Cedar Mount Academy
BRIGHT FUTURES EDUCATIONAL TRUST

Knowledge Organiser

YEAR GROUP: 9 TERM: 1

NAME [   ] FORM [   ]

"Knowledge, like air, is vital to life. Like air, no one should be denied it." – Alan Moore

How to use your knowledge organiser

You are expected to bring your knowledge organiser to the academy every day

This knowledge organiser contains all the key knowledge that you need to know for your learning this term. You should spend at least 30 minutes every evening using the knowledge organiser to complete a learning homework. You should record the subject or subjects on the learning homework page and show this to your form tutor on a weekly basis.

You will be tested in lessons on your learning from this knowledge organiser.

In some lessons, your teacher will ask you to learn specific sections of the knowledge organiser, but otherwise you should work through each subject independently, trying to memorise the information in the booklet. The more you can remember, the more useful it will be for your lessons.

How to learn using a knowledge organiser

The best way to use a knowledge organiser is to revise the information so that you can recall it when you are asked. The best methods to do this are:

- Look, cover, write and check the key words and knowledge lists
- Ask a family or friend member to test you on the knowledge
- Create a mind map to remember the information in each section
- Write down on a blank piece of paper as much as you can remember from the organiser
- Use the knowledge organiser to help you complete work in school and at home

Art

Primary Colours are the 3 main colours. They cannot be made but are used to make other colours.

Secondary Colours are made my mixing 2 primary colours together.
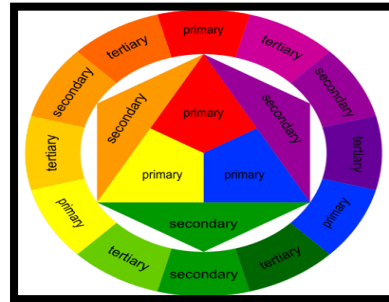
Complementary Colours are opposite on the colour wheel.
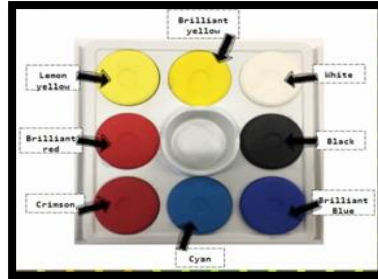
Harmonious Colours are next to each other on the colour wheel.

Tint – when you add white to a colour to make it lighter.
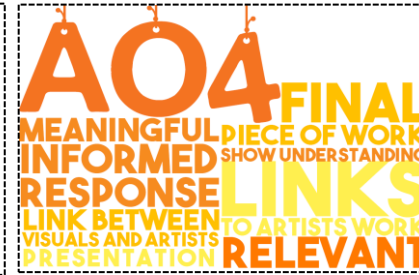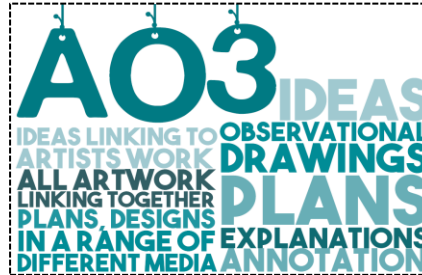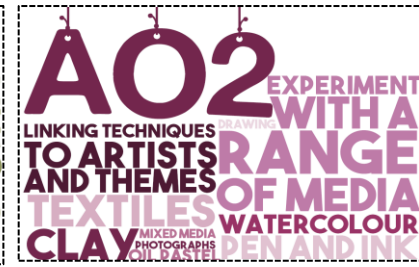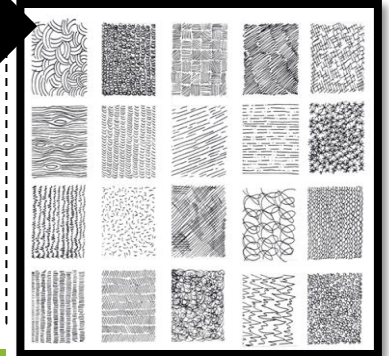
Shade – when you add black to make the colour darker.

Making Objects Look 3 Dimensional

To prevent your drawings from looking flat, you should use a range of tones and marks. Pressing harder and lighter and layering with your pencil creates different tones. Use the direction of your pencil to help enhance the 2D surface and you can include shadows which will also help objects appear 3 dimensional.

Mark Making

To make your drawings look more realistic, you should try to use different marks to show textures and surfaces. You can do this by changing the direction, pressure or length of your marks.
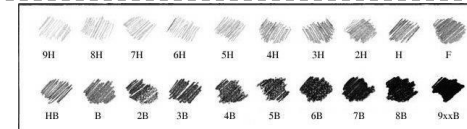
Grades of Pencils

Pencils come in different grades, the softer the pencil, the darker the tone.

H= Hard B=Black

In art the most useful pencils for shading are 4B and 6B. If you pencil has no grade it is most likely to be a HB (hard black) this is a drawing pencil.

Art Techniques Key Words

Media/Medium	The materials and tools used by the artist to create a piece of art.
Technique	The way an artist uses tools and materials to create a piece of art,
Composition	Where you place objects on a page.
Highlight	The bright and reflective area on an object or piece of art.
Shadow/shade	The darker areas within a piece of art or object.
Proportion	The size relationship between different parts - e.g. Height compared to width.

Business Studies

<u>Why do new business ideas come about?</u>

1. Changes in consumer demand

New business ideas come about because of changes in what consumers demand. For example, Activia yoghurts have recently experienced a decrease in demand. This may be because of consumer taste e.g. they now prefer Greek-style yoghurt.

2. Changes in technology

New technology is a cause of new business ideas. 3G was launched in 2004 but no mobile phone devices could use it. Apple developed the iPhone in 2007. This was the first mobile phone that could use the 3G technology.

3. Products and services becoming obsolete

A product or service is obsolete if no one wants it any longer. There is no longer great demand for chimney sweeps, as few people have an open fire.
As people change their behaviour some businesses become irrelevant.

<u>Key Definitions:</u>

<u>Enterprise</u>
Business Enterprise involves starting something of your own. It is usually a business but it might also be a charity or sports club.

<u>Entrepreneurship</u>
An entrepreneur is willing to put his or her career and financial security on the line and take risks in the name of an idea, spending time as well as capital on an uncertain venture.

<u>How do new business ideas come about?</u>

1. Original Ideas

These are ideas that have not been done before. For example the launch of the iPhone in 2007 which was 3G enabled. This allows a business to gain a competitive advantage over their rivals.

2. Adapting existing products/services

Developing new products based on the original one such as Wall's white chocolate magnum.

<u>Risk and reward</u>

Risks	Risk is about chance. What is the chance that a particular outcome will occur?
Rewards	Risks are taken in the hope they will generate rewards

Why are entrepreneurs concerned about the following risks?	Reason:
Business failure	Half of UK business start-ups fail within five years. This means they are no longer able to keep trading. It can also be very expensive if they have invested a lot of money.
Financial loss	If a limited company gets into financial trouble they are personally protected from the losses. However, an unlimited company is not. Their own possessions may be seized to cover the debt.
Lack of security	When you start a business you are not guaranteed to get paid each month unlike a regular job. If you have responsibilities this can be a worry.

Business Studies

Key Definitions

Profit
The difference between sales revenue and total costs. If the figure is positive, then the business has made a profit. This is the main aim of most businesses!

Independence
Being able to make your own decisions and be your own boss.

Rewards
1. Business Success
2. Profit and wealth
3. Independence

The role of business enterprise and the purpose of business activity:

1. To produce goods and services
A business needs to make goods and services that satisfy consumers wants and needs. The profit made is reinvested by businesses, leading to further growth. Business enterprise has an important role to play in society by creating jobs and wealth.

2. To meet customer needs
A business needs to meet customer needs by offering them products and services that they want. A business will not succeed if they are unable to do this.

3. Adding Value
Adding value is the difference between the price of the finished product/service and the cost of the inputs involved in making it. There are a number of ways of adding value:

- Convenience and speed: in Britain most people will pay extra to save their own time e.g. takeaways are more expensive than cooking your own meal from scratch.
- Branding: A Nike tick adds tens of pounds to the 'value' of a pair of trainers. A Mercedes badge adds thousands of pounds to a new car.
- Quality and design: Good quality and well-designed products command higher prices as they are more desirable

Unique selling point (USP): an original feature that competitors aren't offering which customers are willing to pay more for.

Adding value example

- **Tyrrells Potato Chips**
  - Will Chase had been farming potatoes for 20 years (loss-making)
  - Wanted to produce something with more added value
  - Came up with idea to make hand-fried chips with distinctive flavours and packaging
  - Successfully created a premium product and turned Tyrrells into a profitable business

The role of a café entrepreneur:
1. **Organising resources:**
   - Physical resources e.g. premises, kitchen equipment
   - Daily resources e.g. drinks, crockery
   - Human resources e.g. good chef
2. **Making important decisions** e.g closing a loss making café
3. **Taking risks** e.g. opening a café in a new location

Citizenship

Key words   Theme A

1. **Community**: a group of people who are in close contact and who share common interests and values
2. **Neighbourhood**: a local area within which people live as neighbours, sharing living space and interests
3. **Census**: an official count of the population to find out about the changes taking place
4. **Emigration**: leaving your homeland to live in another country
5. **Ethnic**: someone's cultural background
6. **Immigration**: coming to another country to live there
7. **Minority**: a small part of a larger group of people
8. **Tolerant**: open-minded, accepting
9. **Commonwealth**: a voluntary group of independent countries, some of which were former British colonies
10. **European Union**: a group of 28 countries which work together in fields such as the environment, social issues, the economy and trade
11. **Asylum seeker**: someone who says he or she is a refugee, but whose claim has not yet been confirmed
12. **Economic migrant**: a person who travels from one country or area to another in order to improve their standard of living
13. **Refugee**: a person who has been forced to leave their country in order to escape war, persecution, or natural disaster
14. **Economy**: this is made up of all the organisations that provide goods and services, and all the individual organisations that buy them
15. **Entrepreneur**: a person who sets up a business and takes on financial risks in the hope of making a profit
16. **Diversity**: the range of different groups that make up a wider population
17. **Integration**: bringing different groups of people together in society
18. **Identity**: who or what someone or something is
19. **Identity card**: a card that establishes someone's identity
20. **Multiple identity**: when a person feels they have more than one identity
21. **Respect**: Showing consideration for someone's feelings, wishes or rights.
22. **Discrimination**: Treating somebody less favourably because of their colour, ethnic origins, age, gender or disability.
23. **Harassment**: repeatedly threatening, humiliating and pestering somebody.
24. **Victimisation**: discriminating against someone unfairly.
25. **United Nations**: an international organisation that tries to encourage peace, cooperation and friendship between countries.
26. **Racism**: the idea that some people of different ethnic origins are not as good as others
27. **Inclusive** Education: schooling that involves everyone, regardless of disability or non-disability.

