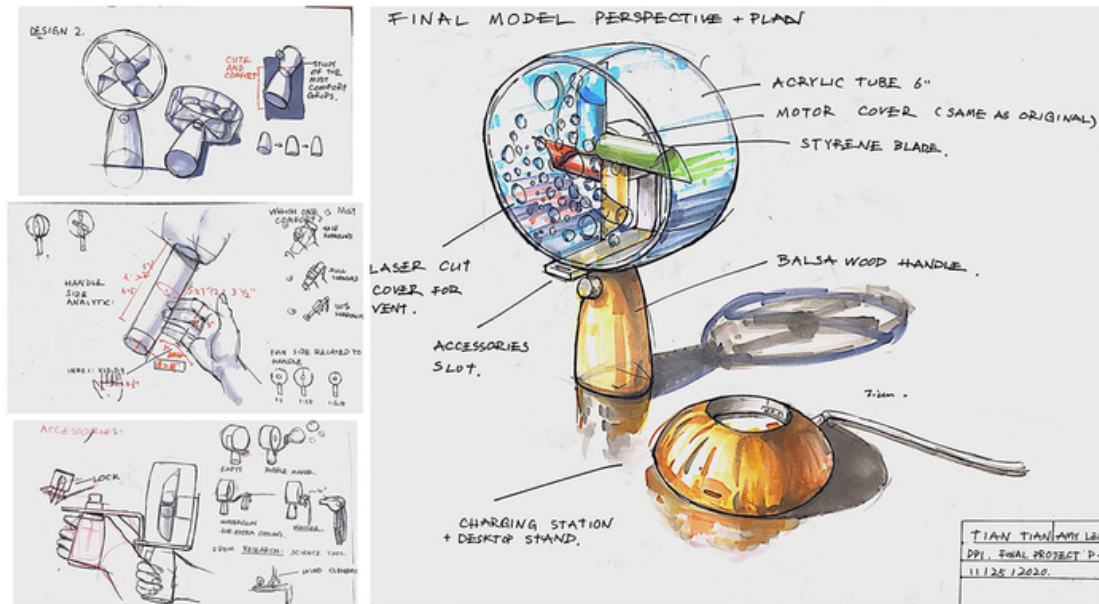
Technology- Desk Tidy Project

Term 1

Watch the video using the QR code to develop your sketching and shading techniques. Have a go on the following page at designing your own desk organiser.



Rendering techniques



Technology- Desk Tidy Project

Term 1

Initial Idea

Use this template and sketch your initial idea of your desk tidy here. You can have a theme of your choice and you can choose the colour scheme.

In the space provided, explain what you themes and colours you have chosen. What do you like? Dislike? What could be improved?

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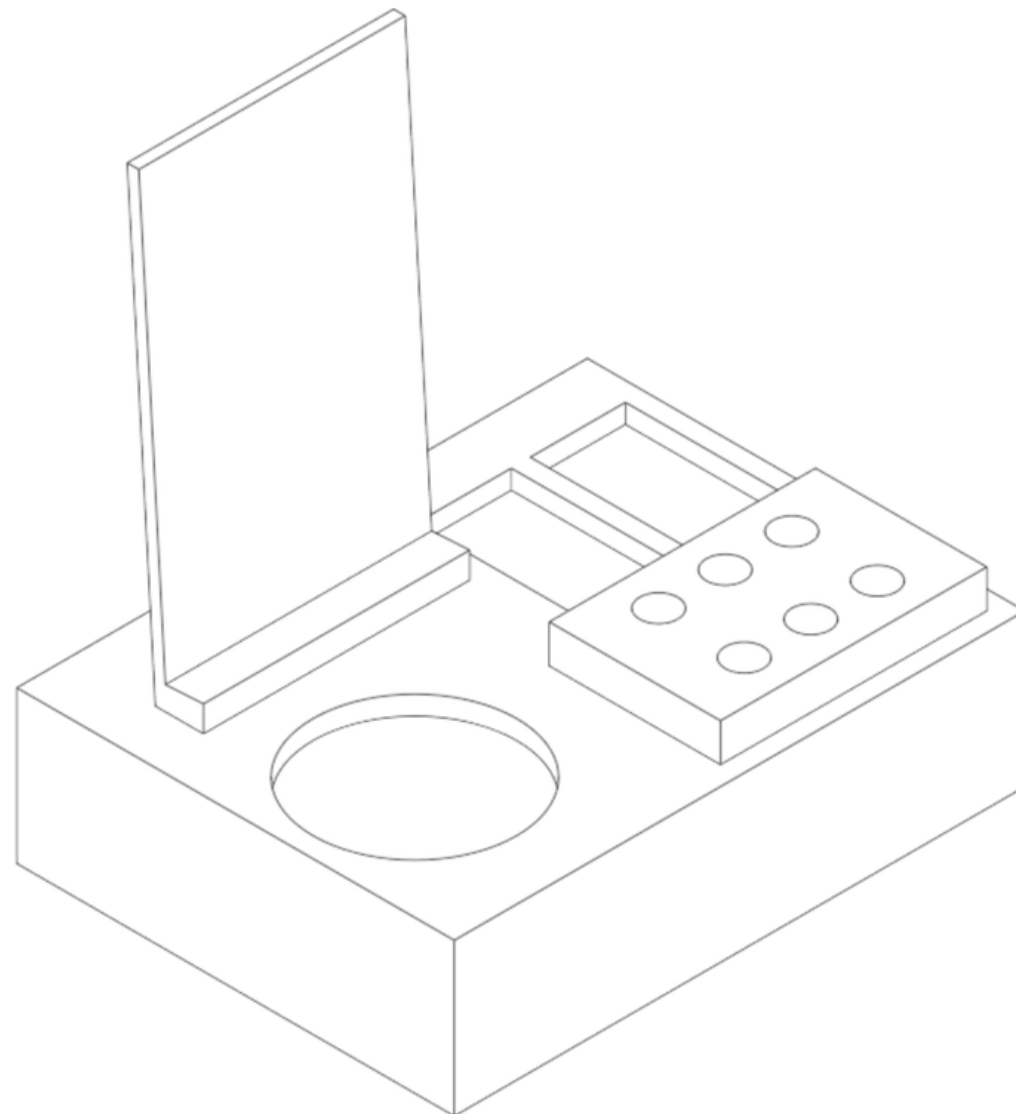
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Technology- Pop Art Cushion Project

