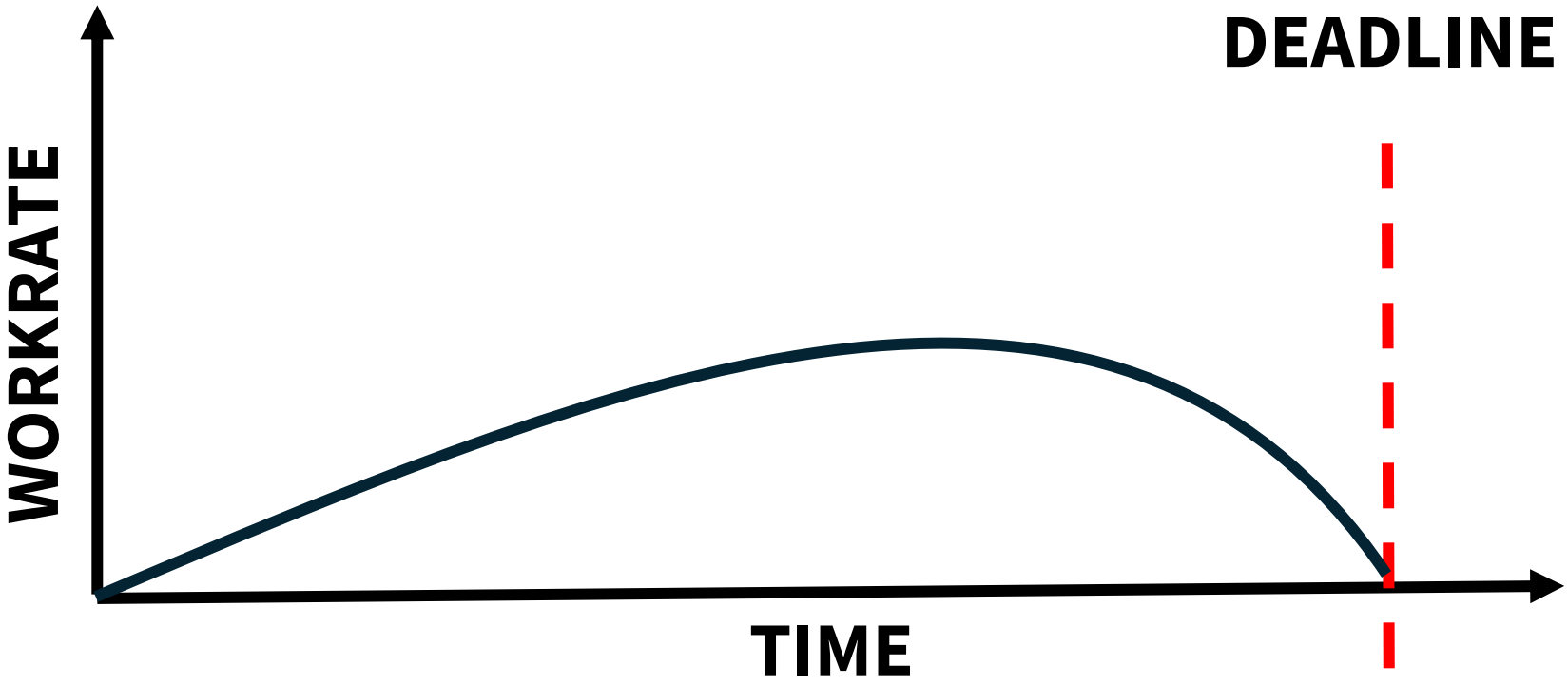
Year 12 Welcome Evening

The school of choice for parents in Reading: where success is **desirable**, **demanded** and **achieved**.

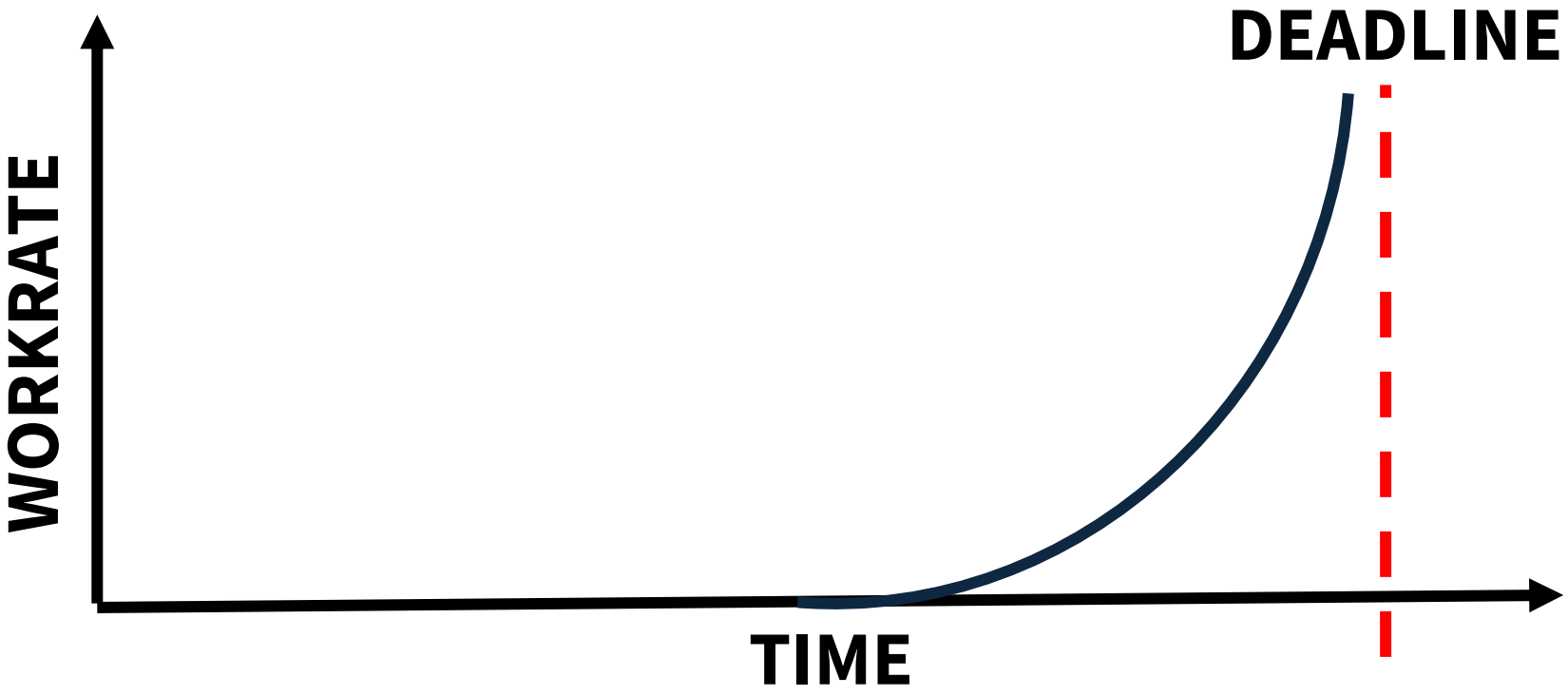
“Nothing is so fatiguing as the eternal hanging on of an uncompleted task”