Citizenship

Key knowledge	Theme A

28. Most people belong to several communities e.g. school, local neighbourhood, country, EU, religious group.

29. Throughout its history, people have settled in Britain from many different countries, bringing their languages, ideas and customs, which have mixed together to make up the country's culture.

30. There are many religious faiths that are followed in the UK, with many of these coming when people moved to this country from elsewhere, e.g. many Muslims from Pakistan, or Christians and Rastafarians from the Caribbean etc.

31. The UK population is growing thanks to migration and life expectancy increasing.

32. The three main categories of people moving to the UK are economic migrants, refugees or asylum seekers.

33. The positives of migration to the UK are that immigrants fill job vacancies and help with the skills gap, they help the economy to grow by working and shopping here, they pay taxes which contribute to the things the country needs, they bring energy and innovation, and the country benefits from cultural diversity.

34. The negatives of migration to the UK are immigrants may be prepared to work for less money than UK workers, more people can put pressure on public services, and there may be problems with integration and friction with local people.

35. People may say they have a multiple identity because of their gender, race, age, place of birth, parents' place of birth, religious faith or the social group they belong to.

36. The Universal Declaration of Human Rights was introduced by the UN because they wanted all people to be treated with respect.

37. People can be prejudiced against people and discriminate against them because of a number of things, including race, sexuality, gender or disability. It against UK law to do this.

38. The Equality Act 2020 bans unfair treatment and helps achieve equal opportunities in the workplace and wider society for all people.

39. Community cohesion is important because it allows everyone to play their part in society and live together happily without friction. Learning English, understanding the country's history and the features of everyday life are all parts of being a UK citizen and help with community cohesion.

40. The Magna Carta was signed by King John in 1215 and meant for the first time in England people were equal before the law and that no could be imprisoned without a fair trial. The signing of the Magna Carta was the beginning of Parliament.

Computer Science

Python -> English	
`print("hello!")`	Prints a value on screen (in this case, hello!)
`input("")`	Inputs a value into the computer.
`x = input("")`	Inputs a value and stores it into the variable x.
`x = int(input(""))`	Inputs a value into x, whilst also making it into an integer.
`answer = x + y`	Saves the result of x and y added together in a variable named answer.
`print(str(x))`	Prints the variable x, but converts it into a string first.
`print("Hello", "World")`	Prints the two strings concatenated with a space between. This code would output "Hello World".
`age = 12` `print("Age: " + str(age))`	The + joins together two variables when printing. Str has to be used to cast age to be a string. This code will output "Age: 12".
`if name == "Fred":`	Decides whether the variable 'name' ha a value which is equal to 'Fred'.
`else:`	The other option if the conditions for an if statement are not met (eg. name = 'Bob' when it should be Fred)
`elif name == "Tim":`	elif (short for else if) is for when the first if condition is not met, but you want to specify another option.
`# COMMENT`	# is used to make comments in code – any line which starts with a # will be ignored when the program runs. They are used to describe the code to a programmer.
`for i in range(0,10):` `    # WRITE CODE HERE`	Repeats any code indented after this line a set number of times, in this case, 10.
`while x < 10:` `    # WRITE CODE HERE`	Repeats any code indented after this line until a condition is met, in this case x becoming equal to or greater than 10.
`list = ["",""]`	Creates a variable and makes it an array – a list which can store many values.

Data types

Data Type	This indicates how the data will be stored. The most common data types are integer, string, and float/real.	Casting code
String	A combination of letters, numbers or characters. (eg, Hello, WR10 1XA)	`str(x)`
Integer	A whole number. (eg. 1, 189)	`int(x)`
Float/Real	A decimal number, not a whole number. (eg. 3.14, -26.9)	`float(x)`
Boolean	1 of 2 values. (eg. True, False, Yes, No)	`bool(x)`
Char	A single character	`char(x)`

Comparative operators

==	Equal to
!=	Not equal to (or different to)
>	Greater than
<	Less than
>=	Greater than or equal to
<=	Less than or equal to

Arithmetic operators

Operation	Symbol	Example	Output
Addition	+	2 + 10	12
Subtraction	-	9 – 6	3
Multiplication	*	5 * 4	20
Division	/	5 / 2	2.5
Floor Division	//	7 // 2	3
Remainder	%	7 % 3	1

Computer Science

Key vocab	
Python	A programming language used to write programs.
Shell	The place where code is run.
Code editor	The place where code is written.
Programming	The process of writing computer programs.
Algorithm	A set of rules/instructions to be followed by a computer system.
Flowchart	A visual method of planning an algorithm using symbols.
Pseudocode	A language similar to English which is used to plan algorithms.
Code	The instructions that a program uses.
Sequence	Parts of the code that run in order and the pathway of the program reads and runs very line in order.
Selection	Selects a pathways through the code based on whether a condition is true.
Iteration	Code is repeated (looped), either while something is true or for a number of times.
Variable	A value that will change whilst the program is executed. (eg. temperature, speed)
Function	A collection of code that works outside the main program. These are created to speed up programming. They can be called from a single line of code at any time.
Comparative Operator	A symbol used to compare multiple values.
Arithmetic operator	A symbol used to manipulate numerical values.
Syntax	The punctuation/way that code has to be written so that the computer can understand it. Each programming language has its own syntax.
Syntax error	An error produced when the computer cannot understand the code which has been written.
Logic error	An error produced when a program is understood by the computer but does not perform as the programmer expects.

Finding errors – follow these steps

1. Have you checked that you have closed all brackets correctly?
2. Have you checked that you have closed all quotes correctly?
3. Are your variable names spelt in the same way consistently? Remember that Python is case sensitive
4. Have you remembered to use commas to separate the variables inside print?
5. Have you used quotes around strings which you want to print out word for word?
6. Have you used int or float on number inputs?

Addition – example code

```
number1 = int(input("Input the first number :"))
number2 = int(input("Input the second number :"))
answer = number1 + number2
print("The answer is " + str(answer))
```

The code above takes two number inputs and stores them as variables called number1 and number2. It then adds these together and saves them in a variable called answer. The final line prints the answer out in a sentence.

Selection – example code

```
fav_num = int(input("Pick a number between 1 & 10..."))

if(fav_num == 7):
    print("Good guess!")
elif(fav_num < 7):
    print("Too low!")
else:
    print("Too high!")
```

The code above inputs a number. If the number is 7 it will print "Good guess!", if it is less than 7 it will print "Too low!" and for anything else it will print "Too high!".

English

Unseen Poetry

Reading and interpreting poems you have not seen before and comparing two or more poems based on a theme.	
You must be able to read, understand and respond to texts you've never come across before	▪ Maintain thoughtful by finding the theme and knowing what the poet wishes to say about the theme ▪ Use textual references and quotations
Analyse the language, form and structure of a poem you've never seen before	▪ Linking to what the poet wishes to say about the theme ▪ Subject terminology – know your terminology and use it!

Twelve things to consider

How does the title help me understand the poem?	Who is 'speaking' in this poem? Who are they speaking to? Are there any other people in it?
How does this poem deal with feelings/emotions?	Can you pick one line which sums up this poem?
If this poem was turned into a series of pictures, what would the pictures be of?	How might the similes and metaphors help you understand the poem?
How are the 5 senses used in this poem (touch, smell, taste, hearing, sight)?	Look at the verbs – what things happen in this poem?
What time period or place do you think this poem comes from? How do you know?	Look only at the first and last line—how are they significant to the poem?
What is the main theme of the poem?	How does the poem make you feel? Why?

Potential themes

Theme: central ideas or topics that run through a text.
Thematic: pertaining to a theme.

▪ Growing up
▪ Parent/child/ and family relationships
▪ Freedom/imprisonment •Power and control
▪ Brutality/kindness
▪ Love/hate
▪ Jealousy
▪ Faith and hope
▪ Nature and our relationship with nature
▪ The past and the future
▪ Poverty and wealth

English

POETRY TERMINOLOGY – LANGUAGE DEVICES	
Anthropomorphism	An animal is given human qualities
Authentic	Seems genuine/truthful
Cliché	Over-used phrase
Colloquial language	Local/casual language
Emotive language	Makes you feel emotional, usually adjectives/verbs/adverbs
Euphemism	Alternative words to make something nasty sound okay
Extended metaphor	A series of metaphors all relating to each other
Hyperbole	Exaggeration
Imagery	Something used to describe something else
Irony	Sarcasm
Metaphor	Something is described as being something else
Mood	Atmosphere
Personification	An object is given human qualities
Semantic field	Words that are about the same thing
Simile	Something is described as being like/as something else to describe it
Symbol/ symbolism	Something that represents something else
Aural Terminology	
Sibilance	A repeated s sound
Onomatopoeia	A verb sounds like what it does
Plosive sounds	Letters p/b
Consonance	Repeated consonant sound
Alliteration	Repeated first letter
Assonance	Repeated vowel sound

POETRY DEVICES – STRUCTURE	
Chronological	In order of time
Caesura	A big break in the middle of a line
Enjambment	A sentence runs over more than one line
Iambic pentameter	5 sets of weak/strong beats in a line
Juxtaposition	Two opposites
Anaphora	Repeated first few words at start of lines
Oxymoron	Two opposite words next to each other
Rhyme scheme	The organisation of the rhyme
Rhyming couplet	Two lines that rhyme next to each other
Half-rhyme	Line endings that sound similar but are not complete rhymes
Internal rhyme	Sounds within the line that are similar
Rhythm	The beat
Stanza/Verse	A paragraph in a poem
Volta	The turning point of a poem
Repetition	Something repeated

POETRY DEVICES – FORM	
Auto-biographical	About the poet
Blank verse	Verse with no rhyme – usually 10 syllables
Free verse	No regular rhyme/rhythm. Most modern poetry is in free verse
Lyrical	Emotional and beautiful
Narrative	A story
Phonetic spelling	Written like it sounds
Sonnet	14 lines, ababcdcdefefgg, often a love poem
Shape poem	Poem is in shape of the main subject
Third person	He/she/they

Food and nutrition

Self-hygiene

WASHING HANDS: To wash your hands before handling food is to be aware of the hazards that one would otherwise go through, as many diseases and conditions circulate by not washing hand with soap and clean, running warm water.

