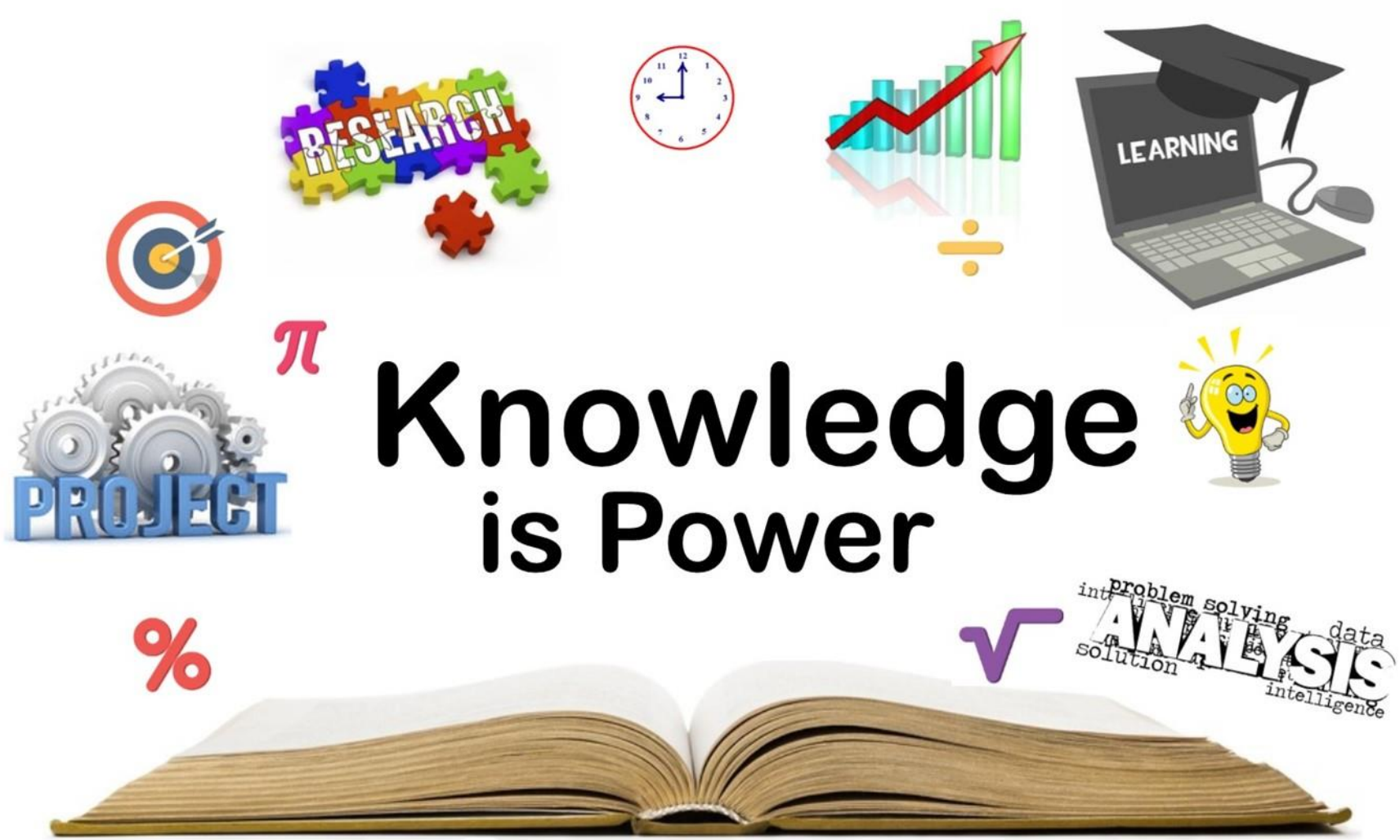
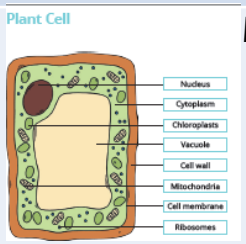
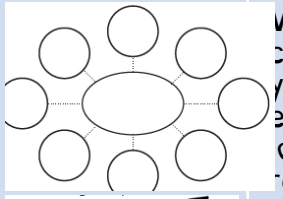
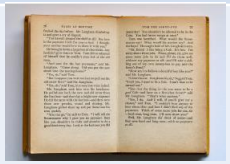


Year 9 Spring 1 - Knowledge Organiser

Just reading through your books or a knowledge organiser is not always an effective way to revise. Instead, you should do something with the information. Choose an example of the revision methods on the pages or see if you can come up with another method. The knowledge is evolutionary not revolutionary. Approximately half the knowledge is new and half helps you revise. Many of the activities are changing. We hope you enjoy them.

In SKL our topic will be on respectful relationships, looking at families and parenting, healthy relationships, conflict resolution, and relationship changes. In the second half of the term the topic will be goal setting where you will begin to look at your educational future at the Academy, by exploring your own learning strengths, career options and goal setting as part of the GCSE options process. You will carry out a personality and career assessment which might help guide you into future career possibilities and from this you will begin to look at choosing your options for your GCSE subjects. Alongside this you will look at the financial side of work, calculating how much money you may receive for certain types of career and what you might spend money on/budgeting as an adult.

Idea	Explanation
Make some flash cards or PowerPoint slides. Make top trumps. 	Write down key words, quotation, questions or equations on one side of a card. On the other side, write the definition or answer. Use them to test yourself.
 Make a poster.	Turn your notes into posters with lots of colour and illustrations. Summarising the key information in a different way is an effective way of learning and your brain will remember the colours more easily. Do the title last!
Draw spider diagrams, or for the adventurous mind maps. 	Write the topic/keyword in the centre of your page. Add everything you know in subtopics. Then explore each subtopic in turn adding more ideas. Colour/pictures help you recall.
Write a song or a rap. 	Are there songs that stick your head. Change the lyrics to the information you want to learn. If you record and listen back it will be a more fun way of revising.
 Plan a lesson	If you teach something to someone else the chance of recalling it is really high. This has been found to be the most effective way of learning something for the long term.
Write a story or comic strip. 	Take the keywords or facts that you need to learn and turn them into a story or a cartoon. The sillier the story the more likely you are to remember it.
Write a quiz. Design a game. 	Playing is how we learn as young children and it is a very powerful way of learning throughout life. If we enjoy the game it helps us remember.

Starter activity: What do you already know?

We will be reading an article from the BBC called "Footballers have 'worryingly poor' teeth."

Discuss the following questions.

- What things can you do to look after your teeth?
- Have you had a tooth ache before? What happened/ what did you do?
- What things can you do before performing a physical activity to help prevent injury?

PRE-READING STRATEGIES

Stand up if you agree with the statement.

Sit down if you disagree.

Footballers have 'worryingly poor' teeth

By James Gallagher
Health editor, BBC News website

3 November 2015

Professional footballers have worryingly poor teeth that could be affecting their performance on the pitch, say dentists.

1. On average, footballers have better teeth and dental health than the general population.
2. You only need to go to the dentist when you have a tooth ache. Regular check-ups aren't important.
3. Dental health is an important part of your overall health.
4. A tooth ache can affect how well a footballer plays.
5. Football teams should employ dentists as part of their medical team.
6. Dental problems can make other injuries (i.e. a pulled muscle in your leg) worse.
7. Sports/ health drinks often contain lots of sugar and are bad for your teeth.

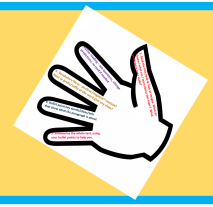
Let's read

- Ask questions, make connections, discuss, re-read, decide on key ideas

Click on the link!

https://www.bbc.co.uk/news/health-34699583

VOCABULARY FOCUS



Some words change their meaning depending on the context in which we use them.

Read the sentences below and look at the blue words in bold. What do they mean in these sentences?

1. “Professional footballers have worryingly poor teeth that could be affecting their **performance** on the pitch.”
2. “Previous research has shown “**striking**” levels of bad teeth in athletes.
3. “These are individuals who otherwise **invest** so much in themselves.”

VOCABULARY FOCUS

PiXL Unlock

Read It

Cavity

Define It

A decayed part of a tooth.

Draw It

Use It

You should go to a dentist to treat a cavity.

Link It

Hole, chamber, hollow, pocket, space, socket

Deconstruct It

From the latin word 'cavus' which means hollow.

Digging Deeper:

In this context we are talking about teeth cavities, however the word can be used in other contexts to mean any empty space within a solid object. For example a hole in a tree or a rock could be described as a cavity if it is a hollowed out space.

Related terms in the article:

Tooth decay– rot of the tooth

Dental erosion (see next slide)

Abscess– a build up of pus caused by infection

Oral health– relating to the mouth

Dental health– relating to the teeth

VOCABULARY FOCUS

PiXL Unlock

Read It

Erosion

Define It

The gradual destruction of something.

Draw It

Use It

Nearly four out of ten of the players had active tooth decay and dental erosion, in which the tooth structure is worn away by acid.

Link It

Wear away, abrasion, dissolving, crumbling, weathering, grinding down

Deconstruct It

From the latin word 'erodere' which means to wear or gnaw away.

Digging Deeper:

Erosion can be used in different topics and subjects. For example in geography you might look at how rocks and cliffs are eroded by water and wind. In English or History you might talk about the erosion on an idea (i.e. an idea that was once widely held, but that has diminished over time.)

VOCABULARY FOCUS

PiXL Unlock

Read It

Nutrition

Define It

The process of providing or obtaining the food necessary for health and growth.

Draw It

Use It

There is a direct link between nutrition and health.

Link It

Nourishment, nutrients, sustenance, food

Deconstruct It

From the latin word 'nuteire' which means to feed or noursih

Digging Deeper:

The human body converts the food consumed into energy in order to function and stay alive. The nutrients in food each provide a different amount of energy to the body.

POST READING: HAVE YOU CHANGED YOUR MIND?

Stand up if you agree with the statement.

Sit down if you disagree.

Footballers have 'worryingly poor' teeth

By James Gallagher
Health editor, BBC News website

3 November 2015

Professional footballers have worryingly poor teeth that could be affecting their performance on the pitch, say dentists.

1. On average, footballers have better teeth and dental health than the general population.
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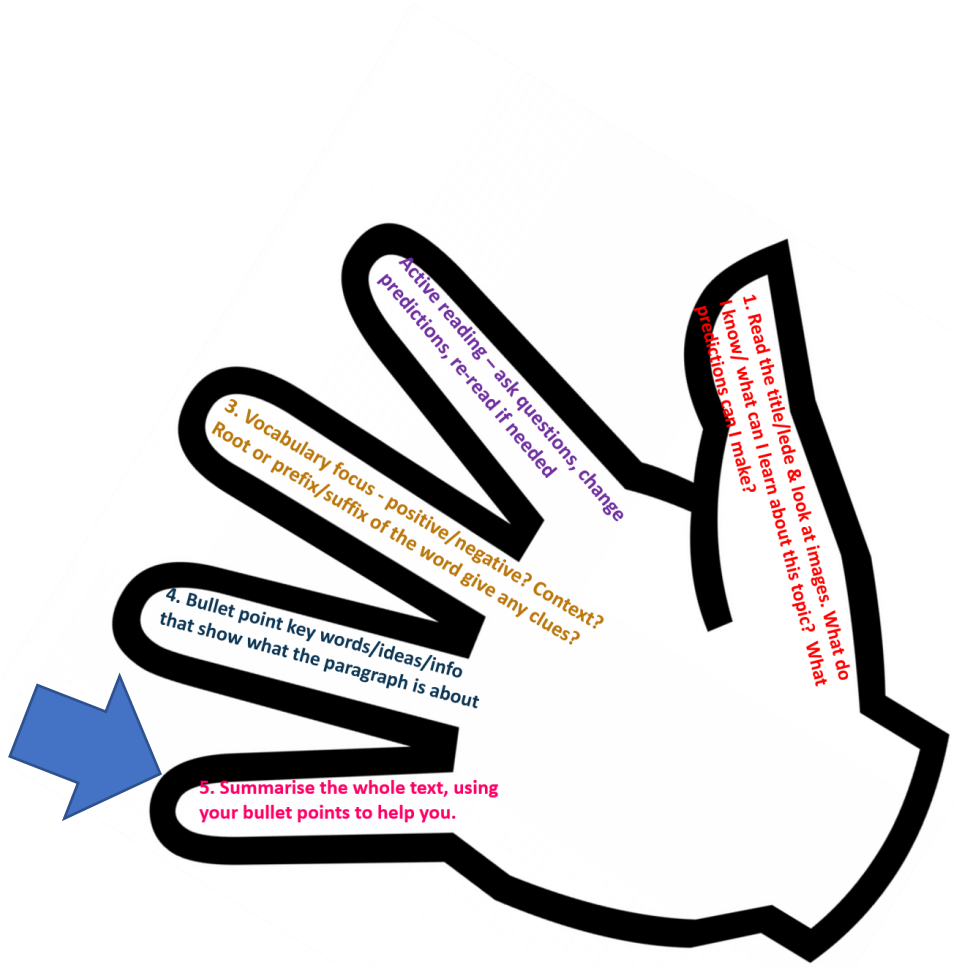
4. A tooth ache can affect how well a footballer plays.
5. Football teams should employ dentists as part of their medical team.
6. Dental problems can make other injuries (i.e. a pulled muscle in your leg) worse.
7. Sports/ health drinks often contain lots of sugar and are bad for your teeth.

AFTER READING- APPLYING AND SUMMARISING KNOWLEDGE

- Write down 5 key things you have learnt from this article.



QUIZ- Answer the following questions. Write your answers in full sentences.

1. How do the teeth of footballers compare to the general population?

2. Why were the researchers surprised by what they found?

3. What severe affect can poor dental health have on players?

4. Name two other ways players might be affected by their dental health?

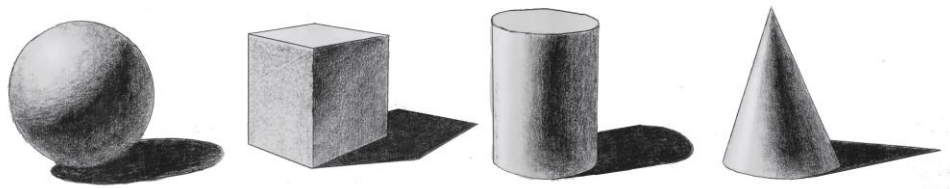
5. Why are footballers and athletes more at risk of poor dental health? Name two factors the article suggests.

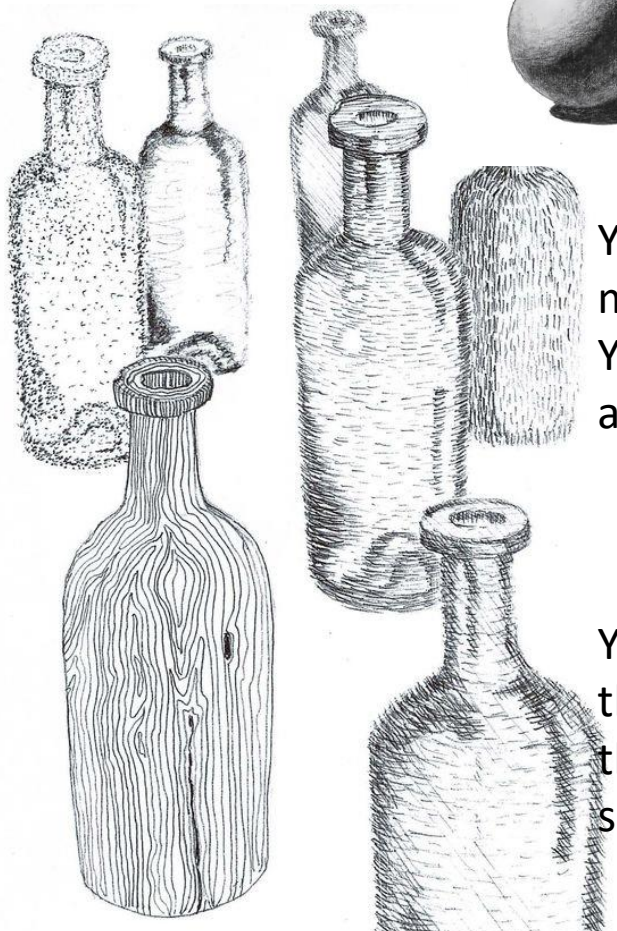
6. What are football clubs doing to improve the dental health of players?