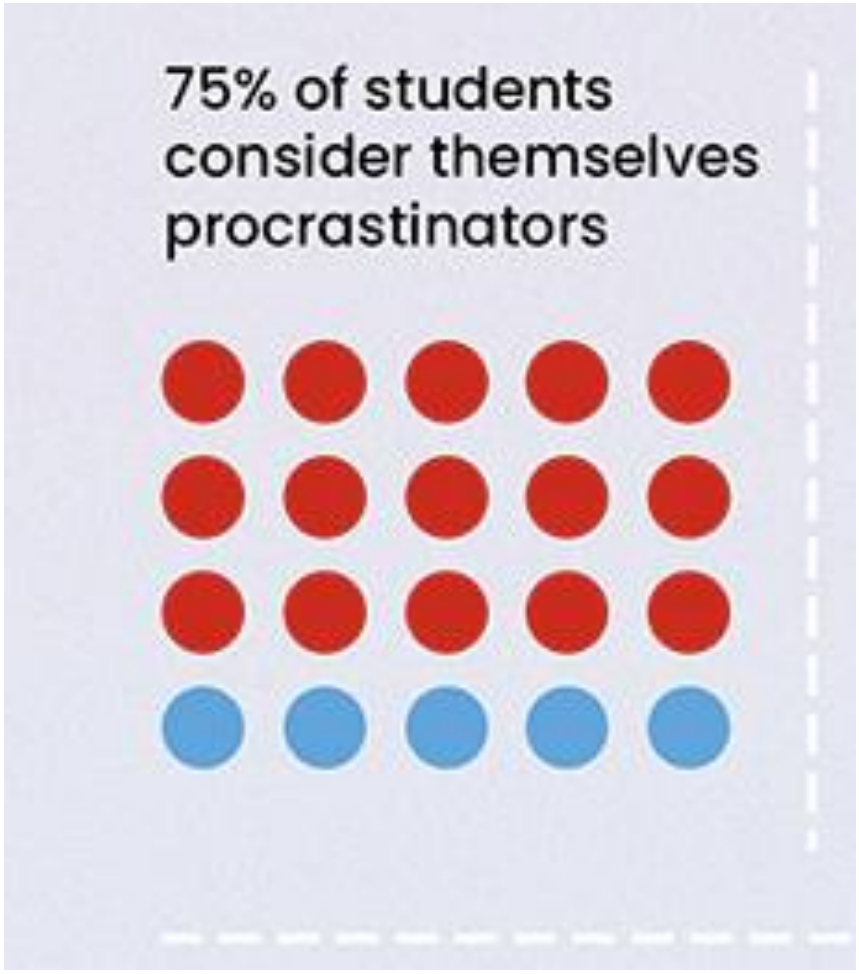
William James, 1897

MY PLAN FOR THIS TALK



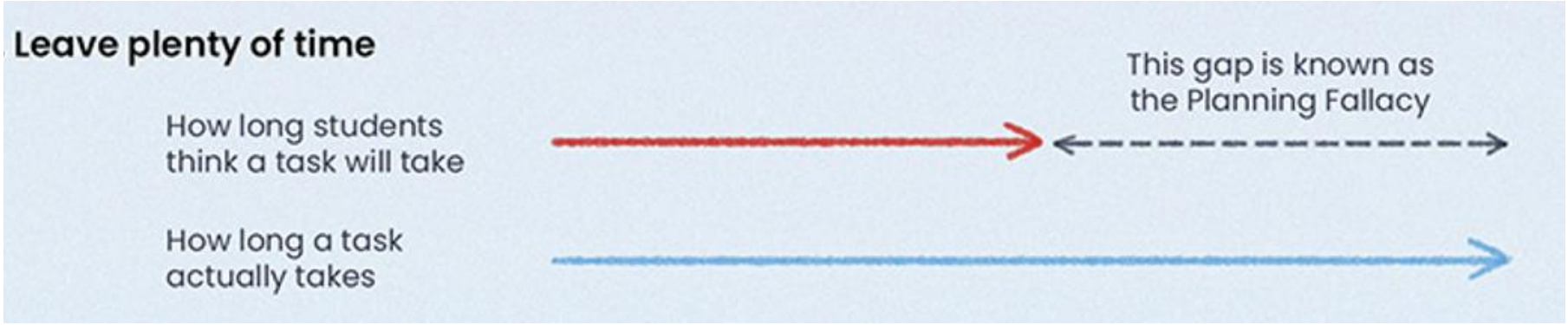
WHAT ACTUALLY HAPPENED




75% of students
consider themselves
procrastinators

CREATE PROCRASTINATION UNFRIENDLY ENVIRONMENTS

1. Avoid distant deadlines and give helpful reminders.



2. Remove temptations.

Research shows that having your phone out whilst studying can reduce concentration by 20%.

3. Remove distraction.

Students who revised in quiet environments performed over 60% better in an exam than their peers who revised listening to music that had lyrics.

Year 12 Welcome Evening

Welcome to the Sixth Form Mindset

Are you going to be a ‘thriver’ or a ‘diver’?