You should wash your hands: After touching body parts; Before changing from raw to cooked meat; After handling raw meat and then other types of food; After using the toilet; After blowing your nose, coughing or sneezing; After handling rubbish; Before and after touching a sick or injured person;

WHY SHOULD WE TIE OUR HAIR BACK? As a single strand of hair contains 50,000 microbes, one must tie it back whenever they have to cook. If you have long hair, it may be advisable to wear a hair net to keep it back when cooking, as it can either fall in the food, get burned or even get stuck in machinery. Even if they're washed, or have been slicked back, hair poses a constant food contamination hazard and therefore needs to be tied back and out of the way.

NO JEWELLERY: When it comes down to cooking, the first thing that comes after having tied our hair back thoroughly washed our hands, is to get rid of all the jewellery we have on. That will limit chances of spreading bacteria and germs onto the dish we're about to cook, as they're peppered with them. Also, this will prevent the jewellery from getting ruined in any way. No watches, no rings, no studs nor bracelets allowed in the kitchen. Is important to keep a clean and neat ambient in the kitchen if the intention is to cook for various people, so one must follow these steps and prevent cross contamination and the spreading of illnesses.

WEARING AN APRON: The clothes we've been wearing all through the day have germs on them and they can easily be transferred to the food we're preparing. A simple step like wearing an apron can go a long way in reducing this risk, for prevention is definitely better than a cure. The apron prevents your clothes from coming in contact with the food, so any germs, dust, hair etc. stay within the apron and off your plate. Many incidents of our clothes catching fire, minor burns are also a part of daily cooking but by merely wearing an apron, all the loose clothing will be tucked in, and will be firmly secured to our body.

Environmental food hygiene

PREVENTING FOOD POISONING: Bacteria and viruses are the most common cause of food poisoning. The symptoms and severity of food poisoning vary, depending on which bacteria or virus has contaminated the food.
The best way to avoid getting food poisoning is to ensure you maintain high standards of personal and food hygiene when storing, handling and preparing food.

Keep in mind the four C's: **cleaning** - **cooking** – **chilling** - **cross-contamination** (avoiding it)

In order to protect yourself and others:
- Sanitize your kitchen dishcloths, sponges and worktops regularly (wash with a solution of one teaspoon chlorine bleach to one quart water, or use a commercial sanitizing agent, following product directions) as this will minimise the chances of bacteria spreading and leading to food poisoning.
- The work area and the surfaces within it should be regularly cleaned and maintained that way, as bacteria thrive in dirty conditions. Emptying bins will avoid rubbish letting out odour which could potentially attract rodents, and mopping floors will further ensure they're both dry and clean, which again, won't let out odours and attract any sort of animals and will also prevents falling and accidentally harming oneself .
- Disposable tissues are to be used over handkerchiefs in some cases, as certain bacteria are carried by some people in their noses, and could easily transfer to kitchen surfaces and lead to physical contamination.
- Never allow raw meat, poultry, and fish to come in contact with other foods. Washing with only a damp cloth will not remove bacteria, therefore wash counters, cutting boards and utensils thoroughly. Not the meat.

Food and nutrition

	Spatula (Utensil)	Vegetable peeler (Utensil)	Oven (Equipment)	Saucepan (Utensil)	Hob (Equipment)
Intended usage	Used for lifting, flipping, or spreading mixtures/food. The handle is supposed to be long enough to keep the holder's hand away from what is being lifted or spread, as well as away from a hot surface.	Used to peel food effortlessly and make it look more appealing in the final dishes. Peeled vegetables will minimize cooking time as there is a larger surface area to volume ratio for the heat to easily cook them.	Used for the heating, baking, or drying of a substance, and most commonly used for cooking.	Versatile and can be used to cook just about anything. Allow a lot food to be cooked at once, as they have high sides, and also prevent spills.	A surface on top of a cooker or set into a work surface, which is heated to cook things on top of it. Gas hobs are quick to produce an even temperature across the cooking surface, whereas induction hobs won't generate heat unless a metal object is placed onto them.
Preparation	Select a clean spatula/ preferably wash it before use to ensure any foreign bodies is not introduced into the food.	Select a peeler once you've made sure it's clean (or possibly, wash before use anyway). This to avoid bacteria transferring onto the food you're about to cook, and doing so, preventing illnesses and pathogens from affecting you.	Make sure to have set the oven on the temperature required in the recipe you're following and introduce your food on the shelves. Close the door and take the chosen dish out of the oven.	Select a saucepan and ensure it is ready to use by passing it through hot water and quickly sanitising them with some soap, this to inhibit the transmission of bacteria to the dish. Just place the pan over the hob and add the ingredients needed.	Cleaned and free of cluster and place the pans on it to start cooking. Follow the recipes' instructions and choose between low, medium or high heat. Pay extreme attention in nearby areas and avoid wearing loose clothes/protect them with an apron.
Safe cleaning	Rub the rubber scraper with a sponge and warm water to melt all the eventual rests of food mixtures on it. Make sure to wipe off the handle too and remove bacteria and dirt attached to it as there's a high chance of them depositing there.	Using a decent sponge which hasn't been used over a long time, rub the peeler's blades. The direction of the movement must be side to side to avoid grating bits of the sponge while cleaning upwards/downwards. Make sure to wipe off the handle too and remove eventual bacteria and dirt attached to it.	Avoid using scouring pads or a harsh chemical agent in the inside of the oven. Thoroughly wipe down the racks and the door with a clean cloth and a natural cleanser such as lemon/vinegar to ensure bacteria are eliminated, and with them the chance of rodents being drawn to the smell of it.	Wash wish soap and water, following the usual requirements - just wash, rinse, and then dry thoroughly to inhibit the transmission of bacteria. The pan should NEVER be soaked nor let to sit in water if it's cast iron, as it would damage it.	Wash your hobs at the end of every week to avoid getting a build-up of plaque and bacteria on them, which could potentially attract rodents and small insects, leading to the food being infected. Ensure the highest standards of hygiene in the kitchen, as the bacteria could easily be transferred into our bodies and attack our cells.
Correct storage	Dry the spatula with a clean cotton cloth and leave to dry further to minimize the timing in the drying process. Put with other similar spatulas in a closed drawer to avoid the aeration bringing new bacteria onto them.	Dry the vegetable peeler with a clean cloth to eliminate any moisture build-up which could potentially lead to bacteria build up and be transferred onto the dish. Position it with the blades facing downwards to avoid injuries.	Clean every month or two with a natural cleanser. The oven must be bone dry when used, therefore leave to dry overnight before using it again.	The pan should be completely dry and cool after each use. To do so, it should be placed on a hob for 1 or 2 m to ensure that it is bone dry. While still warm, lightly oil the inside of the pan and use a cloth or paper towel to rub off any excess. Once it is cool, store it for another day, by keeping any lids off of the pan when stored to keep any moisture build-up away.	Clean with a natural cleanser and be left to air dry for some hours before using it again. This will prevent plaque from forming, and animals from being drawn to the smell of leftover food.

Geography – Tectonic Hazards

Social—people　　　　　Economic—money and jobs　　　　　Environmental—natural world

Key words

Natural Hazard—physical events that have the potential to do damage to humans and property.
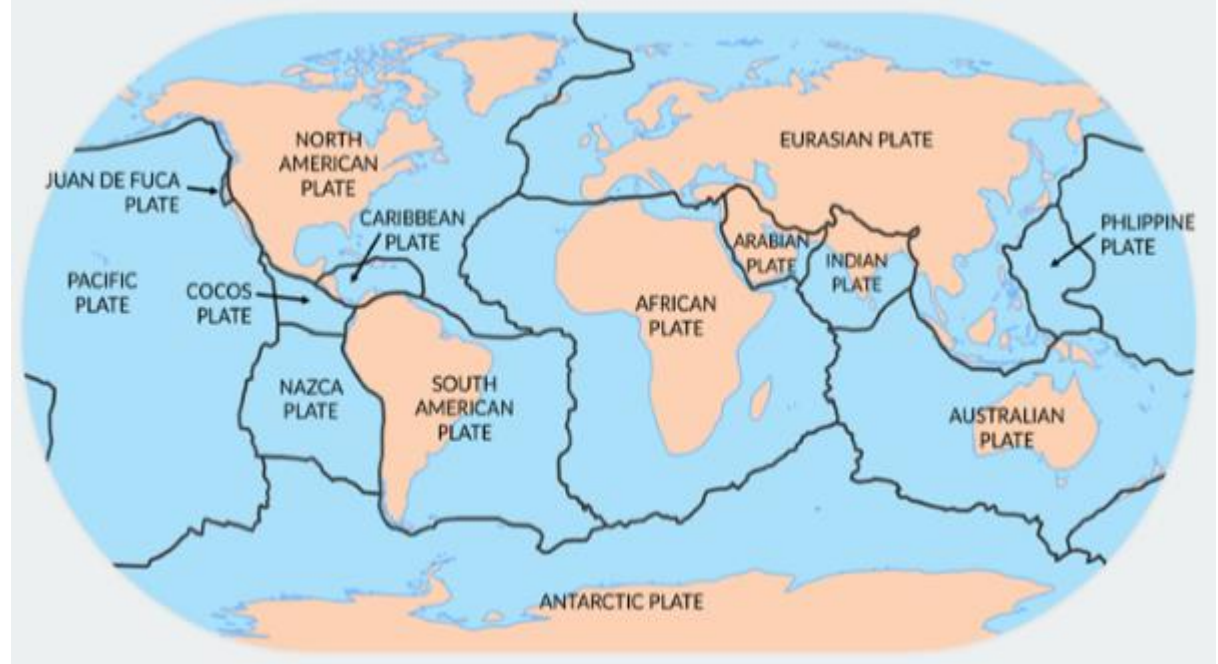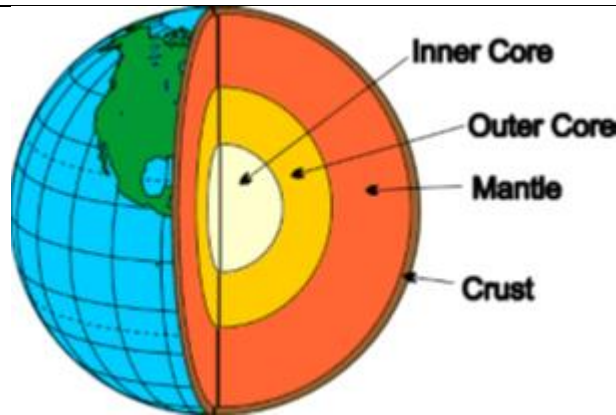
Plate margin—The edge of a tectonic plate

