

YEAR 12 WELCOME EVENING

September 2022



Aims of this presentation

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

- Mr Prior
- Mr Flynn
- Mr Sheridan
- Dr Love
- Mrs Kaminska
- Mrs Sawdon-Smith
- Mrs Hamer
- The mentors
- A-Level teachers!

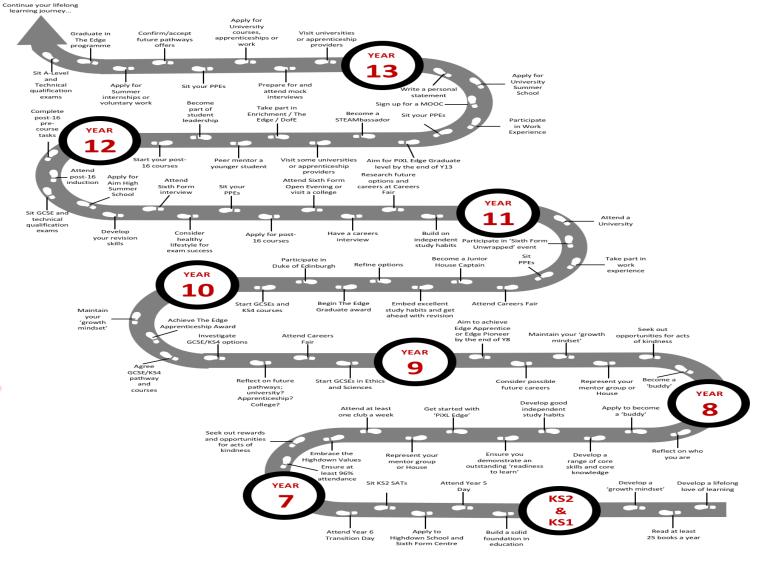
Head of Sixth Form Head of Achievement Assistant Head of Achievement Professional Tutor

