Name:	 	 	

Tutor Group:



Year 8 Knowledge Organiser Term 3





(1) Poetic Vocabulary

Form: The type of poem.

Examples: A dramatic monologue is a poem written from the point of view of one person. A sonnet is a 14 line poem which includes a regular rhyme scheme and is usually about love.

Stanza: A verse or unit within the poem (like a paragraph).

Rhyme: Where words used at the end of lines of poetry sound very similar to each other.

Couplets: Pairs of rhyming lines that often link together.

Blank verse: Poetry written with unrhymed lines.

Enjambment: When a sentence or idea continues onto the next line or stanza.

Caesura: A dramatic pause in the middle of a line of poetry created by punctuation such as a full stop.

(2) Common Methods 1

Simile: A comparison that is not literal. Uses like or as. *Examples: As hot as the sun. Fast like lightning.*

Rhetorical questions: Asking a question that does not require an answer. *Examples: How would you feel? What is he doing?*

Alliteration: Beginning more than one word with the same sound. *Examples: Seven swans are swimming.*

Triplets: Three consecutive words used in the form of a list. *Examples: Fox hunting is cruel, heartless and unnecessary.*

Repetition: Repeating something that has already been written. *Examples: Why? Why would she say that?*

Onomatopoeia: Words that imitate the sound they are describing. *Examples: hiss, boom, bang, echo.*

(3) Pronouns and Perspective

Pronouns: Words used to replace a noun or proper noun. *Examples: I, he, she, we, they, our, you, them, their.*

There are three types of pronoun:

1st person: Referring to yourself or a group that you are in and is used to show personal experience.

Example: I walked down the road. We are going to the park.

2nd **person**: Addresses someone directly, the person you are talking to.

Example: You will really enjoy the ride.

3rd **person:** Written about another person. *Example: He glided elegantly down the road.*

Perspective: Texts are often written from a certain point of view. You can identify the pronouns to help you understand the perspective.

(4) Verb Types

Modal verbs: Words that give an indication of possibility, necessity or permission. Can, may, might, could, should, would, will, must.

Examples:

<u>Can</u> I go to the park? (Permission)
I <u>might</u> go the cinema this weekend. (Possibility)
You <u>should</u> wear a seat belt in the car. (Necessity)

Imperative verbs: words that are commands.

Examples:

<u>Stop</u> running!

<u>Go</u> to bed.

Pick up your pen.

(5) Common Methods 2

Hypophora: When you ask a question and then immediately answer it yourself.

Example: Do you want to succeed? Of course you do!

Personification: A type of metaphor which gives human actions to non-human things.

Example: The tree waved its arms in the wind.

Anaphora: Repeating the same word or phrase at the start of consecutive sentences.

Example: Imagine a world where... Imagine if you... Imagine...

Pathetic fallacy: The use of the weather or nature to indicate a mood or to foreshadow a future event.

Example: A thunder storm might reflect a character's anger.

Sibilance: The repetition of the "S" sound in consecutive words. A type of alliteration.

Example: The snake silently slithered towards its prey.

(6) — and ...

Dash (—): Used to add extra information at the end of a sentence. A dash is a mid sentence punctuation and does not need a capital letter after it.

Example: Please call my mum — she's at home.

Ellipsis (...): Used to show a pause, hesitation or interruption in speech. An ellipsis can also be used to indicate missing words from a quotation to shorten it.

Examples: "I'm... I'm pleasantly surprised." 'The house was large, red, brick...and built over 100 years ago.'

An ellipsis can also be used to leave a cliffhanger at the end of a sentence or text.

Example: Suddenly, it was gone...



Revise the content in each box every week. Then, complete your homework on Educake. www.educake.co.uk

Year 8

Term 3





(1) Key Terms

Variable: An unknown value that is usually represented by a letter.

Like-Terms: Terms with the same variable and power.

Substitute: Replace a variable with a numerical value.

Equivalent: Something of equal value.