7. How do footballers teeth compare to other athletes?

Year 9 Art Knowledge Organiser

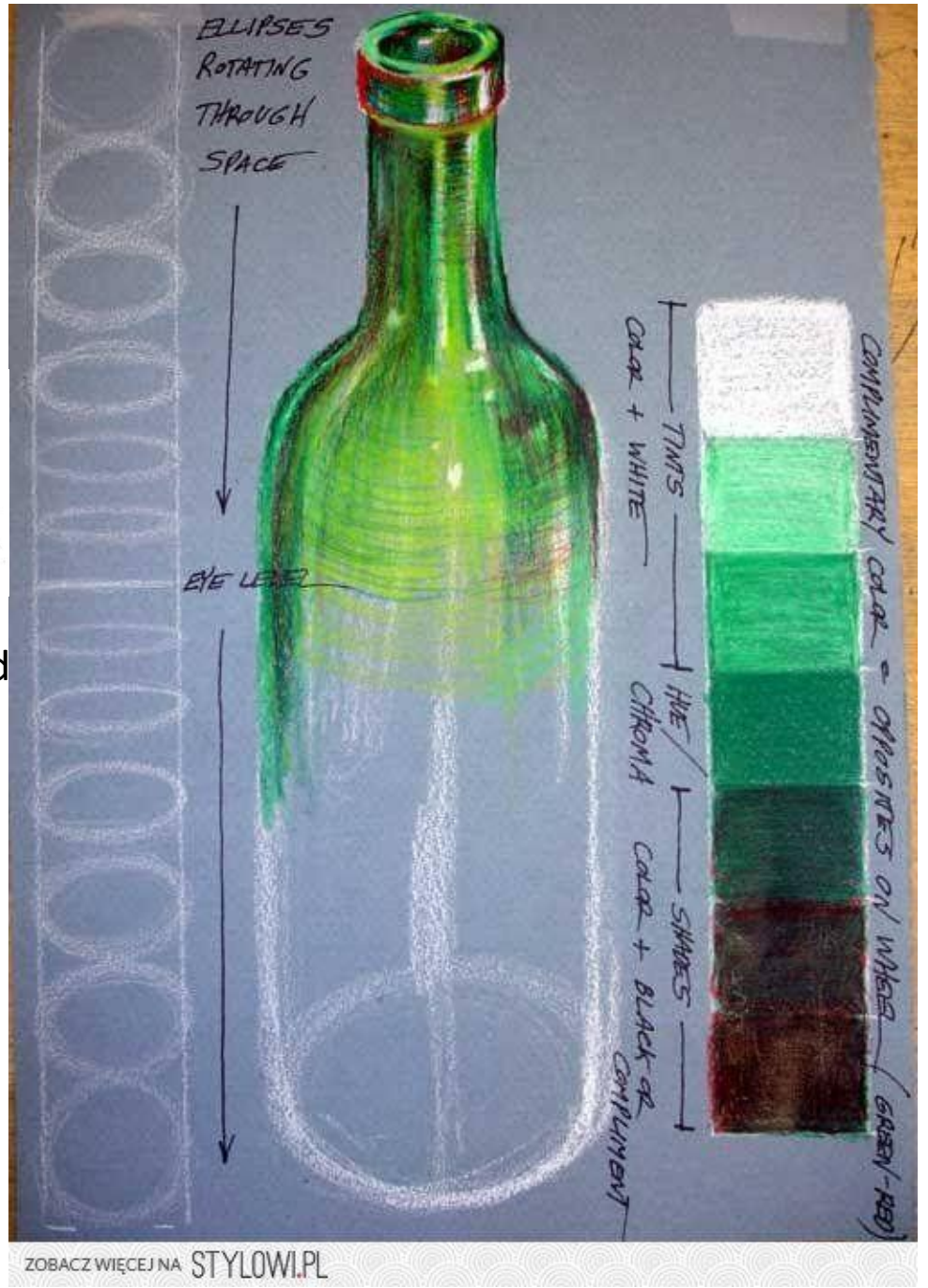
- During Year 9 we do a series of lessons reminding students of the basic formal elements of Art such as **TONE**, **FORM**, **LINE**….etc… See next page for full breakdown of the art elements.
- You continue your learning on observational drawing and using tone to show 3D form. See example b[illegible]





You learn new ways to make more advanced marks to create a 3D- effect.
You use new materials such as ink and learn about their properties.

You are encouraged to draw from life like in the sketch of the bottle to the right. This is the best way to improve your observation skills in Art.



We will be making enlarged drawings of these objects and Using different techniques on them.

The first big project we do in Year 9 is on Pop Art which is a style of Art that uses Items from popular culture as it's subject.
See examples below:

“In the future everyone will be famous
For 15 minutes”

What is POP ART?

“Marilyn” Andy Warhol

“Whaam!!!” Roy Lichtenstein

common images

everyday

- Advertisements
- Consumer goods
- Celebrities
- Photographs
- Comic strips

Numbers

@whisto_maths

What do I need to be able to do?

By the end of this unit you should be able to:

- Identify integers, real and rational numbers
- Work with directed number
- Solve problems with number
- Find HCF/ LCM
- Add/ Subtract fractions
- Multiply/ Divide fractions
- Write numbers in standard form

Keywords

Integer: a whole number that is positive or negative
Rational: a number that can be made by dividing two integers
Irrational: a number that cannot be made by dividing two integers
Inverse operation: the operation that reverses the action
Quotient: the result of a division
Product: the result of a multiplication
Multiples: found by multiplying any number by positive integers
Factor: integers that multiply together to get another number

Integers, real and rational numbers

Rational – root word: ratio

Real numbers: $\frac{2}{3}$ stems from 2 : 1 ($\frac{2}{3}$ of the whole)

Irrational numbers: $\sqrt{2}$ the solution is a decimal that never ends and does not repeat

The square root of a negative is not a real number and cannot be found

HCF/LCM (R)

1 is a common factor of all numbers

Common factors are factors two or more numbers share

HCF – Highest common factor

HCF of 18 and 30

18: 1, 2, 3, 6, 9, 18
30: 1, 2, 3, 5, 6, 10, 15, 30

HCF = 6

LCM – Lowest common multiple

LCM of 9 and 12

9: 9, 18, 27, 36, 45, 54
12: 12, 24, 36, 48, 60

LCM = 36

The first time their multiples match

Standard form (R)

Any number between 1 and less than 10 → $A \times 10^n$ ← Any integer

$6 \times 10^5 + 8 \times 10^5$

$= 600000 + 800000$
$= 1400000$
$= 1.4 \times 10^5$

$(1.5 \times 10^5) \div (0.3 \times 10^3)$

$1.5 \div 0.3 \times 10^5 \div 10^3$
$= 5 \times 10^2$

Directed number (R)

Addition

$2 + -4 = -2$

Zero pair (-1 + 1 = 0)

Two "-1" left = -2

Generalisation: + − = −

Subtraction

Representation for calculation: 2 =

"Subtract" – means take away or remove

$2 - -1 = 3$

Take away one

Start with the representation of 2 = 3

Generalisation: − − = +

Multiplication

= −1
= 1

The act of making counters into their negative is turning them over

$-2 \times -3 = 6$

Divisions are the inverse operations

$a = 5$ $b = -4$

Brackets around negative substitutions helps remove calculation errors

$2a - b = 2 \times 5 - (-4) = 10 + 4 = 14$

Addition/ Subtraction of fractions (R)

$\frac{4}{5} - \frac{2}{3}$

$\frac{12}{15} - \frac{10}{15} = \frac{2}{15}$

Use equivalent fractions to find a common multiple for both denominators

Multiplication/ Division of fractions (R)

$\frac{3}{4} \times \frac{2}{3}$

Shade in 3 parts

Repeat it on this many rows

This many columns

This many rows

$\frac{3}{4} \times \frac{2}{3} = \frac{6}{12}$ ← Parts shaded

Total number of parts in the diagram

Modelled:

3 × 4

Remember to use reciprocals

$\frac{2}{5} \div \frac{3}{4}$

$\frac{2}{5} \times \frac{4}{3}$

Multiplying by a reciprocal gives the same outcome

Represented

$= \frac{8}{15}$

@whisto_maths

Maths & Money

What do I need to be able to do?

By the end of this unit you should be able to:

- Solve problems with bills and bank statements
- Calculate simple interest
- Calculate compound interest
- Calculate wages and taxes
- Solve problems with exchange rates
- Solve unit pricing problems

Keywords

Credit: money being placed into a bank account
Debit: money that leaves a bank account
Balance: the amount of money in a bank account
Expense: a cost/ outgoing
Deposit: an initial payment (often a way of securing an item you will later pay for)
Multiplier: a number you are multiplying by. (Multiplier more than 1 = increasing, less than 1 = decreasing)
Per Annum: each year
Currency: the type of money a country uses.
Unitary: one – the cost of one.

Bills and Bank Statements

Bills – tell you the amount items cost and can show how much money you need to pay

Some can include a total

Look for different units (Is it in pence or pounds)

Menu	Price
Milk	89p
Tea	£1.50

Bank Statements

Bank statement can have negative balances if the money spent is higher than the money coming into the account

Date	Description	Credit	Debit	Balance
19th Sept	Salary	£1500		£1500
19th Sept	Mortgage		£600	£900
25th Sept	Bday Money	£15		£915

Simple Interest

For each year of investment the interest remains the same

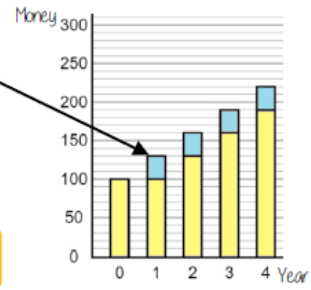
$$\frac{\text{Principal amount} \times \text{Interest Rate} \times \text{Years}}{100}$$

Principal amount is the amount invested in the account

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

$\frac{100 \times 30 \times 4}{100} = £120$

This account earned £120 interest. At the end of year 4 they have £220



Compound Interest

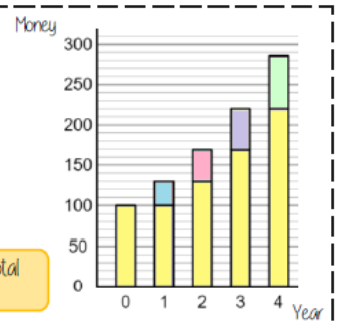
Interest is added to the current value of investment at the end of each year so the next year's interest is greater.

$$\text{Principal amount} \times \text{Multiplier}^{\text{Years}}$$

e.g. Invest £100 at 30% compound interest for 4 years

$100 \times 1.3^4 = £285.61$

This account has £285.61 in total at the end of the 4 years.



Value Added Tax (VAT)

VAT is payable to the government by a business. In the UK VAT is 20% and added to items that are bought.

Essential items such as food do not include VAT.

Wages and Taxes

Salaries fall into tax brackets – which means they pay this much each month from their salary

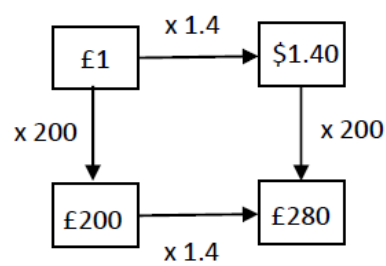
Taxable Income	Tax Rate
£12 501 to £50 000	20%
£50 001 to £150 000	40%
over £150 000	45%

Over time:

Time and a half – means 1.5 times their hourly rate

Double – 2 times their hourly rate

Exchange Rates



When making estimates it is also useful to use estimates to check if our solution is reasonable.

Use inverse operations to reverse the exchange process

Common Currencies

United Kingdom	£	Pounds
United States of America	$	Dollars
Europe	€	Euros

Unit Pricing

4 Oranges £1	5 cupcakes £1.20

$4 = £1.00 \xrightarrow{\div 2} 2 = £0.50 \xrightarrow{\div 2} 1 = £0.25$

$5 = £1.20 \xrightarrow{\div 5} 1 = £0.20$

Cost per Unit

To calculate unit per cost you divide by the cost

Cupcakes are the best value as one item has the cheapest value

There is a directly proportional relationship between the cost and number of units.

Using Percentages

What do I need to be able to do?

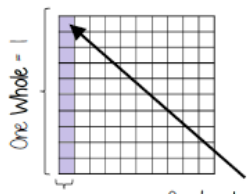
By the end of this unit you should be able to:

- Use FDP equivalence
- Calculate percentage increase and decrease
- Express percentage change
- Solve reverse percentage problems
- Solve percentage problems (calculator and non calculator problems)

Keywords

Percent: parts per 100 – written using the % symbol.
Decimal: a number in our base 10 number system. Numbers to the right of the decimal place are called decimals.
Fraction: a fraction represents how many parts of a whole value you have.
Equivalent: of equal value.
Reduce: to make smaller in value.
Growth: to increase/ to grow.
Integer: whole number, can be positive, negative or zero.
Invest: use money with the goal of it increasing in value over time (usually in a bank).
Multiplier: the number you are multiplying by.
Profit: the income take away any expenses/ costs.