Learning Mentor - Sixth Form Sixth Form Welfare Lead Sixth Form Administrator



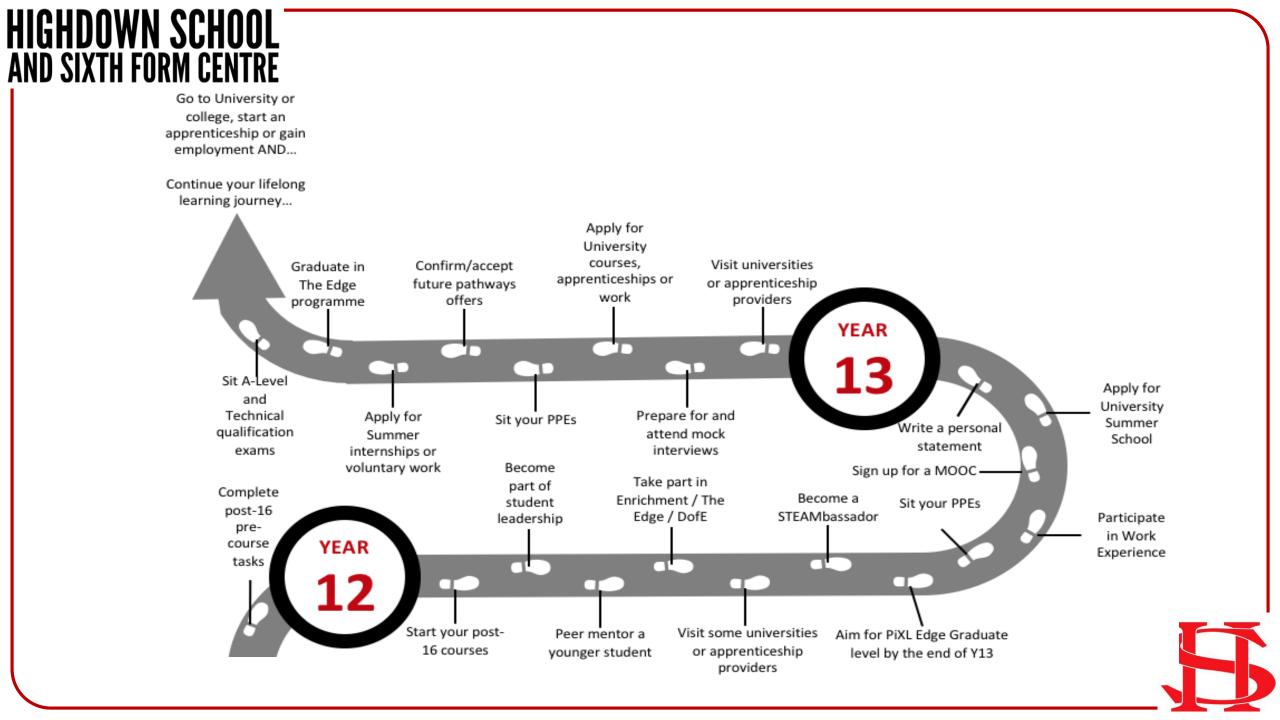


The HIGHDOWN JOURNEY



THE HIGHDOWN LEARNING AND DEVELOPMENT JOURNEY





What myths do we need to 'bust'?

- I don't have any studying to do
- Nobody else wears an ID badge
- I don't have to go to mentor period
- I can work in Waitrose all weekend and do well in my exams
- No-one does any work after the PPEs in the summer, so I am off to Newquay with my mates



What does studying in the Sixth Form involve?

- 3 (sometimes 4) 'Level 3' subjects studied for two years OR
- Level 2 course (one year), with GCSE resits in Maths and English
- Timetabled Independent Learning sessions
- A focused PSHCE programme, as well as a Mentor Period programme to support academic, social and personal progress
- Timetabled 'Enrichment' on a Wednesday afternoon
- Developing a wide range of supercurricular experiences to impress university admissions tutors and employers



How have A-Levels changed?

- A-Levels started to become Linear in 2015
- The changes were phased in over three years
- Curriculum reform is now complete
- A student studying an A-Level subject has chosen to study it for two years
- Examinations in May/June of Year 13 (2024)
- Coursework variable but in many cases now dropped
- 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.
- Mrs Stevens will be sending home further information



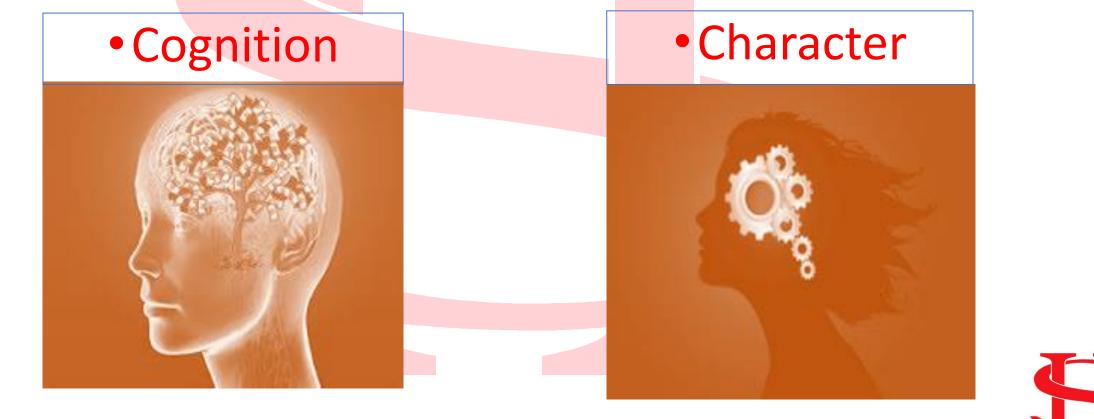
How is the Sixth Form experience structured?

- Start A-Level/BTEC Level 3 and Level 2 courses in September 2022
- A-Level linear PPEs April/May 2023 and December 2023
- University application Sept Nov 2023
- A-Level linear exams May/June 2024

How can students excel in Sixth Form?

- Develop an 'Sixth Form Mindset'
- Embrace the supercurricular

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



In other words...