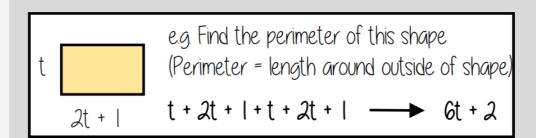
Coefficient: A number used to multiply a variable (usually a letter).

Inequality: Something that compares values showing if one is greater than or less than another.

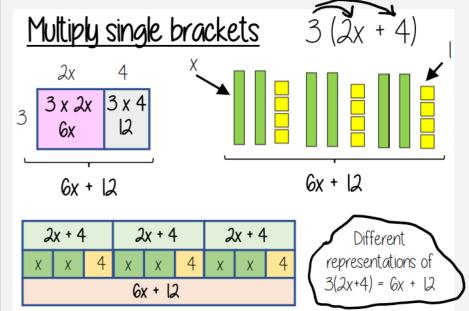
(2) Form Expressions

For an unknown value a letter is normally used:

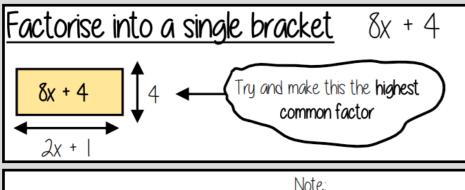
You can simplify expressions by collecting Like-Terms:

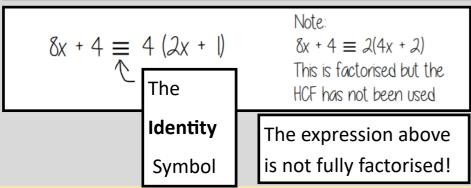


(3) Expand Single Brackets



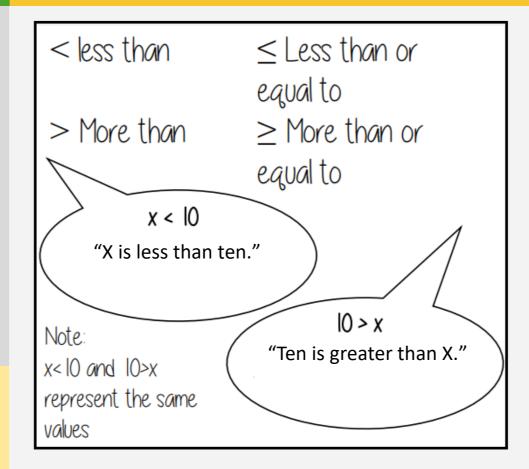
(4) Factorise Single Brackets



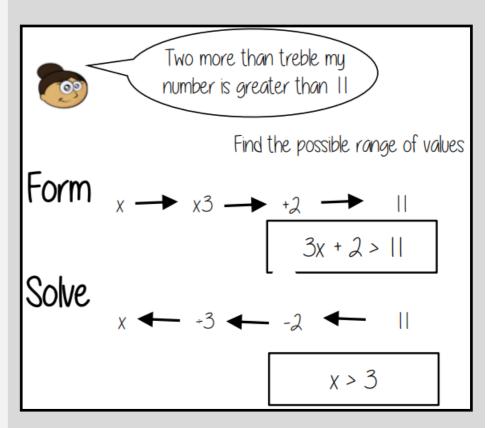




(5) Inequalities



(6) Form and Solve Inequalities



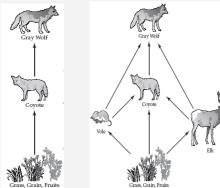




(1) Biology—Food Chains & Webs

Food Web

Food Chain



The arrows show the direction of energy transfer.

Food Chain—Shows the transfer of energy through different trophic levels.

Food webs— Shows the interaction of different food chains in an ecosystem.

Trophic Level—A level in a food chain

Producer—An organism that produces its own food (plant.)

Primary consumer—An organism that eats a producer.

Secondary consumer—An organism that eats a primary consumer.

Tertiary consumer—An organism that eats a secondary consumer.

(3) Chemistry—Key Vocabulary

Reactive—Easily takes part in chemical reactions.

Unreactive—Does not easily take part in chemical reactions.

Reactivity series—A list of elements in order of reactivity from most reactive to least reactive.

