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| **What will we be learning?**  **Photosynthesis** | **Why this? Why now?**  Previous Learning  Interdependence  Plant Reproduction  Future Learning  **GCSE** – Organisation (transport in plants) and Bioenergetics  **A Level** – Transport in Plants and Photosynthesis  Enquiry Processes  Analyse Patterns, Draw conclusions, Present data, Justify opinions, Collect data, Present data, Predict, Plan variables, Evaluate Investigations | **Key Words:**  chlorophyll  chloroplast  photosynthesis  carbon dioxide  oxygen  glucose  starch  fertilisation  pollen  anther  ovule  stigma  pollination  adaptation  transpiration  xylem  potometer  stomata |
| **What will we learn?**   * Ways in which plants obtain resources for photosynthesis. * Why other organisms are dependent on photosynthesis. * How the rate of photosynthesis is affected by changing conditions. * Word equation to describe photosynthesis in plants and algae.   **Misconceptions in this topic**   * Plants obtain their energy directly from the sun. * Plants have multiple sources of food (heterotrophic as well as autotrophic). * Carbon dioxide, water, and minerals are food. * Plants feed by absorbing food through their roots. * Sunlight is a food. * Sunlight is consumed in photosynthesis. * Plants absorb water through their leaves. * Plants produce oxygen for our benefit. | |
| **What opportunities are there for wider study?**  Careers  Farmer Agriculture Gardener Horticulture Botanist Ecologist Environmental Scientist  Plant breeder Florist  STE(A)M  <https://highcliffe.sharepoint.com/sites/LearnSTEM> | |
| **How will I be assessed?**  End of Topic Assessment | |