FDP Equivalence (R)



Percentage
100% = a whole = 100 hundredths

10 hundredths
10 out of 100
10%

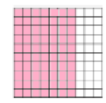
$\frac{10}{100} = \frac{1}{10} = 0.10$

One hundredth
(one whole split into 100 equal parts)

ones	tenths	hundredths
	●	

Converting FDP (R)

$\frac{70}{100}$ → This also means 70 ÷ 100 → 70 out of 100 squares → 70 "hundredths" = 7 "tenths" = 0.7



→ 70 hundredths = 70%

Using a calculator

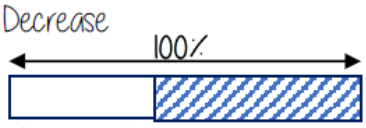
$\frac{\square}{\square}$ → S⇔D Convert to a decimal

× 100 converts to a percentage

Be careful of recurring decimals
e.g. $\frac{1}{3} = 0.3333333$
$= 0.\dot{3}$
The dot above the 3

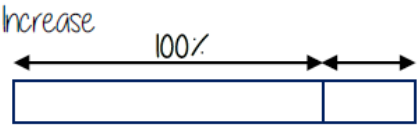
Percentage Increase/ Decrease (R)

Decrease



Decrease by 58%

Increase



Increase by 12%

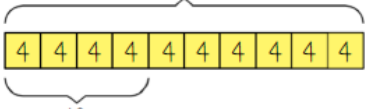
Multiplier: Less than 1
100 – 0.58 = 0.42

100% + 12% = 112%
100 + 0.12 = 1.12
Multiplier: More than 1

Reverse Percentages

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

Original Number (100%)

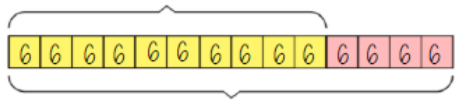


16

40% = 16
10% = 4
100% = 40

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

Original Number (100%)



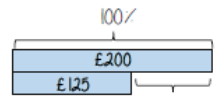
84

140% = 84
10% = 6
100% = 60

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

Percentage change (R)

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



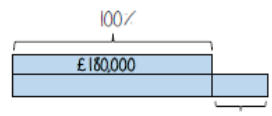
All values of change compare to the ORIGINAL value

Percentage loss

$\frac{75}{200} \times 100 = 37.5\%$

$$\frac{\text{Difference in values}}{\text{Original value}} \times 100$$

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

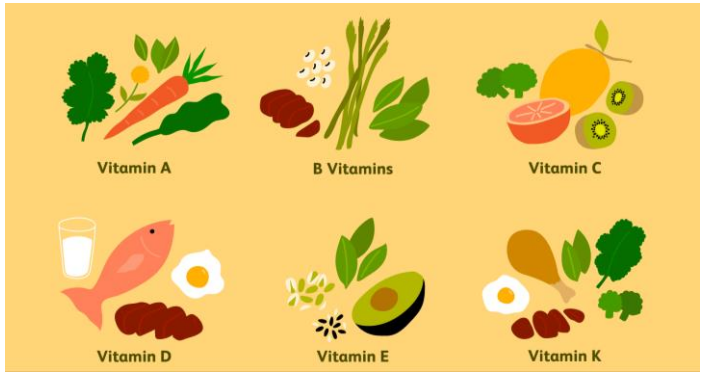


Percentage profit

Money made (profit value) → $\frac{36000}{180000} \times 100 = 20\%$

Micronutrients

	What are they?	Which vitamins?	Food examples…
Water soluble vitamins	Vitamins that are found in the watery parts of fruits, vegetables and grains. We wee them out eat day so it is important to eat them daily.	B1, B2, B3. B9. B12, Vitamin C	Bread, pasta, rice, peas, cheese, leafy green, wheat, nuts, fish, citrus fruits, potatoes
Fat soluble vitamins	Vitamins that are found in fatty foods. Any that aren't used are stored by the body so we need to be careful not to build up an excess of these vitamins.	A, D, E, K	Oily fish, eggs, margarine, sunlight, cereals, vegetable oils, meats, some dairy foods.



Antioxidants are found in foods such as fruit and vegetables, they help protect our bodies from being damaged by free radicals.
Free radicals are chemicals that we encounter every day of our lives. They damage our bodies cells leading to diseases such as cancer and heart disease.
Vitamins A, C and E are anti-oxidants.

	Function	Sources	Deficiency
Iron	Iron is important in making red blood cells, which carry oxygen around the body	Dark green leafy vegetables e.g. spinach, meat.	A lack of iron can lead to iron deficiency anaemia. This can cause tiredness, pale complexion, heart palpitations, headaches.
Calcium	Needed for strong bones and teeth, healthy nerves and muscles and blood clotting – growing children need calcium every day to help build strong bones and teeth.	Milk, cheese, tofu, green leafy vegetables, hard water, sesame seeds.	Too little during childhood can cause rickets, osteoporosis because bones become weaker. It can also slow down blood clotting.

Thai Green Curry

Ingredients

2 Chicken breast
1 Carrot
1 Onion
1 clove of garlic
1 tbsp. oil
4 tsp curry paste
1 tin of coconut milk
Optional: Fresh Chilli

Equipment

Knife
Chopping board
Wooden spoon
Wok
Teaspoon
Can opener

Skills

Slicing
Seasoning
Frying

OPTIONAL VEGETABLES: There are so many different vegetables you can use in Thai green curry such as….
Courgette, pepper, green beans, mangetout baby corn, broccoli and mushrooms.
Instead of chicken you can use…
Pork, beef, lamb, fish or prawns.

Method

1. Peel and chop the onion into slices. Chop the carrot into julienne style pieces. The garlic should be chopped finely.
2. Cut your chicken into thin strips.
3. Start heating oil in the pan, when hot, add your chicken. *always make sure the pan in sizzling hot when your cooking with a wok*
4. Fry for a few minutes until the outside is white. Add the vegetables and fry for another few minutes.
5. Add the curry paste and stir well.
6. Add the coconut milk and simmer for a couple of minutes. * always check the chicken is cooked through before serving (white, no pink)
7. Serve instantly with some basmati rice.

You are welcome to make an Asian dish of your choice.

Lasagne

Ingredients

6 Lasagne sheets

Sprinkle of cheese for the top

1 tomato

For the Filling

250g Mince Meat

1 onion

1 tin of tomatoes

Salt, pepper, herbs

For the Sauce

30g butter

30g flour

300 ml Milk

60g Cheese

Equipment

Chopping board, knife, jug, grater, whisk, wooden spoon, frying pan, sauce pan

Skills

Chopping, dicing, mincing, frying, seasoning, weighing, measuring, making a bechamel sauce, portioning, baking.

Method

1. Chop onion and garlic
2. Start frying the onion and garlic add the meat.
3. When meat is cooked, add the tomatoes and simmer until thickened, add seasoning
4. Making the sauce: in the saucepan melt the butter and flour.
5. When melted switch of the heat and add the milk, little at a time then mixing in.
6. When ALL the milk is mixed in then switch the heat on and constantly whisk until its thickened (boiling point). Switch off and stir through the cheese.
7. **CONSTRUCTION – ½ mince, pasta, ½ cheese sauce. Repeat: ½ mince, pasta, ½ cheese sauce.**
8. Add your remaining grated cheese on top and a sliced tomato.
9. Bake for 40 minutes.

vegetarian lasagne

Ingredients

6 Lasagne sheets

Sprinkle of cheese for the top

1 tomato

For the filling:

1 pepper

1 onion

1 courgette

1 can lentils

1 can chopped toms

For the sauce:

30g butter

30g flour

300 ml Milk

60g Cheese

Equipment

Saucepan, weighing scales, grater, chopping board, measuring jug, wooden spoon, whisk, ovenproof dish

Skills

Chopping, dicing, mincing, frying, seasoning, weighing, measuring, making a bechamel sauce, portioning, baking.

Method

1. Finely dice the onion.
2. Slice the courgette and chop the pepper into large squares.
3. Gently fry the onion until translucent. Add the peppers and courgette and fry for another 5 minutes.
4. Add the lentils, chopped tomatoes and seasoning. Mix well and leave to simmer on a low temperature.
5. Making the sauce: in the saucepan melt the butter and flour.
6. When melted switch of the heat and add the milk, little at a time then mixing in.
7. When ALL the milk is mixed in then switch the heat on and constantly whisk until its thickened (boiling point). Switch off and stir through the cheese.
8. **CONSTRUCTION – ½ filling, pasta, ½ cheese sauce. Repeat: ½ filling, pasta, ½ cheese sauce.**
9. Add your remaining grated cheese on top and a sliced tomato.
10. Bake for 40 minutes.

Tuna Pasta Bake

Ingredients

100g macaroni

100g Cheddar cheese

25g soft margarine

25g plain flour

250ml semi-skimmed milk

Black pepper

1 can of tuna

1 small can of sweetcorn

Equipment

Saucepan, weighing scales, grater, chopping board, measuring jug, wooden spoon, whisk, ovenproof dish

Skills

Grating, mixing, weighing, seasoning, making a roux sauce, slicing

Method

1. Pre-heat the oven to 180C. Grate the cheese, slice the tomato and measure the milk.

2. Melt the butter and flour until mixed into a paste.

3. **Switch the heat off.** Add the milk a tiny bit at a time, only adding more once its all mixed in

4. **Switch the heat on**. Bring the sauce to a simmer, whisking it all the time until it has thickened. Stir through ¾ of the cheese.

5. Mix in the pasta and season with salt and pepper. Pour into an oven proof dish.

6. Cover with grated cheese and sliced tomato. Bake in the oven for 20-25 minutes until golden brown.

You are welcome to make a pasta bake of your choice.

Year 9 Knowledge organiser: Explore India

Topics covered

- ✓ India facts/what we know
- ✓ India physical geography
- ✓ India human geography
- ✓ Climate and Monsoon
- ✓ Tourism in India
- ✓ India's changing population
- ✓ Development within India
- ✓ Welcome to Dharavi
- ✓ India and its environment
- ✓ Future India
- ✓ India Report

Key Ideas:

1. I can describe the location of India and its unique character.
2. I can describe the physical landscape variety of India
3. I describe how cities of India have grown and their impacts
4. I can explain how development is changing India and its environment

Skills

- ❑ To research amazing facts using ICT
- ❑ To use mapping to investigate features
- ❑ To understand different cultures and ways of living
- ❑ To draw/label line graphs
- ❑ To write an extended written account
- ❑ To use ICT to research information

Places and Environments

- ❖ Ganges River
- ❖ Kashmir
- ❖ New Delhi
- ❖ Mumbai
- ❖ Goa
- ❖ Ghats
- ❖ Brahmaputra
- ❖ Kerala
- ❖ Thar Desert

Key Terms Used in this Unit

- States
- Colonialism
- Monsoon
- Hinduism
- Independence
- Bollywood
- Population
- Investment
- Aid
- Slums
- Disputes
- Resources
- Poverty
- Pollution
- Economic growth
- Standard of Living
- Exports
- Technology
- Space Race

Year 9 – Spring 1 – The Language of Protest

Protest Writing Genre Overview

- In this unit of work you will engage with a variety of non-fiction extracts linked to the theme of protest writing, some of these extracts will be modern and some will be pre-1900.
- Protest writing gives activists the chance to communicate their ideas and messages in a clear and persuasive way. These writers may be writing from a particular political social or moral stand point.
- The key themes you will be exploring are segregation, gun control, mental illness, the suffragette movement, voting age and climate change.

Types of text to study

- Speeches
- Television Interviews
- Newspaper Articles
- Coroners Reports
- Recounts of oral accounts

Key Terminology

Inference - a conclusion reached on the basis of evidence and reasoning

Summary - a brief statement or account of the main points of something

Political - relating to the government or public affairs of a country

Emotive Language - when certain word choices are made to evoke an emotional response in the reader

Perspectives - a way of regarding situations, facts, etc, and judging their relative importance (point of view)

Format - the way in which something is arranged or set out

Formality – how formal or informal your writing should be

Counter argument - an argument against another argument, idea, or suggestion

Rebuttal - an instance of disproving evidence or an accusation

Themes

Segregation - the action or state of setting someone or something apart from others

Gun Control - set of laws or policies that regulate the manufacture, sale, transfer and ownership of firearms

Mental Illness - refers to a wide range of mental health conditions — disorders that affect your mood, thinking and behaviour

Suffragette Movement a women's organisation in the early 20th century who, under the banner "Votes for Women", fought for the right to vote

Voting Age – the age in which it is legal to cast a vote in elections

Climate Change - long-term shifts in temperatures and weather patterns. These shifts may be natural or caused by humans

LGBTQ+ & BLM - issues around equality for all regardless of race, gender, sexuality or sexual orientation

Year 9 – Spring 1 – The Language of Protest – Task Sheet

Genre Overview

1. Create a plan for your own persuasive speech to the Houses of Parliament about why the legal age to drive should be lowered to 15 (remember to consider topic, audience, purpose, format and formality).
2. Write a persuasive newspaper article on a topic you feel strongly about e.g. no homework or climate change
3. Write a letter to the Prime Minister arguing why the voting age should be lowered to 16.

Different types of texts:

1. Look at your opening to question 3 from the 'Genre Overview' section above and transform it to the opening of a speech to be given to parliament.
2. Explain the differences between broadsheet and a tabloid newspaper article.

Key Terminology

1. Define the following words: political, suffragette and formality.
2. Write a paragraph about why Saturday School is good idea using a counter argument and a rebuttal.
3. Give an example of which type of non-fiction protest writing you think is the most powerful and explain why e.g. I think a speech is the most powerful form of protest writing because….

Retrieval: write as much as you remember from the following skills in class. Use the checklists in class to check your responses.

1. How do we write a summary?
2. List as many structural methods as you can think of.
3. What are the four sentence types?
4. List as many persuasive language methods as you can think of.

Year 9 – Rise of the Nazis, life in Nazi Germany and the Holocaust

Key words	
National Socialism	A political system in which a strong government rules a country and protects the interest of one racial group.
Adolf Hitler	An Austrian politician who became leader of the Nazi Party in 1921 and led them to power by 1933. Hitler shot himself in 1945.
The SA	Abbreviation of 'Sturmabteilung' or 'Storm Division'. Known as the brown shirts, they were an armed wing of the Nazi Party in its early years
The SS	Abbreviation of 'Schutzstaffel' or 'Protection Squadron'. Known as the black shirts, they took over from the SA as the Nazis' most loyal and committed soldiers. Oversaw much of the Holocaust.
Hitler Youth	A series of youth organisations in Nazi Germany, where young boys would learn practical and military skills and girls would learn how to be 'good' mothers and wives
Anti-Semitism	Hatred of discrimination of Jews. This had existed for centuries but was particularly important in Nazi Germany.
The Holocaust	General term given to the treatment of Jews and other 'undesirables' by the Nazis between about 1938 and 1945.
Eugenics	The belief that it is possible and desirable to improve the human race by selective breeding and by eradicating undesirable elements or 'genetic' traits.

Why did people support the Nazis?

Although the Nazi Party never won an election in Germany, they did have a lot of support in some sections of society. Some historians say that the Nazis won support through 'negative cohesion', which means that their supporters did not always agree with each other, but supported the Nazis because shared a fear of hatred of something/someone else. Some reasons for supporting the Nazis are as follows:

- **The Great Depression of 1929** – led to a lot of unemployment and poverty in Germany. The Nazis promised to end unemployment and also provided aid to many who could not afford food.
- **Fear/hatred of Communism** – Many middle and upper class people saw that if the communists took power they would lose their wealth. The Nazis were one of the most active and vocal groups against communism.
- **Appeal to traditional values** – The Nazis promised a return to 'traditional' German values which many people thought had been forgotten in the 1920s.
- **Propaganda and anti-Semitism** – The Nazis put the blame for many of Germany's problems on the Jews. For desperate people looking for someone to blame this idea could easily become attractive.

The Carrot:

For those who did as they were told and matched the Nazi ideal, there were many benefits for living in Nazi Germany. Propaganda also promised people happiness if they supported the Nazi regime.

The stick:

The Nazis made it very clear that anyone who disobeyed their rules would be punished. This meant prison and execution for many. They also set up 'work and education' camps in Germany.

The Nazis controlled society through the 'carrot and stick method'

The Nazis promised the German people that they would create a 'Third Reich' and bring all true Germans to glory. Although there were some advantages for certain people, they ultimately failed to meet most of their promises and when WWII began they ended many of their policies aimed at helping the German people. On the right are some examples of people did and did not benefit from Nazi rule.

The Holocaust

Although there is historical debate around when the Holocaust started, the word is usually used to describe the mistreatment and murder of over 6 million Jews and millions of others by the Nazis, either because of their race, religion, sexuality, ability or lifestyle.

The Holocaust did not begin suddenly but was a process that arguably begun in 1933 and continued until the Nazis were defeated in 1945.

The most well-known feature of the Holocaust is the concentration and death camp, where prisoners were systematically murdered, overseen by the SS.