Primary effects—The initial impact of a natural event e.g buildings collapsing

Secondary effects—Effects that occur indirectly and on a longer timescale e.g diseases
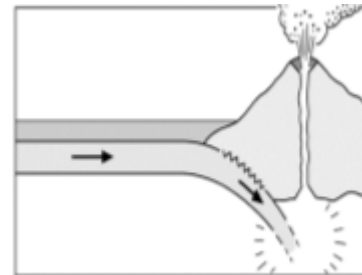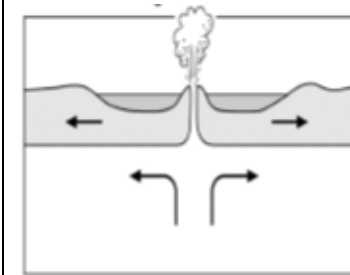
HIC—High income country e.g Italy

LIC—Low income country e.g Nepal

- The Earth is split into different pieces called plates.
- These plates move due to convection currents in the mantle.
- On the edges of plates (plate margins) is where you will find earthquakes and volcanoes.
- Plates move in three different directions:

Types of Crust

Oceanic	Continental
- Newer	- Older
- More dense	- Less dense
- Thinner	- Thicker
- Can sink	- Cannot sink

Destructive

Towards: Earthquakes and volcanoes

Constructive

Apart: Earthquakes and volcanoes

Conservative

Slide past: Eathquakes

Geography – Tectonic Hazards

Social—people   **Economic**—money and jobs   **Environmental**—natural world

Case Studies

- Nepal: 7.8 on the Richter scale
- Italy 6.3on the Richter scale

Effects of the earthquakes

Nepal	Italy
▪ 9,000 deaths ▪ Over 1 million homeless ▪ Many important buildings were destroyed in Kathmandu ▪ Avalanches on Mount Everest killed 19 people	▪ 308 deaths ▪ 70,000 homeless ▪ Many churches and monuments were destroyed ▪ Aftershocks triggered landslides

Response to the earthquakes

Nepal	Italy
▪ First 24hrs survivors fend for themselves ▪ Nepal army sent 9 helicopters in remote villages ▪ 30-bed mobile hospital from Pakistan ▪ Many tourists cancelled trips ▪ $450million of international aid was sent to help rebuild schools, buildings etc.	▪ Within an hour, the Italian Red cross was searching for survivors ▪ Mortgages and bills were suspended ▪ State of emergency was declared ▪ Residents did not have to pay taxes during 2010 ▪ Six scientists were found guilty of manslaughter as they had not predicted the earthquake.

Protection

Buildings can be made so that they are less likely to collapse when the ground shakes. Bracing, base isolation and wider bases can all limit damage. However, this is expensive and not always suitable for LICS.

Reducing the risk of earthquakes

Planning

Planning what to do helps individuals and emergency services act quickly and calmly. Examples include earthquake drills and preparing emergency supplies.

Prediction

It is possible to predict locations where earthquakes are most likely to occur however it is very difficult to predict when they will happen.

Why are effects of earthquakes generally worse in LICS

HICs	LICs
▪ Better building quality ▪ Quicker responses ▪ More money to spend on emergency services ▪ Able to limit spread of diseases due to high quality healthcare	▪ Poorer building quality ▪ Slower responses ▪ Less money to spend on rescue efforts ▪ More likely to see diseases from polluted water

History

Key Words

Totalitarian *Having complete control*
Propaganda *Spreading of ideas and information to influence others*
Censorship *Limiting access to information to prevent knowledge or freedom of thought*
Indoctrination *Brainwashing*

Key Dates

Jan 30th 1933	Hitler becomes Chancellor
April 1933	Burning of the Books
20th July 1933	Catholic Concordat
August 1934	Hitler becomes President and Fuhrer
December 1936	Membership of Hitler Youth becomes compulsory
7th November 1938	Kristallnacht (Night of Broken Glass)
April 1939	Jews evicted and sent to Ghettos
January 20th 1942	Wanssee Conference leading to the 'Final Solution'
July 1944	July Bomb Plot

Key People

Joseph Goebbels	Minister for Propaganda
Heinrich Himmler	Leader of the SS
Herman Goering	Head of the army from 1940
Pastor Martin Niemollor	Protestant who opposed Hitler. Wrote the poem 'First they came.'
Hans and Sophie Scholl	Brother and sister. Leaders of the White Rose Group – youth opposition to Hitler
Claus Von Stauffenberg	Army officer who planned to assassinate Hitler in the July Bomb Plot

OPPOSITION TO THE NAZIS – Generally quite weak, but some examples existed

- POLITICAL LEFT – Though political parties were banned, some formed underground groups, often infiltrated by the Gestapo, caught and executed. Overall limited impact.
- CHURCH – Pastor Niemoller, Bonhoeffer and Galen.YOUTH – Edelweiss Pirates and Swing Youth

As the war went on, this opposition increased

- KREISAU CIRCLE – non violent who discussed how to make Germany a better country after the Nazi's
- WHITE ROSE GROUP – student opposition. Leaders Hans and Sophie Scholl (later caught and executed). Non violent – e.g. graffiti, leaflets
- ARMY- failed July Bomb Plot of 1944 by Claus Von Stauffenberg

YOUTH – important as easiest group to indoctrinate. The future of Germany

- Hitler knew loyalty from young people was key if he wanted the Nazis to remain strong.
- Focus for boys = military and preparing soldiers. Girls = preparing future mothers.
- Hitler Youth (boys) - camping, military style uniforms, sports competitions. Compulsory 1936-45
- German Maidens (girls) – trained in domestic skills like sewing and cooking.
- Education was 'Nazified'. Teachers had to be Nazi, subjects were re written to fit in the with Nazi aims. E.g. eugenics about race, History about Germany's great past and the betrayal; of the Treaty of Versailles, Geography about lebensraum and more PE.
- In universities anti-Nazi, Jewish, Communist books burnt – led to lower standards in universities

WOMEN – life focused around 3 K's – (Kirche, Kuche, Kinder - Church, Kitchen, Children)

- Nazis had an old fashioned attitude to women – supposed to be mothers and not workers.
- When Nazis came to power, women employed by state – doctors, teachers – sacked for men.
- Loans offered to encourage women to marry – 1000 marks which was half a years pay. To get this they had to leave their job. If they had 4 children, did not need to pay it back.
- Medals were given for the more children that you had – 8=gold, 6=silver, 4=bronze.
- Nazis wanted women to wear old fashioned clothes, no trousers, high heels, makeup. Slimming was not liked as better to be bigger to have more babies.
- Lebensborn – Single Aryan men and women having babies to create master race
- German Women's League co-ordinated activities giving advice on babies, cooking, healthcare
- The Nazi policy changed over time though – when war started, women were asked to go back to work. 50% of workforce was women by 1944.

History

NAZI'S AND THE CHURCH

- Christians were very influential – 1/3 Catholic (20M) and 2/3 Protestant (40M). Therefore, at first Hitler was careful to maintain their support as they were so popular.
- July 1933 – Catholic Concordat – agreed to not interfere with the Nazis if the Nazis didn't interfere with them. However Hitler soon broke his deal and by 1935 began arresting priests, in 1936 crucifixes removed from schools and by 1939 Catholic education destroyed. In 1937 the Pope spoke out about the Nazis in his 'burning anxiety' statement, but many Catholics were too scared to speak out.
- The Protestant Church was controlled by the Nazi's. By 1936 all Protestant Churches merged to form the 'Reich Church'. The Swastika replaced the cross and the bible was replaced by Mein Kampf.

PROPAGANDA

- Goebbels was Minister of Propaganda – 'a lie told a thousand times becomes the truth'.   Germany became a 'propaganda machine'
- Took simple ideas and repeated them – e.g. the Nazis would make Germany strong, Hate the Treaty of Versailles, 'Hitler Myth', 'Cult of Fuhrer', blamed Jews and Communists for problems.
- Controlled all art, theatre, film music radio and literature- all work had to be approved by the Nazis before it was published.
- Use of the Media – Sold cheap radios, by 1939 70% of households had them. Leni Riefenstahl produced famous films such as 'Triumph of the Will'.   Controlled newspapers – 3% in 1933, 82% in 1944.
- Displays of Power- Public Rallies e.g. Nuremberg Rallies, Triumph of the Will, Berlin Olympics 1936.
- Education – Controlled school textbooks. Indoctrination.