 Gaining a brilliant set of GCSE grades does not necessarily mean students are going to breeze through A-Levels

The Five Elements of the Sixth Form Mindset

VESPA

- Vision: How well do you know what you want to achieve?
- Effort: How many hours of independent work do you do?
- Systems: How do you organise your learning and organise your time?
- Practice: What kind of work do you do to practice your skills?
- Attitude: How do you respond to setbacks?



HIGHDOWN SCHOOL and sixth form centre

If students find they performed well at GCSE, but are struggling by the first month of Sixth Form, could it be because they fit one of the following patterns?





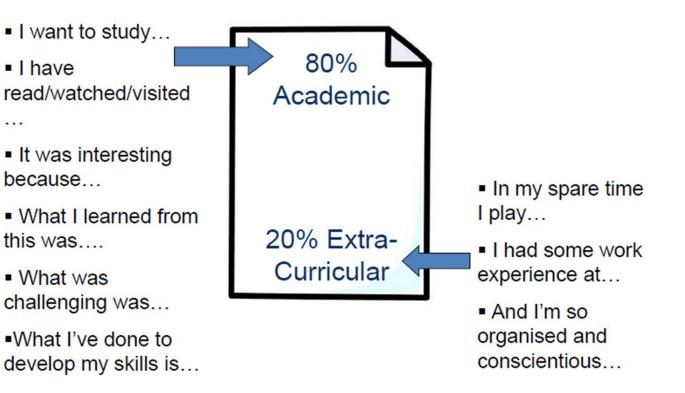
HIGHDOWN SCHOOL AND SIXTH FORM CENTRE What is 'supercurricular' learning?

Structuring the Personal Statement

Super-curricular Activities

Activities that you do outside of school that are to do with your subject

- Summer schools
- Work experience (Medicine place more emphasis on work experience)
- Public lectures
- Voluntary work
- Competitions
- Enrichment activities in the local area publicly accessible opportunities
- Read newspapers, journals, books













- Listen to the radio / download podcasts / watch TED talks
- Watch more TV (the right kind of TV!)





• Subscribe to a MOOC – Massive Open Online Course (many are free!) a canvas **NovoED**) iversity 2 STUD • Try a virtual museum visit Check out 'subject specific' societies (the chances are, most A-Level subjects have a 'society' that have free resources for Sixth Form students #GeeksOnTwitter Brian Cox O Follow 1. Geographical Society Getting very excited about the Curiosity rover landing. Life on Mars ? buff.ly/Ow2pLw + Rock 13 Report + • Follow academics on social media (or be old-fashioned, and write to them!)

There is a reason why our students achieve!

- Our expectations
- The quality of teaching
- The Pastoral support they receive
- The opportunities they are given



What are our expectations?

- Dress code
- ID badges
- Study Zones
- Independent Learning slots
- Attendance

How much work should students expect?

- Expect homework every night
- Around 4-5 hours per subject per week is recommended, i.e. 15 hours in total in addition to timetabled lessons
- If students use Independent Learning slots wisely, then this does not become overwhelming (not 'Free Periods'!)
- Remember the supercurricular the work you haven't been asked to complete!

What support is there?

- Mentor for all students
- Academic Monitoring and Mentoring
- Subject evenings
- Sixth Form Welfare lead
- Dedicated Study Room and Sixth Form Learning Mentor
- School nurse support
- 16-19 Bursary support



What is the 16-19 Bursary?

- A government funded scheme to help young people facing financial constraints to stay in full time education after year 11.
- Vulnerable Student Bursary for students who...
 - Are currently in care
 - Are leaving or have recently left care
 - Receive Income Support in their own name
 - Are disabled and receive both Employment Support Allowance and Disability Living Allowance
- Discretionary Student Bursary for students who...
 - Have an annual household income of below £25,000
- The Bursary can be used for a range of support, such as...
 - Transport costs, essential course equipment, books, trips etc
 - Financial support towards exam re-sit fees
 - University visits
- Application forms can be collected from the Sixth Form Team, or the Finance Office



What is Academic Monitoring?