Social group	Advantages	Disadvantages
Women	Women were rewarded for marrying and having children through loans and medals. They were also praised in Nazi propaganda.	Women lost many of the freedoms they had enjoyed in the 1920s. They were now pressured into becoming housewives and mothers, and many lost their jobs under the Nazis.
Workers	Unemployment dropped dramatically under the Nazis and workers were usually able to find work. They were also given benefits such as cheaper holidays, cars and activities.	Wages did not rise as much as much as promised, and the employment figures covered up the fact that many were working in conscripted (compulsory) work for very little money. As the war began many of the previous benefits for workers ended.
Young people	Hitler Youth organisations were set up for boys and girls. These were mostly fun and offered opportunities for adventure.	Young people were targeted for propaganda, particularly through school where they learnt national socialist ideas. Any young people who had fun in the 'wrong' way were punished, often being put in camps.
'Undesirables'	There were virtually no advantages to fitting into this category.	Referred to as the 'untermenschen', Jews, eastern Europeans, homosexuals, people with disabilities, Roma/Sinti people, criminals and Jehovah's Witnesses were put in camps and often killed or worked to death.

1933 – The Nazis call for Jewish businesses to be boycotted, Jewish books are banned and Jews are banned from some jobs

→

1935 – Homosexuals can now be arrested, and the Nuremburg Laws make Jewish people non-citizens.

→

1938 – In an event known as 'Kristallnacht' thousands of Jewish businesses, homes and synagogues are looted. 91 Jews are killed.

→

1940 – Auschwitz, the largest concentration camp, is built in Poland.

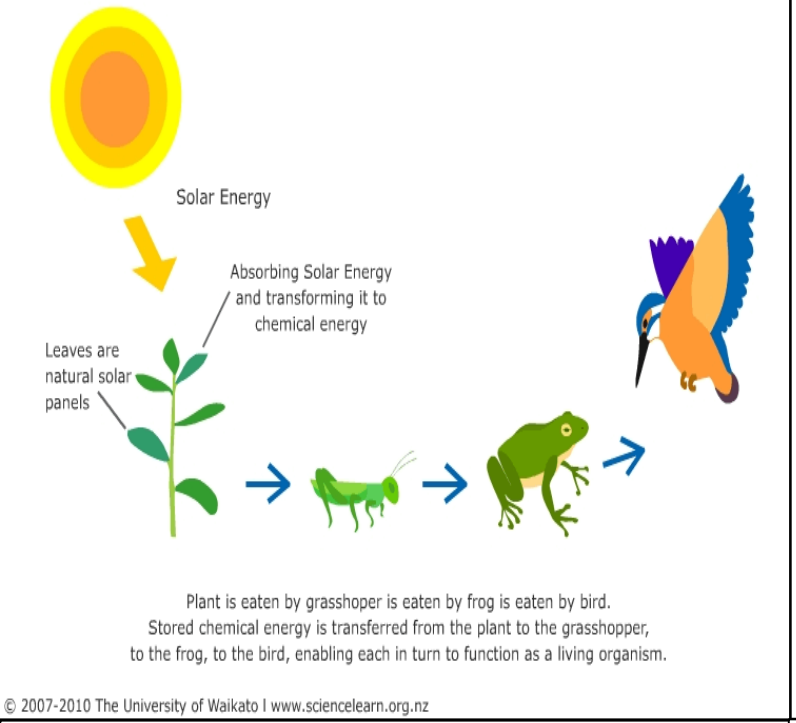
→

1941 – Mass killing of Jewish and Eastern European people begins

→

1942-45 – Jews from all over Europe are taken to death camps and systematically murdered

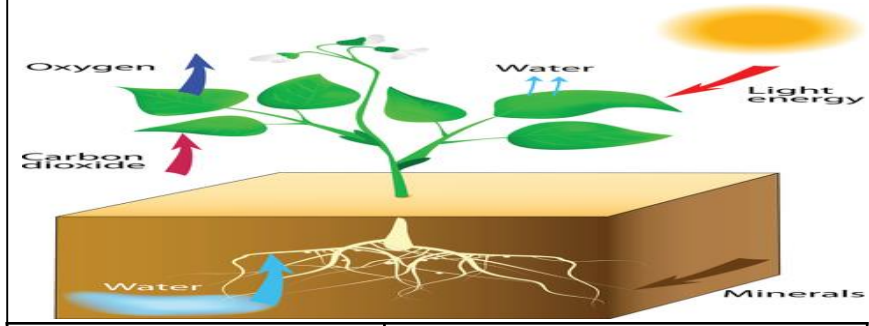
BIO-ENERGETICS (ENERGY IN BIOLOGICAL SYSTEMS)



Plant is eaten by grasshoper is eaten by frog is eaten by bird.
Stored chemical energy is transferred from the plant to the grasshopper, to the frog, to the bird, enabling each in turn to function as a living organism.

The feeding relationships are one way in which organisms depend on each other. To begin with, almost all organisms rely on the Sun as the original source of energy for their ecosystem. **Plants** and **algae** can make use of the Sun's energy to produce food molecules, in the process of photosynthesis. This is why they are called **producers**. Other types of organism can't do this, so they rely on the plants and algae.

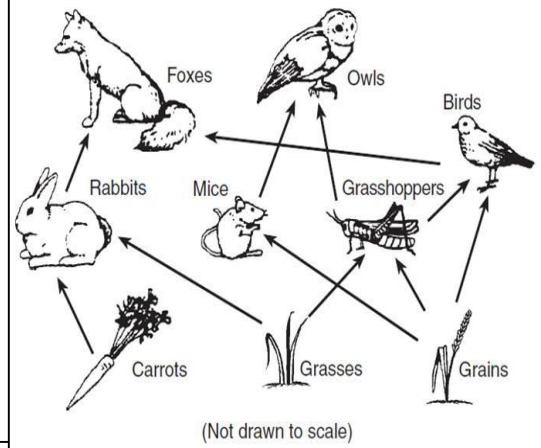
- **Consumers** eat the producers, so the energy from the sun flows through the ecosystem. Molecules (which contain the energy) also flow through, and get recycled when organisms produce waste (poo and wee!) and after they die and decay. The diagram helps to show this.
- You can see that all the organisms in the ecosystem depend on each other. This is called **interdependence.** The consumers wouldn't surviv without the producers capturing energy from the sun, the producers wouldn't survive without the decomposers recycling molecules for them to use (e.g. nutrients from the soil),



Plants make use of light energy from the environment (ENDOTHERMIC) to make food (glucose)

Carbon dioxide + Water
→
Oxygen + Glucose

A **food web** shows many **feeding relationships.** It connects many food **chains**, since many organisms eat more than one other organism, and are eaten by more than one other.



(Not drawn to scale)

Aerobic respiration

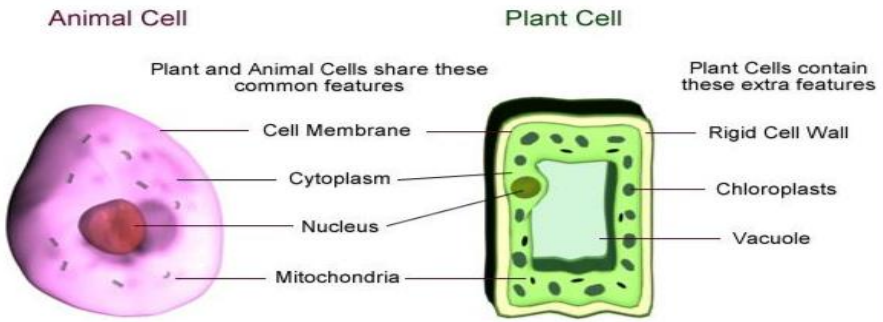
Respiration with oxygen. Occurs inside the mitochondria continuously

Glucose is oxidised by oxygen to transfer the energy the organism needs to perform it's functions.

Aerobic respiration releases a large amount of energy from each glucose molecule

glucose + oxygen →
carbon dioxide + water

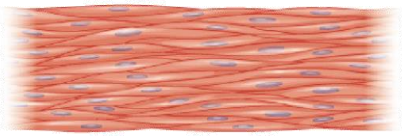
CELLS AND REPRODUCTION 1



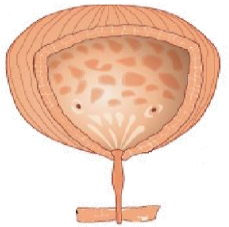
Key Terms	Definition
Cell wall	Made of cellulose, which supports the cell
Cell membrane	Controls movement of substances into and out of the cell
Cytoplasm	Jelly-like substance, where chemical reactions happen
Nucleus	Contains genetic information (chromosomes) made of DNA. Controls what happens inside the cell
Vacuole	Contains a liquid called cell sap, which keeps the cell firm
Mitochondria	Where most respiration reactions happen
Chloroplast	Where photosynthesis happens

Body organization
All living organisms are made up of one or more cells. **Unicellular organisms**, like amoebas, consist of only a single cell. **Multicellular organisms**, like people, are made up of many cells. Cells are considered the fundamental units of life.
The cells in complex multicellular organisms like people are organized into **tissues**, groups of similar cells that work together on a specific task. **Organs** are structures made up of two or more tissues organized to carry out a particular function, and groups of organs with related functions make up the different **organ systems.**

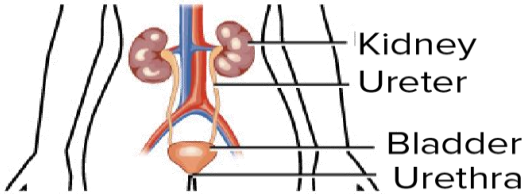
Muscle cell



Muscle tissue



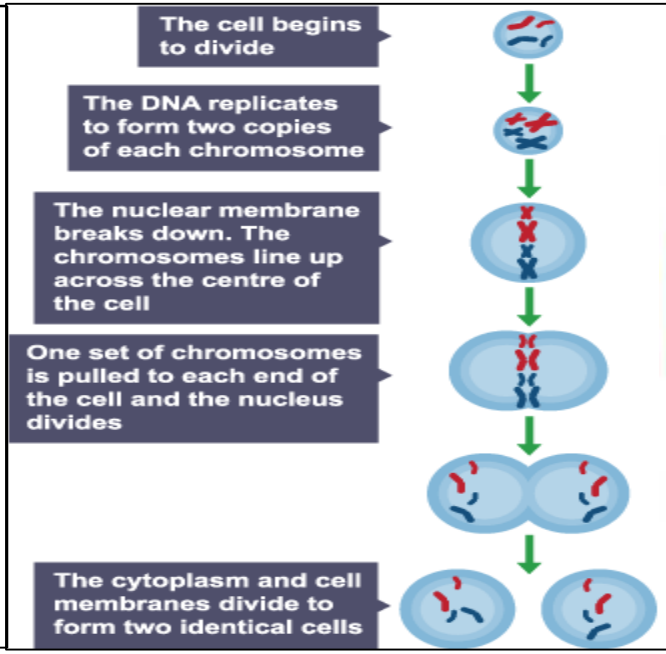
Organ (bladder)

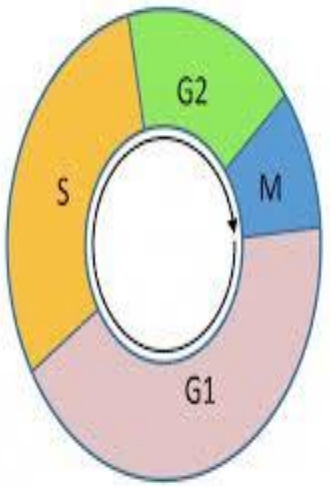


Organ system

The human cell nucleus contains 46 chromosomes or 23 pairs. They are ultimately long strands of coiled up DNA.

Cells are continually lost or made. All cells have a life cycle known as the cell cycle To make new cells the body carries out cell division in a process known as mitosis





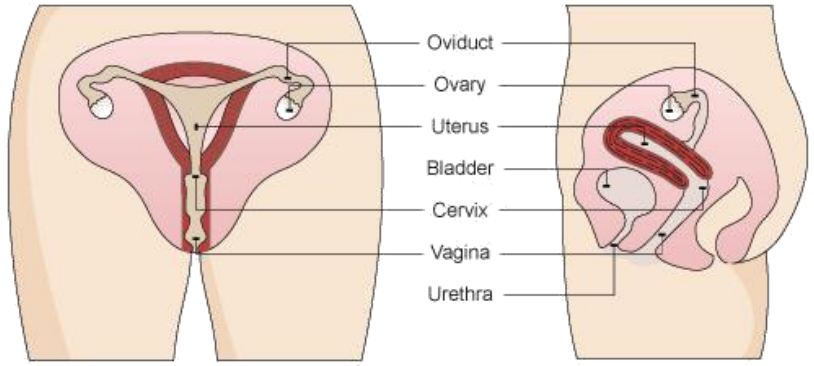
G1 - Growth

S - DNA synthesis

G2 - Growth and preparation for mitosis

M - Mitosis (cell division)

CELLS AND REPRODUCTION 2



The two **ovaries** (one of them is called an ovary) contain hundreds of undeveloped female **gametes** (sex cells). These are called **ova** (one of them is called an ovum) or egg cells. Women have these cells in their bodies from birth, whereas men produce new sperm continually.

Oviducts

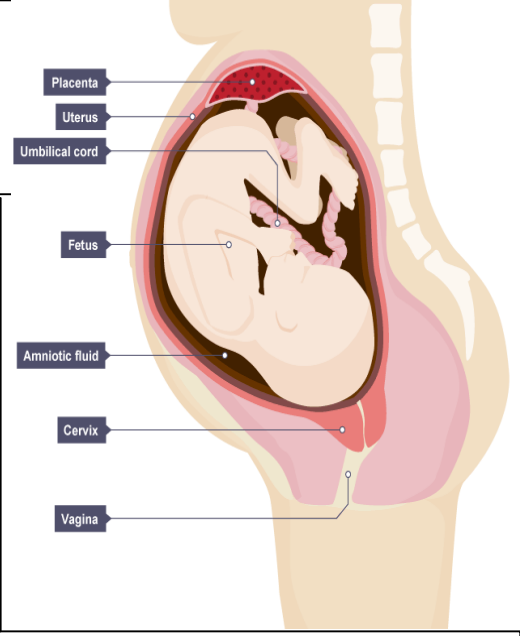
Each ovary is connected to the **uterus** by an **oviduct**. This is sometimes called a Fallopian tube or egg tube. The oviduct is lined with **cilia**, which are tiny hairs on cells. Every month, an egg develops, becomes mature and is released from an ovary. The cilia waft the egg along inside the oviduct and into the uterus.

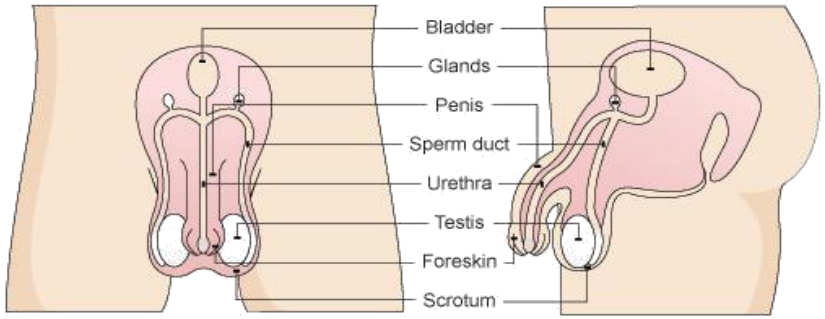
Uterus and cervix

The **uterus**, also called the womb, is a muscular bag with a soft lining. The uterus is where a baby develops until its birth.