Displacement reaction—When a more reactive element takes the place of a less reactive element in a compound.

E.g. Copper Chloride + Sodium -> Sodium Chloride + Copper

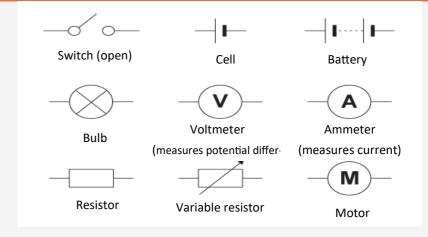
Ceramics—Solid, tough materials made by baking clay in a hot oven or kiln e.g. bricks and pottery.

Polymers—A long chained molecule made from monomers e.g. plastics.

Composites—Made from two or more different types of materials e.g. MDF, fibreglass and nylon.

Recycling—Converting waste materials into usable products.

(5) Physics—Circuits



Key Vocabulary:

Potential difference (V) - Difference in energy between two points in a circuit.

Resistance (Ω) - Difficulty of current flow.

Current (A) - Rate of flow of electric charge.

(2) Biology—Other Key Vocabulary

Carnivore—An organism that only eats animals.

Herbivore—An organism that only eats plants.

Omnivore—An organism that eats both plants and animals.

Predator—An animal that hunts, kills and eats other animals for food.

Prey—Organisms that predators kill for food.

Interdependence—When one organism depends on another organism for survival.

Ecosystem Where organisms interact with their physical surroundings.

Habitat—Where an organism lives.

Population—The number of one species of organism.

Community—All of the different species in an area.

(4) Chemistry—The Reactivity Series & Metal Reactions

potassium most reactive K sodium Na calcium Ca magnesium Mg aluminium carbon zinc Zn iron Fe tin Sn lead hydrogen Cu copper silver Ag gold platinum least reactive Pt

- Metals less reactive than carbon can be extracted from their ores by heating them with carbon.
- Metal extraction from an ore can be very expensive, sometimes this means it's not done.

Au ast reactive Pt

Metal Extraction

Metal Oxide + Carbon —> Carbon dioxide + Metal

Copper Oxide + Carbon —> Carbon dioxide + Copper

Metal and Acid Reactions

Metal + Acid —> Salt + Hydrogen

Copper + Hydrochloric Acid —> Copper Chloride + Hydrogen

(6) Physics—Series and Parallel Circuits

Series Circuit	Parallel Circuit	
Current is the same at all points in the circuit.	Current is shared across the branches.	
Potential difference is shared between components.	Potential difference is the same at all points in the circuit.	

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Trinity TV > Year 8> Science

Year 8 Term 3





(1) Keywords Risk The likelihood of a hazard causing danger. A natural event that can cause loss of life, **Natural Hazard** damage to property, and can disturb human activity e.g. earthquake. A human caused situation that can cause loss of Man-Made Hazard life, damage to property and can disturb human activity, e.g. crime. The shaking of the surface of the Earth caused by **Earthquakes** the movement of tectonic plates. A rotating storm with strong winds and heavy Hurricanes Criminal activities that are planned and **Organised Crime** controlled by powerful groups and carried out on a large scale. **Coastal Erosion** The wearing away of the coast land by the sea.

(2) Where is North America?

North America is a continent with 23 countries.

To the north lies the Arctic Ocean, to the east lies the Atlantic Ocean and to the west lies the Pacific Ocean.

It is the third largest continent, after Asia and Africa.

Nearly 600 million people live here.



(3) How does the Earth create risk?

Earthquakes are caused by:

- Tectonic plates move due to the movement of material in the Earth's mantle.
- Plates move in three different directions.
- Plates can move apart and towards each other, this movement causes some plates to snag past each other side by side at different locations around the world.
- This side by side movement is a conservative plate margin.
- As plates move past each other, friction is built up which eventually releases as energy—causing an earthquake.

Earthquakes can cause damage to buildings and other infrastructure—often leading to death and injury, especially in built up areas (like cities).

(4) How does the ocean create risk?