Aims of this presentation

- To help students make the best possible start to Sixth Form life

- To explain the ethos and expectations of Highdown Sixth Form Centre

- To help answer some key questions about Highdown Sixth Form Centre

Who are the key staff?

- Ms L Mathews – Headteacher
- Mr Prior - Head of Sixth Form
- Ms Pattison - Second in Sixth, Pastoral
- Mr Lilley – Second in Sixth, Achievement

- Mrs Kaminska - Learning Mentor / Attendance
- Mrs Sawdon-Smith - Sixth Form Welfare Lead

- The mentors
- A-Level teachers!

What does studying in the Sixth Form involve?

- 3 (sometimes 4) ‘Level 3’ subjects studied for two years
- Timetabled Independent Learning sessions
- A focused CCC programme, as well as a Mentor Period programme to support academic, social and personal progress
- Timetabled ‘Enrichment’ twice per fortnight
- Developing a wide range of **supercurricular** experiences to impress university admissions tutors and employers

How are A-Levels structured?

- A-Levels have been linear since 2015
- A student studying an **A-Level** subject has chosen to study it for two years
- Examinations in May/June of Year 13 (2027)
- Coursework still an important part of some courses
  - Art / Textiles / English / Geography / History / Music
- A-Levels are graded A*-E, not A*-C

How have BTECs changed?

- Assessment includes rigorous exams.
- Assignments no longer allow ongoing marking and improvement.
- During an assignment teachers are limited in the help they can offer.
- Once work is handed in (has to be by the deadline) limited feedback can be given before it can be resubmitted.
- If a unit is not passed - the qualification cannot be passed.
- Each assignment has to meet the deadlines and must meet ALL criteria.

How is the Sixth Form experience structured?

- Start A-Level/BTEC Level 3 courses in September 2025
- A-Level linear PPEs March 2026 and November 2027
- BTEC exams in Year 12, and ongoing assessment
- University application Sept – Nov 2026
- A-Level linear exams May/June 2027

How can students excel in Sixth Form?

Developing a ‘Sixth Form Mindset’

Research has shown that 90% of reasons to explain why students struggle with Sixth Form Study are issues of character, not cognition

Cognition

Character

In other words…

- Gaining a brilliant set of GCSE grades does not necessarily mean students are going to breeze through A-Levels
- A-Levels are a big difference from GCSEs
- Past performance is no guarantee of future performance

- Are you a thriver?
- Or are you a diver?

The Five Elements of the Sixth Form Mindset

- Research has shown that there are five key elements to success at A level - and more importantly, that these five elements can be learned.
- They are not gifts or genetic quirks handed down to lucky people.

The Five Elements of the Sixth Form Mindset – what are 'thrivers' like?

- **Vision**: Thrivers have developed an answer to the question 'Why have you joined our Sixth Form?' They have thought about what they want to achieve.

- **Effort**: Thrivers outwork their peers – 4 or 5 times harder in terms of time spent on tasks beyond the classroom. They are proactive, rather than passively waiting for instruction.

- **Systems**: Thrivers organise themselves – they know the structure and content of their courses.

- **Practice**: Thrivers revise differently. They focus on the things they can't do, rather than constantly restudying what they can do.

- **Attitude**: There is a resilience to the thrivers. They are happy to receive all feedback – good and bad – to develop further.

But divers....

HIGHDOWN SCHOOL AND SIXTH FORM CENTRE

The low vision student

- Characterised by listlessness, boredom, low-level anxiety, exasperation, and a tendency to procrastinate

HIGHDOWN SCHOOL AND SIXTH FORM CENTRE

The low effort student

- Characterised by satisfaction, contentment and short-termism – oblivious to levels of hard work put in by others.

HIGHDOWN SCHOOL AND SIXTH FORM CENTRE

The low attitude student

- Characterised by anger, frustration with progress, unhappiness, self-loathing, negativity – often comparing themselves unfavourably to others

HIGHDOWN SCHOOL AND SIXTH FORM CENTRE

The low (or no)-systems student

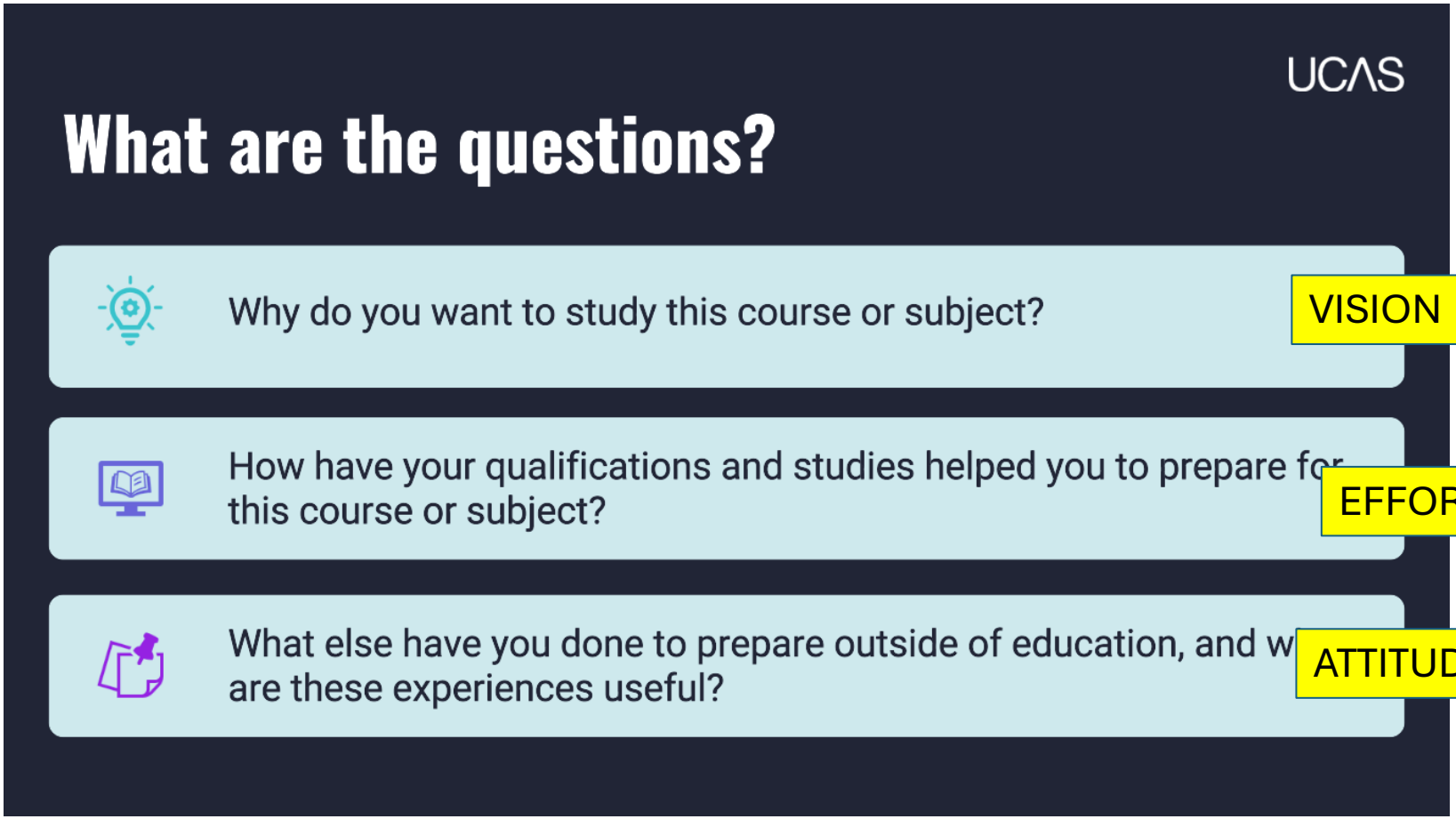
- Characterised by a scaling-up of old systems that now can't cope, missing deadlines because the work has been forgotten, poor sleep and late waking, chaotic bags and folders, often high-stress

