



Form 5

Parent Information Evening

13 September 2017

Overview of the Year Ahead

Mr Shields

- Approximately 39 school weeks from beginning of September to end of June
- However, Form 5 pupils will begin study leave around 9 May (**31 school weeks**)
- Track 1 – early October
- Winter examinations (Track 2) – early December
- A level subject choice information evening - December
- Mock GCSE results day - January
- Track 3 – March
- Study leave – early May

GCSEs – Putting Into Perspective



Key Personnel

Title	Role
Raising Standards Coordinator (RSCo) Dr Brown and Ms Graham	Vice Principal and Senior Teacher with responsibility for coordinating all aspects of the raising achievement strategy across all key stages
Raising Standards Leader (RSL) <ul style="list-style-type: none">• Mr Shields (KS4)	Senior Teacher with oversight of academic progress within each Forms 4 and 5
Key Stage Leader (KSL) <ul style="list-style-type: none">• Mr Hughes	Member of SLT with responsibility for Key Stage 4
Learning Support Mentor (LSM)	Member(s) of the SEN team who will work with pupils disappplied from subjects or who are struggling with study skills
Class Teacher	First person to speak to if a pupil is having difficulty in understanding a particular topic or for guidance with controlled assessment

Key Strategies – pupil based

- Strong study habits all year
- Full attendance
- Effective revision technique including making a revision timetable
- Use of study support sessions on Tuesday afternoon
- Managing controlled assessment

Key Strategies – school based

Dr Brown

- Pupils who have underachieved in a tracking assessment **MUST** know what they need to do in order to improve i.e. how to **Close the Gap (CTG)**;
- **Fine grading** will replace the bar charts to indicate how secure the grade is;
- Teachers will use their professional judgement at each tracking point to predict the grade that will be achieved next August – **Professional Predicted Grade.**

Fine Grading and PPG

Professional Predicted Grade (PPG)

Fine Grading System

- B1 (High B grade – with support could go up to an A grade)
- B2 (Secure B grade)
- B3 (Insecure B grade – in danger of dropping to a C grade)

Remember...

The PPG will take account of the whole picture: test results, Form 4 examination results, coursework/controlled assessment and current work ethic

Post Track

- Self-evaluate Track result using CTG pro-forma
- Engage with subject teacher regarding actions required
- Sit re-test as required (during Tuesday 2.00-3.10)
- Pupils 'at risk' will meet with Head of Year and Raising Standards Leader to agree actions
- Pupils may be directed to remain after school in supervised study (one or two afternoons in addition to Tuesday 2.00pm session) 3.20-4.30pm
- This will be reviewed after the next track

Levels of intervention

- At departmental level (decided by class teacher, Subject Leader) for pupils who have underperformed in an assessment or homework
- Whole school (after school supervised study)
 - Pupil who has underperformed in a number of subjects as evidenced by post-track PPGs OR consistently underperformed in one subject across a number of tracks

Pupils 'at risk' following Track 2 and/or Track 3

- For progression and to permit pupil choice, all pupils should aim to pass GCSE Mathematics and English and a total of 7 GCSEs
- At risk pupil and parent to meet with Dr Brown/Mr Shields and Mr Hughes
- Prioritise subjects for improvement
- Support strategies may include reducing number of subjects to provide additional study support

Effective Revision Strategies

- Deputy Head Boy, Patrick Donnelly (organisation)
- Deputy Head Girl, Trinity Geddis (Revision Strategies)

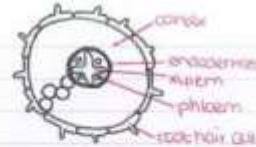
Revision Strategies - Trinity

- Be prepared
- Use the specification
- Make condensed notes
- Discover what type of learner you are:
 - Visual
 - Auditory
 - Reading/writing
 - Kinesthetic
 - Multimodal
- Past papers

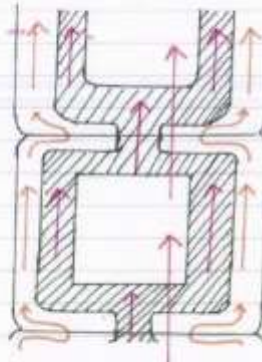
Condensed Notes

Water movement through the leaf

3 pathways!



Higher water potential ψ

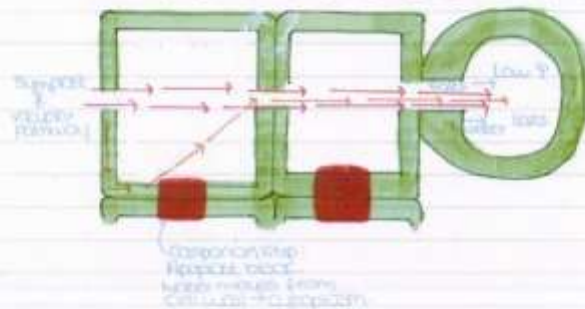


→ Vacuolar pathway - through cell surface membrane, cytoplasm & tonoplast.

