**Homework Menu Grid- Year 9 B7 Cell Biology and Organisation 2**

Complete some of the tasks from the grid below to reach a total of 60 points over this unit of work. Try and cover a variety of tasks over the unit so that you’re practising different skills. Once you’ve completed a task, colour that box on the grid to keep a record of your points. Can you get the highest point score this unit?

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| **Topic** | **1 Point** | **2 Points** | **4 Points** | **6 Points** | **10 Points** |
| **Cells** | Draw a labelled diagram of a plant cell and an animal cell. | Draw a labelled diagram of a bacteria cell. What are the differences between prokaryotic and eukaryotic cells? | Compare and contrast plant cells, animals cells and bacteria cells. | Choose one specialised animal cell and one specialised plan cell. Draw a labelled diagram of each and explain how they are adapted for their functions. | Make a 3-D model of a cell of your choice! |
| **The circulatory system** | Describe the function of the circulatory system. | Describe what is meant by a double circulatory system | Draw a labelled diagram of a vein, artery and capillary. Compare and contrast these three structures | Draw or print a diagram of a heart. Label the structures. Plan a method to remember how blood flows through the heart. | Research William Harvey and Galen. Explain how knowledge of the circulatory system develop over time? |
| **The respiratory system** | Describe the function of the respiratory system. | Draw or print a diagram of the respiratory system. Label each part. | Explain how the lungs are adapted for gas exchange. | Research and produce an information leaflet about how smoking affects the lungs. | Research and develop an information sheet about how covid-19 affects the respiratory system. |
| **The digestive system** | Describe the function of the digestive system. | What are the three digestive enzymes? Describe what each of these breakdown. | Create a meal plan for a marathon runner in the week leading up to a race. | Draw a labelled diagram to show how enzymes work though lock and key theory. | Design an investigation to investigate how temperature affects enzyme activity. |

**Homework Menu Grid**

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| **The nervous system** | Describe the function of the nervous system. | Draw a labelled diagram of a nerve cell Explain how it is adapted for its function. | Describe the stages of a reflex arc. | Explain how our knowledge of the nervous system developed through history. | Research the brain. Create a presentation to explain what the different parts of the brain do. Do brains differ between men and women? Compare the brains of two different organisms? |
| **The endocrine system** | Describe the function of the endocrine system. | Choose two hormones, Describe what their role in the body is. | Explain how fight or flight’ helps animals to survive. You must include the effects of adrenaline. | Create a map of glands in the body. Label each one and identify what hormone is produced at each one. | Research and produce and information leaflet about ‘giantism’. |
| **Plant tissues and organs** | Put the following into size order:  *Organ, cell, tissue, organ system, organism, organelle*  Give a plant example of each. | Describe the structure and function of two specialised plant cells. | Draw a labeled diagram of the cross section of the leaf. Describe the function of each part you have labelled. | Research an interesting an unique plant that grows outside of the UK. Describe its key features and adaptions. | Write a revision quiz for the whole of this unit.  There must be at least 10 questions.  You must include a mark scheme with the answers. |