Term 1



Product Analysis



Answer as many of the questions as you can to create a detailed response for each heading in the task.

Watch the video explaining a product analysis then try it out on the next page.

ACCESS FM		
AESTHETICS What does it look like? What shape is it? What colours? What style? Do you like it? Why?	SAFETY Are there any sharp edges/corners? Are there any loose bits? Is there anything that could come off or harm a child?	FUNCTION What does it do? How does it work? Easy to use? Does it have many or a single function?
COST How much does this cost? Is it good value for money? Why? Does the brand name make it more expensive? Why do you think this?	SIZE What are the key dimension? Is it suitable for it's task? What makes it suitable?	MATERIAL What is it made from? Are the materials appropriate? Why? How is it made? Is it well made? What components are there?
CUSTOMER Who is the product aimed at? Age range? Interests? Taste & Style? What would they use it for? How?	DESIGN SPECIFICATION Use each of the ACCESS FM headings & answer the questions to describe in detail all the elements of your design. Write each point as a justified sentence: 'It must/ There should be.... because.....'	
ENVIRONMENT Does it produce harmful chemicals? Does it make other people uncomfortable? Did the manufacture cause pollution? What? Does it use energy? What? What is the effect of this energy?	PRODUCT ANALYSIS Analyse existing products to understand what is commercially successful. Explore all aspects of the product using these headings. Give your personal opinions about each of the headings. A visual or actual disassembly of the product will help you to understand how the product was manufactured.	



Product Analysis

Product Information:

This vibrant £20 Pop Art Cushion features a bold comic-style design with bright speech bubbles like “WOW!” and “ZAP!”, making it a fun decorative piece for any room. Cushions like this are typically made with a durable polyester cover and a soft polyester fibre filling, though common cushion materials also include cotton, linen blends, foam, or feather fillings. This product was made in China.

Aesthetics

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Cost

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Customer

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Size

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Materials

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Personal Opinions

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Technology- Pop Art Cushion Project

