GES YEAR 8 SCIENCE Term 1 (Sept-Oct, 2019-20)

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| TOPICS: SKILLS IN SCIENCE, FOOD & NUTRITION |

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| Theme: Identify and demonstrate the skills used in Science. To explore the periodic table, the different types of diets and nutrients. | Level: Year 8 |
| Objectives: To apply scientific skills in everyday life and within the laboratory. To understand the role of food and nutrition in humans. | |

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| Focussing Statements | Key Words | |
| 1. **Why do humans need food and why should we be aware of nutritional value?** 2. Recall why we need food. 3. Recall the nutrients we need in our diets. 4. Describe why our bodies need fibre and water. 5. Interpret food information labels. 6. Recall the tests used detect some nutrients. 7. Recall some good sources of the different nutrients and fibre. 8. **Can you describe how factors change the amount of energy we need from food?** 9. Describe what our bodies use the different nutrients for. 10. Describe the benefits of a balanced diet. 11. Explain how different types of malnutrition are caused and their effects. 12. **Can you identify and recall the main organs in the digestive system.** 13. Describe the functions of the organs in the digestive system. 14. Explain how the food is moved through the digestive system. 15. Describe how enzymes work as catalysts in digestion. 16. Recall some benefits and drawbacks of bacteria in the digestive system. 17. **What is respiration? How does it occur?** 18. Explain how diffusion occurs in terms of movement of particles. 19. **What is absorption?** 20. Explain how diffusion allows absorption by the small intestine. 21. Explain how the small intestine is adapted to its function. 22. **Working Scientifically – Skills in Science** 23. Calculate surface areas of rectangles and cuboids. 24. Explain the importance of surface area in Science (e.g. in absorption).   **Assessment – in November on the above topics.** | Diet  Nutrient  Carbohydrates  Proteins  Fibre  Constipation  Fuel  Respiration  Kilojoules  Bias  Malnutrition  Deficiency Disease  Kwashiorkor  Rickets  Anaemia  Starvation  Obesity  Reference Intakes  Digestion  Insoluble  Egestion  Ingestion  Microorganisms  Enzymes  Catalysts  Diffusion  Microvillus  Hypothesis  Prediction  Scientific Method  Theory  Observations  Data  Results  Evidence  Independent Variable  Dependent Variable  Control  Anomalous Results | Explaining words  …..the function of the cell…  ……a needed in the body for different purposes.  ……benefit an individual’s health.  ……due to the function of the organ system….  …..resulting in the data that shows….  ….is dependent upon the variable.  The anomalous result can be explained by….. |

**Text Book and worksheets**