Coastal erosion happens when:

- Waves can be very powerful and destructive.
- Especially when they have travelled a long distance.
- Softer rock at the coast erodes quicker.
- There are two main types of erosion at the coast: hydraulic action and abrasion.

Coastal erosion causes the land to be lost to the sea over time. This causes damage to property, loss of infrastructure and even risk to life.

(5) How does the atmosphere create risk?

Hurricanes are caused when:

- Ocean temperatures are at least 27°c.
- Coriolis effect spinning the Earth.
- A cluster of thunderstorms.
- Latitude is 5° to 30° north or south of the Equator.
- Low wind shear.
- Ocean depths above 50m.

Hurricanes bring with them strong winds, heavy rainfall and storm surges.

Hurricanes damage property, destroy infrastructure and sometimes death and injury.

(6) How do humans create risk?

Organised crime happens when:

- Powerful groups carry out crime on a large scale.
- This can include criminal activity such as the illegal movement of drugs internationally.

Organised crime can have severe social and economic effects such as:

- Fear and intimidation of anyone who stands in its way.
- Mobilisation of police forces on a large scale.
- Violence in areas where criminal activity is taking place—sometimes including innocent civilians.
- Drug related health problems.



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Trinity TV > Year 8 > Geography

Term 3: What was life like in Hitler's Germany?







(1) Introduction and Propaganda

- When Hitler came to power, Germany went from being a democracy to a dictatorship.
- Hitler used propaganda to gain support for himself from German people.
- Joseph Goebbels was the Nazi Minister for Propaganda between 1933 and 1945.

Propaganda	Information used to promote a political viewpoint.	
Dictatorship	A country governed by a dictator. This often means lack of political freedom.	
January 1933	Hitler becomes Chancellor of Germany.	

(2) Life for children

- The Hitler Youth was set up to teach German boys to have absolute loyalty to Hitler and the ideas of the Nazi Party. They were also taught military values.
- The League of German Maidens was set up to teach German girls how to be good mothers and housewives.

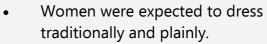
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1926	The Hitler Youth is formed.
1936	Hitler Youth clubs become compulsory.

(3) Life for women

Year 8

- Hitler and the Nazi party believed that women had three main roles: To have Children, go to Church, and look after the home.
- These can be remembered as the **Three K's:**
 - Kinder = Children
 - **Kirche= Church**
 - Kucher= Kitchen



They were expected to have children to help repopulate the German nation. Women were awarded the Mother's Cross for having over 4 children.



Lebensborn

A system to encourage women to have more children.

Life for workers

- Hitler was popular with German workers because he promised 'Bread and Work'.
- He wanted Germany to be self-sufficient, so wanted his workers to work hard.
- To achieve this he provided leisure time for workers through Strength through Joy programme. Workers could go on holidays and apply for a free VW Beetle car.



(5) Opposition to Hitler and the Nazi Party

- **Edelweiss Pirates** were a group of teenagers who opposed the Hitler Youth.
- White Rose Group was led by Hanz and Sophie Scholl. University students who opposed the Nazi party.
- Religious opposition members of the Church such as Martin **Niemoller** opposed the Nazi's treatment of the Church.
- Freddie Overgsteen joined a resistance group against the Nazi occupation of the Netherlands.

Opposition to Hitler and the Nazi party was dealt with using terror. For example:

- Execution.
- Concentration Camps.
- The Gestapo.

The Gestapo

A group who monitored, investigated and removed any opposition to Hitler and the Nazi Party.

(6) Life for minority groups

- Hitler and the Nazi party believed that some people in Germany were not in fact German, he believed this about groups such as; Jewish People, Black people and Roma Gypsy people.
- Hitler and the Nazi party believed that disabilities could be passed onto different generations, so sterilised people with disabilities during the T4 Programme.
- Homosexual people were sent to concentration camps.

Minority Group	A group in society that does not make up the majority of the population.	
	The Nuremburg Laws are passed in	
1935	Germany, this stripped many human rights away from Jewish people.	



programme.

