### **Medical Science project**

You can choose any aspect of medicine to study and show how our understanding has changed over time. Example projects could be the: Our understanding of the human body, the fight against disease, developing and testing medicines, surgery and transplants or anything else related to our understanding of health or fitness.

#### Tasks:

- Research an aspect of Medical science. Collect your research into an organised research folder with important aspects highlighted.
- Create a timeline showing the key developments of understanding and technology in this area. The timeline needs to be detailed and colourful and show how scientific progress was made.
- Choose **3** key points on the timeline that you consider the **most** important leaps in understanding. **Explain** why you have chosen these as the key points in this area.
- Choose one of these points and produce a fact-file on the main scientists involved and how they worked together to make the discovery. How has their discovery impacted on our lives. Has this discovery lead to any negative effects?
- Where do you think science is moving in the future in this area? Why do you think this? How might this affect us and society in future?
- Prepare a short 5 minute presentation on what you have learnt and the key developments in your area.

#### **Assessment levels**

You will be assessed on your project (timeline and factfile), research and presentation. There are three main areas of assessment as detailed in the table

below. Students will also assess each others work to establish the most effective ways of presenting their findings.

LEVEL	Thinking Scientifically	Applications of	Communicating
		Science	
Expected	Identify data or evidence that has been used to develop scientific ideas.	Highlight where scientific ideas have been used	Use scientific language and key words and present the data and ideas correctly.
Expected	Recognise scientific	Link uses of science to	Use appropriate language
-	questions not yet	the main scientific ideas.	when presenting
	answered and identify	Identify how	scientific ideas.
	where creative thinking	developments and	Distinguish between
	by scientists has helped	applications have	opinion and facts. Show
	develop ideas	affected society.	how scientists work
			together and
			communicate to develop ideas.
Embedded	Describe evidence that	Explain how society is	Effectively present ideas
	either supports or refutes	affected by scientific	from a range of sources
	an idea and how new	ideas and developments.	in the most appropriate
	ideas have led to changes	Explain how creative	way. Explain how
	in existing understanding	thinking has generated	scientists from different
	of science. Explain the	ideas in science. Suggest	areas have worked
	relative importance of	positive and negative	together to achieve
	the discoveries in this area.	effects of developments.	progress.
Exceptional	Explain the processes by	Explain how creative	Explain how scientists
Exceptional	which the ideas and	thinking can generate	from a range of
	evidence collected was	new ideas for future	backgrounds and
	accepted or rejected by	research. Suggest ethical	specialisms have
	the scientific community.	and cultural arguments	contributed to scientific
	Explain how scientific	against scientific and	developments in the
	evidence and ideas	technological	area. Evaluate
	contribute to questions	development	information from
	that science may not be		different sources and
	able to answer.		explain its limitations.

## Subject: RE

## Year: 9

Research two of the following debates about the existence of God one in support of Gods existence and one against.

- 1. The Design Argument (in support)
- 2. The First Cause Argument (in support)
- 3. The Big Bang Theory (Against)
- 4. Evolution & Natural Selection (against/in support)
- 5. Miracles (in support or against)

### Write a short summary about your two chosen arguments.

Use the web links below as a guide to your research.

https://www.tutor2u.net/religious-studies/blog/teleological-argument

https://www.bbc.com/bitesize/guides/zpxpr82/revision/5

https://www.bbc.co.uk/news/science-environment-19997789

https://www.bbc.com/bitesize/guides/zx7634j/revision/4

https://www.learnreligions.com/argument-from-miracles-248258

## Subject: Business Studies

### Year 9:

Task 1: Research the difference between aims and objectives. Write down the common objectives and aims that businesses tend to set for themselves.

Task 2: Research into the four different types of ownership – sole traders, partnerships, private limited companies and public limited companies. For each, explain what they mean, the advantages of them and the disadvantages of them. See if you can provide an example.