Propaganda was effective as it re-enforced old ideas e.g. anger at the Treaty, blaming Jews, communists and the Weimar Republic

NAZI TERROR – **the Nazis aimed to create a totalitarian state**

- SS - Black uniform, Hitler's personal bodyguard, by 1939 had 240 000 members, had to be 'Aryan' and physically fit - even a filling could disqualify you! Ruthless and could arrest people without trial and could search houses
- Concentration Camps - Replaced temporary prisons, at first torture, hard labour and indoctrination. By late 1930's this changed, and they became forced labour camps holding anyone who opposed the Nazis e.g. Communists, Jews, Socialists, trade unionists, church leaders etc
- Gestapo - State Secret Police, could tap telephones, open mail and had a huge network of informers. Arrested people without trial, tortured them and imprisoned them in concentration camps
- Police and Courts - All bosses of the Police became Nazi's, crimes ignored if committed by Nazi's. Courts under Nazi control and they appointed judges so no fair trials.   Offences carrying the death penalty went from 3 in 1933 to 46 in 1943, including telling an anti Nazi Joke, having sex with a Jew.
- Informers – A local warden would collect information, which could affect whether or not you got a job. Warden noted any signs of independent thinking e.g. not flying a Nazi flag or not being enthusiastic enough about Hitler
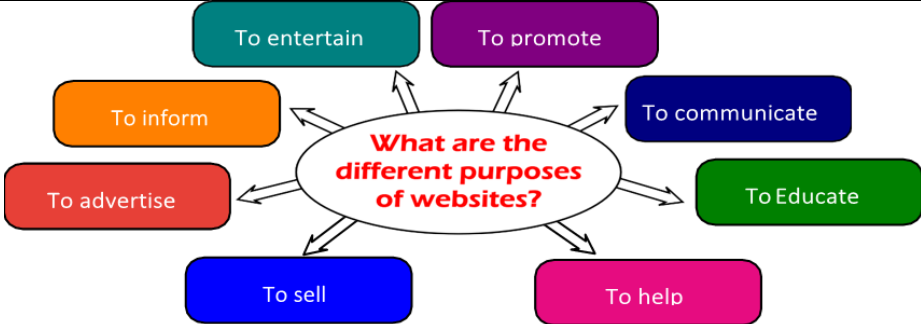
WORK AND ECONOMY – **FOCUS OF THE ECONOMY WAS TO PREPARE FOR WAR**

- Nazis reduced unemployment. Created jobs building autobahns, men between 18-25 had to join National Labour Service, conscription and jobs in rearmament.
- Invisible unemployment as women, Jews, communists lost jobs. Trade Unions also banned.
- Many workers felt better off – 'Strength Through Joy' incentives. Cars, holidays
- Many workers lost out though – cost of living increased by 25%, wages didn't go up
- 4 Year Plan started in 1936 to prepare Germany for war – led by Goring - links to rearmament
- When the war broke out in 1939, economy wasn't ready and lots of men had to join army.
- Led to women and children working after 1941 when war went bad after invading Russia. By 1944, 50% of workforce were women. Rationing also introduced.
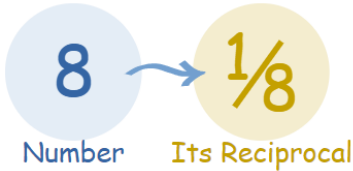
I-Media

Target audience: You need to know your target audience: Who are they? What kind of things do they do? What products do they use? How old are they? What are they interested in? The answers to these questions and many more will help you better understand the people you are designing for. Getting an understanding of these individuals helps you create with ease and make something you know will relate to them			
Asset table An asset table is a list of all of the assets, images and information you have collected for the project - listing where you got it from and describing any legal issues with using it		**Planning** You will need to create a work plan which lists all of the tasks involved in the whole project. You then need to estimate how long each task will take and create a chart or diary to record how long they REALLY take to complete. Build in some contingency time in case things go wrong! Add this to the plan and explain why you had to use it if things don't go according to plan all the time.	
Client Requirements Your client is the person you will be working for. They will tell you what to plan, design or create for them. The Client will set out requirements that they want you to follow when you plan the project - eg: Purpose, Theme, Style, Genre, Content	Your client, a game publisher called NuComputerGames, is releasing a computer game called TIMECHASER, aimed at 14-16 year olds and priced at £29.99. In the game the player can travel through time using doorways which are open for a limited period of time. The player has a special Timewatch to help them find the doorways. NuComputerGames plan to promote this game through an advertisement in a magazine which is available in print and online formats. This should be created as a digital graphic and should include a range of appropriate text and images to make it suitable as an advertisement for the game. NuComputerGames requires two versions of the final digital graphic. One will be of suitable quality to be used in a full colour printed magazine and will be a half page advertisement of 215 mm wide x 140 mm high. The graphic should then be re-purposed for use online at a lower resolution. This should be 600px wide to fit the online format. Read through all of the tasks carefully, so that you know what you will need to do to complete this assignment.		**Export Options** Digital Graphics need to be saved in different formats for different purposes - the size and resolution will be different for: Print use Websites Multimedia Check the client brief	!

What type of file formats do digital graphics use? .tiff .jpg .png .bmp .gif .pdf You will need to find out the different uses and properties of these different file formats and be able to describe why different formats are suitable for different situations.	Why are digital graphics used? ▪ To entertain ▪ To inform ▪ To advertise ▪ To promote ▪ To educate	Where are digital graphics used? ▪ Magazine covers ▪ CD/DVD covers ▪ Adverts ▪ Websites ▪ Multimedia Products ▪ Games	Why are digital graphics used? ▪ To entertain ▪ To inform ▪ To advertise ▪ To promote ▪ To educate	Tools and Techniques : ▪ Cropping / Cutout Studio ▪ Rotating ▪ Changing Brightness / contrast/Colour adjustment
	What can you change about an image to make it more suitable for different uses? ▪ Size in Pixels ▪ Resolution (Dots per inch) ▪ Quality ▪ Compression	Visualisation A Visualisation is a sketch or diagram of what you think the final graphic might look like	Which resources will be needed to make your digital graphic? ▪ Digital Camera ▪ Internet ▪ Computer System ▪ Serif Software	Technical Compatibility Your final image must meet the technical specification set by the client. Correct size in Pixels and Correct ResolutionIn Serif Draw Plus - File > Export > Adjust the size and resolution to fit the client brief

I-Media

How does the appearance of websites change on different devices?

1. The screen resolution you are using can change the look of a site.
2. The operating system used can change the look of a site.
3. Fewer images may be used on mobile versions.
4. The web browser used may change things.
5. The orientation can change

Advantages & disadvantages of using the internet

Advantage	Disadvantages
1. Easy communication across the world	1. Viruses
2. 24/7 access to information	2. Cyber-bullying / Trolling
3. Entertainment	3. Viruses
4. Online Banking	4. Exposure to inappropriate material
5. Online Shopping	5. Identity theft
6. Learning Resources and information availability	6. Leakage of private information

Different devices used to access websites

- Laptop/PC
- Mobile Phone
- Smart Watch
- Tablet
- Games Console
- Smart TV
- Smartspeaker

Different ways to connect to the internet?

1. ADSL Broadband over existing phone lines.
2. Cable Broadband -. through cables shared by the TV service
3. Fibre Broadband. - High speed fibre optic cables
4. Ethernet - a cable running from a router / network point
5. Wi-fi - wireless signal from a wireless router

Common features of website

Fractions Decimals and Percentages

Key Vocabulary		
Numerator	Shows how many parts we have	$\dfrac{5}{8}$
Denominator	Shows how many equal parts the item is divided into	
Improper Fraction	A fraction which has a larger numerator than a denominator	$\dfrac{8}{5}$
Mixed Number Fraction	A whole number and a fraction combined into one mixed number	$5\dfrac{1}{3}$
Equivalent Fraction	A values that have the same value but may look different	$\dfrac{1}{10}$ and $\dfrac{3}{30}$
Simplify	Divide both Numerator and Denominator by the same factor to get an equivalent fraction which uses the smallest possible whole numbers	
Reciprocal	8 → 1/8 Number Its Reciprocal	
Integer	A whole number, including negative numbers	

Fraction Decimals and Percentages (continued)

Key Vocabulary		
Terminating	A decimal number that has digits that stop	For example 0.26
Percent	A part of a whole expressed out of 100	
Recurring	A decimal number which has a digit (or group of digits) which repeat forever	2.333333333.... Can be written as $2.\dot{3}$
Convert	To change a value from one form to another	For example $\dfrac{1}{10}$ and 10%

Ratio

Key Vocabulary		
Simplest form	To write a ratio in its smallest form by dividing both numbers	
Unitary form	A technique in solving ratio problems by finding the value of a single unit.	Written as 1:n or n:1

Maths

Types of Number

Key Vocabulary	Definition	Example
Prime	A number that is divisible only by itself and 1. It must have exactly two factors	e.g. 2,3,5,7,11 ….
Multiple	The result when one number is multiplied by another number	Multiples of 11 are 11, 22, 33, 44….
Factor	The numbers we multiply together to get a given number	Factors of 6 are 6 and 1, 2 and 3
Even	Any integer that divides by 2 and gives an integer answer. Numbers that end in 2,4,6,8 or 0	
Odd	Any integer that is not divisible by 2. Numbers that end in 1,3,5,7,9	
Squared	When a number is multiplied by itself	$3^2 = 3 \times 3 = 9$
Cubed	When a number is multiplied by itself twice	$4^3 = 4 \times 4 \times 4 = 64$
Rational	A number which can be made by dividing two integers	
Irrational	Numbers that cannot be represented as fractions. e.g. π or $\sqrt{2}$	

Angles

Corresponding angles are equal	
Alternate angles are equal	
Co-interior angles sum to 180°	