Term 1

Pop Art Sketching

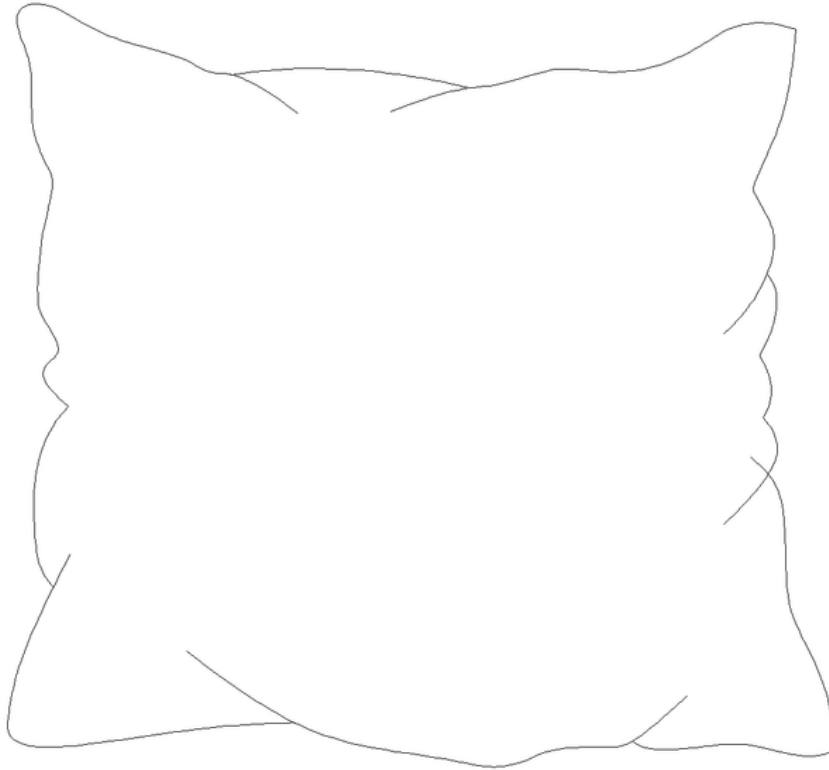


Watch both videos using the QR code to develop your sketching and shading techniques. Have a go on the following page at designing your own pop art cushion!

Rendering techniques



Initial Idea



Use this page to sketch your initial idea of your Pop Art cushion. Be creative, explore the different texts and images used in Pop Art, customise it to suit your client! How can you make your idea different to others?

In the space provided, explain what you have chosen for your cushion. Explain your colours/ text/ image selection. What do you like? Dislike? What could be improved?

LIFE



FACULTY OF LIFE

Humanities Unit: Has there ever been a time when everyone has been equal?

Term 1



This page helps you understand the key skills and knowledge you will develop in the: Has there ever been a time when everyone has been equal? unit. Use it to support your work in lessons and Gwaith Cartref.

Global Goals



What are human rights?



Human rights are "rights and freedoms to which all humans are entitled."

A right that is believed to belong justifiably to every person.

The rights people are entitled to simply because they are human beings, irrespective of their citizenship, nationality, race, ethnicity, language, gender, sexuality, or abilities.

Relative Poverty

In the UK we have poverty although it is generally different from the desperate poverty we see in lower income countries (LICs).

It is called **relative poverty** because it is **compared with the rest of the population**.

For example, someone in poverty in the UK may still have somewhere to live and food to eat but may not be able to buy new clothes or pay the bills. However, somebody living in poverty in an LIC may not have enough food to survive.



Causes of Modern Poverty

Relationship breakdown – women are more likely to keep the children and are less likely to be able to work

Between the late 1980s and mid 2000s house prices raised dramatically. This means that people who do not own a house are very likely to be unable to afford one.

Black and ethnic minority people are more likely to be in poverty than white people in the UK.

People with disabilities but who can work are more likely to be unemployed than non-disabled people.

Deindustrialisation - there used to be a great many jobs in industry such as: mining, factories, etc. that have now disappeared.

Unemployment/low-income benefits have been cut and become harder to access.

Many council houses have been sold off which means that many people are stuck on the



How did Elizabethan society deal with poverty?

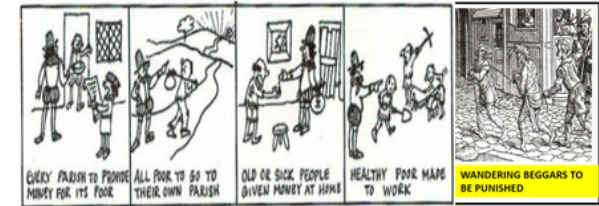


- In 1558, Elizabeth I was crowned Queen.
- She inherited a country that was in crisis with political, religious, economic and social problems.
- One of the biggest challenges facing Elizabeth was how to deal with the growing problem of poverty in England and the army of unemployed and homeless people.



The way in which a society deals with its poor and vulnerable says a lot about its values. That's why historians are interested in finding out how Elizabethan society dealt with or looked after their poor.

Elizabethan Poor Law, 1601



In 1601, Parliament passed a new law. It set out who deserved help, who was responsible for helping the poor, how and where help was to be given and what should happen to idle or undeserving beggars.

What is the United Nations?

The UN is an international organisation that was created in 1945 after the Second World War. Its founders were shocked by the destruction of the war and the horrors of the Holocaust. They wanted to create an organisation that they hoped would improve the lives of the world's people.

One of the aims of the United Nations is to protect human rights. In order to achieve this, on 10 December 1948 the Universal Declaration of Human Rights (UDHR) was announced.



Education around the World

- 262 million children and young people around the world do not attend school.
- 40 million of these are from African countries.
- Many children in low income countries (LICs) are needed to work from a very young age to support their families usually in agriculture.
- Education plays a key role in building sustainable and resilient societies, and contributes to the achievement of all other Sustainable Development Goals.