The **cervix** is a ring of muscle at the lower end of the uterus. It keeps the baby in place while the woman is pregnant.

The **vagina** is a muscular tube that leads from the cervix to the outside of the woman's body. A man's penis goes into the woman's vagina during sexual intercourse.





Testes

The two **testes** (one of them is called a testis) are contained in a bag of skin called the **scrotum**. The testes have two functions:

- to produce millions of male **gametes** (sex cells) called **sperm**
- to make male sex **hormones**, which affect the way a man's body develops

Sperm duct and glands

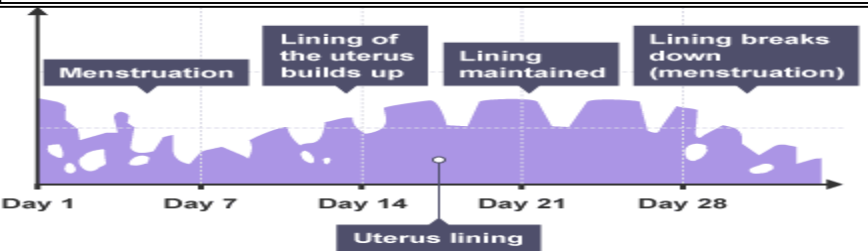
The sperm pass through the **sperm ducts**, and mix with fluids produced by the **glands**. The fluids provide the sperm cells with nutrients. The mixture of sperm and fluids is called semen.

Penis and urethra

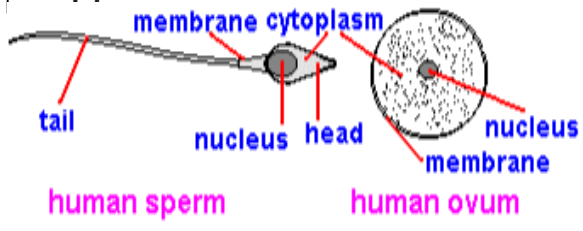
The **urethra** is the tube inside the penis that can carry urine or semen. A ring of muscle makes sure that there is no chance of urine and semen getting mixed up.

The menstrual cycle

The female reproductive system includes a cycle of events called the **menstrual cycle**. It lasts about 28 days, but it can be slightly less or more than this. The cycle stops while a woman is pregnant. These are the main features of the menstrual cycle:



Fertilisation happens if the egg cell meets and joins with a sperm cell in the oviduct. The fertilised egg attaches to the lining of the uterus. The woman becomes pregnant, the lining of the uterus does not break down and menstruation does not happen.



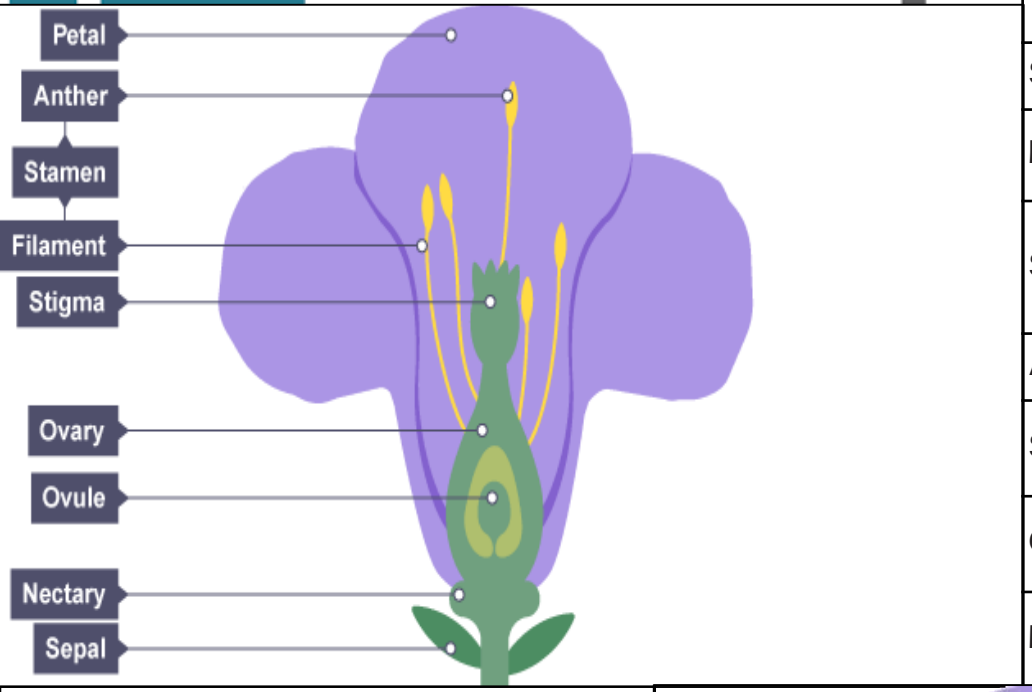
Fetal development and birth

The fertilised egg divides to form a ball of cells called an **embryo**. The embryo attaches to the lining of the uterus. It begins to develop into a **fetus** and finally into a baby.

The role of amniotic fluid, the placenta and the umbilical cord

CELLS AND REPRODUCTION 3

PLANT REPRODUCTION



Structure	Function
Sepals	Protect the unopened flower
Petals	May be brightly coloured to attract insects
Stamens	The male parts of the flower (each consists of an anther held up on a filament)
Anthers	Produce male sex cells (pollen grains)
Stigma	The top of the female part of the flower which collects pollen grains
Ovary	Produces the female sex cells (contained in the ovules)
Nectary	Produce a sugary solution called nectar, which attracts insects

Seed dispersal

The plant spreads the seeds out – this is called seed dispersal – so

their offspring don't compete with them for light or soil nutrients.

Seeds can be dispersed in many ways:

Animals – they eat the fruit and release the seeds in their waste

Wind – for example sycamore seeds

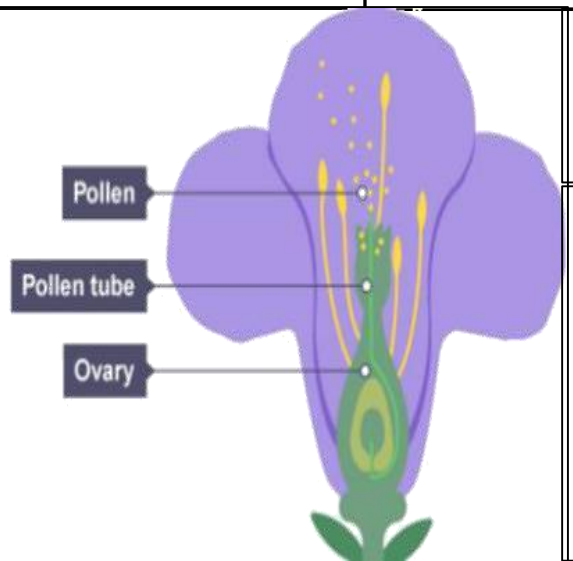
Water – for example coconuts

Pollination

Pollination is the transfer of pollen from the anthers of one flower to the stigma of another flower (of the same species).

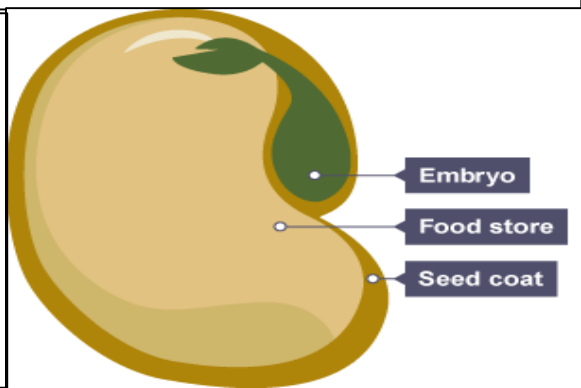
In wind pollination, the wind carries the pollen from the anthers of one flower to the stigma of another

In insect pollination, insects carry the pollen from anthers to stigmas. They go to flowers to get nectar for food (e.g. bees), and the pollen sticks to them so they carry it onwards



After fertilisation, the female parts of the flower develop into a fruit:
the ovules become seeds
the ovary wall becomes the rest of the fruit

Seeds
A seed has three main parts:
•embryo – the young root and shoot that will become the adult plant
•food store – starch for the young plant to use until it is able to carry out photosynthesis
•seed coat – a tough protective outer covering



FORCES

A force can be a **push or a pull**, for example when you open a door you can either push it or pull it. You can not see forces, you can only see what they do.

When a force is applied to an object it can lead to a change in the objects
Speed

Direction of movement

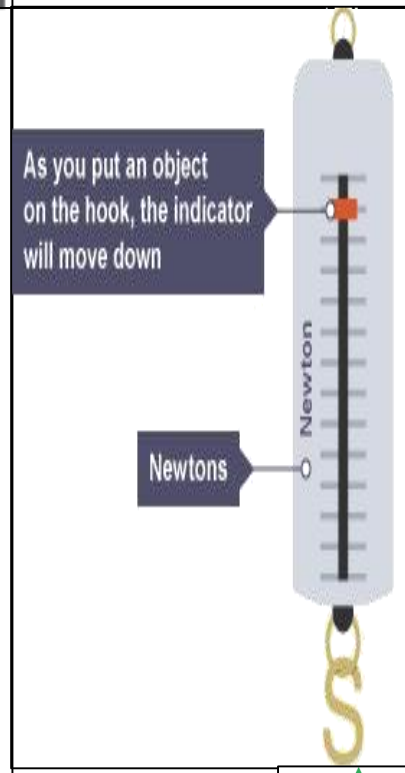
Shape (think about a rubber band)

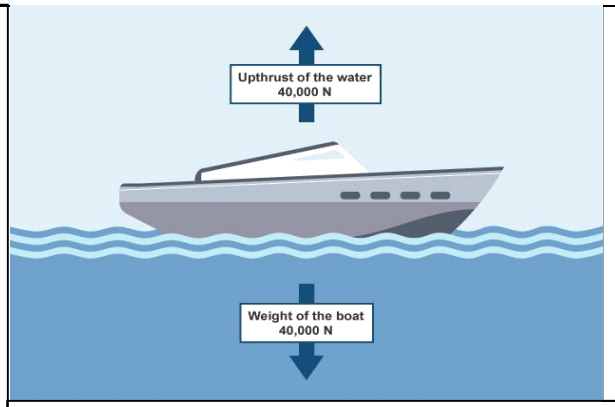
Forces can also be divided into 2 types, contact forces and non contact forces.

Contact forces for example friction, are caused when two objects are in contact.

Other forces for example gravity, are **non contact forces.** The two objects do not need to be in contact for the force to occur.

The unit of force is the **Newton (N)**, this is named after Sir Isaac Newton, who came up with many theories including those to do with gravity and the three laws of motion. We measure force using a piece of equipment called a Newton metre.





Force Diagrams

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If the forces on an object are unbalanced, this is what happens:
•a stationary object starts to move in the direction of the resultant force
•a moving object changes speed and/or direction in the direction of the resultant force
In the example below, the resultant force is the difference between the two forces:
100 – 60 = 40 **N** (to the right)

Balanced forces

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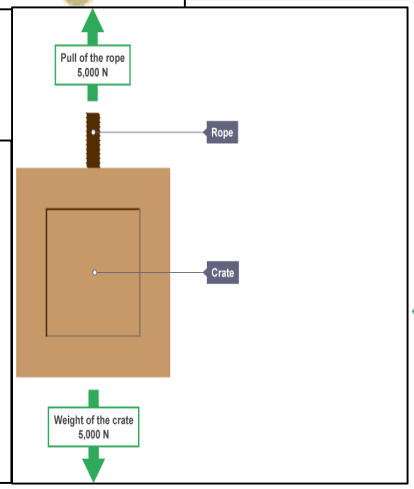
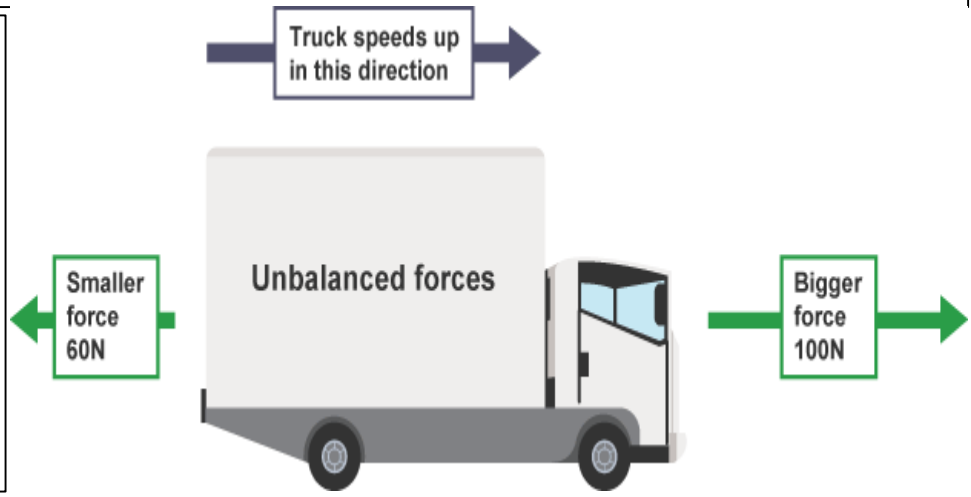
Remember that an object can be moving, even if there are no forces acting on it.



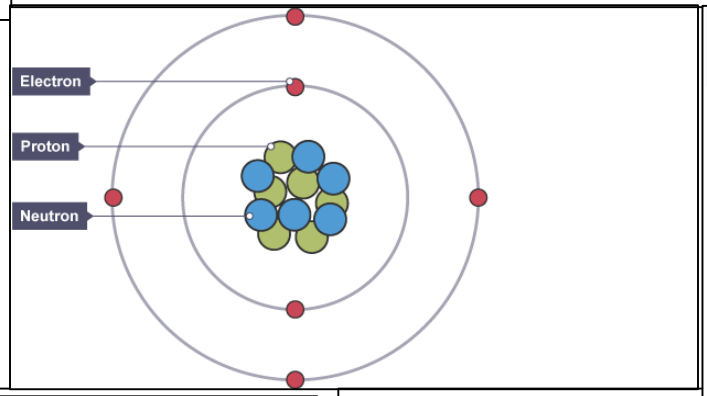


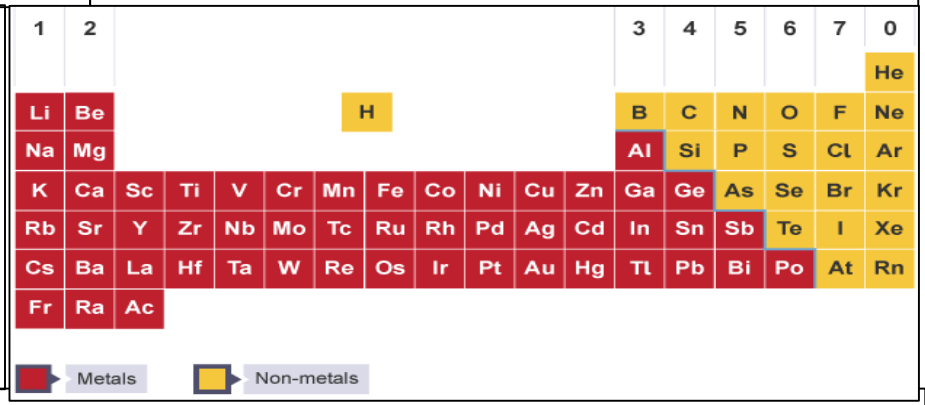
Mendeleev's beard 1

All the different elements are arranged in a chart called the periodic table. A Russian scientist called Dmitri Mendeleev produced one of the first practical periodic tables in the 19th century. The modern periodic table is based closely on the ideas he used:

Structure of the Atom

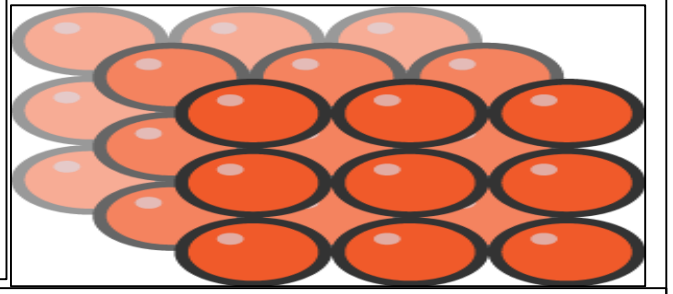
An atom is made up of three subatomic particles: protons, electrons and neutrons.
Protons and neutrons are found in the nucleus of the atom (in the centre).
Electrons are found orbiting the nucleus in shells (also known as *energy levels*).
Protons have a positive charge.
Electrons have a negative charge.
Neutrons have a no charge.