- Use of data to monitor progress and intervene when needed
 - Data includes Attendance, Ready to Learn grades, Predicted grades, Consequence and Praise points
 - Monitoring includes at Curriculum, Mentor, Head of Achievement and Leadership levels.

What is Academic Mentoring?

- Different from monitoring
- Target setting
- Actions identified to meet targets
- Individual basis
- Long term "Growth Mindset"
- Communication is key



Other than A-Levels, what opportunities are there?

- EPQ
- Core Maths
- Mentoring scheme
- Boffit
- Leadership
- VWEX
- Enrichment



HIGHDOWN SCHOOL AND SIXTH FORM CENTRE Why is Enrichment important?

Every Wednesday Period 5

- Sport
- Current affairs film club
- Learning to cook
- Duke of Edinburgh
- Hairdressing
- Wellbeing
- Community Work
- Podcasting

Students can also organise their own Enrichment opportunities

Other Opportunities

- Mentoring
- Classroom Assistants
- Student Leadership
- World Challenge
- National Citizen Service
- Work Experience



Study Skills in the Sixth Form



Well Done!

You have been successful despite.....

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







Quiz Time

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
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
 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
 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
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

Assignments 11/4/2021, 6:17 AM		
Multiple Choice on carbohydrates, pro	teins, enzym	nes and lipids
Due 8 Nov		
View assignment		
✓ Reply		
	Novem	ber 8, 2021
Assignments 11/8/2021, 11:46 AM Updated		<u> </u>
Folders for marking - DUE WED 10th N	IOV	
Due 10 Nov		
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Assignments 11/8/2021, 11:47 AM	MB	A REAL PROPERTY AND A REAL
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MODULE 2: Foundations in biology 2.1.1: Cell structure

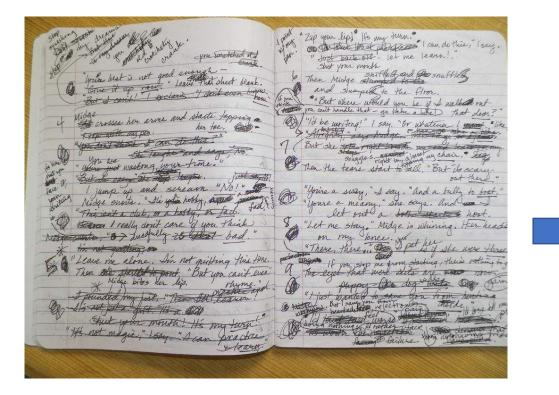
PLCs.....

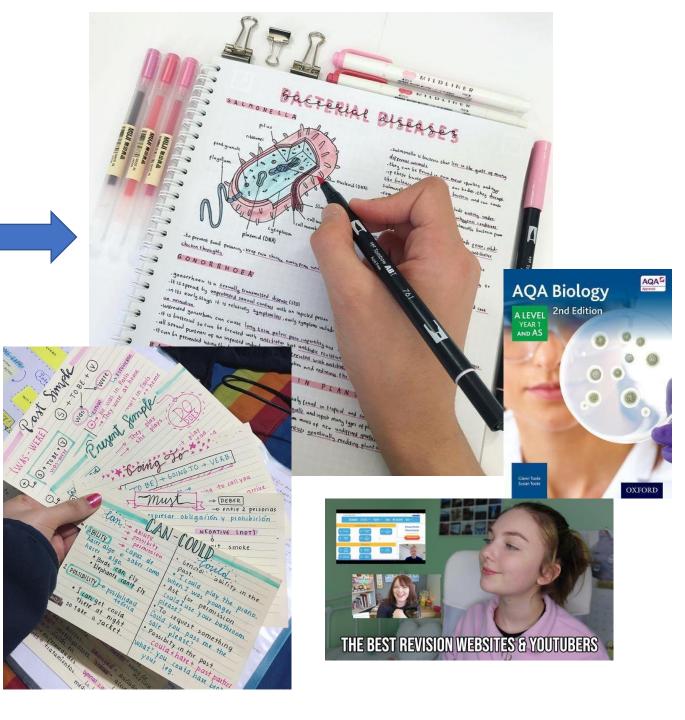
Learners should be able to demonstrate and apply their knowledge and understanding of:	Notes ready?	3	\odot	\odot	Revision done?
 a) the use of microscopy to observe and investigate different types of cell and cell structure in a range of eukaryotic organisms. 					
b) the preparation and examination of microscope slides for use in light interoscopy					
c) the use of staining in tight 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 lissue					
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					
 the interrelationship between the organelles involved in the production and secretion of proteins 					
) the importance of the cytoskeleton			1 2		
k) the similarities and differences in the structure and ubrastructure of prokaryotic and eukaryotic cefts					

