**Topic Overview: Respiration**

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|  | Ref | Outcome | Achieved | ☺ |
| Emerging | E9SbR1.1 | Recall that respiration takes place in every living cell and takes place in mitochondria |  |  |
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| E9SbR2.1 | Know that respiration happens, in cells, that breaks down glucose to provide energy and form new molecules. |  |  |
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| Developing | D9SbR3.1 | Be able to describe what is needed for aerobic respiration to take place |  |  |
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| D9SbR4.1 | Recall what anaerobic respiration is  |  |  |
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| Securing | S9SbR5.1 | Use word equations to describe aerobic and anaerobic respiration. |  |  |
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| S9SbR6.1 | Explain how specific activities involve aerobic or anaerobic respiration. |  |  |
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| Mastering | M9SbR7.1 | Explain how yeast fermentation is used in brewing and bread-making |  |  |
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| M9SbR8.1 | Suggest how organisms living in different conditions use respiration to get their energy. |  |  |
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| M9SbR9.1 | Describe similarities and differences between aerobic and anaerobic respiration.  |  |  |

**Keywords**

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| **Aerobic respiration:** Breaking down glucose with oxygen to release energy and producing carbon dioxide and water.**Anaerobic respiration (fermentation):** Releasing energy from the breakdown of glucose without oxygen, producing lactic acid (in animals) and ethanol and carbon dioxide (in plants and microorganisms).  |
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