Task 3: Look into the concepts "limited liability" and "unlimited liability". Explain the difference between the two and link it back to the four types of ownership to explain which ownership types have which liability.



### **Programming Challenges:**

#### 1. Fortune Cookies

Write a programme that will simulate opening a fortune cookie and give you a random fortune such as "You will make many friends in your life"

Hint: You will need to use

Import random

And put this at the start of your program. You can then generate a random number between 1 and 10 like this;

random\_number = random.randint(1,10)



#### Is Virtual School Right for Your Student?



2. Create a **Multiple Choice Quiz** of 10 questions. **If** the user gets the answer right then they get a point and told they are "Correct".

Your quiz should give the total points at the end.

# Subject: English

## Year: 9

**The text you will be studying is DNA.** Find out what DNA means and why it is important. Explain **fully** what it is. Find out who discovered DNA.

- 1 Find out what a Bonobos monkey is. Research what the differences are between Bonobos monkeys and chimpanzees.
- 2 Which, in your opinion, are closer relatives to humans, chimpanzees or Bonobos? Explain the reasons for your choice.
- 3 Gather your research and your findings onto an A4 sheet.

Subject: French

Year: 9

#### THE PRESENT TENSE

The present tense describes what is happening now, at the present time or what happens regularly.

Je vais à l'école ce matin. I am going to school this morning.

Il vend des glaces aussi. He sells ice cream as well.

Elle joue au tennis le samedi. She plays tennis on Saturdays.

The expressions *depuis* and *ça fait... que* are used with the present tense when the action is still going on :

Je l'attends depuis deux heures. I've been waiting for him for two hours.

Ça fait trois mois que je travaille en France. I've been working in France for three

months.

In the present tense, most verbs use a regular pattern, depending on whether the ending of the infinitive ends in **-er**, **-re** or **-ir**.

	Chanter (to sing)	Attendre (to wait)	Choisir (to choose)
I	Je chant <b>e</b>	J'attend <b>s</b>	Je chois <b>is</b>
You (singular)	Tu chant <b>es</b>	Tu attend <b>s</b>	Tu chois <b>is</b>
He/she/one	II/Elle/On chante	II/Elle/On attend	II/Elle/On choisit
We	Nous chantons	Nous attendons	Nous chois <b>issons</b>
You (plural)	Vous chantez	Vous attendez	Vous chois <b>issez</b>
They	Ils/Elles chantent	Ils/Elles attendent	Ils/Elles choisissent

Now complete this translation;

Hello. My name is..... I am 15 years old and I live in Ripon, a small town in the north of England, near York. I have two sisters and one brother. My brother is called David and my sisters are called Erika and Claire. We live in a large house in the centre of town. In our house there is a lounge, four bedrooms, a dining room, a kitchen, two bathrooms and a garage. We have a small garden behind the house.

In my bedroom there is a computer, a hi fi, a desk, two chairs, a wardrobe, a chest of drawers and, of course, a bed. I spend a lot of time in my room. For example, I do my homework, I listen to music, I talk to my friends on the computer and I practise my guitar.

In my spare time I play the guitar, I watch TV, I play football with my friends at school, I go out at the weekend and I like to read. Sometimes I help my mother in the kitchen, but I don't like working in the garden.

#### THE PERFECT TENSE

The perfect tense is used to describe what happened in the past, an action which is completed and is not happening now.

It is made up of two parts: either avoir or être in the present tense, and a past participle.

Samedi dernier, j'ai chanté dans un concert. (Last Saturday, I sang in a concert.)

Hier, ils sont allés à La Rochelle. (Yesterday, they went to La Rochelle.)

Regular verbs form the past participle as follow:

-er verbs change to -é eg. travailler becomes travaillé

-re verbs change to -u eg. attendre becomes attendu

-ir verbs change to –I eg. finir becomes fini

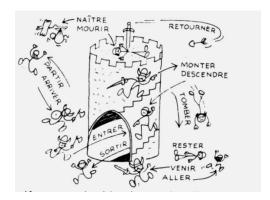
Many verbs have irregular past participles. Look them up in your verbs table!