Hitler launches his Strength through Joy

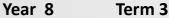


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Trinity TV > Year 8 > History> Term 3

Religious Studies: How does the Old Testament Influence Abrahamic Faiths?







(1) Keywords A member of the ancient Hebrew nation— Israelite / **Hebrews** Gods people, descendants of Abraham. A day of rest, kept by Jewish people from **Sabbath** Friday evening to Saturday evening. A festival where Muslims remember the **Ashura** freeing of the Israelites from Egyptian rule. A festival where Jewish people remember the **Passover** freeing of the Israelites from Egyptian rule. 10 10 rules given to Moses, from God. **Commandments** Something which causes trouble or harm. **Plague** Killing an animal in an offering to God. **Sacrifice**

(2) Who was Moses?

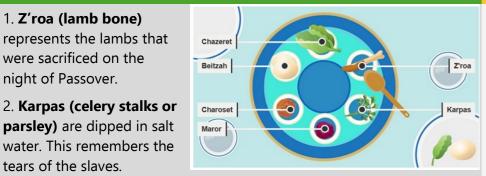
- Moses was born in Egypt.
- His mother placed him in a basket, to avoid him being killed by Egyptians. This was because Egyptians feared new born boys, as they worried when they grew up they would fight against them.
- Moses grew up in the palace as an adopted son of the pharaoh's daughter.
- When he was older he killed an Egyptian in anger of the treatment of Hebrews. He then fled Egypt.
- 40 years later, he was asked by God to free the Hebrews from Egypt.
- With Gods help, he completed this.

- (3) Judaism: Passover—Influence
- Passover is an annual celebration of the story of Exodus for Jewish people.
- During Passover, Jewish people remember how their ancestors were saved from Egypt.
- Passover is celebrated with a series of rituals. Each ritual symbolises a different part of the story.
- On the evening before Passover starts, Jews have a special service called Seder. This takes place over a meal. The Seder plate has six items on it.

(4) What is on the Passover meal?

1. Z'roa (lamb bone) represents the lambs that were sacrificed on the night of Passover.

parsley) are dipped in salt water. This remembers the tears of the slaves.



- 3. Maror (bitter herbs, often horseradish) symbolises the bitter suffering of the slaves.
- 4. Charoset (paste made from fruits and nuts) remembers the materials they used to build bricks when they were slaves.
- 5. **Beitzah (hard boiled egg)** remembers the determination of the slaves (hard).
- 6. Chazeret (bitter herbs such as lettuce) represent the bitterness of slavey.



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Trinity TV > Y7 > Religious Studies > Term 3

(5) The Ten Commandments

After Moses had freed the Hebrews from Egypt, they began to make their journey to Canaan (the Promised Land). God continued to communicate with Moses. When Moses was praying on Mount Sinai God revealed to him the 10 Commandments.

- You shall have no other Gods
- Do not make any idols.
- You shall not take the name of the Lord your God in vain
- Remember the Sabbath day, keep it holy.
- Honour your father and mother.
- Thou shall not murder.
- Thou shall not commit adultery.
- Thou shall not steal.
- Thou shall not bare false witnesses against your neighbour.
- 10. You shall not covet.

(6) Ashura

- Prophet Muhammad (peace be upon him) and the early Muslims created the day of Ashura.
- This is the 10th day of the Islamic month of Muharram, as an annual day of fasting in commemoration of God giving victory to Moses over the Pharaoh.
- Muslims learn that even in moments of great despair, the victory of God is always near.
- On this day, they may fast. This is because the believe Moses fasted when he was freed.







Week 1 - Computer Systems

Core Knowledge

- A programmable device that takes in data, processes it, and then outputs as information.
- General purpose computers are devices that have a variety of
- **Embedded systems** are specialised systems that can perform a limited number of actions.
- **Computers** work due to a combination of **hardware** and **software**
- **Operating systems** allow interactions between software and hardware.

Key Literacy Computer

Definition - A programmable device that takes in data, processes it and then outputs as information.

Associated terms - Machine, Device, Mobile Phone, Network, Virtual Reality, Networking.

