SB8 Exchange and Transport in Animals

SB8a Efficient transport and exchange

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| Step | Learning outcome | Had a look | Nearly there | Nailed it! |
|  | Recall the names of substances that need to be transported into and out of the body. |  |  |  |
|  | Describe the functions of the substances that are transported into the body. |  |  |  |
| C:\Users\bhuiya_f\Downloads\Steps icons\Steps icons\Progression_icon_L6.jpg | Describe the adaptations of the lungs for gas exchange. |  |  |  |
| C:\Users\bhuiya_f\Downloads\Steps icons\Steps icons\Progression_icon_L8.jpg | Calculate surface area : volume ratios. |  |  |  |
|  | Explain the importance of surface area : volume ratios in transport systems. |  |  |  |

SB8b Factors affecting diffusion

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| Step | Learning outcome | Had a look | Nearly there | Nailed it! |
|  | Describe what is meant by concentration and use appropriate units. |  |  |  |
|  | Describe how surface area affects the rate of diffusion. |  |  |  |
|  | Describe how concentration gradient affects the rate of diffusion. |  |  |  |
|  | Describe how distance affects the rate of diffusion. |  |  |  |
| C:\Users\bhuiya_f\Downloads\Steps icons\Steps icons\Progression_icon_L8.jpg | Calculate rates of diffusion using Fick’s law. |  |  |  |

SB8c The circulatory system

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| Step | Learning outcome | Had a look | Nearly there | Nailed it! |
|  | Recall the components and function of the circulatory system. |  |  |  |
|  | Recall the functions of the different types of blood vessels. |  |  |  |
| C:\Users\bhuiya_f\Downloads\Steps icons\Steps icons\Progression_icon_L6.jpg | Describe the functions of the different types of blood cells (erythrocytes, phagocytes, lymphocytes). |  |  |  |
| C:\Users\bhuiya_f\Downloads\Steps icons\Steps icons\Progression_icon_L6.jpg | Describe the functions of blood platelets and plasma. |  |  |  |
|  | Describe how the different blood vessels are adapted to their functions. |  |  |  |

SB8d The heart

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| Step | Learning outcome | Had a look | Nearly there | Nailed it! |
|  | Recall the parts of the heart. |  |  |  |
| C:\Users\bhuiya_f\Downloads\Steps icons\Steps icons\Progression_icon_L6.jpg | Describe the flow of blood through the heart. |  |  |  |
|  | Explain how the heart is adapted for its function (valves, differing ventricle muscle thicknesses). |  |  |  |
|  | Recall and use the equation that relates cardiac output, stroke volume and heart rate. |  |  |  |

SB8e Cellular respiration

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| Step | Learning outcome | Had a look | Nearly there | Nailed it! |
| C:\Users\bhuiya_f\Downloads\Steps icons\Steps icons\Progression_icon_L6.jpg | Explain why organisms need to respire. |  |  |  |
| C:\Users\bhuiya_f\Downloads\Steps icons\Steps icons\Progression_icon_L6.jpg | Recall the word equation for aerobic respiration. |  |  |  |
| C:\Users\bhuiya_f\Downloads\Steps icons\Steps icons\Progression_icon_L6.jpg | Recall the word equation for anaerobic respiration in humans. |  |  |  |
|  | Explain why respiration is an exothermic process. |  |  |  |
|  | Compare aerobic and anaerobic respiration. |  |  |  |