Trapezium

Parallelogram

Kite

Rhombus

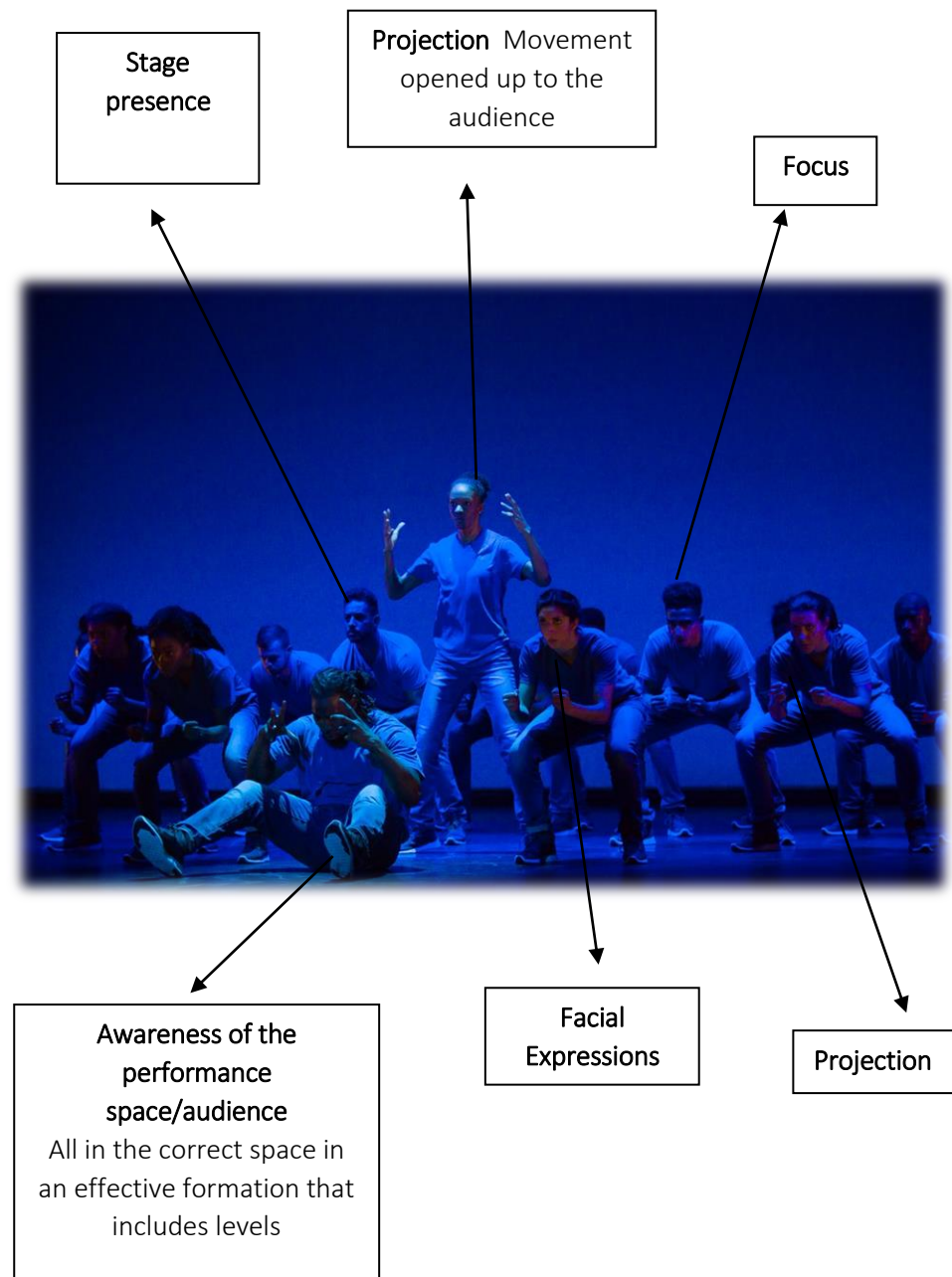## Performing Arts – Dance: Physical Skills

Focus & control	Concentrating on executing the movement accurately with full control of the body
Expression	How much emotion and feeling you apply to the movement
Posture	The way the body is held
Balance and Coordination	The ability to hold a steady position and to use a combination of parts of the body together efficiently
Extension	The lengthening of body parts outwards. E.g. Straight arms and pointed toes
Energy	How much physical effort you put into the dance
Dynamic range	Noticing and applying the correct quality to each movement. For example: sharp, soft, fluid etc.
Accuracy	Performing the movements in the correct order with technical accuracy
Alignment	Correct placement of body parts in relation to each other
Flexibility	Projecting your movements outwards into the space with appropriate energy.
Rhythm	A strong, regular repeated pattern of movement
Facial expression	Animating the face to engage with your audience/communicate the theme of your performance.
Projection	Projecting your movements outwards into the space with appropriate energy.
Stamina	Ability to maintain physical and mental energy over periods of time.
Spatial Awareness	Being aware of the space around you as well as the shape, size, level and direction of the movement.
Movement memory	Your ability to remember movement

Correct posture

Flexibility

Extension

Focus and Control

Balance & Coordination

Correctly aligned leg/Good alignment

Performing Arts – Dance: Performance and Interpretative skills:

Interaction with other performers	How effectively you communicate with others on stage
Focus	Use of the eyes to enhance performance or interpretative qualities
Confidence	Being certain of your abilities and evidencing this in your performance
Energy and Stamina	Performing to the best of your physical ability and keeping this consistent throughout
Awareness and appreciation of sound accompaniment/ musicality	The ability to make the unique qualities of the music evident in performance. Having an awareness of the beats and highlights within the music and complimenting/contrasting this with your movement.
Rhythm and timing	Performing the correct movements at the correct time to compliment the music.
Emphasis	The accents provided by the dancer at different moments throughout the dance
Stage Presence	The ability to command the attention of a theatre audience
Facial expression	Animating the face to engage with your audience/communicate the theme of your performance.
Use of space	How much space you use when dancing.
Awareness of the performance space and audience	Showing effective consideration of the space you are performing in as well as the target audience and where they are situated.
Projection	The energy a dancer uses to connect with and draw in the audience.
Energy and commitment	Committing your full mental and physical ability to the dance consistently for the whole performance.

Stage presence

Projection Movement opened up to the audience

Focus

Awareness of the performance space/audience
All in the correct space in an effective formation that includes levels

Facial Expressions

Projection

Performing Arts - Drama

PERFORMANCE:	TECHNICAL SKILLS:	KEYWORDS:	
Emphasis	Status	Stimulus	You starting point and approach to a performance piece
Projection	**Staging** – choosing and using the appropriate staging	Social skills	Compromise, share ideas etc
Focus	**Character**/ use of both vocal and physical characteristics	Research	Independent research to bring to rehearsal
Accurate interpretation	Using the **space**/ **physical contact**/**movement**/ **Spatial awareness**/audience	Lighting	Create an atmosphere for your performance
Use of space	Coordination	Sound	Sound effects -Live & Pre-recorded
Appreciation of sound accompaniment	**Voice** – manipulation/ pitch/tone/rhythm/pace/volume/choral/ soundscapes	Health & Safety	Rehearsal space & performance space
Musicality	**Blocking/Choral work**	Set Design	Backdrops & props
Facial expression	Stamina	Advertising	Promoting your performance e.g media
Quality	Emotional Engagement	Costume	Selecting appropriate performance clothing
Timing	**Stage Combat**/ safely performing physical actions.	Staging	Types of stages and performance space
Body Language	The ability to **reproduce movement** accurately	Rehearsal Schedules	Planning & working to deadline
	Whole body participation and/or **isolation**	Professional Conduct	Punctuality, attendance, working effectively with others
	Gestures or traits to a character.	STYLES AND PRACTITIONERS:	
	Awareness of, and **relationship** to other characters and performers /**proxemics**	**Naturalism**	Stanislavski, emotion memory
		Epic Theatre	Bertolt Brecht, alienation devices
		Physical Theatre	DV8, Gecko theatre companies

Physical Education

Table Tennis Rules	Handball Rules
Scoring - A match is played best 3 of 5 games (or 4/7 or 5/9). For each game, the first player to reach 11 points wins that game, however a game must be won by at least a two point margin. A point is scored after each ball is put into play. The edges of the table are part of the legal table surface, but not the sides. **Flow of the match** - Each player serves two points in a row and then switch server. However, if a score of 10-10 is reached in any game, then each server serves only one point and then the server is switched. After each game, the players switch side of the table. In the final game (ie 5th game), the players switch side again after either player reaches 5 points. **Serve** - The ball must rest on an open hand palm. Then it must be tossed up at least 6 inches and struck so the ball first bounces on the server's side and then the opponent's side. If the serve is legal except that it touches the net, it is called a let serve. Let serves are not scored and are reserved	**The six metre line** - No handball player (other than the goalkeeper) is allowed in the goal area (inside the 6m line). '**Walking**' - If a handball player takes more than three steps without dribbling (bouncing the ball) or holds the ball for more than 3 seconds then you lose the ball. '**Double dribble**' - Handball players cannot receive the ball and bounce it, then hold the ball, and bounce it again. This is termed 'double dribble' and is against the rules. **Handball fouls** - No tripping, pushing, hitting, clinching, charging or holding is allowed in handball. **Free-throws** in handball - These are awarded for slight infringements of the rules. All defenders are required to stay 3m (9.84ft) away from the person taking the free-throw. Penalty-throws in handball - These are awarded when denying a clear scoring opportunity with an infringement. **Handball sanctions** - Depending on the seriousness of the offenses, the referee can award players with either a yellow card (warning), suspension (2 minutes sitting out), or a red card (dismissal). **Goal-throws** - This occurs when the ball comes off a goalkeeper and crosses the goal line. The goalkeeper then takes the throw from within their own area

Performing Arts – Music

Keywords

1. **Brief**   Instructions for a composer
2. **Notation**   Way of writing down music
3. **Compose**   Create a piece of music
4. **Composition**   A piece of music
5. **Evaluate**   WWW/ EBI
6. **Pitch** High and low
7. **Duration**   Length of sound
8. **Tempo**   Speed
9. **Dynamics**   Volume
10. **Timbre**   Sounds –instruments –voices
11. **Texture**   Layers of sound
12. **Structure**   Organisation / order of sound
13. **Silence**   No sound
14. **Repetition**   Repeat the same musical idea
15. **Sequence**   Repeat the musical idea at a lower or higher pitch
16. **Decoration** Using embellishments such as trills or mordents to provide more interest
17. **Variation**   Repeat a musical idea in an altered form
18. **Modulation**   Change key –tonic to dominant; tonic to relative minor etc
19. **Changed tonality**   From major to minor –or vice versa
20. **Transposition**   Playing in a different key
21. **Contrast**   Difference between parts –rhythmic, harmonic, melodic
22. **Inversion**   Repeat the musical idea as a mirror image