The Blitz

- During World War 2 the German Air force (Luftwaffe) targeted large British cities. They would fly over the cities and drop bombs on the buildings below.
- They did this to destroy buildings that were key to Britain's war effort and damage the morale of the British people so badly that they would give up fighting.
- These aerial bombardments were known as the Blitz.



Evacuation

Evacuation was when the vulnerable members of society were removed from the dangers of the Blitz to the safety of the countryside, e.g. Wales as there were fewer military targets than England

In particular, children were evacuated from towns and cities e.g. Swansea, Cardiff, Liverpool or London, to safe rural areas.

People expected that when the Luftwaffe attacked, civilian casualties would be enormous - if huge numbers were killed/gassed, the deaths would have a negative impact on morale/nations' spirits.

Evacuation started in September 1939.



Evacuation

Children assembled carrying gas-masks, toothbrushes, change of clothes and identity labels. They'd be taken to the nearest train station, many under the impression they were going on holiday to keep them calm.

At their destination, a billeting officer allocated children to the host families (the family that the children would be staying with) on the platform. Children from the same family were usually kept together.

Evacuation officially ended in March 1946.



Humanities Unit: Has there ever been a time when everyone has been equal?

Term 1 Gwaith Cartref Tasks



Below are a range of activities for you to complete independently whilst we are learning about Has there ever been a time when everyone has been equal?. You will be set these tasks by your Humanities teacher as part of the YAW Gwaith Cartref

- 1 Watch the clip and then create a summary of what you see
<https://www.youtube.com/watch?v=ZtKPr1tpsQ0>



2

Fill in your 'Pledge for Action' card. Your teacher will give this to you in lesson time. What will you do to take action on the Global Goals?

3

Research Task: Life in the Pontypridd Workhouse

Objective:
Uncover the experiences of people in the Pontypridd Workhouse during the 19th century.

Use the internet to explore the Pontypridd Workhouse. Focus on these questions, with one slide for each:

- What was the workhouse's main purpose?
 - Who lived there?
 - What work did the residents do?
 - What were the living conditions?
 - How did the workhouse affect the local community?
- Include one surprising or shocking fact.

Also, find a picture or illustration of the Pontypridd Workhouse and add it to your slides.

4

Use your knowledge organiser given out by your teacher to revise for a knowledge test next lesson

5

HOMEWORK: DOES EVERYONE HAVE THE SAME VIEW ON CHARITY?

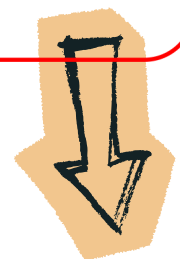


Throughout this topic, you will be working on your discussion skills. For this piece of homework, you will need to interview one person in your house the questions below and record their response.



6

Complete the questionnaire found here...



https://docs.google.com/forms/d/1r7dKYYkwnNg9soprHpxX7eC7STBUsgUzn00cTXbpPOA/edit?usp=drive_web&ouid=104233175919652962047

Tick off and date the ones you have completed

Clip Summary	Research Task	Does everyone have the same view?
Pledge for Action	Revision	Questionnaire

Below are a range of activities for you to complete independently whilst we are learning about: How to plan a for a fitness session.

1

Plan an effective warm-up using the success criteria:

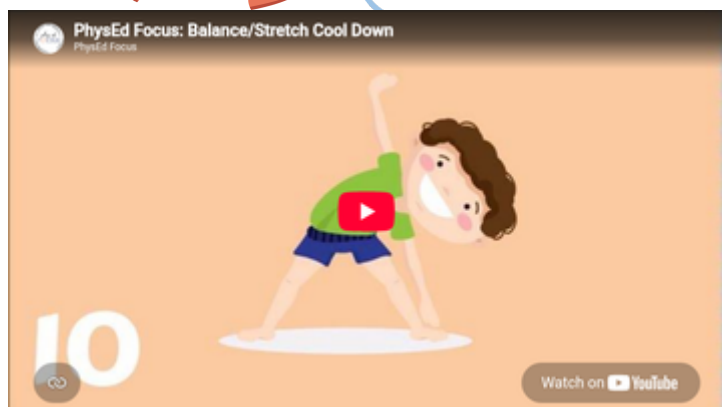
1. Pulse raiser
2. Dynamic stretches
3. Skill-based drill

Explain the importance of a warm-up



What is the importance of a cool down. Explain the impact it has on lactic acid in the muscles.

Research task - Research into a professional sporting team and identify their cool-down procedures after a game or competitive event.



Lactic acid is a chemical waste product made by your body when cells break down glucose (sugar) for energy without using oxygen.

Complete the cool down and assess strengths and areas for improvement.

