Name:

Tutor Group: .................................................


## Year 8

Knowledge Organiser Term 3

## English: Poetry

## (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.

## (4) Verb Types

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

## Examples:

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

Imperative verbs: words that are commands.

## Examples:

Stop running!
Go to bed.
Pick up your pen.

## (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.

## (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 nonhuman 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

## (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:

$\mathbf{1}^{\text {st }}$ 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.
$\mathbf{2}^{\text {nd }}$ person: Addresses someone directly, the person you are talking to.
Example: You will really enjoy the ride.
$3^{\text {rd }}$ 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.

## (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...

## (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.

## (4) Factorise Single Brackets

Factorise into a single bracket $8 x+4$


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## (2) Form Expressions

For an unknown value a letter is normally used:


You can simplify expressions by collecting Like-Terms:

(5) Inequalities


## (3) Expand Single Brackets

## Muttiply single brackets $3(2 x+4)$



$$
6 x+12
$$

$$
6 x+12
$$


$3(2 x+4)=6 x+12$
(6) Form and Solve Inequalities


## (1) Biology-Food Chains \& Webs



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.

## (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.

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Trinity TV > Year 8> Science

## (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 $\rightarrow$ 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.

## (4) Chemistry-The Reactivity Series \& Metal Reactions

| potassium most reactive | K |  |
| :---: | :---: | :---: |
| sodium | Na |  |
| calcium | Ca |  |
| magnesium | Mg | Metals less reactive than carbon can be |
| aluminium | Al | extracted from their ores by heating them |
| carbon | C |  |
| zinc | Zn | with carbon. |
| iron | Fe |  |
| tin | Sn | - Metal extraction from an ore can be |
| lead | Pb | very expensive, sometimes this means it's not |
| hydrogen | H |  |
| copper | Cu | done. |
| silver | Ag |  |
| gold | Au |  |
| platinum least reactive | Pt |  |

## Metal Extraction

Metal Oxide + Carbon $\rightarrow$ Carbon dioxide + Metal
Copper Oxide + Carbon $\rightarrow$ Carbon dioxide + Copper

## Metal and Acid Reactions

Metal + Acid $\longrightarrow$ Salt + Hydrogen
Copper + Hydrochloric Acid —> Copper Chloride + Hydrogen

## (5) Physics-Circuits



Key Vocabulary:
Potential difference (V) - Difference in energy between two points in a circuit.
Resistance ( $\Omega$ ) - Difficulty of current flow.
Current (A) - Rate of flow of electric charge

## (6) Physics-Series and Parallel Circuits

| Series Circuit |  |
| :--- | :--- |
| Current is the same at all <br> points in the circuit. <br> Potential difference is <br> shared between compo- <br> nents. | Current is shared across <br> the branches. <br> Potential difference is the <br> same at all points in the <br> circuit. |


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

(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.

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Trinity TV > Year 8 > Geography

## (2) Where is North America?

## North America is a continent with $\mathbf{2 3}$ 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.

## (5) How does the atmosphere create risk?

Hurricanes are caused when:

- Ocean temperatures are at least $27^{\circ} \mathrm{c}$.
- Coriolis effect spinning the Earth.
- A cluster of thunderstorms
- Latitude is $5^{\circ}$ to $30^{\circ}$ 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.

## (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).

## (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 placesometimes including innocent civilians.
- Drug related health problems.


## (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 <br> viewpoint. |
| :---: | :--- |
| Dictatorship | A country governed by a dictator. This often <br> means lack of political freedom. |
| January 1933 | Hitler becomes Chancellor of Germany. |

## (4) 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.


Hitler launches his Strength through Joy programme.

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Trinity TV > Year 8 > History> Term 3

## (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.

| 1926 | The Hitler Youth is formed. |
| :--- | :--- |
| 1936 | Hitler Youth clubs become compulsory. |

## (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 Na -
 zi 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.


## (3) Life for women

- 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:
$\checkmark \quad$ Kinder $=$ Children
$\diamond$ Kirche = Church
॰ Kucher= Kitchen
- Women were expected to dress traditionally and plainly.
- 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.