- •I use my computer to do homework and research for school.
- •My computer has a powerful processor, which makes it great for gaming.

Week 2 - CPU

Core Knowledge

- Modern computers use the Von Neumann Architecture that allows store and run programs.
- The control unit runs the instructions and communicates with the other
- **Arithmetic Logic Unit (ALU)** calculates the logic operations that are required.
- **Clock** is used to regulate the number of cycles carrier out per second.
- Registers in the CPU: Memory Address Register, Memory Data Register, Current Instruction Register, Program Counter, Accumulator.
- A CPU Bus transports data between components inside the processor and memory.

Key Literacy CPU

Definition - The central processing unit, is a large chip inside the computer. It is the brains of the computer; it controls everything.

Associated terms - Processor, Clock Speed, Cores, Cache, Overclocking.

- •In our computing class, we learned about the CPU and its role in running software and handling data.
- •The processor's clock speed determines how quickly a computer can process data and run applications.

Week 3 - FDE Cycle

Core Knowledge

- **Fetch:** Instructions are loaded into the random access memory before the processor starts running the program.
- **Decode:** Binary representation of an instruction needs to be decoded before it is executed.
- **Execute:** Instructions are executed and the control unit will communicate with other components in which order to be executed for the instructions to work.

Key Literacy Fetch— Decode-Execute Cycle

Definition - The fetch-decode-execute cycle describes the basic operations of modern computers.

Associated terms - Programme Counter, Memory, Opcode, Instructions.

Three fundamental logic gates: AND, OR, NOT.

Logic Circuits used a combination of logic gates.

or logic circuit and show the different outputs.

- •The Fetch-Decode-Execute Cycle is a series of steps that a CPU goes through to carry out program instructions.
- •The CPU's efficient execution of the Fetch-Decode-Execute Cycle is key to the speed and functionality of a computer.

Logic gates switch on and off, depending on the input that been

provided and the type of gate being used. If the inputs evaluate

to **True**, then the electrical current flows through the gate. If the

Truth tables are used to plan the different inputs for a logic gate

inputs evaluate to False, then the electrical current flow

Week 4 & 5 - Main Memory & Secondary Storage

Core Knowledge: Main Memory

- Random Access Memory is volatile and data is lost when the power is switched off.
- **Read Only Memory** is non-volatile that the memory is not lost when the power is switched off.
- **Cache** improves the performance of a computer system by saving frequently used instructions.
- **Solid State** storage has no moving parts, and is very expensive which can also be called flash memory.
- Optical Storage is used to distribute media and software such as movies or video games.
- Magnetic Storage is the oldest form of storage and is stored in series as polarized dots

Week 6 & 7 - Optical / Magnetic Storage & Understanding Binary

Core Knowledge: Optical & Magnetic Storage

- **Optical Storage** utilises discs with a reflective surface to store data.
- Optical devices use **light** to store data. A **laser** burns marks into the reflective surface of the disc. These marks are called **PITS** and the gaps are called lands.
- Magnetic Storage uses discs but sections of the material is magnetised and demagnetised to represent data.
- Factors when comparing storage devices: Cost, Capacity, Access speed, durability, reliability, portability.

Core Knowledge: Understanding Binary

- Binary system is also known as 'base 2' as they are only two digits to select from (1 & 0) and data is converted using the power of two.
- **BIT table:** 128, 64, 32, 16, 8, 4, 2, 1.

Key Literacy Binary

Definition - Binary is a number system that only uses two digits: 1 & 0. **Associated terms** - Bit, Byte, Binary System, Binary Arithmetic, Binary Logic

- •The binary system is a base-2 numbering system used in computing, as opposed to the decimal system, which is base-10.
- A bit is the smallest unit of data in binary code, representing a single binary digit, either 0 or 1.

Key Literacy Logic Gates

through will be stopped.

Week 8 - Logic Gates

Core Knowledge

Definition - A logic gate is an electronic component that performs a specific Boolean operation on one or more input signals to produce an output signal, which is determined by a set of logical rules.

