Edexcel International GCSE Biology 4BI1 Learning Plan

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| **Unit: 3. Plant Physiology** | | **Chapter: 11. Transport in Plants** | | **Hours: 8** |
| Content coverage | Learning outcomes | Resources | Assessment | |
| **Section 2: Structures and functions in living organisms**  d) Movement of substances into and out of cells  **Section 2: Structures and functions in living organisms**  h) Transport | **2.15** understand the processes of diffusion, osmosis and active transport by which substances move into and out of cells.  **2.17** practical: investigate diffusion and using living and non-living systems.  **2.53** describe the role of phloem in transporting sucrose and amino acids between the leaves and other parts of the plant.  **2.54** describe the role of xylem in transporting water and mineral ions from the roots to  other parts of the plant  **2.55B understand how water is absorbed by root hair cells.**  **2.56B understand that transpiration is the evaporation of water from the surface of**  **a plant**  **2.57B understand how the rate of transpiration is affected by changes in humidity, wind speed, temperature and light intensity**  **2.58B practical: investigate the role of environmental factors in determining the**  **rate of transpiration from a leafy shoot.**  **2.70** understand the origin of carbon dioxide and oxygen as waste products of metabolism and their loss from the stomata of a leaf | Video: Biology – Section 2 – Lesson 5 – Transport – Beginning to 13:20  Powerpoint: Biology – Section 2 – Lesson 5 – Beginning to slide 53  Textbook pages:  152 – Osmosis  158 – Uptake of water by roots  159 – Loss of water by the leaves – transpiration | Page 164 – 167 Qs. 1 to 12  Textbook Answers (PDF)  Chapter 11 - exam question - pdf  Chapter 11 - exam question mark scheme – pdf  Chapter 11 - Talking paper video | |

Videos – [www.igcsesciencecourses.com](http://www.igcsesciencecourses.com)

Textbook Ref: Edexcel International GCSE (9-1) Biology Student Book - Pearson (Bradfield and Potter)