**Little Heath Sixth Form**

**(Subject)** Personal Learning Checklist

**Student Name: ……………………….…………………………………..………**

|  |  |
| --- | --- |
| **Unit Name:**  **Monitoring the activity of the human body** | **Unit Code:**  **G622** |
| *Minimum Target Grade:* | *Aspirational Target Grade:* |

*KEY:* ***Red =*** *with difficulty* ***Amber*** *= not sure* ***Green*** *= yes*

|  |  |  |  |
| --- | --- | --- | --- |
| **GCSE Re-Cap (Skills and Knowledge)** | **Red** | **Amber** | **Green** |
| * Know the equations for respiration and burning |  |  |  |
| * Understand the need for the respiratory and circulatory system and state the parts and what each part does |  |  |  |
| * Know the parts of the heart |  |  |  |
| * Know the composition of blood |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Skills** | **Red** | **Amber** | **Green** | **To address this before the exam I will:-** |
| * **Carried out a heart dissection** |  |  |  |  |
| * **Planned investigations which look at the way the body changes with exercise** |  |  |  |  |
| * **Used data to describe what happens to the body during exercise** |  |  |  |  |
| * **Used data to decide the status of a person’s health** |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Knowledge/Specification (continued)** | **Red** | **Amber** | **Green** | **To address this before the exam I will:-** |
| * compare cellular respiration to the burning of fuels |  |  |  |  |
| * outline why humans need to respire, with reference to muscle cell contraction, nerve impulse transmission, active transport and metabolic reactions |  |  |  |  |
| * state that ATP provides the immediate source of energy for biological processes |  |  |  |  |
| * describe how the circulatory and respiratory systems both play a part in the process of respiration |  |  |  |  |
| * state the differences between aerobic and anaerobic respiration in terms of their location within cells, substrates, products and quantity of energy made available to a respiring cell |  |  |  |  |
| * Describe the link between the circulatory system and respiratory system |  |  |  |  |
| * State the path air takes into the lungs |  |  |  |  |
| * State the key parts and features of the lungs |  |  |  |  |
| * Describe the structure of the different parts of the respiratory system |  |  |  |  |
| * Describe the function of the different parts of the respiratory system |  |  |  |  |
| * Link the structure of each part to its function. |  |  |  |  |
| * Describe how to measure the peak flow of a person |  |  |  |  |
| * State the expected ‘normal’ readings |  |  |  |  |
| * Describe how a spirometer is used |  |  |  |  |
| * Describe all the readings which a spirometer shows. |  |  |  |  |
| * State the expected normal readings from breathing rate, tidal volume and vital capacities. |  |  |  |  |
| * Explain why it is important to know the standard readings for these physiological tests |  |  |  |  |
| * explain how gases are exchanged between the atmosphere and the blood through the alveoli |  |  |  |  |
| * Explain how oxygen and nutrients reach the cells within tissues |  |  |  |  |
| * Explain how carbon dioxide is removed from the cells within tissues |  |  |  |  |
| * Describe the structure of the heart and the roles of the four chambers |  |  |  |  |
| * Describe double circulation |  |  |  |  |
| * Describe the characteristics of arteries, veins and capillaries |  |  |  |  |
| * Describe the difference between hormonal and nervous control |  |  |  |  |
| * Explain how heart rate is affected by nervous control |  |  |  |  |
| * Explain how heart rate is affected by hormonal control |  |  |  |  |
| * State that an electrocardiograph can be used to monitor the activity of the heart |  |  |  |  |
| * Describe what electrocardiograph show about the probable physiological status of people |  |  |  |  |
| * Recognise traces for normal heart, sinus tachycardia, bradycardia, sinus arrhythmia and ventricular fibrillation |  |  |  |  |
| * Describe the blood pressure ECG diagram |  |  |  |  |
| * State that an sphygmomanometer can be used to monitor blood pressure |  |  |  |  |
| * State the expected values for blood pressure |  |  |  |  |
| * Explain how to blood pressure changes throughout the body |  |  |  |  |
| * Describe how red blood cell counts can be used to diagnose anaemia |  |  |  |  |
| * State the principles of how blood sugar monitoring is used in the treatment of diabetics |  |  |  |  |
| * State when blood tests are carried out |  |  |  |  |
| * Describe how blood is taken |  |  |  |  |
| * Give examples for each of the different types of drugs |  |  |  |  |
| * Describe the procedure for drug testing using ELISA |  |  |  |  |
| * Explain the basic principles of X ray radiation |  |  |  |  |
| * Describe how CT scans are used for diagnosis |  |  |  |  |
| * Describe how MRI scans are used for diagnosis |  |  |  |  |
| * Explain the principles of ultrasound scanning |  |  |  |  |
| * State the advantages and disadvantages of each scan |  |  |  |  |

|  |
| --- |
| **REVISION**  **Use the information on this checklist to make revision cards and notes** |

**Grade tracking:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| *Grade* | *Date* | *Grade* | *Date* | *Grade* | *Date* |
|  |  |  |  |  |  |
| *Grade* | *Date* | *Grade* | *Date* | *Grade* | *Date* |
|  |  |  |  |  |  |

*Note: You should discuss this checklist regularly with your subject teacher/mentor*