Many verbs form the perfect tense with *avoir*. This includes many common verbs which have irregular past participles, such as:

Avoir	eu	Faire	fait
Boire	bu	Mettre	mis
Comprendre	compris	Pouvoir	pu
Connaître	connu	Prendre	pris
Croire	cru	Savoir	su
Devoir	dû	Voir	vu
Dire	dit	Vouloir	
Etre	été	voulu	

With avoir, the past participle doesn't change to agree with the subject

About thirtheen verbs, mostly verbs of movement like *aller* and *partir*, form the perfect tense with *être*. You need to learn them. Here is a picture which could help you to memorise them:



When you form the perfect tense with être, the past participle agrees with the subject of the verb. This means that you need to add an extra -e if the subject is feminine, and to add an extra -s if the subject is plural (more than one).

the computer and read my new book. I had my lunch, then I decided to go and see my friend Paul. We went into town, we met some friends and then we went to the cinema. We saw the new Bond film. After the film we went to McDonalds and had a burger and chips. I returned home by bus at 10 o'clock.

After the film we went to McDonalds and had a burger and chips. I returned home by bus at 10 o'clock. On Sunday I stayed in bed until 11 o'clock, then I got up, had a shower and got dressed. I went down to the kitchen and had my breakfast. I listened to the radio, then I read the newspaper. I phoned Paul and we went to the park together to play football with some friends.

#### THE FUTURE TENSE

The future tense is used to describe what will (or will not) happen at some future time:

L'année prochaine, je passerai mes vacances à Paris. (Next year l'Il spend my holidays in Paris.)

Qu'est-ce que tu feras quand tu quitteras l'école? (What will you do when you leave school?)

The future tense must be used after *quand* if the idea of future tense is implied.

Je lui dirai de vous téléphoner **quand** il rentrera. (l'Il ask him to phone you when he gets home)

The endings for the future tense are the same as the endings of the verb *avoir* in the present tense/

Je ...ai Nous ...ons

To form the future tense of regular **-er** and **-ir** verbs, you just add the endings to the infinitive of the verb:

Travailler	je travaillerai	Partir	nous partirons
Donner	tu donneras	Jouer	vous jouerez
Finir	il finira	Sortir	Ils sortiront

To form the future tense of regular **-re** verbs, you take the final **-e** off the infinitive and add the endings:

Prendre je prendrai

Attendre j'attendrai

Some common verbs don't form the first part of the verb in this way. But they still have the same endings:

Acheter	j'achèterai	Faire	je ferai
Aller	j'irai	Pouvoir	je pourrai
Avoir	j'aurai	Recevoir	je recevrai
Courir	je courrai	Savoir	je saurai
Devoir	je devrai	Venir	je viendrai
Envoyer	j'enverrai	Voir	je verrai
Être	je serai	Vouloir	je voudrai

#### Now complete this translation

This evening I shall go home at 4.00. I'll take the bus as usual and I shall arrive home at 4.30. When I get home I shall have a cup of coffee and I'll eat some biscuits. Mum will return home at 6.00. We shall have dinnet at 7 o'clock, then I will do my homework. I'll have Maths, Science and Geography. Then I shall watch televison a bit. I shall play on the computer for an hour and I shall go to bed at about 11 0'clock.

Tomorrow morning I'll get up early and I shall leave for shool at 8.30. This weekend I'm going to watch a film at the cinema and I'm going to play football for my club. My friend Eric will come to the house and we shall watch a DVD or we shall play computer games. Perhaps we'll eat a pizza.

#### The imperfect tense- higher only

The imperfect is used to describe something that used to happen frequently or regularly in the past:

Quand j'étais petit, j'allais chez mes grands-parents tous les week-ends. (When I was small, I used to go to my grandparents' every weekend.)

