**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 |
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| 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 |

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| **Unit summative and formative assessment details:**Weekly Seneca, factual re-call MCQExtended writing Practical ResearchEnd 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**GlycolysisLink ReactionKrebs cycleOxidative phosphorylationRespiratory substancesAerobic 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**