HIGHDOWN SCHOOL AND SIXTH FORM CENTRE

The low practice student

- Often organised and hardworking but loyal to repeated patterns of GCSE preparation, comfortable behaviours, sense of control achieved through large stationery purchases, claims "you can't revise" for skills-based courses

The new UCAS form



Key Information

- School day – every day starts at 8:40 and finishes at 15:10
- Attendance – a staged approach
- Signing in and out – students can go off site at break and lunch – but must sign out and back in again
- Flexible Working Passes – Information will follow in Term 2 (after half-term)
- Dress Code - Put simply “Is a student suitably dressed for a learning environment?”
- ID badges - a safeguarding issue – will be produced ASAP
- WEX

Excellence Evening 2025

Well Done!

You have been successful despite……

- COVID
- Pressure from Teachers/Parents
- Peer pressure
- Your own pressure you put on yourself
- Exam system
- Lack of time
- Distractions


Quiz Time

1. A cooked potato can jump-start your brain when your feeling foggy

2. After age 30, the brain shrinks exactly 0.25% in mass each year

3. The brain is the fattiest part of the body with a fat content of around 60%

4. The brain does feel pain compared to the rest of the body

5. The human brain is so soft that a table knife would be more than enough to slice through it

6. The energy used by the brain is enough to light a 25 watt light bulb

7. The average human brain is made up of water up to 80%

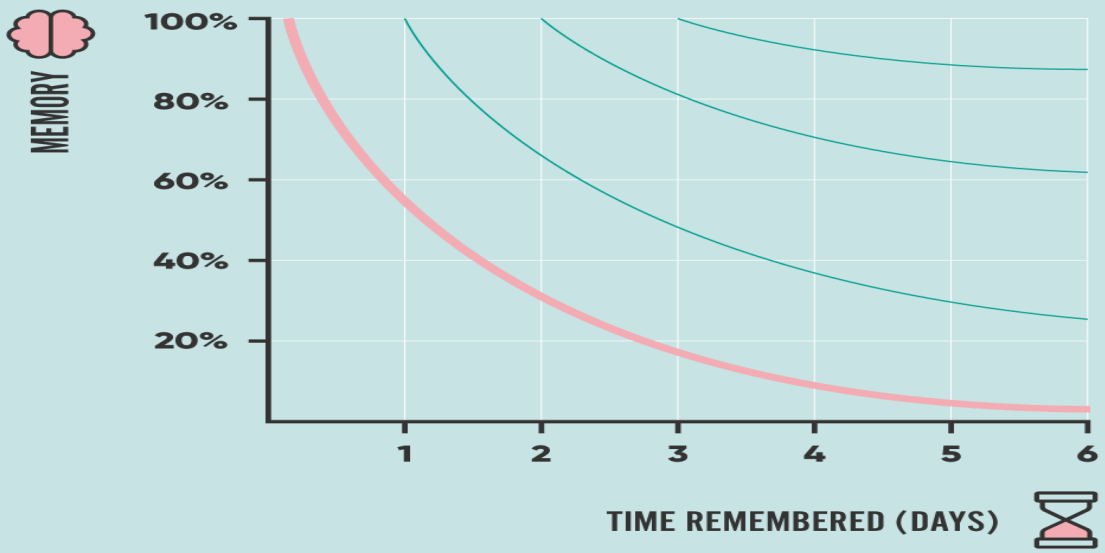
8. The average brain weighs as much as an average Chihuahua dog