Atoms

Everything is made from atoms, including you. Atoms are tiny particles that are far too small to see, even with a microscope. If people were the same size as atoms, the entire population of the world would fit into a box about a thousandth of a millimetre across.



Chemical reactions

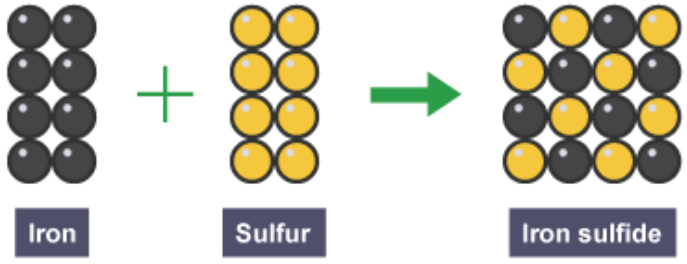
Atoms are rearranged in a chemical reaction. The substances that:
react together are called the reactants
are formed in the reaction are called the products
No atoms are created or destroyed in a chemical reaction. This means that the total mass of the reactants is the same as the total mass of the products. We say that **mass is conserved** in a chemical reaction.

Chemical equations

The changes in chemical reactions can be modelled using equations. In general, you write:
reactants → products
The reactants are shown on the left of the arrow, and the products are shown on the right of the arrow. Do not write an equals sign instead of an arrow. If there is more than one reactant or product, they are separated by a plus sign.

Word equations

A word equation shows the names of each substance involved in a reaction, and must not include any chemical symbols or formulae. For example:
iron + sulphur → iron sulphide
In this reaction, iron and sulphur are the reactants, and iron sulphide is the product.



Iron sulfide, the compound formed in the reaction, has different properties to the elements from what it is made.

Compounds

A compound is a substance that contains atoms of two or more different elements, and these atoms are chemically joined together. For example, water is a compound of hydrogen and oxygen. Each of its molecules contains two hydrogen atoms and one oxygen atom. There are very many different compounds.

Chemical reactions 2

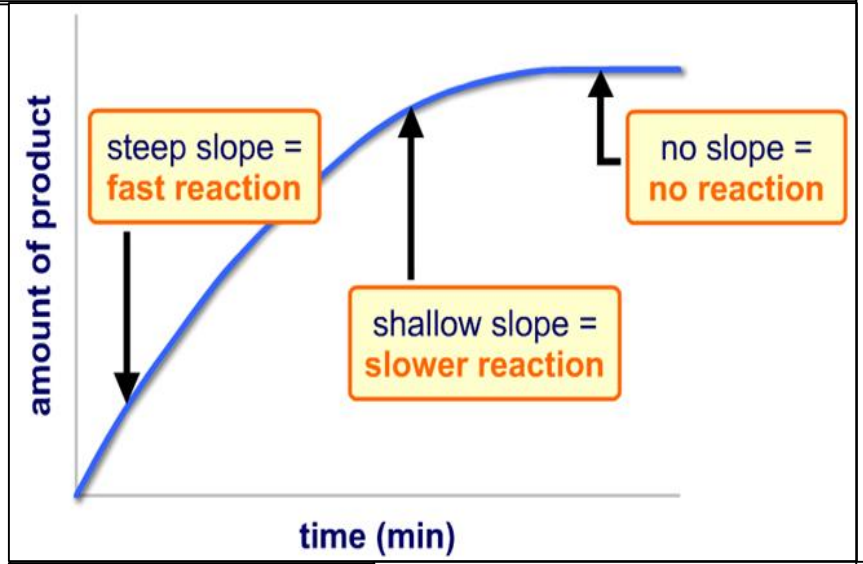
Chemical Reactions
Chemical reactions occur when particles collide with enough **ENERGY**. The minimum amount of energy particles need to react when colliding is called the **ACTIVATION ENERGY**.

Increasing temperature increases the **speed** of the particles (because they gain kinetic energy) so they **collide successfully more often** and **with more energy**. This increases the rate of reaction.

Increasing the pressure of gases brings the particles closer together so they **collide successfully more often**. This increases the rate of reaction.

Increasing the concentration of reactants increases the number of particles, so they **collide successfully more often**. This increases the rate of reaction.

Increasing the surface area of a **SOLID** (you cannot change the surface area of a liquid or gas) **increases the number of successful collisions**. This increases the rate of reaction.

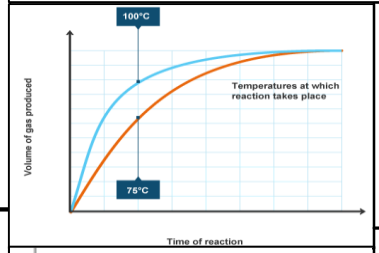


Collision Theory: chemical reactions occur when reactant particles **collide** with a certain amount of **energy**.

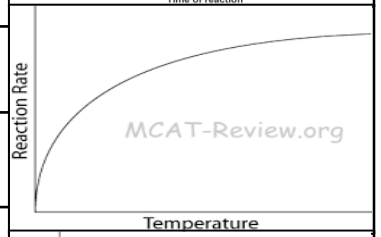
The rate of a reaction depends on two things:
the **frequency** of collisions between particles. The more often particles collide, the more likely they are to react.

the **energy** with which particles collide. If particles collide with less energy than the activation energy, they will not react.

Factors affecting the rate of reaction	
Temperature	The higher the temperature, the quicker the rate of reaction.
Concentration	The higher the concentration, the quicker the rate of reaction.
Surface area	The larger the surface area of a reactant solid, the quicker the rate of reaction.
Pressure (of gases)	When gases react, the higher the pressure upon them, the quicker the rate of reaction.

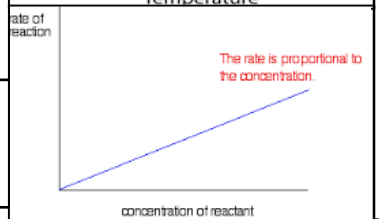


You may be presented with graphs like these ones.You need to be able to describe what they show. 'Describe' means say what you see. If numbers are given in the graph—quote them where appropriate.



As temperature increases so does rate of reaction. This means that reactions finish faster at higher temperatures, as the graph shows—the reactant is used up faster at 100oC, so it levels off sooner.

As temperature increases, rate of reaction increases very quickly.
As temperature continues to increase the rate of reaction increases more slowly.
Eventually the rate of reaction **levels-off**.



Rate of reaction and concentration are **directly proportional**—as one doubles, the other doubles

FORCES

A force can be a **push or a pull**, for example when you open a door you can either push it or pull it. You can not see forces, you can only see what they do.

When a force is applied to an object it can lead to a change in the objects
Speed

Direction of movement

Shape (think about a rubber band)

Forces can also be divided into 2 types, contact forces and non contact forces.

Contact forces for example friction, are caused when two objects are in contact.

Other forces for example gravity, are **non contact forces.** The two objects do not need to be in contact for the force to occur.

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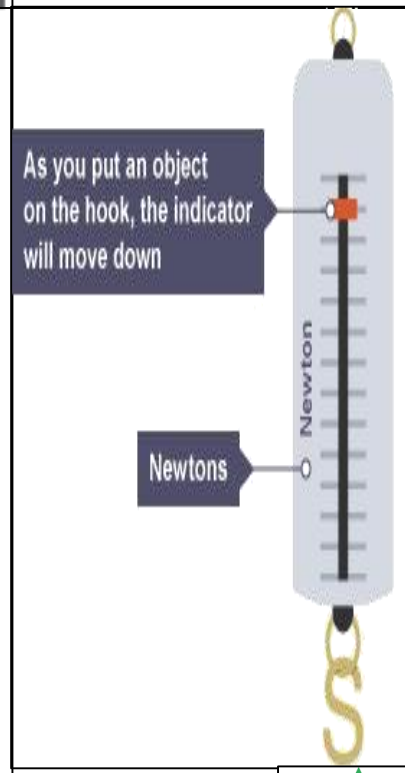

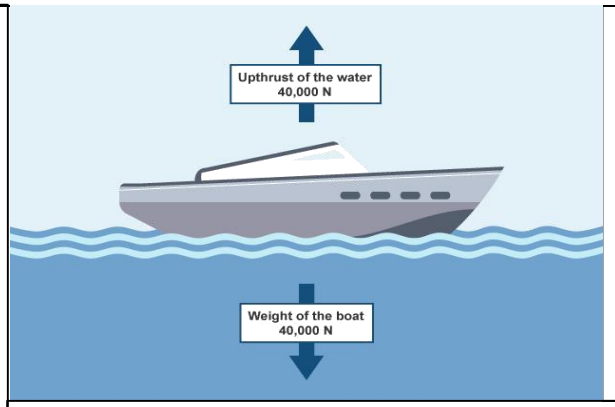

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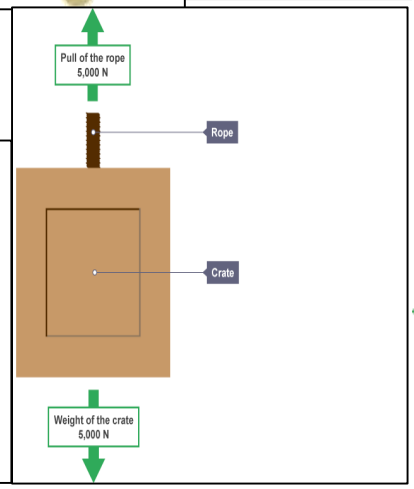
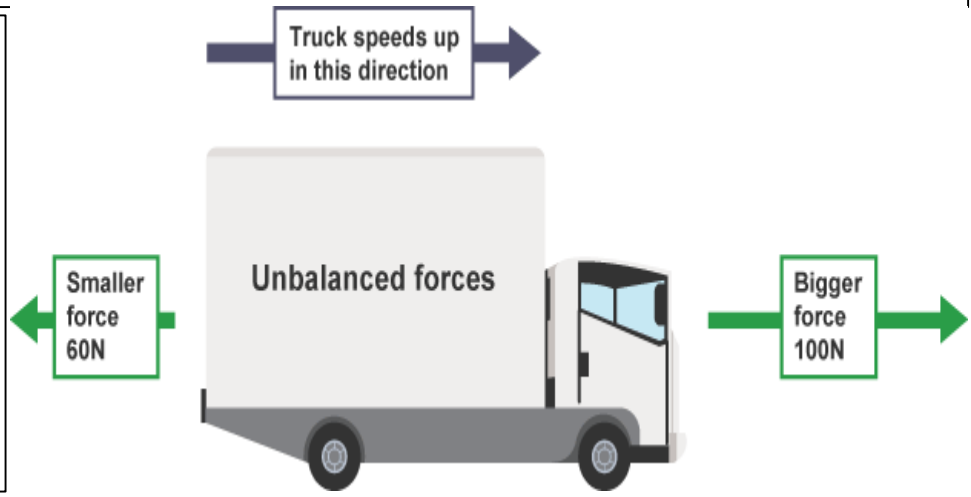




ENERGY

Key Terms	Definitions
Energy	Energy is a quantity that is stored in many objects and situations. Anything storing energy can do **work**.
Work	Work is done when energy changes from one store to another.
Potential energy	Potential energy is energy stored in objects that don't seem to be doing anything. See the examples.
Chemical potential energy	Energy stored in fuels (like wood, or the gas we run Bunsen burners on) is called chemical potential energy.
Elastic potential energy	Elastic objects, like springs or rubber bands, store elastic potential energy when they are stretched.
Gravitational potential energy	Any object that is not on the ground has gravitational potential energy. This is because they are lifted up in a gravitational field, and could fall down!
Kinetic energy	Movement energy. Any moving object stores kinetic energy.
Thermal energy	Also known as heat energy. All objects store some thermal energy, because the particles are moving. The higher the temperature of an object, the more thermal energy it stores.
Conservation of energy	The law that says energy cannot be created or destroyed. It can only change how it is stored.

Energy Transfer

Energy is transferred, so it changes store, in loads of situations. Examples to know:

- When a fuel is burned, the chemical potential energy in the fuel ends up stored as **thermal energy** in the surroundings;
- When an object falls off a shelf, the **gravitational potential energy** it stores is transferred (changed) to kinetic energy while it is falling.
- When the object hits the floor, all the gravitational potential energy it had to start with ends up stored as **thermal energy** in the surroundings.
- When a spring that's been stretched is released, the **elastic potential energy** it stored is transferred to kinetic energy then to thermal energy

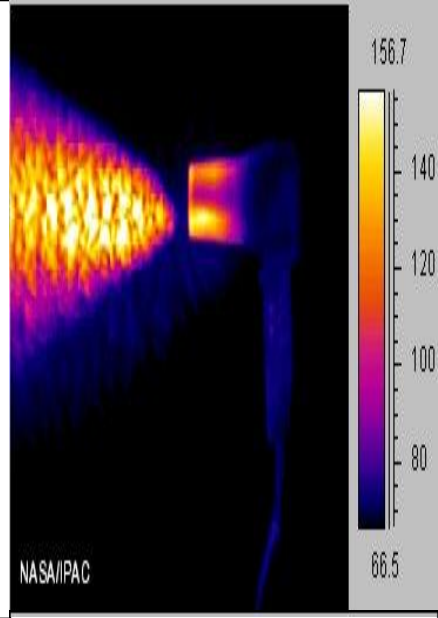
Energy Stores

Energy can be stored in objects, or when objects are doing something. It is a quantity measured in joules (J). Examples to know:

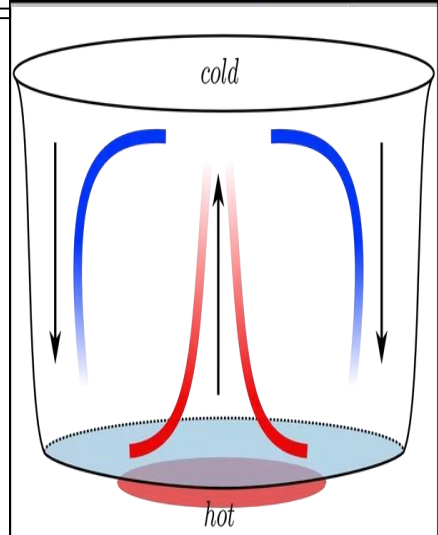
Energy is stored in fuels as **chemical potential energy**
Energy is stored in anything elastic when it is stretched, as **elastic potential energy**
Energy is stored in any object that has been lifted up, because the object stores **gravitational potential energy**
Energy is stored in moving objects as **kinetic energy**.
Energy is stored in any object as **heat energy**. (obviously, if it is cold, it doesn't store much heat energy!) This is also known as *thermal energy*.

