YEAR 7 SCIENCE

HALF TERM 4 & 5

MAGHULL HIGH SCHOOL – CURRICULUM MAP

Unit: **Living Organisms** **LESSON TOPIC QUESTION(S)**	1. Biomedical Scientist Career 2. Animal and Plant Cells 3. Onion and Cheek Cells 4. Specialised Cells 5. Cells, Tissues, Organs and Organ Systems 6. Diffusion	7. Skeleton 8. Joints and Movement 9. Muscles 10. Muscle Fatigue 11. Nutrients 12. Nutritional Imbalances	13. Digestive System 14. Food Test 1 15. Food Tests 2 16. Alcohol 17. UK Food (Reading) 18. Drugs
Knowledge & Skills Development	• How to use a microscope • Label an animal & plant cell with organelles. • Explain the function of each organelle. • Define and explain diffusion giving examples of substances moving by diffusion. • Define a specialised cell & explain why it is specialised. • Organisation of cells, tissues, organs and organ systems. • Label and describe each part of the digestive system • Explain the role of digestive enzymes including mode of action & products.		• Recall how to perform food tests and the positive and negative results for each • Describe the function of the skeleton. • Describe the differing types of joints and identify them on a human body. • Explain how antagonistic muscle pairs work. • Explain the effects on the human body of drugs, alcohol and poor nutrition
Assessment / Feedback Opportunities	**Formative Assessment** Teacher questioning Quizzes Mid topic assessment		**Summative assessment** End of topic assessment
Key Vocabulary	Independent Variable, Dependent Variable, Control Variables, Method, Conclusion, Precaution, Evaluation, Reliable, Precision, Valid, Anomaly Cell, Tissue, Organ, Muscle, Skeleton, Joint, Digestion, Enzyme, Respiration, Magnification, Slide, Cover, Slip, Microscope, Vacuole, Membrane, Nucleus, Cell Wall, Chlorophyll, Cytoplasm, Chloroplast, Diffusion, Transplant, Specialised, Stem Cells		
Literacy/Reading Opportunities	Dedicated reading lesson Subject specific vocabulary introduced before reading of related texts Word etymology from Latin and Greek roots Reading of simple and complex sentences, paragraphs, articles Scientific writing including structuring methods, comparisons and evaluations		
Cross Curricular Themes	Numeracy/Maths – averages (means), reading scales, graph plotting, lines of best fit, using and rearranging equations, using scientific calculators, significant figures PE – Joints, Muscles, Muscle Fatigue		

Personal Development (Including British Values, RSE, Citizenship)	RSE Curriculum – Substance Misuse (L9) PSHE – Healthy diets
Career Opportunities	Dedicated careers lesson at start of topic Nursing, Medicine, Physiotherapy, Research Scientist, Nutritionist