It is also used for description in the past, particularly of weather:

J'étais en vacances. Il faisait beau. (I was on holidays. The weather was fine.) Est-ce qu'il portrait des lunettes? (Was he wearing glasses?) It describes how things used to be: A cette époque, il y avait beaucoup moins de circulation. (At that time, there was much less traffic.) It often translates 'was... ing' and 'were...ing': Que faisiez-vous quand j'ai téléphoné? (What were you doing when I phoned?) It can be used to describe something you wanted to do, but didn't. Nous voulions aller à paris, mais il y avait une grève des transports. ((we wanted to go to paris, but there was a transport strike.) It describes something that lasted for a long period of time. En ce temps-là, nous habitions à Marseille. (At that time we lived in Marseille)

C'était + adjective can be used to say what you thought of something:

C'était magnifique. (It was great.)

C'était affreux. (It was awful)

The imperfect tense can also be used for making excuses, for example in the following expressions:

Ce n'était pas de ma faute. (It wasn't my fault.)

Je croyais/pensais que... (I thought that...)

Je voulais seulement... (I only wanted to...)

Je ne savais pas que... (I didn't know that...)

It is also used with *depuis* to show how long something had been happening.

Ils habitaient là-bas depuis 10 ans. (They had been living there for 10 years)

#### Forming the imperfect tense:

The endings for the imperfect tense are the samme for all verbs:

Je ...ais Nous ...ions

Tu ...ais Vous ...iez

II/Elle/On ...ait Ils/Elles ...aient

To form the imperfect tense, you take the **nous** form of the **present** tense, eg. *nous allons*.

#### Now complete this translation

When I was young I used to live in London. I went to a primary school not far from the railway station. I used to get up every day at 8 o'clock and I went to school by car with my mum. Lessons started at 9.15. I used to like art and music. I didn't like maths; I preferred science.

I used to play football in the park with my friends and I used to watch programmes for children on the TV. I didn't eat tomatoes and mushrooms, but I loved pizza and pasta.

At the weekend we used to go out into the countryside in the car. We used to go and see my grand-parents who lived in Essex. We went for walks, we had lunch in a pub and sometimes we went to the seaside. We used to play on the beach or go to the funfair. When the weather was bad we would stay indoors and watch a film.

#### Si clauses- higher only

Sentences which contain two parts, one of which is an 'if' clause, normally follow one of the following pattern:

*Si* + present tense, +future tense

S'il **pleut** demain, je **resterai** à la maison. (If i trains tomorrow, I'll stay at home)

Si + imperfect tense, + conditional tense

**Sauriez**-vous quoi faire si la voiture **tombait** en panne ? (Would you know what to do if the car broke down ?

*Si* + pluperfect tense, + conditional perfect tense

Si tu m'avais téléphoné plus tôt, jaurais pu venir. (If you had phoned me earlier, I could have come)

Subject: Music

Year: 9

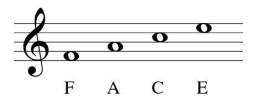
Use the information on the pages to answer the questions. Make sure you answer in as much detail as possible. If you are unsure about something, research to find out what it could be. Look at the following website:

https://www.mymusictheory.com/

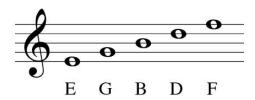
Music is written through symbols called **notes**. These notes are named after the first seven letters of the alphabet, A-G.

Music notes are written on a five lines, called the **stave**. Notes can be placed on the lines or in the spaces between the lines.