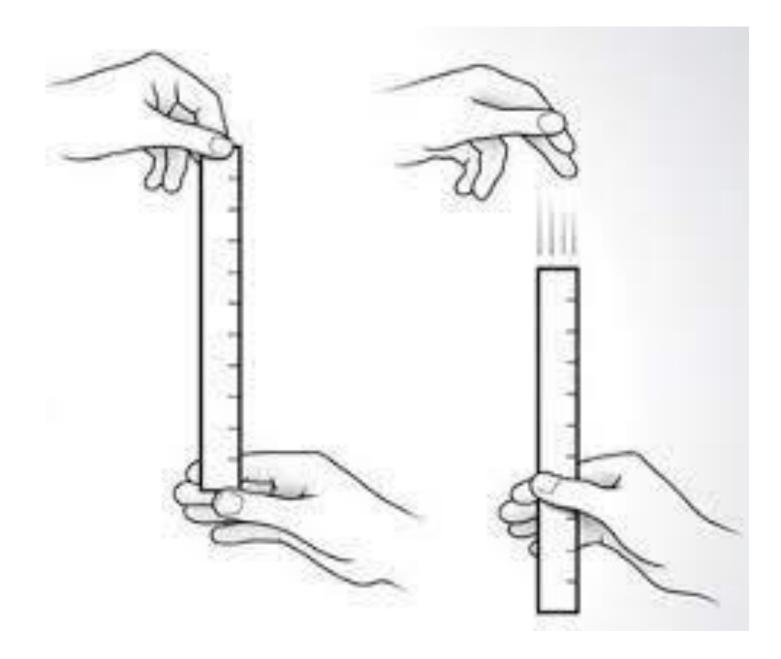
2.1.2: Biological molecules

Learners should be able to demonstrate and apply their knowledge and understanding of:	Notes ready?	3	\odot	\odot	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 hexase 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 					
 the structure of starch (amylose and amylopectin), alycogen and cetulose molecules. 					
g) how the structures and properties of glucose, starch, glycogen and cellulose molecules relate to their functions in bring organisms					
h) the structure of a triglyceride and a phospholipid as examples of macromolecules					
0 the synthesis and breakdown of triglycerides by the formation (ester/fication) and breakage of ester bonds between fatty acids and glycerol					
) how the properties of triglycende, phospholipid and cholesterol molecules relate to they functions in two	FS				

Zip your lips" It's my turn. Jost back att - let me learn!." you wookched at at Then Midge Shifted and Geosnuttles Leave That sheet blank. and sumper to the floor. "I don't even kinger It you "" But where would you be if I walked out arine and state tapping "I'd be writing! "Altrighter," sa 1 say. "Ir whatener ! statester says price of But she star right house me rad have so snuggles not un almost my chair, " Log Then the tears start to fall, " But its scare and then C out there "Youre a sway," I say, " and a bully to boot. jump up and scream B yours a meany," she says. and I let out a both start to host. Vidge spirits. "Let me stay," Midge is whining. Her heads on my knee. " pat her she was three "There, there " " There is got here there Etoca I really don't care you think " > Lesofully tin not anothing so The eyes that were starting, there are the are the are alone. In not quitting this time. Midge bites her lip. "But you can't even mym failure yteand



