

**Cell Biology Sequence Map**

**L1: Eukaryotic and Prokaryotic Cells**  
**Video:** [GCSE Biology Revision "Eukaryotes and Prokaryotes"](https://www.youtube.com/watch?v=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](https://www.youtube.com/watch?v=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](https://www.youtube.com/watch?v=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"](https://www.youtube.com/watch?v=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](https://www.youtube.com/watch?v=GCSE_Biology_Osmosis_8) (youtube.com)  
[GCSE Biology - Osmosis #8](https://www.youtube.com/watch?v=GCSE_Biology_Osmosis_8) (youtube.com)  
**BBC Bitesize:** [Diffusion - Transport in cells - AQA - GCSE Combined Science Revision - AQA Trilogy - BBC Bitesize](https://www.bbc.co.uk/bitesize/guides/zpqpqhv/revision/11)

**L9: Active Transport**  
**Video:** [GCSE Biology - Active Transport #9](https://www.youtube.com/watch?v=GCSE_Biology_Active_Transport_9) (youtube.com)  
[GCSE Biology Revision "Active Transport"](https://www.youtube.com/watch?v=GCSE_Biology_Revision_Active_Transport) (youtube.com)  
**BBC Bitesize:** [Diffusion - Transport in cells - AQA - GCSE Combined Science Revision - AQA Trilogy - BBC Bitesize](https://www.bbc.co.uk/bitesize/guides/zpqpqhv/revision/11)

**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](https://www.youtube.com/watch?v=GCSE_Biology_What_Is_The_Difference_Between_Light_And_Electron_Microscopes_6) (youtube.com)  
[GCSE Biology - What is Microscopy? #5](https://www.youtube.com/watch?v=GCSE_Biology_What_Is_Microscopy_5) (youtube.com)  
[GCSE Biology Revision "Required Practical 1: Microscopes"](https://www.youtube.com/watch?v=GCSE_Biology_Revision_Required_Practical_1_Microscopes) (youtube.com)  
**BBC Bitesize:** [Cell measurement - Cell structure - AQA - GCSE Combined Science Revision - AQA Trilogy - BBC Bitesize](https://www.bbc.co.uk/bitesize/guides/zpqpqhv/revision/3)

# 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



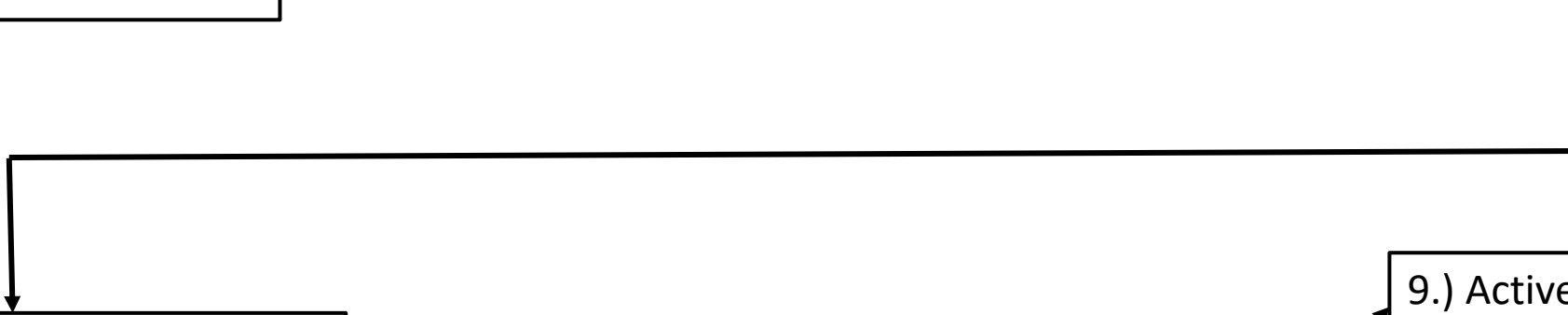
## 2.) Animal Cell Structure & Function

- 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



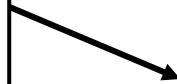
## 3) Plant Cell Structure & Function

- 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



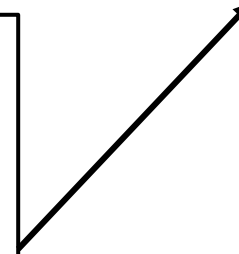
## 4 & 5.) Diffusion:

- 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?