**Topic Overview: Breathing**

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|  | Ref | Outcome | Achieved | ☺ |
| Emerging | E9SbB1.1 | Recall the parts of the gas exchange system |  |  |
| E9SbB1.2 | Understand that smoking is bad for lungs |  |  |
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| E9SbB2.1 | Recall and locate the parts of the gas exchange system |  |  |
| E9SbB2.2 | Know that it is tar that can cause lung disease |  |  |
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| Developing | D9SbB3.1 | Describe the effects of exercise on breathing  |  |  |
| D9SbB3.2 | Know the main parts of a cigarette and damage they cause  |  |  |
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| D9SbB4.1 | Explain how the structure of the lungs allows efficient gas exchange |  |  |
| D9SbB4.2 | Explain why carbon monoxide is dangerous |  |  |
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| Securing | S9SbB5.1 | Explain how the parts of the gas exchange system are adapted to their function |  |  |
| S9SbB5.2 | Know what causes asthma and suggest ways to treat it  |  |  |
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| S9SbB6.1 | Explain how changes in volume and pressure inside the chest move gases in and out of the lungs. |  |  |
| S9SbB6.2 | Explain how exercise, smoking and asthma affect the gas exchange system. |  |  |
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| Mastering | M9SbB7.1 | Predict how a change in the gas exchange system could affect other processes in the body. |  |  |
| M9SbB7.2 | Evaluate a possible treatment for a lung disease. |  |  |
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| M9SbB8.1 | Evaluate the impact of having only one lung |  |  |
| M9SbB8.2 | Evaluate a model for showing the mechanism of breathing. |  |  |
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| M9SbB9.1 | Evaluate how efficient the gas exchange system is compared to other organisms |  |  |
| M9SbB9.2 | Suggest how recreation drugs might affect different body systems. |  |  |

**Keywords**

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| **Breathing:** The movement of air in and out of the lungs. |
| **Trachea (windpipe):** Carries air from the mouth and nose to the lungs. |
| **Bronchi:** Two tubes which carry air to the lungs. |
| **Bronchioles:** Small tubes in the lung. |
| **Alveoli:** Small air sacs found at the end of each bronchiole. |
| **Ribs:** Bones which surround the lungs to form the ribcage. |
| **Diaphragm:** A sheet of muscle found underneath the lungs. |
| **Lung volume:** Measure of the amount of air breathed in or out. |