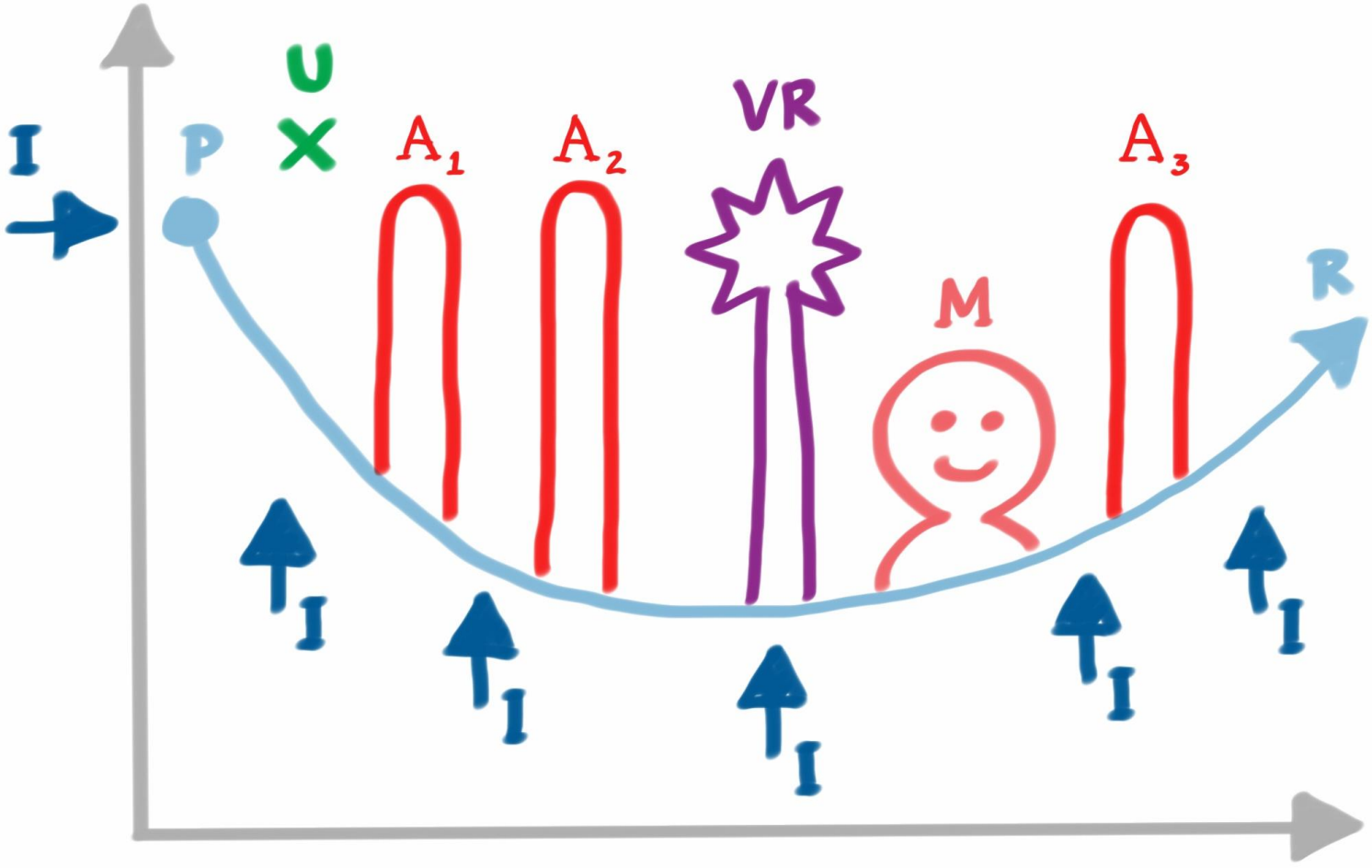
9. The word cerebellum means "little brain"