Performing Arts – Music

Keywords

23. **Retrograde**Repeat the musical idea in reverse
24. **Retrograde inversion**   Repeat the musical idea in reverse and as a mirror image
25. **Unison**   Two or more parts sounding at the same pitch
26. **Record label**   Co-ordinates the production, manufacture, distribution and marketing of a song
27. **Major record label** Large label which has most departments in house
28. **Indie record label** Smaller label, usually focused on a particular style of music
29. **Music publishing**   Makes sure songwriters and composers get paid
30. **Promoter**   Finds venues, prices the event, publicising it to make it a success
31. **Broadcasting**   Distributing songs to a dispersed audience
32. **Marketing** Responsible for identifying opportunities for the song to be heard
33. **Publicise**   Make the song and artist well known
34. **Online marketing**   Publicising an artist through websites & social media platforms
35. **High street stores** Selling cd's through shops i.e. HMV
36. **Digital download**   Selling songs through online stores i.e. Itunes
37. **PRS**   Collects money for music used in live performances
38. **MCPS**   Licenses the composer's copyright for cd's and digital downloads
39. **PPL**   Licenses the right to play sound recordings –e.g. In pubs, shops
40. **A&R**   Looks after the best interest of the artist
41. **Artist manager**   Guides the career of an artist
42. **PR** Generates publicity, promotes the artist
43. **Booking agent**   Contacts promoters and venues to get gigs
44. **Tour manager**   Looks after financial and logistical aspects of a tour

---

Religious Studies

Keywords   Crime and Punishment
1. **Justice**: doing what is right and fair based on the law
2. **Law**: guidelines as to how people should behave; the rules that govern society
3. **Punish**: impose a penalty on someone for doing something wrong
4. **Reconciliation**: restoring peace and friendship between individuals or groups
5. **Agnostic**: someone who believes it is not possible to know whether or not God exists
6. **Atheist**: someone who does not believe in the existence of God
7. **Humanist**: a non-religious person who looks to reason and empathy in order to live a meaningful life
8. **Adultery**: a couple having sex even though one (or both) of them is married to someone else
9. **Civil disobedience**: refusing to comply with certain laws as a peaceful form of protest against them
10. **Cybercrime**: crime committed online
11. **Rehabilitate**: restore someone back to law-abiding life
12. **Free will**: having the freedom to choose what to do
13. **Blasphemy**: disrespect towards God or something considered sacred
14. **Deterrence**: discouragement from doing something, for example, carrying out a criminal act
15. **Protection**: keeping someone or something safe from harm, for example criminal activity
16. **Reformation**: changing something (or someone) for the better
17. **Retribution**: punishment given in revenge for a wrong that has been done
18. **Offender Behaviour Programme (OBP):** scheme intended to reduce reoffending by tackling issues associated with crime
19. **Reconcile**: restore friendly, peaceful or agreeable relations with someone
20. **Reoffend**: return to criminal behaviour
21. **Restorative justice**: a form of rehabilitation in which criminals are given the opportunity to meet victims of crime
22. **Human rights**: rights which all human beings are entitled to
23. **Torture**: inflicting severe pain on someone
24. **Fair trial**: a public hearing by an independent tribunal established by law, that takes place within a reasonable time
25. **Situation ethics**: ethical decisions are made according to the specific context of the decision
26. **Trial by jury**: a trial where the jury's decision directs the actions of the judge

Religious Studies

Key knowledge	Crime and Punishment

27. Justice is important to Christians because they believe that God is just so people should be too.

28. Jesus taught that people shouldn't judge others. Only God can judge.

29. We need laws so that everyone is protected from crime and people know how to act towards each other.

30. There are several causes of crime, including poverty, social environment, addiction, hate, mental illness, civil disobedience and boredom.

31. Prison Fellowship is a Christian organisation that gives prisoners practical support and prays for them.

32. Theoretical solutions to evil and suffering are humans cause suffering with their free will and that this life is preparation for paradise.

33. Practical solutions include intercession (praying for other people) and charity work.

34. The Bible teaches that punishment is important but that it should allow people to reform.

35. The four aims of punishment are protection, retribution, deterrence and reformation. Christians have different opinions on which aim is the best.

36. Jesus taught that it was important to treat prisoners and criminals well.

37. Some Christians agree with the death penalty as there are teachings to support it in the Old Testament, as it is given as punishment for certain crimes.

38. Many Christians disagree with the death penalty as it contradicts Jesus' teachings about love and forgiveness.

39. Non-religious people may agree with the death penalty as they say it is a deterrent, gives justice to victims and protects society from the worst criminals.

40. Non–religious people may disagree with it as sometimes the wrong person is convicted for a crime, and it is hypocritical to condemn murder and then kill murderers.

Sources of wisdom and authority - SOWA

41. "What does the Lord require of you? To act justly and to love mercy." Micah 6:8

42. "Do not judge, and you will not be judged. Forgive, and you will be forgiven." Luke 6:37

43. "Defend the oppressed." Isaiah 1:17

44. "Let any one of you who is without sin be the first to throw a stone at her." John 8:7

45. "When you give to the needy, do not let your left hand know what your right hand is doing, so that your giving may be in secret." Matthew 6:3

46. "Whatever you did for one of the least of these brothers and sisters of mine, you did for me." Matthew 25:40

47. "You have heard it was said, 'Eye for eye, tooth for tooth'. But I tell you, do not resist an evil person. If anyone slaps you on the right cheek, turn to them the other cheek also." Matthew 5:38-39

48. "Blessed are the merciful, for they will be shown mercy." Matthew 5:7

49. "The Human Rights Act is an invisible safety net for all of us." Amnesty International

Science

cytoplasm	*site of chemical reactions in the cell*	gel like substance containing enzymes to catalyse the reactions
nucleus	*contains genetic material*	controls the activities of the cell and codes fro proteins
cell membrane	*semi permeable*	controls the movement of substances in and out of the cell
ribosome	*site of protein synthesis*	mRNA is translated to an amino acid chain
mitochondrion	*site of respiration*	where energy is released for the cell to function

permanent vacuole	*contains cell sap*	keeps cell turgid, contains sugars and salts in solution
cell wall	*made of cellulose*	supports and strengthens the cell
chloroplast	*site of photosynthesis*	contains chlorophyll, absorbs light energy

	Diffusion **No** energy required	*Movement of particles in a solution or gas from a higher to a lower concentration*	E.g. O_2 and CO_2 in gas exchange, urea in kidneys. Factors that affect the rate are concentration, temperature and surface area.
	Osmosis **No** energy required	*Movement of water from a dilute solution to a more concentrated solution through a semi permeable membrane*	E.g. Plants absorb water from the soil by osmosis through their root hair cells. Plants use water for several vital processes including photosynthesis and transporting minerals.
	Active transport **ENERGY** required	*Movement of particles from a dilute solution to a more concentrated solution*	E.g. movement of mineral ions into roots of plants and the movement of glucose into the small intestines.

Radiation	Heat	Electrical	Mechanical
Electromagnetic waves or sound	*Temperature difference between objects*	*Electric current flow*	*Force acts upon an object*

7 Li 3	**Mass number**	*The sum of the protons and neutrons in the nucleus*	
	Atomic number	*The number of protons in the atom*	Number of electrons = number of protons

C – Control Variable – Variable we keep the same

I – Independent Variable – Variable we will change

D – Dependent Variable – Variable we will measure

E – Equipment - What apparatus will we use and how

R – Repeats – 3 times, remove anomalies, calculate mean

Non-renewable energy resource	*These will run out. It is a finite reserve. It cannot be replenished.*	e.g. Fossil fuels (coal, oil and gas) and nuclear fuels.
Renewable energy resource	*These will never run out. It is an infinite reserve. It can be replenished.*	e.g. Solar, Tides, Waves, Wind, Geothermal, Biomass, Hydroelectric

Power station	*Generates electricity*	Fuel burnt releasing thermal energy	➡	Water boils into steam	➡	Steam turns turbine	➡	Turbine turns generator	➡	Generator induces voltage
National Grid	*Transports electricity across UK*	Power station	➡	Step-up transformer	➡	Pylons	➡	Step-down transformer	➡	House, factory

Kinetic energy	*Energy stored by a moving object*	½ X mass X (speed)² ½ mv^2
Elastic Potential energy	*Energy stored in a stretched spring, elastic band*	½ X spring constant X (extension)² ½ ke^2 (Assuming the limit of proportionality has not been exceeded)
Gravitational Potential energy	*Energy gained by an object raised above the ground*	Mass X gravitational field strength X height mgh

Science

Atom	*The smallest part of an element that can exist*	Have a radius of around 0.1 nanometres and have no charge (0).
Element	*Contains only one type of atom*	Around 100 different elements each one is represented by a symbol e.g. O, Na, Br.
Compound	*Two or more elements chemically combined*	Compounds can only be separated into elements by chemical reactions.

Method	Description	Example
Filtration	*Separating an insoluble solid from a liquid*	To get sand from a mixture of sand, salt and water.
Crystallisation	*To separate a solid from a solution*	To obtain pure crystals of sodium chloride from salt water.
Simple distillation	*To separate a solvent from a solution*	To get pure water from salt water.
Fractional distillation	*Separating a mixture of liquids each with different boiling points*	To separate the different compounds in crude oil.
Chromatography	*Separating substances that move at different rates through a medium*	To separate out the dyes in food colouring.