The names of the notes in the spaces are:



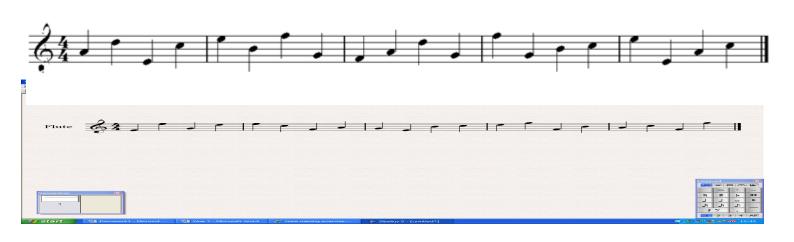
The names of the notes on the lines are:



The note names in the spaces spell FACE. Can you think of a phrase to remember the note names on the lines? For example, the phrase Every Good Boy Deserves Fruit is a simple sentence and uses the names of the notes in the correct order.

_	_	_	_	_
F	G	R	D	F
<b>L</b>	J			

Can you name these notes?





The symbol at the beginning of every line of music is called a **treble clef**.



Music notes are divided by lines on the stave, called **bar lines**.

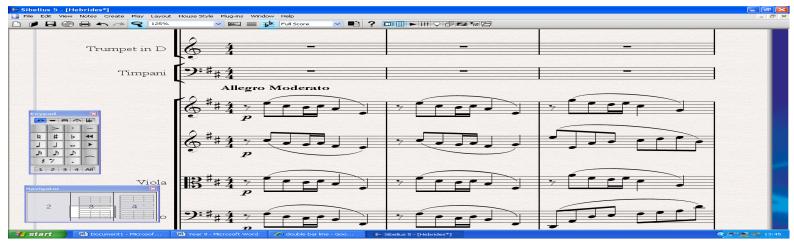
At the very end of a piece of music there is always a **double bar line**.

The set of numbers at the beginning of a piece of music is called the **time signature**.

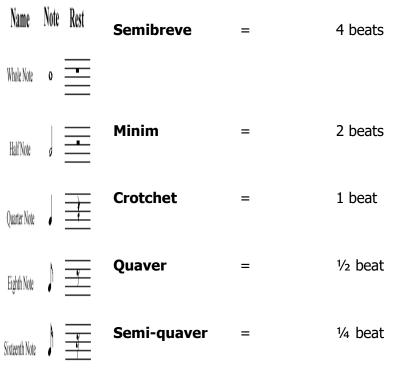
Using the stave below, practise drawing ten treble clefs:



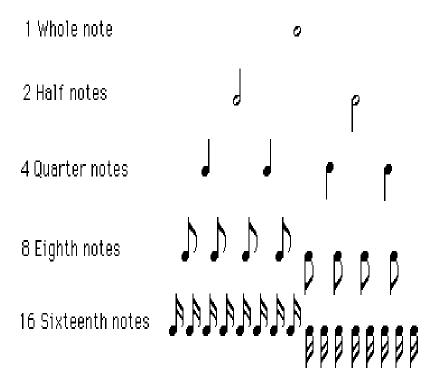
Putting together everything that you have learned, can you label all the musical symbols on this piece of music, including the names of the notes.



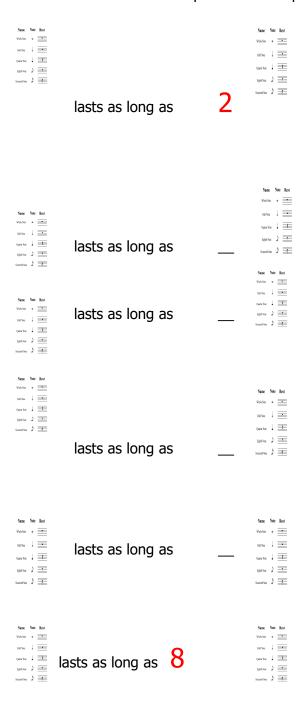
There are many different types of notes. This is to represent how many beats each note is worth. They all look different and have a name.



This means that four quavers are equal to two crotchets, that two crotchet are equal to one minim, etc. The chart below will help to explain this:



How long is each note? Complete the following sentences with the right answer. The first and last sentences have been completed as examples.