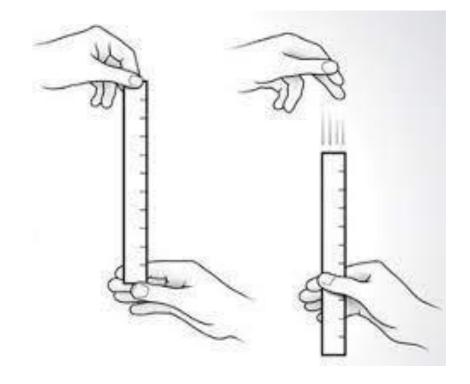




Reaction Time Chart for the Ruler Drop Test

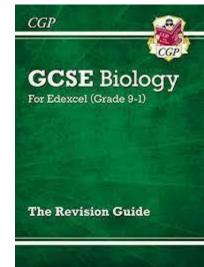
Norms	Reaction Time in Seconds	In Cm.
Excellent	.05	1999 1 (* 1947)
Excellent	,06	2
Excellent	OS	3
Excellent	.09	ann 📲 👘 👘
Excellent	.10	5
Excellent	11	0
Excellent	.12	7
Above Average	.13	8
Above Averag	.14	9
Above Average	14	10
Above Average	.15	11
Above Average	.10	12
Above Average	.16	13
Above Average	17	14
Above Average	.18	15
Average	.18	16
Average	.19	17
Average	.19	18
Average	20	19
Average	.20	20
Below Average	.21	21
Below Average	21	22
Below Average	22	23

The norms on the chart see for 16 to 19 year olds.



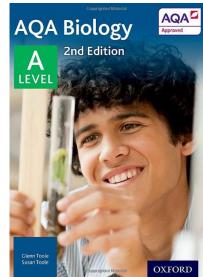
GCSE:

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



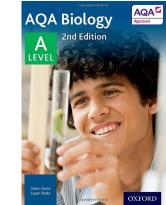
A Level Grade E:

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



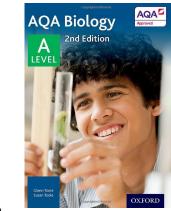
A Level Grade C:

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.





Describe a Malteser to someone who has never seen, tasted or experienced a Malteser before



The Malteser National Curriculum

Describe a Malteser to someone who has never seen, tasted or experienced a Malteser before

Meeting expectations:

Exceeding expectations:

So proud of you I could burst:

(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.

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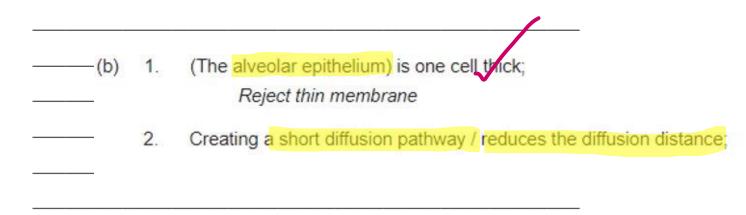
(b)	1.	(The alveolar epithelium) is one cell thick;	
	Reject thin membrane		

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

2 max

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

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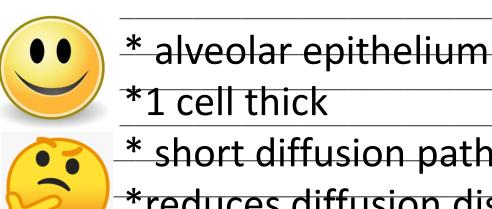
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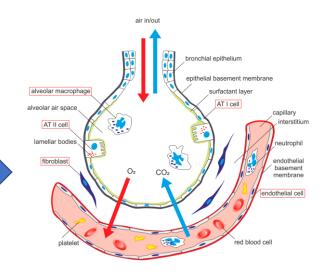
* alveolar epithelium
 * short diffusion pathways
 * reduces diffusion distance

(2)

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



* short diffusion pathways *reduces diffusion distance



(2)



What are your strengths for	What are your worries for
the coming year in your	the coming year for your
studies	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	What are your worries for the coming year for your studies
Enjoy the subjects I've selected and I know the teachers well	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