Thermal energy transfer by radiation

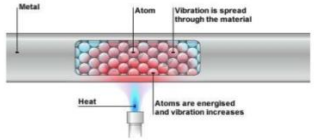
All objects give out some infra red radiation, but the hotter they are the more radiation they give out. All objects can also absorb infra red radiation: when they do, they heat up. Radiation can travel through empty space – so this is how the Sun heats up the Earth. The objects don't have to be touching, unlike in conduction, and there are no particles involved.



Convection
Heat can be transferred from one place to another by convection.
Fluids
Liquids and gases are fluids because they can be made to flow. The particles in these fluids can move from place to place.
Convection occurs when particles with a lot of heat energy in a liquid or gas move and take the place of particles with less heat energy.
Liquids and gases **expand** when they are heated.
This is because the particles in liquids and gases move faster when they are heated than they do when they are cold.



Conduction



Heat energy is conducted through the solid in this way. As the atoms of the solid gain kinetic energy the temperature of the solid increases.

Thermal energy transfer by conduction

Hot materials can transfer thermal energy to other materials that they are touching. This is called **conduction** of thermal energy. As the diagram shows, the particles that are heated increase in kinetic energy when they are heated. They bump into neighbouring particles and pass on (transfer) thermal energy. This is why a table feels warm after a hot cup of tea is lifted from it, and the reason why thermal energy can pass through the bottom of a saucepan to cook your dinner.

German

Module 3: Bleib gesund! (Stay healthy!)

Here is the vocabulary you will need for Stimmt 2, Module 3.
Remember to listen to the German by copying and pasting the blue codes next to the speaker icons here. The full address is: https://www.activeteachonline.com/view

Das Frühstück • Breakfast	
der/das Joghurt	*yoghurt*
der Käse	*cheese*
der Schinken	*ham*
der Speck	*bacon*
der Toast	*toast*
der Kaffee	*coffee*
der Tee	*tea*
der Orangensaft	*orange juice*
die Butter	*butter*
die Marmelade	*jam*
die Orangenmarmelade	*marmalade*
die Milch	*milk*
die heiße Schokolade	*hot chocolate*
das Brötchen	*roll*
das Obst	*fruit*
das Ei	*egg*
die Eier (pl)	*eggs*
die Frühstücksflocken (pl)	*cereal*

OFkDURoO

In this Module you will learn how to:

- talk about typical breakfasts
- discuss typical German food
- understand and use recipes
- talk about healthy lifestyles
- understand and respond to longer texts
- describe and compare dinner parties

www.textivate.com
Username: openacademy
Password: surname123
Go to 'my resources' to find your work.

Keep practising your German vocabulary on www.quizlet.com
• *Either*:
click on this link: https://quizlet.com/_8ievl8?x=1qqt&i=25q2il
• *Or*:
use your class link to go directly to your Quizlet class.

German

Was isst du zum Frühstück? • What do you eat for breakfast?

W8f15TTr

Ich esse einen Joghurt.	*I eat a yoghurt.*
ein Brötchen mit Butter und Marmelade	*a roll with butter and jam*
Ich esse kein Frühstück.	*I don't eat any breakfast.*
Max isst Toast mit Butter.	*Max eats toast with butter.*
Ellie und Sarah essen Eier.	*Ellie and Sarah eat eggs.*
Ich trinke einen Kaffee.	*I drink a coffee.*
eine Tasse Tee	*a cup of tea*
Das ist (un)gesund.	*That's (un)healthy.*
Das ist lecker/furchtbar.	*That's delicious/awful.*

Wie ist das? • What is it like?

St8YRTC7

süß	*sweet*
sauer	*sour*
salzig	*salty*
scharf	*spicy*
vegetarisch	*vegetarian*
lecker	*delicious*
ekelhaft	*disgusting*

Im Restaurant • In the restaurant

GUuUNYNp

Was nimmst du?	*What are you having?*
Ich nehme ...	*I'll take/I'm having ...*
den Fisch	*the fish*
die Gemüsesuppe	*the vegetable soup*
das Hähnchen	*the chicken*
die Nudeln	*the pasta*

Die Speisekarte • Menu

(der) Fisch mit Reis und Erbsen	*fish with rice and peas*
(der) Flammkuchen mit Sauerkraut	*Flammkuchen with pickled cabbage*
(die) Bratwurst mit Eiern	*fried sausage with eggs*
(die) Gemüsesuppe mit Brötchen	*vegetable soup with a roll*
(das) Hähnchen mit Pommes frites und Karotten	*chicken with chips and carrots*
(das) Schnitzel mit Kartoffeln	*pork fillet in breadcrumbs with potatoes*
(das) Steak mit Rösti	*steak with rösti potatoes/ hash browns*
(die) Käsespätzle mit Salat	*speciality cheesy pasta with salad*

Ein Rezept • A recipe

Nimm ...	*Take ...*
150 Milliliter Milch	*150 millilitres of milk*
50 Gramm Butter	*50 grams of butter*
eine Zwiebel	*an onion*
Schneide ...	*Cut ...*
Misch ...	*Mix ...*
Stell ...	*Put ...*
Erhitze ...	*Heat ...*
Rühre ...	*Stir ...*
Serviere ...	*Serve ...*

German

Mein Lieblingssandwich • My favourite sandwich

das Ketchup	*ketchup*
der Senf	*mustard*
der Thunfisch	*tuna fish*
die Erdnussbutter	*peanut butter*
die Gurke	*gherkin*
die Mayo	*mayonnaise*
die Olive	*olive*
die Sardelle	*sardine, anchovy*

Z9UWwwls

Gesund bleiben • Staying healthy

Man muss ...	*One/You/People must ...*
acht Stunden schlafen	*sleep for eight hours*
wenig Fett und Zucker essen	*eat little fat and sugar*
viel Obst und Gemüse essen	*eat lots of fruit and vegetables*
mehr Wasser trinken	*drink more water*
früh ins Bett gehen	*go to bed early*
drei Stunden trainieren	*exercise for three hours*
zweimal pro Woche joggen	*jog twice a week*

A4aW74jb

Oft benutzte Wörter • High-frequency words

normalerweise	*usually*
gestern	*yesterday*
bis	*until*
früh	*early*
spät	*late*
mehr	*more*
wenig	*little*
weniger	*less, fewer*
oft	*often*
besser	*better*
mein	*my*
dein	*your*
sein	*his*
ihr	*her*
mit	*with*
ohne	*without*
in	*in, into*
auf	*on, onto*

Strategie 3

Kognaten und falsche Freunde

Cognates and near-cognates are words that are spelled exactly the same or nearly the same as English words and have the same meaning in German. It is helpful to identify these as you can learn them quickly and easily. Look at the word lists on these pages and find all the cognates and near-cognates. You will find more than 20.

Watch out for ***falsche Freunde*** ('false friends'). These are tricky words that look like cognates but have a different meaning. What does ***Marmelade*** actually mean?

Read the Strategy Box for ideas about 'false friends'.

6zCKPmHE

HcgsBEKc

Die Mahlzeiten • Mealtimes

die Vorspeise	*the starter*
die Hauptspeise	*the main course*
die Nachspeise	*the dessert*

Knowledge Organiser: Year 9 Spring Term 1 Part 1 Computational Thinking and Algorithms

Summary

An **algorithm** is a plan, a logical step-by-step process for solving a problem. Algorithms are normally written as a **flowchart** or in **pseudocode**. The key to any problem-solving task is to guide your thought process. The most useful thing to do is keep asking 'What if we did it this way?' Exploring **different** ways of solving a problem can help to find the best way to solve it. When designing an algorithm, consider if there is more than one way of solving the problem.

When designing an algorithm there are two main areas to look at:

The **big picture** - What is the final goal?
The **individual stages** – What hurdles need to be overcome on the way to the goal?

Before an algorithm can be designed, it is important to check that the problem is completely understood. There are a number of basic things to know in order to really understand the problem:

What are the **inputs** into the problem? What will be the **outputs** of the problem?
In what order do **instructions** need to be carried out? What decisions need to be made in the problem? Are any areas of the problem repeated?

Key Vocabulary

Abstraction
The process of separating and filtering out ideas and specific details that are not needed in order to concentrate on those that are needed.

Algorithm
A diagram that shows a process, made up of boxes representing steps, decision, inputs and outputs.

Decomposition
The breaking down of a system into smaller parts that are easier to understand, program and maintain

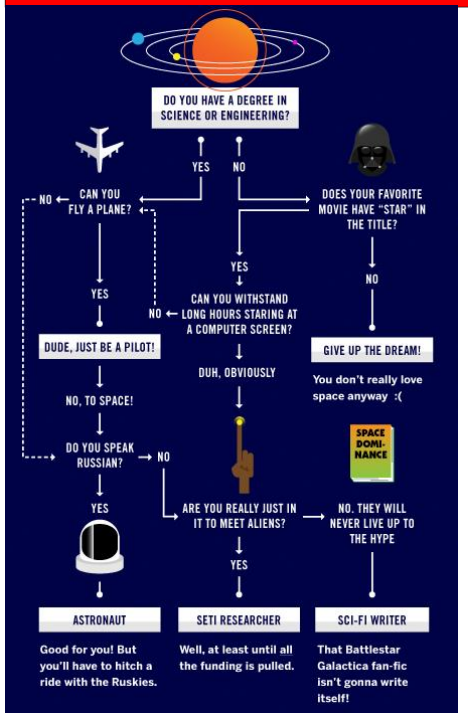
Pattern recognition
Finding similarities and patterns in order to solve complex problems more efficiently.

Program
Sequences of instructions for a computer

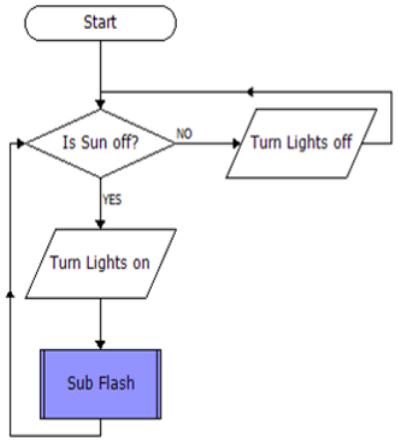
Programming
The process of writing computer software.

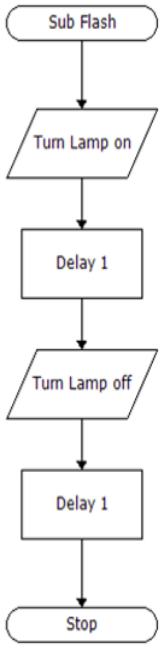
Subroutine
A set of instructions designed to perform a frequently used operation within a program

Flowchart—and subroutines



Algorithm





PseudoCode—uses structured English

INPUT – indicates a user will be inputting something
OUTPUT – indicates that an output will appear on the screen
WHILE – a **loop** (**iteration** that has a **condition** at the beginning)

FOR – a counting loop (iteration)
REPEAT – UNTIL – a loop (iteration) that has a condition at the end#

IF – THEN – ELSE – a decision (**selection**) in which a choice is made

Any instructions that occur inside a selection or iteration are usually indented

http://bit.ly/33QDxv3

Year 9 RS: How do Muslims interact with culture and society?

Key words	
Allah	The God in Islam
Quran	The Holy book in Islam
Mosque	The place of worship in Islam
Muhammad	The last prophet in Islam
Irham	The set of white clothing that all Muslims wear whilst on Hajj
Tawaf	Walking 7 times in an anti-clockwise direction around the Kaaba in Mecca.
Mecca	The holy city in Saudi Arabia.
Eid ul Fitr	A celebration or festival that occurs at the end of Ramadan.
Ramadan	A holy month of fasting and prayer.

The 5 Pillars of Islam.

- Muslims take an oath to only worship Allah and that they believe that Muhammad is the messenger of Allah.
- Muslims pray 5 times a day.
- Muslims give charity (Zakat) to the poor.
- Muslims fast during the month of Ramadan.
- Hajj is the pilgrimage to Makkah.

Muslims are monotheistic and worship one, all-knowing God, who in Arabic is known as Allah. Followers of Islam aim to live a life of complete submission to Allah. They believe that nothing can happen without Allah's permission, but humans have free will.

The Shahadah (1ST Pillar)

The Shahadah is the first pillar of Islam It is the belief that there is only one God and that Muhammad is His messenger. The Shahadah is the Muslim declaration of faith in Allah. It is the pillar on which all the other pillars are based. Muslims will say the Shahadah many times during their lives. In particular they will:

- Repeat it many times each day Whisper it into the ear of their new-born baby.

- Teach it to their children as soon as they are old enough to learn it. Hope that it will be the last words to cross their lips before they die.

There is no God but Allah and Muhammad is the messenger of Allah.'

Salah (2nd Pillar) Salah is the second pillar of Islam, 'Salah' means 'prayer' in Arabic. It is every Muslim's duty to pray to Allah five times a day.

Muslims often stand shoulder to shoulder when praying as a sign of the equality of humans before Allah.

Salah does not have to take place in a Mosque. It can be carried out in any public place as long as:

begins with washing (called wudu). This is a special kind of washing. The place is clean. Muslims use a prayer mat to make sure of this. All prayer mats have a directional arch on them, which is pointed to Makkah.

Hajj (5th Pillar)

Hajj is the fifth pillar of Islam. It is a journey to Makkah to take part in a very special ceremony which lasts three to five days.

Every adult Muslim should go on Hajj at least once in their life. Some Muslims save for many years to be able to afford to go.

Hajj shows that everyone is equal in the eyes of Allah. Everyone wears the same clothes and does the same things.

The Ka'aba is a special building that stands in the centre of Mecca. Thousands of Muslims walking around the Ka'aba at the same time. The walk around it in an anti-clockwise direction, seven times.

Hajj takes place every year during the month of Ramadan. Pilgrims travel to the city of Makkah from all over the world.

Hajj promotes equality and fellowship amongst Muslims. It creates a sense of belonging and brotherhood amongst them.

They are given special titles after they return from Hajj. A man is called a Hajji and a woman is called a Hajja.

Zakah (3rd Pillar)

Zakah is the third pillar of Islam. It means charity. It is the amount of money that every Muslim who is financially able must pay to support people who are poor and needy. Zakah should be given once a year, and should be paid to a mosque or to Zakah organisations such as Islamic relief or Muslim Hands. Every Muslim must give 2.5% of their surplus money to Zakah. Zakah money helps people less fortunate than those who give it. Paying Zakah is a test of honesty– a Muslim cannot live happily with himself if he does not pay Zakah.

Sawm (4th Pillar)

Sawm is the fourth pillar of Islam. It means fasting. When fasting, Muslims do not eat or drink anything. Muslims practice Sawm by fasting every year in the month of Ramadan. During Ramadan, Muslims fast from until sunset.

By practicing Sawm, a Muslim develops sympathy for suffering. It also demonstrates discipline and obedience to Allah

Muslims do not have to fast if they are under 12, too old, pregnant, breastfeeding, travelling or sick. At the end of each day the family gets together to break their fast as a group. They eat dates and drink water before anything else each night because this is what Muhammad recommended. During Ramadan, Muslims who are fasting will eat a large meal, before the sun rises (dawn) in order to set themselves up for a day without food and water.