→ Symplast pathway - Water moves from cell to cell through cell cytoplasm & plasmodesmata.

→ Apoplast pathway - Water moves from cell to cell through cell walls.

Water movement into the xylem of the central stele:



- Water is transported through the cortex & then through endodermis cells which have a Caspation strip blocking the apoplast pathway.
- Allowing active control of the passage of water & dissolved ions.

Create a Study Plan

Mr Hughes

A good revision plan should be:

Realistic

Detailed

Flexible

- Make use of resources online - The 'Get Revising' study planner automatically schedules revision around your life, breaks revision into manageable chunks and is easy to change and update. Best of all it is free and available on any internet-enabled device.
- Use your specification to identify all topics in the subject.



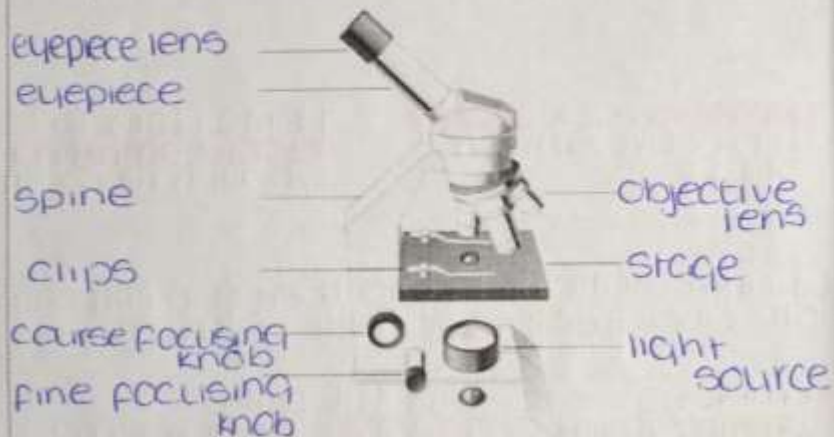
www.getrevising.co.uk/planner

Revision Tips

- Revision is not the few weeks before the exam – it is a constant process which should happen throughout the year on a weekly basis. Reviewing the notes covered in each subject each week. Keeping knowledge fresh and reinforcing information.
- Study in a quiet, comfortable room - well lit and ventilated.
- Remove distractions - leave the TV, phone and computer out of the revision room. Music can be a distraction too!
- 2 –3 hours a night, broken down to manageable chunks (45 –50 mins) then a short break.
- Be active in your revision – make notes, create ‘Super summaries’ etc. to keep your brain alert.
- Be accountable.
- Review ‘Super summaries’ and try past papers.

1.1 Cells Revision Summary

- Use a light microscope to identify the structures present in plant and animal cells



- Calculate the size of specimens and magnification using a scale bar

$$\text{Magnification} = \frac{\text{Eyepiece lens magnification} \times \text{Objective lens magnification}}{\text{magnification}}$$

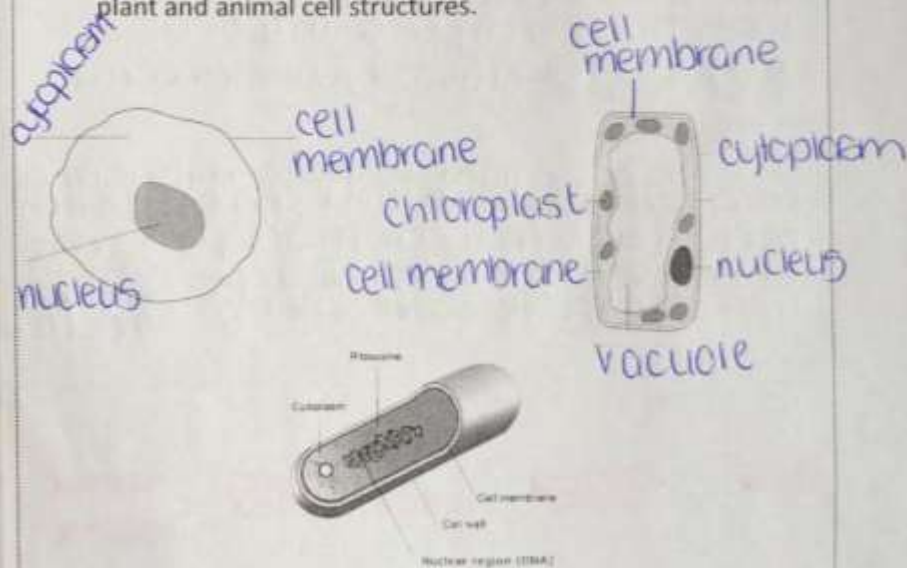
Calculating the actual size of a specimen

$$\text{Actual size of specimen} = \frac{\text{size of image viewed}}{\text{magnification}}$$

Calculate the magnification using a scale bar

$$\text{Magnification} = \frac{\text{Length of scale line measured}}{\text{Length of scale line given}}$$

- Know the structure and function of the parts of an animal cell and the additional structures present in a plant cell.
- Compare and contrast the structure of a bacterial cell with plant and animal cell structures.



