Cell Biology Sequence Map

L1: Eukaryotic and Prokaryotic Cells
Video: GCSE Biology Revision "Eukaryotes and Prokaryotes" (youtube.com)
BBC Bitesize: https://www.bbc.co.uk/bitesize/guides/zpqpqhv/revision/11

L2: Animal Cells
Video: GCSE Biology - Cell Types and Cell Structure #2 - YouTube
BBC Bitesize: https://www.bbc.co.uk/bitesize/guides/zpqpqhv/revision/7
https://www.bbc.co.uk/bitesize/guides/zpqpqhv/revision/8

L3: Plant Cells
Video: GCSE Biology - Cell Types and Cell Structure #2 - YouTube
BBC Bitesize: https://www.bbc.co.uk/bitesize/guides/zpqpqhv/revision/7
https://www.bbc.co.uk/bitesize/guides/zpqpqhv/revision/8

L4+L5: Diffusion and Investigating Diffusion
Video: GCSE Biology Revision "Diffusion" (youtube.com)
BBC Bitesize: https://www.bbc.co.uk/bitesize/guides/zs63tv4/revision/1
https://www.bbc.co.uk/bitesize/guides/zs63tv4/revision/2
https://www.bbc.co.uk/bitesize/guides/zs63tv4/revision/3

L6+L7+L8 Osmosis and Osmosis RPA:
Video: GCSE Biology - Osmosis #8 (youtube.com)
GCSE Biology - Osmosis #8 (youtube.com)
BBC Bitesize: Diffusion - Transport in cells - AQA - GCSE Combined Science Revision - AQA Trilogy - BBC Bitesize

L9: Active Transport
Video: GCSE Biology - Active Transport #9 (youtube.com)
GCSE Biology Revision "Active Transport" (youtube.com)
BBC Bitesize: Diffusion - Transport in cells - AQA - GCSE Combined Science Revision - AQA Trilogy - BBC Bitesize

L10: Observing Cells - The Light and Electron Microscope
Video: https://www.youtube.com/watch?v=SX6mow1AExI
BBC Bitesize: https://www.bbc.co.uk/bitesize/guides/zpqpqhv/revision/3

L11+L12: Microscopy and Required Practical - Observing Plant Tissue
Video: GCSE Biology - What Is The Difference Between Light And Electron Microscopes? #6 (youtube.com)
GCSE Biology - What is Microscopy? #5 (youtube.com)
GCSE Biology Revision "Required Practical 1: Microscopes" (youtube.com)
BBC Bitesize: Cell measurement - Cell structure - AQA - GCSE Combined Science Revision - AQA Trilogy - BBC Bitesize

Cell Biology

1.) Prokaryotic & Eukaryotic Cells:

- What does the term prokaryotic cell mean?
- What does the term eukaryotic cell mean?
- State which are larger, prokaryotes or eukaryotes.
- Classify the following as prokaryotes or eukaryotes: leaf palisade cell, human cheek cell, bacterial cell.
- Draw and label a bacterial cell

2.) Animal Cell Structure & Function

- Draw and label an animal cell
- State what an organelle is and where they can be found.
- Describe the function of the different organelles found in an animal cells

3) Plant Cell Structure & Function

- Draw and label a plant cell
- State what an organelle is and where they can be found.
- Describe the function of the different organelles found in plant cells

4 & 5.) Diffusion:

- What does the term diffusion mean?
- What factors can affect the rate of diffusion?
- Give examples of substances that diffuse in and out of cells
- Calculate the SA:V of 2 cubes, one cube is 1cm by 1cm, the second cube is 4cm by 4 cm.
- Explain how organs are adapted to make diffusion as effective as possible in our bodies.
- What makes an exchange surface effective?

6 - 8) Osmosis & RP

- Define the term osmosis
- What does osmosis involve the movement of?
- What affects the rate of osmosis?
- What was the method used to investigate osmosis in potato chips?
- What was the independent variable?
- What was the dependent variable?
- What was the control variable?
- How could you use the graph produced from your results to estimate the concentration of sugar inside the potato?

9.) Active Transport

11 - 12.) Plant & Animal Cell Preparation & Observation

- What is the method used to prepare an onion skin slide?
- What is the method followed to prepare and mount a cheek cell?