Year 9 Spring 1 'Zero waste' project

Zero Waste

Zero Waste is a philosophy and design framework that promotes not only reuse, recycling, and conservation programs, but also, and more importantly, emphasizes sustainability by considering the entire life-cycle of products, processes, and systems

Zero waste products and shops

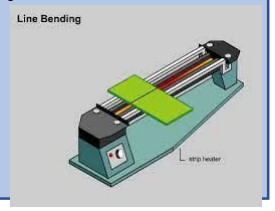
Check out this 'zero waste' companies
https://www.thezerowastecompany.com/
http://www.ethicalernie.co.uk/

Model making

Your design brief for this project is to design and make a mobile phone holder using one piece of coloured acrylic, producing no waste. You will all be given the same size piece of acrylic. You will be able to bend your acrylic using a line bender and it will be cut on the laser cutter.

To start you off we will be giving you cardboard to try out your ideas. You used model making when you made your CAM toy. Why do you think model making will be important for this project?

Line bending acrylic.
https://www.youtube.com/watch?v=-s1d4xy6uiw watch this video to show you how to use a line bender



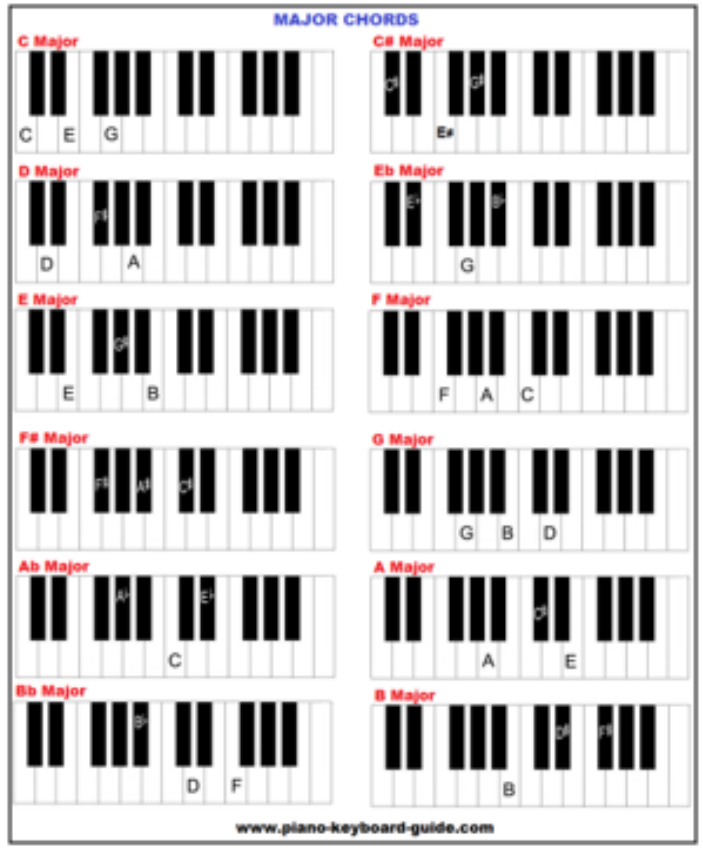
Zero waste Furniture

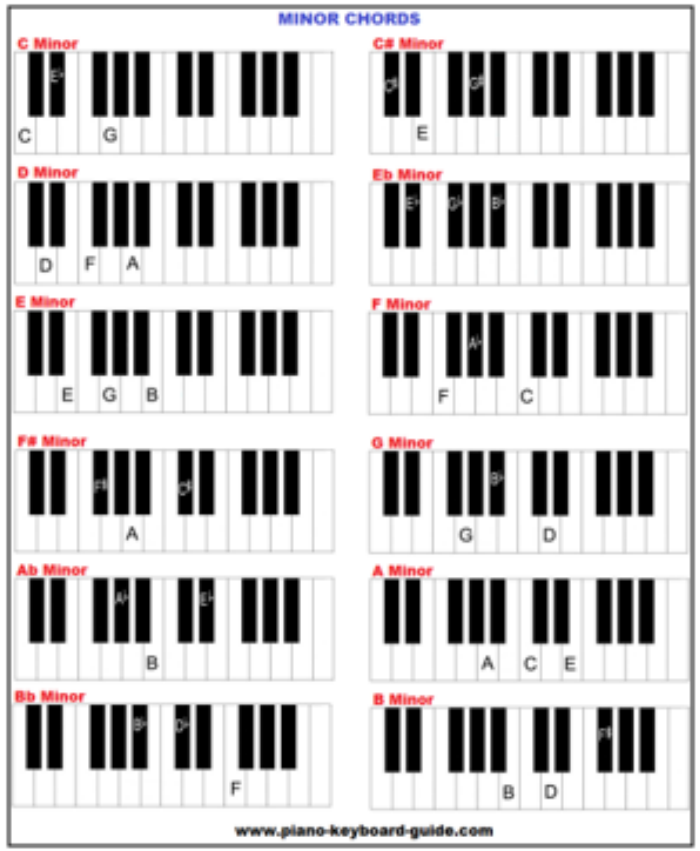
Go to this website to see how one piece of wood makes this chair, with no leftover wood
https://www.homecrux.com/ken-landauer-zero-waste-furniture/129561/

Examples of acrylic phone holders.
How will you design yours?
What does it have to do?
What size doe sit need to be?

Year 9 Spring Term Knowledge Organiser

Chord – 2 or more notes played at the same time
Semitone – the shortest distance between 2 notes
Tone – equal to 2 semitones
Major tonality – happy, brighter sounding music based on a specific set of notes in a scale
Minor tonality – sad, darker sounding music based on a specific set of notes in a a scale





AQA

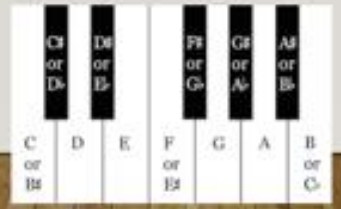
WORKING THEM OUT!!!

Key Signatures with Sharps (#)

To work out what the key is for Key Signatures with Sharps (#) in them, look at the last Sharp and move a semitone up!

C# + one step up = D

The Key is D Major

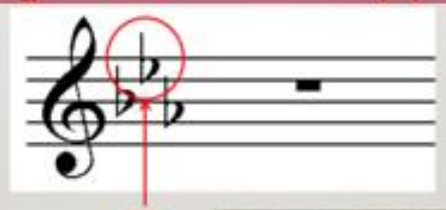


AQA

WORKING THEM OUT!!!

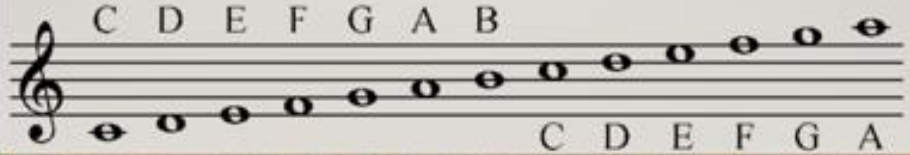
Key Signatures with Flats (*b*)

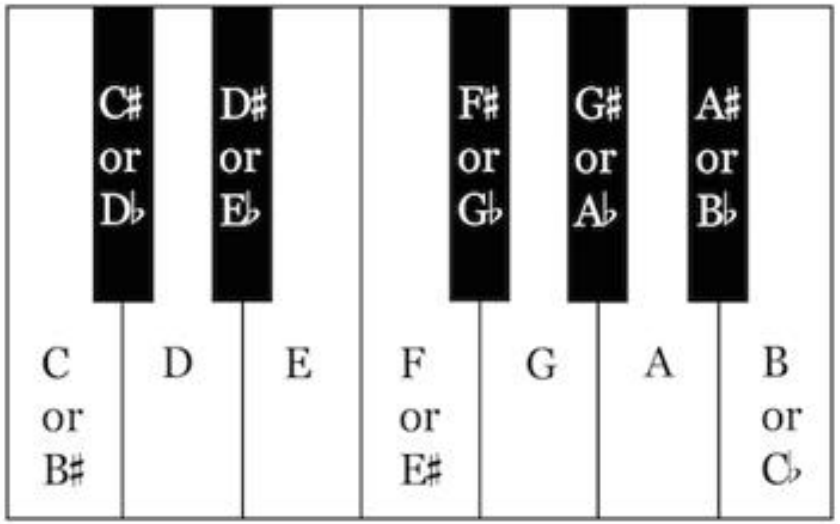
To work out what the key is for Key Signatures with Flats (*b*) in them, look at the "second to last flat!" This will be the key!



E*b*

The Key is E*b* Major





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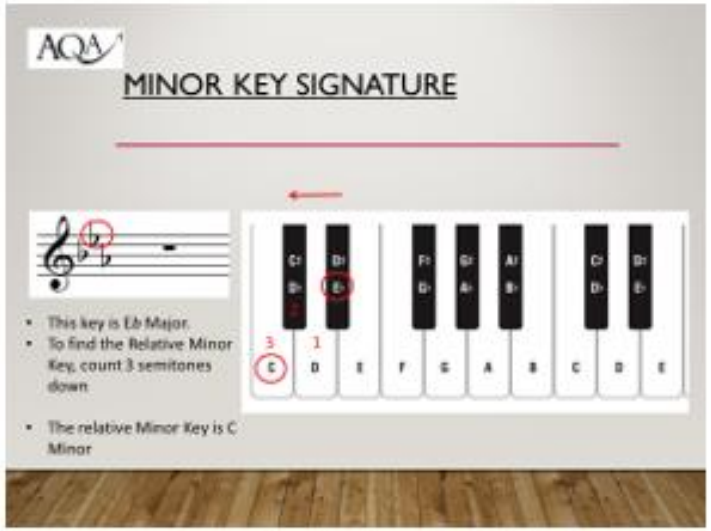
MINOR KEY SIGNATURE



- This key is E*b* Major.
- To find the Relative Minor Key, count 3 semitones down
- The relative Minor Key is C Minor

Using your knowledge of key signatures, tonalites and semitones/tones, see if you can work out the names of these key signatures – watch out for sharps and flats, major or minor!

_____ Major

_____ Minor

_____ Major

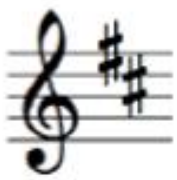
_____ Minor

_____ Major

_____ Minor

_____ Major

_____ Minor



_____ Major

_____ Minor

_____ Major

_____ Minor

_____ Major

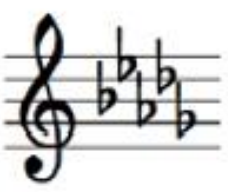
_____ Minor

_____ Major

_____ Minor

_____ Major

_____ Minor



_____ Major

_____ Minor

_____ Major

_____ Minor

_____ Major

_____ Minor

_____ Major

_____ Minor

Year 9 Knowledge Organiser – Physical Education (Spring 1)

Principles of training

F **Frequency – How often you train**

I **Intensity – How hard you train**

T **Time – How long you train**

T **Type – How specific your training is**

Think back to a sport you have played and consider the training you would need to complete in order to perform to your best. The FITT principle ensures you are working at a level that will challenge you. If you are not working hard enough, your body will not adapt and your fitness will not improve.

An example of the FITT principle in action….

Katarina Johnson-Thompson is a Team GB athlete and competes in the Heptathlon.

Katarina has begun circuit training to improve her fitness to be able to compete in her seven different events. After 2 weeks, she feels her sessions should last longer. **Which principle is this focusing on?**

After one month, Katarina increases the number of sessions she takes part in. **The amount of sessions over a period of time is known as what?**

Katarina is now benefiting from her circuit training but is now looking to add more variation to her sessions. **Which principle would she be using if she wanted to change the training programme?**

One year before the next Olympic games, Katarina needs to step up her training programme. **Name the component of the FITT principle she would use to increase the difficulty of the training.**

Exercise intensity: The Borg scale

(RPE – Rating of Perceived Exertion)

RPE	Intensity
6	No exertion
7	
8	
9	
10	
11	Light exertion
12	
13	Somewhat hard
14	
15	Hard (Heavy)
16	
17	Very Hard
18	
19	
20	Maximal Exertion

This scale measures how hard performers think they are working. It can also be used to measure Heart Rate and training zones.

(RPE x 10 = Heart Rate)

Scan this QR code to find out more about the FITT principle and other principles of training. What does it teach us? What can we learn and does it help us when we are preparing and playing sport?

Create a 2 week training programme using the FITT principle.

Consider the Frequency, Intensity, Time and Type. Use the template to design your plan below.

Day	Activity	Time
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		
Sunday		
Monday		
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		
Sunday		

Things to consider

Think about the training for different sports and consider the sporting activities it would require. Consider, football, badminton, rugby, netball, gymnastics and athletics. **When would you require each FITT principle of training?**

Now consider the additional principles of training. Use a search engine to discover what the additional principles of training are. **Can you explain how training could use the FITT or additional principles of training?**

Meaning can be communicated both physically and vocally. The following are skills used by actors to interpret and communicate characters' personality and intention.

- **Body Language** – Showing what you feel by the way you stand.
- **Gesture** – how you communicate with your hands and/or arms.
- **Facial expression** – showing what you feel on your face.
- **Voice tone** – the emotion that you are putting into your voice. E.g an angry tone of voice.
- **Emphasis** – where you stress certain words to show meaning.
- **Pitch** – how high or low you are speaking.
- **Pace** – how fast or slow you are speaking.
- **Pause** – Allowing breaks in the speaking
- **Accent** – changing the way you speak to show where you are from.

YEAR 9 DRAMA - INTERPRETING A TEXT

Interpreting a text means taking the words or script written by someone else and find a way of bringing that play to life, some people call it from page to stage.

Exercises which might help you understand a character from a play you are exploring may include:

The given circumstances – Using the ideas of Constantin Stanislavski, think about **who** the characters are, **where** the play is set, **when** the play is set, **what** has just happened, **why** the characters are there.

Stage business – thinking about what your character is doing on stage to make the performance more realistic and believable.

Subtext - Dramatic characters as well as *real* people often say one thing but mean another. Their meaning can be very different to the spoken words so that a sarcastic tone and a change of inflection can subvert the surface meaning of the words:

What do you know about the United Kingdom of Great Britain and Northern Ireland?

Name and flag	Patron Saint	National Flower(s)	National Animal(s)	Coat of Arms	Motto	Anthem plus de facto /alternate
United Kingdom 	United Kingdom does not have a patron saint or flower. It does have Britannia as the embodiment of the nation. 		Lion  Bull dog 	Royal coat of arms of the United Kingdom 	Dieu et mon droit meaning "God and my right" The motto is said to have first been used by Richard I (1157–1199) as a battle cry and presumed to be a reference to his French ancestry (indeed he spoke French and Occitan but knew only basic English) It was adopted as the royal motto of England by King Henry V (1386–1422)	"God Save the Queen" King replaces Queen when a male is on the throne.
England 	St George	Tudor Rose 	Lion 			God Save the Queen / Jerusalem
Scotland 	St Andrew	Thistle 	Unicorn 		*In Defens* (Scots) "In Defence"	God save the Queen / flower of Scotland
Wales 	St David	Leek or daffodil  	Red Dragon 		*Cymru am byth* (Welsh) "Wales forever"	"Hen Wlad Fy Nhadau“ (Welsh) "Land of my Fathers"
Northern Ireland (currently no flag Ulster banner removed 1973)	St Patrick 	Flax or Shamrock 	None	Many disagree with it as the body that created it is defunct.	 *Quis separabit?* "Who will separate us?"	Londonderry Air