10. The essential oil of jasmine can quickly restore mental alertness

11. Every time you recall a memory or have a new thought a new connection is made

THE FORGETTING CURVE

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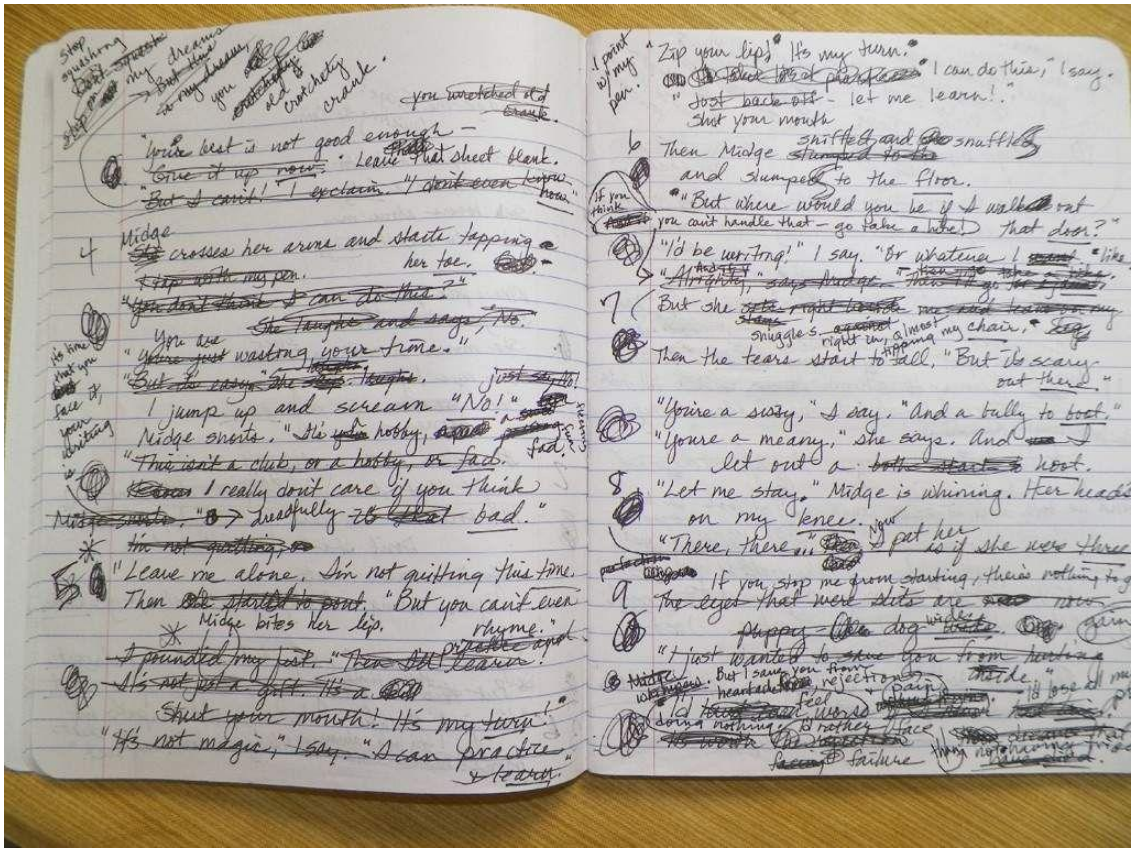
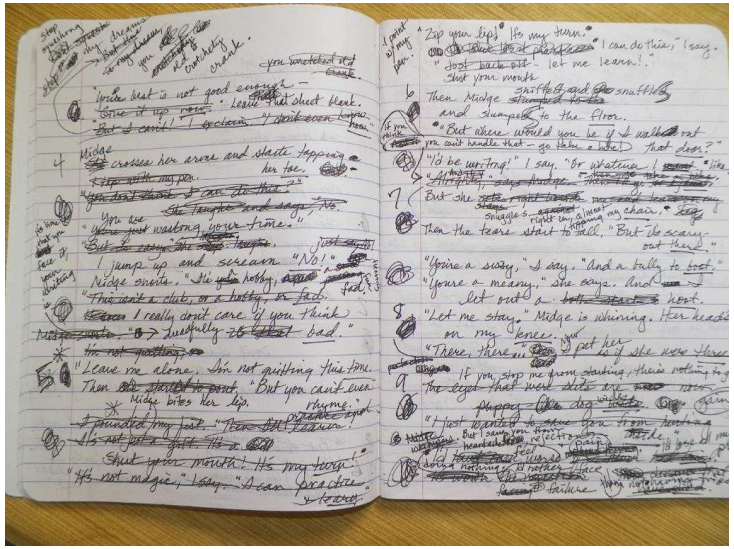
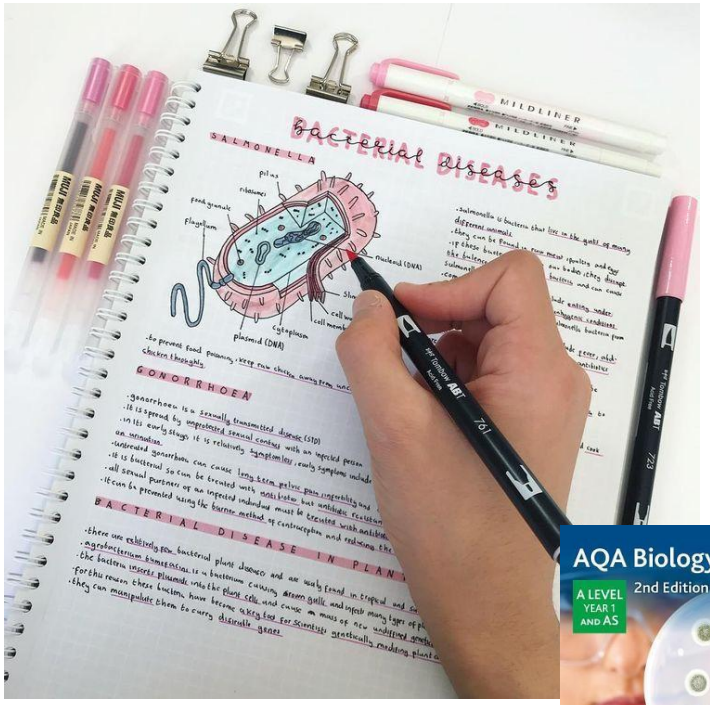
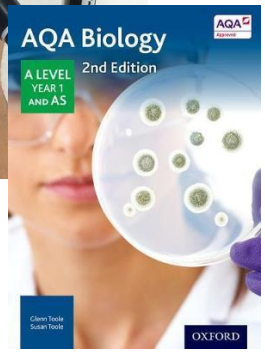





BACTERIAL DISEASES
SALMONELLA
GONORRHOEA
BACTERIAL DISEASE IN PLANTS


AQA Biology
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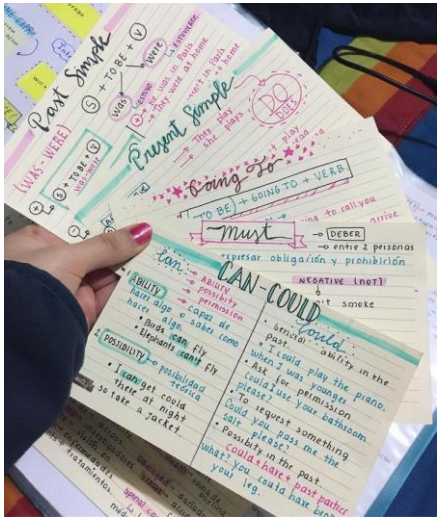
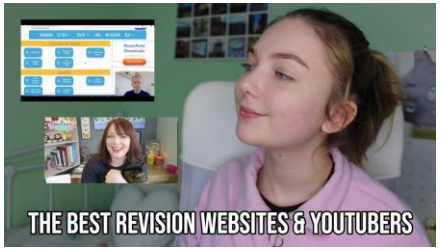
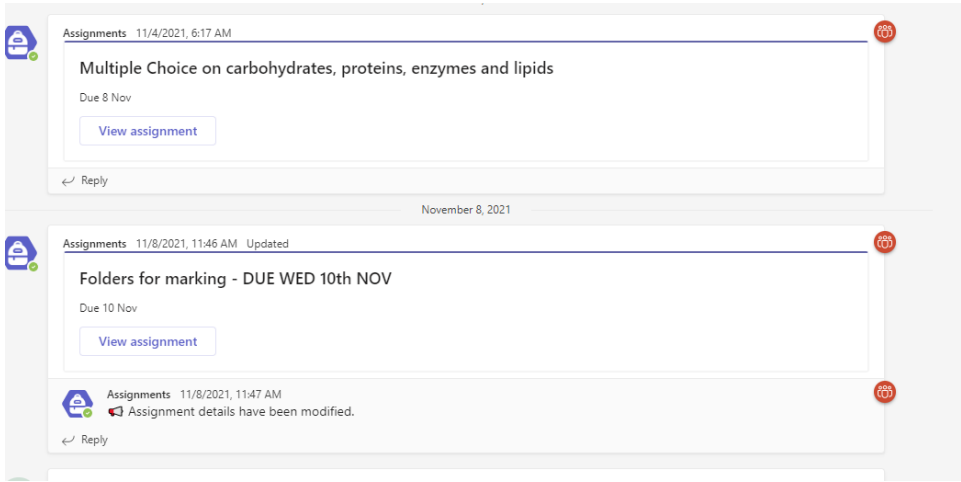

Past Simple
Present Simple
Going to
must
CAN-COULD


THE BEST REVISION WEBSITES & YOUTUBERS

8.2 A-level required practical activities

The following practicals must be carried out by all students taking this course. Written papers will assess knowledge and understanding of these, and the skills exemplified within each practical.