## (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.

| (1) Keywords |  | (2) Who was Moses? |  |
| :---: | :---: | :---: | :---: |
| Israelite / Hebrews | A member of the ancient Hebrew nationGods people, descendants of Abraham. | 1.2. | Moses was born in Egypt. <br> 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. |
| Sabbath | A day of rest, kept by Jewish people from Friday evening to Saturday evening. |  |  |
| Ashura | A festival where Muslims remember the freeing of the Israelites from Egyptian rule. | 3. | Moses grew up in the palace as an adopted son of the pharaoh's daughter. |
| Passover | A festival where Jewish people remember the freeing of the Israelites from Egyptian rule. |  |  |
| $10$ <br> Commandments | 10 rules given to Moses, from God. | 4. | When he was older he killed an Egyptian in anger of the treatment of Hebrews. He then fled Egypt. |
| Plague | Something which causes trouble or harm. | 5. | 40 years later, he was asked by God to free the Hebrews from Egypt. <br> With Gods help, he completed this. |
| Sacrifice | Killing an animal in an offering to God. |  |  |

## (3) Judaism: Passover-Influence

1. Passover is an annual celebration of the story of Exodus for Jewish people.
2. During Passover, Jewish people remember how their ancestors were saved from Egypt.
3. Passover is celebrated with a series of rituals. Each ritual symbolises a different part of the story.
4. 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.

## (6) Ashura

1. Prophet Muhammad (peace be upon him) and the early Muslims created the day of Ashura.
2. This is the $10^{\text {th }}$ day of the Islamic month of Muharram, as an annual day of fasting in commemoration of God giving victory to Moses over the Pharaoh.
3. Muslims learn that even in moments of great despair, the victory of God is always near.
4. 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 uses.
- Embedded systems are specialised systems that can perform a limited number of actions.
- Computers work due to a combination of hardware and software components.
- Operating systems allow interactions between software and hardware
Key Literacy Compute
Definition - A programmable device that takes in data, processes it and then outputs as information
Associated terms - Machine, Device, Mobile Phone, Network, Virtua 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 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

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

## 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 components.
- 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 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
$\bullet$ 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

## 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.
-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.

## Week 8 - Logic Gates

## Core Knowledge

- Three fundamental logic gates: AND, OR, NOT.
- 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 inputs evaluate to False, then the electrical current flow through will be stopped.
- Logic Circuits used a combination of logic gates.
- Truth tables are used to plan the different inputs for a logic gate or logic circuit and show the different outputs.

Key Literacy Logic Gates
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.

| Weeks $\mathbf{1}$ and 2 - Vocabulary |  |  |  |
| :--- | :--- | :--- | :--- |
| Week 1: |  | Week 2: |  |
| hay | there is/are | antiguo/a | old |
| vivo en | I live in | bonito/a | pretty |
| un centro comercial | a shopping centre | feo/a | ugly |
| un cine | a cinema | grande | big |
| un estadio | a stadium | hermoso/a | beautiful |
| un museo | a museum | histórico/a | historical |
| un parque | a park | moderno/a | modern |
| un polideportivo | a sports centre | nuevo/a | new |
| un pueblo | a town | ocupado/a | busy |
| un restaurante | a restaurant | pequeño/a | small |
| un supermercado | a supermarket | ruidoso/a | noisy |
| una biblioteca | a library | tranquilo/a | quiet |
| una ciudad |  |  |  |
| una estación de tren | a city | a train station | urbano/a |

## Weeks 1 and 2 - Grammar

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.

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Trinity TV > Year > Subject

| Weeks $\mathbf{3}$ and $\mathbf{4}$ - Vocabulary |  |  |  |
| :--- | :--- | :--- | :--- |
| Week 3: |  | Week 4: |  |
| voy... | l go... | Se puede... You can |  |
| en autobús | by bus | andar | to walk |
| en autocar | by coach | beber | to drink |
| en avión | by plane | charlar | to chat |
| en barco | by boat | comer | to eat |
| en coche | by car | by train | comprar |

## Weeks 5 and 6 - Vocabulary



## 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.

## $\underline{I R-T O ~ G O}$

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'