Pre 1900		*Tiny solid spheres that could not be divided*	Before the discovery of the electron, John Dalton said the solid sphere made up the different elements.
1897 'plum pudding'		*A ball of positive charge with negative electrons embedded in it*	JJ Thompson 's experiments showed that showed that an atom must contain small negative charges (discovery of electrons).
1909 nuclear model		*Positively charge nucleus at the centre surrounded negative electrons*	Ernest Rutherford's alpha particle scattering experiment showed that the mass was concentrated at the centre of the atom.
1913 Bohr model		*Electrons orbit the nucleus at specific distances*	Niels Bohr proposed that electrons orbited in fixed shells; this was supported by experimental observations.

Periodic table with groups labelled: Alkali metals, Transition metals, Halogens, Noble gases. Groups 1 2 3 4 5 6 7 0. Metals to the left of this line, non metals to the right.

- The shells closest to the centre (lowest electron energy levels) are filled first.
- The first shell can hold two electrons.
- The next three shells can hold eight electrons.
- This is called the electron configuration.

Name of Particle	Relative Charge	Relative Mass
Proton	+1	1
Neutron	0	1
Electron	-1	Very small

Specific Heat Capacity - *Energy needed to raise 1kg of substance by 1°C*
Change in thermal energy = mass X specific heat capacity X temperature change.

Travel and Tourism

Types of tourism	Accommodation	Importance of T&T sector to the UK economy
▪ **Domestic Tourism:** Taking trips and holidays in your own country, for example a couple from Manchester visiting the Lake District. ▪ **Outbound Tourism:** Travelling to a different country for a visit or holiday. ▪ **Inbound Tourism**: Visitors from overseas coming into the country.	▪ **Serviced** eg room, concierge, restaurant, bar, housekeeping, leisure, conferences ▪ **Non-serviced** eg room, self-catering facilities ▪ **Types**: hotels, motels, guest houses/bed and breakfast, apartments, youth, hostels, caravans, chalets, camping, holiday cottages, holiday parks)	▪ **Direct Employment**: Created by travel & tourism organisations. ▪ **Indirect Employment**: Created to supply & support travel & tourism organisations. ▪ **GDP**: The value of a country's economy.
Types of travel	Types of Organisations in T&T Sector	Sustainable Tourism
▪ **Leisure Travel**: Visiting friends & ▪ family (VFR), day trips, short breaks. ▪ **Business Travel**: Meetings, incentives, conference & events (MICE). ▪ **Specialist Travel**: Adventure, health, education, dark tourism	▪ **Private**: Owned by individuals or shareholders, out to make a profit. ▪ **Public**: Funded & owned by Government, to provide ▪ a service/education, not out to make a profit. ▪ **Voluntary**: Funded by membership fees or donations, usually to promote a cause or educate people.	▪ *Meeting the needs of present tourists and local communities while protecting the natural, historical, and cultural environment for the future.* ▪ **Benefits**: Reduced energy consumption, reduced waste, links with the local community, competitive edge, image, cost savings

Travel and Tourism

Visitor Attractions	Tourism Development & Promotion	The Role of Consumer Technology
Types ▪ Natural ▪ Purpose-built ▪ Heritage 	▪ **Types** – national tourism agencies, regional tourist boards, tourism and visitor information centres, national and local government departments ▪ **Role** – encourage visitors, increase tourism revenue, promote special events, market and promote the UK, its regions and destinations, provide information, advice and guidance	▪ **Websites**: Virtual tours of attractions, guest reviews, online bookings. ▪ **Mobile Tickets**: m-tickets, saves on printing & delivery costs, less chance of being lost, instant. ▪ **Apps**: Communication of information, entertainment, can be used 24/7, promotion of attractions, use of QR codes. ▪ **Airports**: self-service check-in, security, interactive displays for advertisements
	Trade & Professional Bodies ▪ Civil Aviation Authority (CAA), Office of Rail Regulation (ORR), the Association of British Travel Agents (ABTA), the Association of Independent Tour Operators (AITO), UK inbound. ▪ **Role** – encourage visitors, increase tourism revenue, promote special events, market and promote the UK, its regions and destinations, provide information, advice and guidance	**Ancillary Organisations** ▪ Car hire, travel insurance, airport services, event bookings, product comparison providers. ▪ Provide supporting services for tourists and travellers.

World Languages

Physical Descriptions – Adjectives	
Gordo	Fat
Alto	Tall
Guapo	Good looking
Delgado	Slim
Feo	Ugly
Bajo	Short

Family members	
abuelo	Grandfather
bebé, el - baby	bebé, el - baby
Hermanastro/a	step brother/sister
Hermano/a	Brother/sister
hijo (único)	(Only) child
madrastra	step mother
madre	mother
mamá	mum
marido	husband
mujer	Wife/woman
nieto	grandson
Novio/a	Boy/girlfriend
padrastro	stepfather
padre	father
padres	Parents/fathers
papá	dad
pareja	partner

Hair Descriptions	
Tengo el pelo _____	I have _____ hair
Largo	Long
Corto	Short
Rizado	Curly
Liso	Straight
Ondulado	Wavy
Castaño	Brown
Negro	Black
Rubio	Blonde
Rojo/pelirrojo	Ginger
Gris	Grey

Key Questions
Describe tu familia – Describe your family
¿Cómo es tu carácter? – What's your personality like?
¿Cómo es tu hermano? – What's your brother like
¿Qué tareas domesticas haces? – What chores do you do?

Personality Descriptions – Adjectives	
activo	active
agresivo	aggresive
alegre	lively
amable	Nice
antipático	unpleasant
cariñoso	affectionate
cómico	funny
comprensivo	Understanding
contento	happy
cuidadoso	careful
deportivo	sporty
educado	Educated/polite
egoísta	selfish
fuerte	Strong
gracioso	funny
hablador	chatty
honrado	honest/fair
injusto	Unfair
loco	mad
maleducado	rude
orgulloso	Proud

Tareas = chores	Arreglo mi dormitorio – I tidy my room	Cocino – I cook	Hago la cama – I make my bed	Lavo los platos – I wash the dishes
Paso la aspiradora – I hoover		Plancho – I iron	Trabajo en el jardín – I work in the garden	

World Languages

Referring to the past

antes	before
era	it was
en el pasado	in the past
ya	already
desde hace	since
en octubre	in October
hace dos años	two years ago
el año pasado	last year
por la tarde	in the afternoon
el verano pasado	last Summer
por la mañana	in the morning
el mes pasado	last month
por la noche	in the evening
cuando tenía ocho años	when I was 8 years old
recientemente	recently
el sábado pasado	last Saturday

Referring to the future

pasado mañana	the day after tomorrow
el próximo día	the next day
quisiera / le gustaría	he/she would like
en el futuro	in the future
la semana que viene	next week
el año que viene	next year

En mi casa hay (In my house there is/are)

- una cocina – a kitchen
- un salón/una sala de estar – a living room
- un comedor – a dining room
- dos dormitorios – two bedrooms
- un jardín – a garden
- un comedor – dining room
- un sótano – basement
- un ático/desván – attic
- un cuarto de baño - bathroom
- tradiciónal – traditional
- moderno – modern
- grande – big
- pequeño/a – small
- bonito/a- pretty
- cómodo/a – comfortable
- lujoso/a – luxurious
- sucio/a – dirty   limpio/a - clean
- ruidoso/a - noisy

Verb forms

Verb (perfect)	PRETERITE
Bailar (bailado) - to dance (danced)	bailé I danced
Beber (bebido) - to drink (drunk)	bebí I drank
Comer (comido) - to eat (eaten)	comí I ate
Comprar (comprador) - to buy (bought)	compré I bought
Dar (dado) - To give (given	di I gave
Empezar (empezado) - to begin (begun)	empecé I begun
Escuchar (escuchado) - to listen to (listened to)	escuché I listened (to)
Gastar (gastado) - to spend (spent)	gasté I spent (money)
Hacer (hecho) - to do (did)	hice I did/made
Ir (ido) - to go (went)	fui I went
Jugar (jugado) - to play (played)	jugué I played
Mirar (mirado) - to watch (watched)	mire I watched
Perder (perdido) - to lose (lost)	perdi I lost
Poder (podido) - to be able (was able)	pude I could
Preferer - to prefer	prefer I preferred
Quedarse - to stay / remain	me quedé I stayed/remained
Salir (salido) - to leave (left)	salí I left
Ser (sido -) to be (was)	fui I was
Tener (tenido) - to have (had)	tuve I had
Venir (venido) - To come (came)	veni I came
Ver (visto) - to see (saw)	vi I saw
Viajar (viajado) - to travel (travelled)	viajé I travelled
Visitor - to visit	visité I visited
Volver - to return / go back	volví I returned

Quantities

mucho/a/os/as -a lot of / many
demasiado - too much
algunos/as - a few
varios/as - several
una gran cantidad de - a large number of
todo – all
cada – each
un poco de - a bit of

Describing the area and accommodation

es	it is
no es	it isn't
son	they are
está	it is located / situated
están	they are located / situated
hay	there is / there are
no hay	there isn't / there aren't
tiene	it has
tienen	they have
era	it was
no era	it wasn't
eran	they were
estaba	it was located / situated
estaban	they were located / situated
había	there was / there were
tenía	it had
tenían	they had
será	it will be
estará	it will be located / situated
habrá	there will be
tendrá	it will have

En mi pueblo/barrio hay…… = In my town/ neighbourhood
No hay…… - There isn't…
una pescadería – fishmongers
una comisaría – police station
un polideportivo – a sports centre
un centro comercial – a shopping centre
unas tiendas – shops
una iglesia – a church
un mercado – a market
un castillo – a castle
una panadería – a bakery
una carnicería – a butcher
una lavandería -launderette
Hay mucho que hacer – there are lots of things to do

Record of learning homework

How to record your learning

You should record the subject or subjects on the learning homework page and show this to your form tutor on a weekly basis.

Week: Sep 2	Week: Sep 9	Week: Sep 16	Week: Sep 23	Week: Sep 30	Week: Oct 7	Week: Oct 14	Week: Oct 21

Week: Oct 28	Week: Nov 4	Week: Nov 11	Week: Nov 18	Week: Nov 25	Week: Dec 2	Week: Dec 9	Week: Dec 16