Required activity	Apparatus and technique reference
1. Investigation into the effect of a named variable on the rate of an enzyme-controlled reaction	a, b, c, f, l
2. Preparation of stained squashes of cells from plant root tips; set-up and use of an optical microscope to identify the stages of mitosis in these stained squashes and calculation of a mitotic index	d, e, f
3. Production of a dilution series of a solute to produce a calibration curve with which to identify the water potential of plant tissue	c, h, j, l
4. Investigation into the effect of a named variable on the permeability of cell-surface membranes	a, b, c, j, l
5. Dissection of animal or plant gas exchange or mass transport system or of organ within such a system	e, h, j
6. Use of aseptic techniques to investigate the effect of antimicrobial substances on microbial growth	c, i
7. Use of chromatography to investigate the pigments isolated from leaves of different plants, eg leaves from shade-tolerant and shade-intolerant plants or leaves of different colours	b, c, g
8. Investigation into the effect of a named factor on the rate of dehydrogenase activity in extracts of chloroplasts	a, b, c
9. Investigation into the effect of a named variable on the rate of respiration of cultures of single-celled organisms	a, b, c, i
10. Investigation into the effect of an environmental variable on the movement of an animal using either a choice chamber or a maze	h
11. Production of a dilution series of a glucose solution and use of colorimetric techniques to produce a calibration curve with which to identify the concentration of glucose in an unknown 'urine' sample	b, c, f
12. Investigation into the effect of a named environmental factor on the distribution of a given species	a, b, h, k, l



PLCs....

MODULE 2: Foundations in biology
2.1.1: Cell structure

Learners should be able to demonstrate and apply their knowledge and understanding of:	Notes ready?	☹	😐	🙂	Revision done?
a) the use of microscopy to observe and investigate different types of cell and cell structure in a range of eukaryotic organisms					
b) the preparation and examination of microscope slides for use in light microscopy					
c) the use of staining in light microscopy					
d) the representation of cell structure as seen under the light microscope using drawings and annotated diagrams of whole cells or cells in sections of tissue					
e) the use and manipulation of the magnification formula					
f) the difference between magnification and resolution					
g) the ultrastructure of eukaryotic cells and the functions of the different cellular components					
h) photomicrographs of cellular components in a range of eukaryotic cells					
i) the interrelationship between the organelles involved in the production and secretion of proteins					
j) the importance of the cytoskeleton					
k) the similarities and differences in the structure and ultrastructure of prokaryotic and eukaryotic cells					

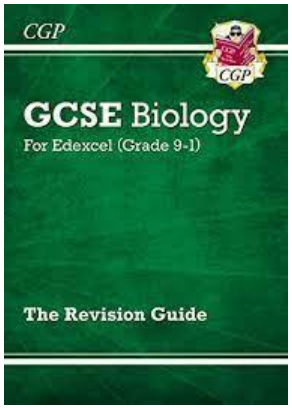
2.1.2: Biological molecules

Learners should be able to demonstrate and apply their knowledge and understanding of:	Notes ready?	☹	😐	🙂	Revision done?
a) how hydrogen bonding occurs between water molecules, and relate this, and other properties of water, to the roles of water for living organisms					
b) the concept of monomers and polymers and the importance of condensation and hydrolysis reactions in a range of biological molecules					
c) the chemical elements that make up biological molecules					
d) the ring structure and properties of glucose as an example of a hexose monosaccharide and the structure of ribose as an example of a pentose monosaccharide					
e) the synthesis and breakdown of a disaccharide and polysaccharide by the formation and breakage of glycosidic bonds					
f) the structure of starch (amylose and amylopectin), glycogen and cellulose molecules					
g) how the structures and properties of glucose, starch, glycogen and cellulose molecules relate to their functions in living organisms					
h) the structure of a triglyceride and a phospholipid as examples of macromolecules					
i) the synthesis and breakdown of triglycerides by the formation (esterification) and breakage of ester bonds between fatty acids and glycerol					
j) how the properties of triglyceride, phospholipid and cholesterol molecules relate to their functions in living organisms					

tes TES

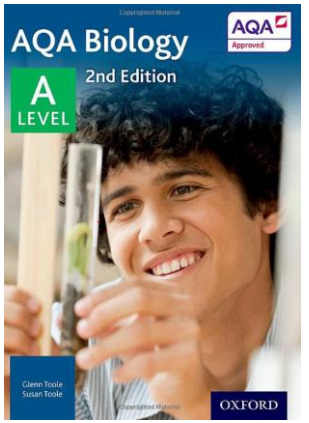
GCSE:

Neurones carry an electrical impulse from receptors in the fingers to the coordinator in the brain to the effector in the hand muscle

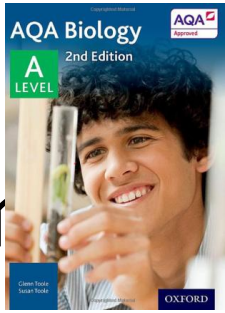


A Level Grade E:

Sensory neurones carry an electrical impulse from receptors in the fingers to the coordinator in the brain via relay and motor neurones to the effector in the hand muscle

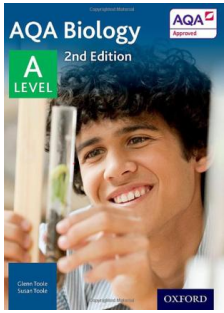


A Level Grade C:



Sensory neurones carry an electrical impulse via saltatory conduction from Pacinian corpuscle receptors in the fingers to the motor area in cerebral hemisphere in the brain via relay and motor neurones to the effector in the hand muscle. The action of sodium and potassium ions causes a wave of depolarisation which is transmitted via channel proteins in the neurones

A Level Grade A:



Sensory neurones carry an electrical impulse via saltatory conduction from Pacinian corpuscle receptors in the fingers to the motor area in cerebral hemisphere in the brain via relay and motor neurones to the effector in the hand muscle. The action of sodium and potassium ions causes a wave of depolarisation which is transmitted via channel proteins in the neurones. High intensity stimuli result in higher frequency stimuli passing along neurones. Maximum depolarisation is +40mv per wave and is due to the alternating closure of sodium and potassium voltage gated proteins. Addition of sodium channel blockers will inhibit the depolarisation.