Associated terms - Truth Table, Boolean Logic, AND Gate, OR Gate, NOT Gate.

- Logic gates are used in various computing and electronics applications, such as microprocessors, memory units, and control systems.
- Boolean logic is a mathematical system used to manipulate binary data using logical operators like AND, OR, NOT, XOR, and XNOR.

Key Literacy Memory

Definition - Memory, also known as primary storage, is used by a computer to store data and instructions.

Associated terms - Choices, Decision, Creation, Options, Independent.

•There is a selection of chocolate.



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Trinity TV > Year 8 > Computing

Year 8





Weeks 1 and 2 - Vocabulary

Week 1:		Week 2:
hay	there is/are	antiguo/a
vivo en	I live in	bonito/a
un centro comercial	a shopping centre	feo/a
un cine	a cinema	grande
un estadio	a stadium	hermoso/a
un museo	a museum	histórico/a
un parque	a park	moderno/a
un polideportivo	a sports centre	nuevo/a
un pueblo	a town	ocupado/a
un restaurante	a restaurant	pequeño/a
un supermercado	a supermarket	ruidoso/a
una biblioteca	a library	
una ciudad	a city	tranquilo/a
una estación de tren	a train station	urbano/a
una iglesia	a church	
una mezquita	a mosque	
una piscina	a pool	
una tienda	a shop	
una piscina	a pool	

a shop

Weeks 3 and 4 - Vocabulary

old

big

beautiful

modern

small

noisy

quiet

urban

historical

pretty ugly

Week 3:		Week 4:	
voy	I go	Se puede You can	
en autobús	by bus	andar	to walk
en autocar	by coach		
en avión	by plane	beber	to drink
en barco	by boat	charlar	to chat
en coche	by car	comer	to eat
en tren	by train	comprar	to buy
a pie	by foot	hacer	to do
en bicicleta	by bike		
barato/a	cheap	ir	to go
caro/a	expensive	jugar	to play
lento/a	slow	leer	to read
rápid <mark>o/a</mark>	fast	salir	to go out
incómodo/a	uncomfortable	ver	to see/watch
lento/a	slow	visitar	to visit

Weeks 5 and 6 - Vocabulary

Week 5: Phonics		Week 6:		
	Looks like: Sounds like:		anoche	last night
	qu	k	antes	before
	V	b	ayer	yesterday
	j	h	el año pasado	last year
	ca / co / cu	ka / ko / koo	el fin de semana pasad	do last weekend
	ce / ci	theh / thee	en el pasado	in the past
			la semana pasada	last week
	Remember: the letter 'h' at the beginning of a word is always SILENT .		recientemente	recently
			hace dos días	two days ago
			hace dos años	two years ago

Term 3

Weeks 1 and 2 - Grammar

una tienda

Hay

"Hay" is a very useful word in Spanish which means "There is" or "There are".

It is very important to pronounce this word correctly, think of the word "eye" in English.

- En mi pueblo, hay una piscina. In my town, there is a swimming pool.
 - En mi pueblo, hay tiendas. In my town, there are shops.
- En mi pueblo, no hay museo. In my town, there isn't a museum.

Weeks 3 and 4 - Grammar

Se puede

"Se puede" is an expression used which means "you can".

"Se puede" is always followed by a verb in the **infinitive** (the 'to' part of the verb that you find in the dictionary).

Infinitives always end in -ar/-er/ir.

For example:

- Se puede ver una película en el cine.
 - You can watch a film at the cinema.
- Se puede comer en un restaurante.

You can eat at a restaurant.

No se puede ir al parque.

You can't go to the park.

Weeks 5 and 6 - Grammar

The irregular verb 'ir'

'Ir' (to go) is a key irregular verb in the past tense which you need to learn off by heart.

IR — TO GO

fui – I went

fuiste – you went

fue - he/she/it went

fuimos – we went

fuisteis – you went (pl.)

fueron – they went

NOTE: The verbs 'ser' and 'ir' are exactly the same in the past tense e.g. 'fue' can mean 'it was' or 'he/she went'

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