When there are two or more quavers in music, they can be joined together, like this:



When there are two or more semiquavers in music, they can also be joined together, like this:

Look at the following piece of music. Underneath all the notes, write in the number of beats in each one (i.e. 1 beat, ¼ beat, 2 beats etc.):



Using the blank stave below, draw your own set of notes in whichever order you like. You must then label the name of each note (i.e. A B C D E F or G) and also the value of each note (i.e. 4 beats, 2 beats, 1 beat,  $\frac{1}{2}$  beat or  $\frac{1}{4}$  beat):





# Subject: History, Living Under Nazi Rule

Year: 9

Give each paragraph a heading:

Write TWO bullet points to summarise each paragraph:

Propaganda within Nazi Germany was taken to a new and frequently perverse level. Hitler was very aware of the value of good propaganda and he appointed Joseph Goebbels as head of propaganda.

Propaganda is the art of persuasion – persuading others that your 'side of the story' is correct. Propaganda might take the form of persuading others that your military might is too great to be challenged; that your political might within a nation is too great or popular to challenge etc. In Nazi Germany, Dr Joseph Goebbels was in charge of propaganda. Goebbels official title was Minister of Propaganda and National Enlightenment.

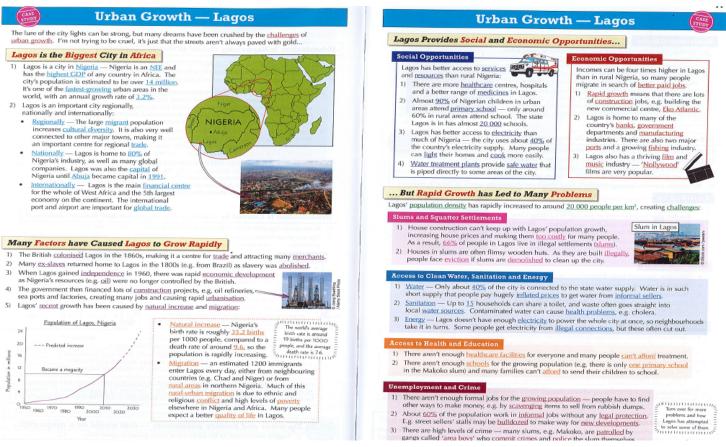
To ensure success, Goebbels had to work with the SS and Gestapo and Albert Speer. The former hunted out those who might produce articles defamatory to the Nazis and Hitler while Speer helped Goebbels with public displays of propaganda.

To ensure that everybody thought in the correct manner, Goebbels set up the Reich Chamber of Commerce in 1933. This organisation dealt with literature, art, music, radio, film, newspapers etc. To produce anything that was in these groups, you had to be a member of the Reich Chamber. The Nazi Party decided if you had the right credentials to be a member. Any person who was not admitted was not allowed to have any work published or performed. Disobedience brought with it severe punishments. As a result of this policy, Nazi Germany introduced a system of censorship. You could only read, see and hear what the Nazis wanted you to read, see and hear. In this way, if you believed what you were told, the Nazi leaders logically assumed that opposition to their rule would be very small and practiced only by those on the very extreme who would be easy to catch.

Hitler came to power in January 1933. By May 1933, the Nazi Party felt sufficiently strong to publicly demonstrate where their beliefs were going when Goebbels organised the first of the infamous book burning episodes. Books that did not match the Nazi ideal was burnt in public – loyal Nazis ransacked libraries to remove the 'offending' books. "Where one burns books, one eventually burns people" commented the author Brecht.

https://www.historylearningsite.co.uk/nazi-germany/propaganda-in-nazi-germany/

### Subject: Geography



### Year: 9

#### Use the information sheet above and the internet to complete the following questions:

- 1) Describe the location of Lagos. (3 marks)
- 2) Nigeria is an NEE, what does this tell us about the country? (3 marks)
- 3) Why is Lagos important nationally? (4 marks)

Subject: Drama

Year: 9

Write out your strengths in drama and what you want to work in this year.

Explain which topic you enjoyed the most in year 8 and why.

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