B4 Revision Sheet

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| Equation for calculating population size | Assumptions that need to be made when using capture-recapture data |
| Define Ecosystem | Define habitat |
| Define community | Define population |
| Define transect line | Draw a kite diagram |
| Define zonation | Compare biodiversity of natural and artificial ecosystems |

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| Balanced symbol equation for photosynthesis | Describe the development of the understanding of photosynthesis |
| Describe the two stages of photosynthesis | Describe uses of glucose in plants |
| Explain why insoluble starch is used for storage | Explain effect of limiting factors on photosynthesis |
| Explain why plants take in carbon dioxide and give out oxygen in the day | Explain why plants give out carbon dioxide and take in oxygen at night |

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| Label the parts of the leaf | State the function of each part   * Epidermis * Palisade Layer * Spongy Mesophyll |

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| Define diffusion | Explain how to increase the rate of diffusion |
| Define osmosis | Define partially permeable |
| Define flaccid | Define plasmolysed |
| Define turgid | Define lysis |
| Define crenation | Explain how leaves are adapted to increase the rate of diffusion of carbon dioxide and oxygen |

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| Draw the arrangement of xylem and phloem in the root | Draw the arrangement of xylem and phloem in the stem |
| Draw the arrangement of xylem and phloem in the leaf | Describe structure and function of the xylem |
| Describe structure and function of the phloem | Define transpiration |
| Describe the effect on transpiration of   * Increase in light intensity * Increase in temperature * Increase in wind * Decrease in humidity | Explain how the structure of the leaf helps to reduce water loss |
| State uses of water |  |

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| Describe why farmers need to use fertiliser | State uses of nitrate |
| State uses of phosphate | State uses of potassium |
| State uses of magnesium | Describe what plants deficient in magnesium look like |
| Describe what plants deficient in nitrate look like | Describe what plants deficient in phoshate look like |
| Describe what plants deficient in potassium look like |  |

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| State the 3 factors that are needed for decay | Explain why microbes need oxygen and water for decay |
| Define detritivore | Define saprophyte |
| State 3 examples of detritivores | State 2 examples of saprophytes |
| State methods of food preservation | Define extracellular digestion |

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| Explain the disadvantages of using pesticides | Define hydroponics  Give examples of uses of hydroponics |
| Explain the advantages and disadvantages of hydroponics | Explain how intensive farming improves the efficiency of energy transfer |
| Describe organic farming techniques | Explain the advantages and disadvantages of organic farming |
| Explain the advantages of biological control | Explain the disadvantages of biological control |