**UNIT OVERVIEW:** Respiration

1. **ENQUIRY:** Why is respiration essential for life?

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| **Unit intention:** ***What and Why*?** Respiration is the process whereby energy stored in complex organic molecules is transferred to ATP. ATP provides the immediate source of energy for biological processes | | | |
| **Success criteria: I can** | | 🗸 | X |
| |  | | --- | | Explain the need for cellular respiration | | Describe the structure of the mitochondrion | | Explain the process and site of glycolysis (HSW8) | | Describe the link reaction and its site in the cell | | Describe the process and site of the Krebs cycle (HSW8) | | Explain the importance of coenzymes in cellular respiration | | Explain the process and site of oxidative phosphorylation | | Evaluate the chemiosmotic theory | | The process of anaerobic respiration in eukaryotes | | |  |  |
| **Unit summative and formative assessment details:**  Weekly Seneca, factual re-call  MCQ  Extended writing  Practical Research  End of unit test | | | |
| **Home Learning (What and how often):**  **Home Learning (What and how often):**  Homework once a week (flip learning and Seneca)  Revisit class content (make notes)  Research activities for practical  <http://www.abcam.com/pathways/scientific-pathway-poster-library>  <https://www.bbc.co.uk/news/science-environment-13616778>  <https://liverfoundation.org/for-patients/about-the-liver/diseases-> | | | |
| **Topic Sequence**  Glycolysis  Link Reaction  Krebs cycle  Oxidative phosphorylation  Respiratory substances  Aerobic respiration |  | | |

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| **Success criteria** – Have you met them? Show your evidence in the boxes below. |
| **1.** |
| **2.** |
| **3.** |
| **4.** |
| **5.** |
| **6.** |
| **How will you improve your work?** |

**End of Unit EVALUATION**