

Subject	Year	Term
GCSE Science	9	1
Topic		
B1 – Cell Biology		
Content (Intent)		
Prior Learning (Topic) 7B1 – The Basics of Life; 8B2 – DNA & Inheritance		
1. Looking at cells (light and electron microscopes) 2. Eukaryotic Cells (Plants and animals) 3. Biology Required Practical No. 1 – Microscopy 4. Prokaryotic cells and estimating size 5. Cell differentiation 6. 6a Stem cells 6.b Therapeutic cloning 7. Mitosis and the cell cycle 8. Substances in and out of cells - diffusion 9. Surface Area to Volume Ratio 10. Solving the surface area to volume ratio problem 11. Substances in and out of cells - osmosis 1 12. Substances in and out of cells - osmosis 2		
Future Learning (Topic) B2a – exchange surfaces; Year 11 – cell division; Key stage 5 – Biology		
How will knowledge and skills be taught? (Implementation)	How will your understanding be assessed & recorded (Impact)	
Demos Diffusion of air freshener across classroom; effect of temperature on diffusion of potassium permanganate. Practical work Required Prac 1 – microscopy; Required Prac 2 – osmosis in plant tissue; Diffusion of acid into indicator cubes. Written Notes and completed worksheets in exercise books, research tasks using fact cards.	- 2 x standard homeworks (Level given. Written feedback. Response expected.) -1 x end of topic test (Level given. Verbal feedback to class and individuals.)	
How can parents help at home?		
Look at the topic specific resources on the VLE. Look at the CGP GCSE Revision guide. Use appropriate Youtube channels: cognito, primrosekitten, khan academy, freesciencelessons. Take an interest! Ask your children what they have learnt and be curious about their learning.		

Helpful further reading/discussion

Reading

Horrible Sciences
newscientist.com
catalyst-magazine.org

Vocabulary Lists

Diffusion, osmosis, active transport, surface area, volume, differentiation, stem cells, mitosis, chromosomes.

Careers Links

Medicine (doctor/nurse)
Scientific Research