Use the exam question…

(b) Explain how **one** feature of an alveolus allows efficient gas exchange to occur.

The alveolus is thin and is only 1 cell thick and this allows gas exchange to occur.

(2)

Use the exam question…

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(b) 1. (The alveolar epithelium) is one cell thick;

Reject thin membrane

2. Creating a short diffusion pathway / reduces the diffusion distance;

2 max

(2)

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* alveolar epithelium
* short diffusion pathways
*reduces diffusion distance

(2)

Use the exam question…

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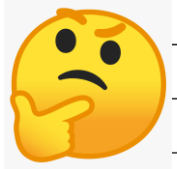
~~* alveolar epithelium~~

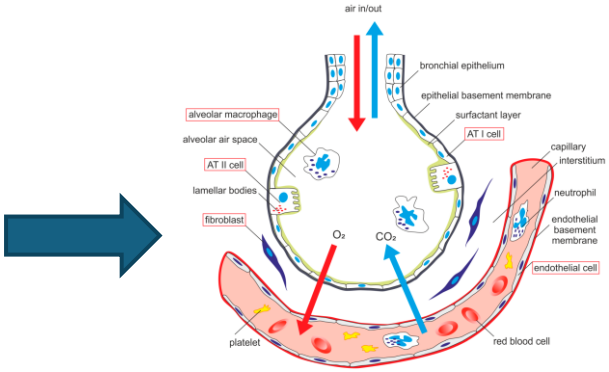
~~*1 cell thick~~

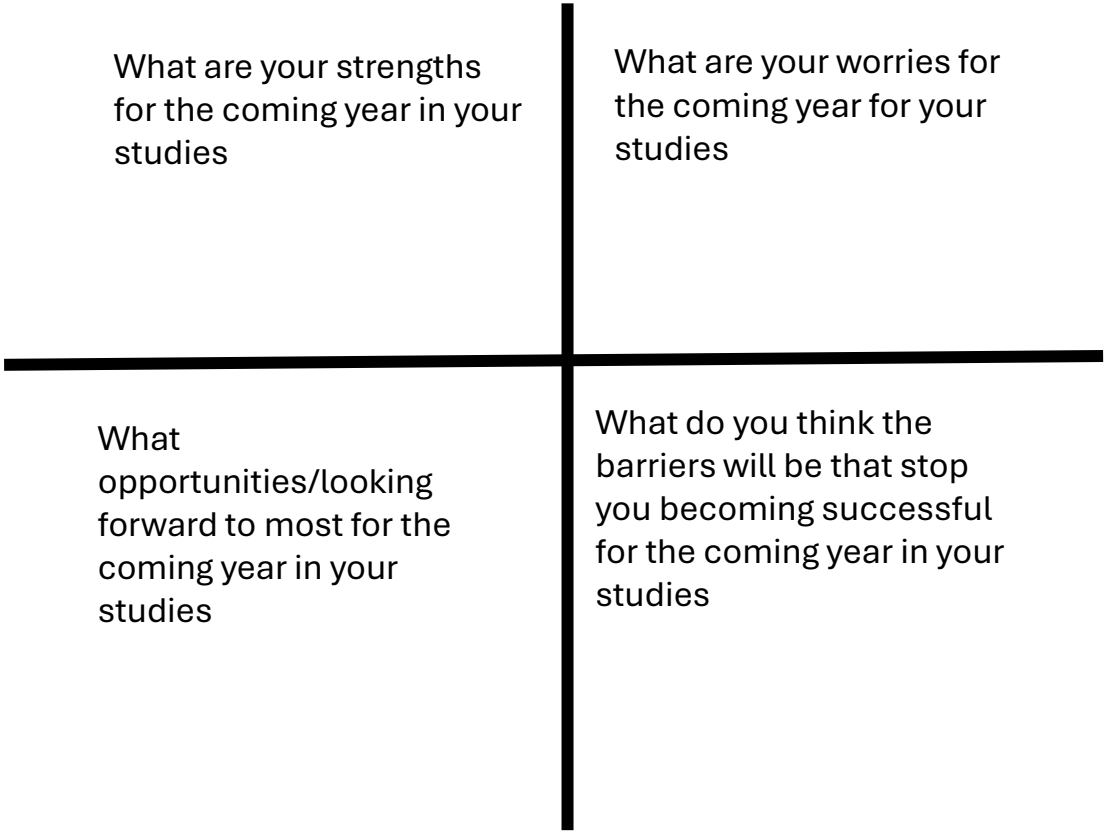


~~* short diffusion pathways~~

~~*reduces diffusion distance~~

(2)




What are your strengths for the coming year in your studies
What are your worries for the coming year for your studies
What opportunities/looking forward to most for the coming year in your studies
What do you think the barriers will be that stop you becoming successful for the coming year in your studies

What are your strengths for the coming year in your studies

Enjoy the subjects I've selected and I know the teachers well

What are your worries for the coming year for your studies

What to do if I don't understand the work in the lesson I have just had

What opportunities/looking forward to most for the coming year in your studies

Looking forward to working with my friends I and being more independent

What do you think the barriers will be that stop you becoming successful for the coming year in your studies

Handing work in on time as I have part time job outside school

Excellence Evening 2025