	Cell wall	Cell membrane	Nucleus	Cytoplasm	Chloroplast	Vacuole
Animal	X	✓	✓	✓	X	X
Plant	✓ cellulose	✓	✓	✓	✓ green plants	✓
Bacteria	✓	✓	X	✓	X	X

Focusing the microscope

5 step process

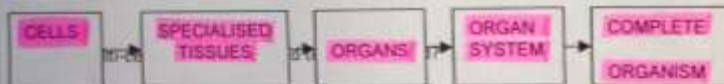
1. place **slide on stage** and secure with **clips**
2. turn to **low power lens** focus (with of c.k)
3. flip going to high power do it **carefully**
4. when blurry - sharpen with **fine**
5. move lens down (x40) objective so nearly touches slide

Preparing a slide

3 steps

1. Using **forceps**, peel a thin layer of specimen (to allow light to pass through) ←
2. place on slide and add a few drops of **iodine** to stain and show more clearly
3. lower coverslip in a triangle shape using forceps (to avoid bubbles)

- Understand that multi-celled organisms are organised to transport substances and communicate between cells.



Function of system	Systems involved
Improving exchange	Respiratory system and digestive system
Transporting substances	Circulatory system
Communication	Nervous system and endocrine system (hormones)

- Investigate the process of diffusion.

Definition of **diffusion** - random movement of a substance (simple soluble one) from high conc to where it is low conc until equilibrium

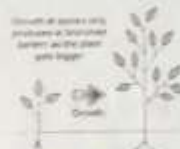
- Examples of diffusion in action -
- **alveoli** in lungs
 - soluble material in intestine
 - **transpiration** in plants

- Compare and contrast growth patterns in plants and animals

There are 2 main patterns of growth...



animals grow evenly
= when have similar shape



plants grow in opposite (root/shoot) give branching pattern

- Understand what stem cell research is and its implications.

What are stem cells?

Undifferentiated cells that can differentiate into any specialised cell by **mitosis**

Where can they be harvested from?

- **embryous**
- **umbilical cord blood**
- **adult cells**
- **adult bone marrow**

What do they turn into?

any specialised cell

Why are they useful?

easy to grow/culture and easy to extract. treat diseases

What are the ethical issues?

- **killing human life** playing god
- **taking away human rights** of embryo

Why are embryonic better than adult stem cells?

- **adult bone marrow** can only differentiate to bone marrow cells difficult to extract & culture
- **embryonic cells** - **easy to extract** and they can become any specialised cell

What is peer review? a process of **self-regulation** and evaluation involving scientists within the **same research field** to **maintain standards, improve performance** and provide credibility. The stated purpose of stem cell research peer review is to make **certain of the accuracy** and rigor of research findings on stem cells **before they are made public**

How to Revise Using Past Papers

Use these:

1.The Question Paper

2.The Mark Scheme

Available on the examination board website CCEA

Do it this way:

1. Complete under timed conditions
2. Work in exam conditions
3. Don't stop to look things up
4. When you have finished, check your answers with the mark scheme
5. Diagnose where you went wrong (Close the Gap)
6. Use your notes/textbook to improve your answers
7. Use your specification to ensure that you have covered all topics

How Can Parents Help?

Dr Scully



1. Planning

Mr Hughes:

- *Study in a quiet, comfortable room - well lit and ventilated.*
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Planning to take account of other activities, dinner, other family members,.....

2. Equipment



3. Getting started and creating routine

‘Don’t wait for something big to occur. Start where you are, with what you have, and that will always lead you into something greater.’

Mary Manin Morrissey
(American Preacher)

4. Revising

Experiment with different techniques:

- Key point / summary notes (RADAR)
- LACAWAC
- Talking aloud

Revision should be active.

Lifestyle



- Eat healthily
- Keep hydrated
- Exercise
- **Prioritise sleep:**
Consider restricting access to the internet/social media/gaming around bed time

Your son or daughter might tell you:

“It’s too early to start yet”

“It’s too late to start now”

“No-one else has started revising”

“Revision is boring. It’s just staring at a book”

“I can revise and listen to music or watch the television”

“All I can do is my best, I don’t need to revise”

“I’ve done loads of revision”

And finally

- Be there for them
- Be positive - praise them for the effort they have made

And finally

- Be there for them
- Be positive - praise them for the effort they have made
- And don't forget the value of a nice cup of tea!



Where to Find Additional Help?

- Getrevising.co.uk
 - a wealth of revision material including the facility to create personalised study timetables and revision timetables
- Guidance on the Belfast Royal Academy Website
 - [BRA Study Guide](#)