ASCOT HIGH SCHOOL

DEPARTMENT OF SCIENCE

GRADE 9 HUMAN AND SOCIAL BIOLOGY

TERM 1: SEPTEMBER-DECEMBER 2025

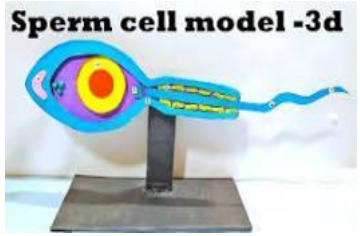
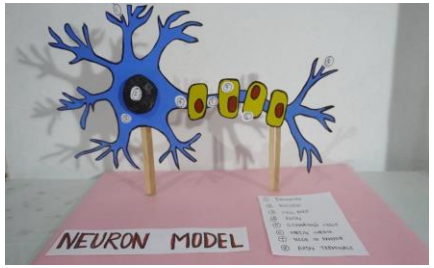
National Goals:

1. Jamaicans are Empowered to Achieve their Fullest Potential.

2. Jamaica has a Healthy Natural Environment

Unit	Duration	Topic	Specific Objectives	Suggested Teaching and Learning Activities	Assignment/ Project
Orientation Activities& Diagnostic Test: September 1-12					
Living Organisms and The Environment	3 Weeks Sept. 15– Oct. 3	**Characteristics of Living Organisms**	Students should be able to: 1. Describe the characteristics of living organisms as **movement, respiration, sensitivity (irritability), growth, reproduction, excretion, nutrition.**	• Students will be shown various pictures and asked to classify as living and non-living things. • Students will watch the video, **"Characteristics of Living Organisms"** and formulate a definition for each characteristic of living organisms. **Video Link**: https://www.youtube.com/watch?v=lb_3SNPSLP0&t=131s	**GRADED HOMEWORK: (10%)** • Characteristics of Living Organisms Worksheet
Living Organisms and The Environment	4 Weeks Oct. 6-31	**Cells- Unspecialised Plant & Animal Cells**	Students should be able to: 1. Define the terms cells, microscope, microscopic, organelles and unspecialised cells. 2. Draw and label an unspecialized plant and animal cells. 3. Compare the structures	• View unspecialised plant and animal cells under the microscope. Examine the drawings of the plant and animal cells, then	**GRADED CLASSWORK: (10%)** • Comparison table of plant and animal cells. • Comparison table of animal cell and plant cell to bacterial, viral and fungal cells. • Cells Worksheet

			of an unspecialized plant and animal cells. 4. State the function of the following cell structures: **cell wall, cell membrane, nucleus, ribosomes, cytoplasm, mitochondria, vacuoles, chloroplast, endoplasmic reticulum.**	compare (note the similarities and differences between the structures. • .Students will watch the video **Comparing Plant and Animal cells**. **Video Link:** https://www.youtube.com/watch?v=HjC-eMiMDfo Compare plant and animal cells by using a Venn Diagram. • Students will watch the video "**Cell City Analogy**" then form pairs and construct a table outlining the function of the parts of the cell. **Video Link**: • https://www.youtube.com/watch?v=RQTMmf8dYeM	

		Cells-Selected Microbes **Cells-Specialized Cells**	5. Label a bacterial, viral and fungal cell. 6. Compare the structures of the unspecialized plant and animal cells to the bacterial, viral and fungal cells. 7. Define the terms specialized cells, tissues, organs, systems, organisms. 8. List examples of tissues, organs and systems in animals. 9. Relate the structure of specialized cells **(epithelial, sperm, egg, nerve, muscle and connective tissue cells)** to their functions. 10. Explain the importance of cell specialization in humans.	• In a table students will compare the structures of bacterial, viral and fungal cells to an unspecialized animal and plant cells. • In groups students present on the structure and function of a named Specialized Cell. **(Creative Expression Piece)**	**HOMEWORK:** • Draw and Label a fungal, viral and bacterial cells. **PRACTIAL (20%):** • Students will make a 2D or 3D of a named Specialized cell.  

					CRITERIA FOR MODEL: ✓ **Correct Labels (5 marks)** ✓ **Clarity of Structures (5 marks)** ✓ **Materials used (4 or more) 4 marks** ✓ **Creativity (2 marks)** ✓ **Neatness (2 marks)** ✓ **Evidence of Collaboration (2 marks)**
MID-TERM BREAK-OCTOBER 16-20 **SESSIONAL TEST ONE (WRITTEN PAPER) (20%)**					
Unit	**Duration**	**Topic**	**Specific Objectives**	**Suggested Teaching and Learning Activities**	**Assignment/ Project**
Living Organisms and The Environment	4 Weeks Nov.3-28	**Osmosis, Diffusion and Active Transport**	Students should be able to: 1. Define the following terms: osmosis, diffusion and active transport. 2. Explain diffusion and osmosis as passive processes and active transport as an active process in living organisms. 3. Distinguish between	• Experimental activity to demonstrate diffusion using potassium permanganate crystals. • Experimental Activity to demonstrate osmosis using irish potato. • Name the type of process diffusion, osmosis or active transport based on scenarios given.	**GRADED HOMEWORK & CLASSWORK (10%)** • Comparison table for simple diffusion, osmosis and active transport • Worksheets on Diffusion, Osmosis and Active Transport.

			osmosis, diffusion and active transport. 4. Explain the importance of passive and active transport in living organisms include examples in plants and animals. 5. Conduct simple investigations on osmosis and diffusion.	• Students will watch videos on diffusion, osmosis and active transport. **Video Link**: https://www.youtube.com/watch?v=PRi6uHDKeW4 https://www.youtube.com/watch?v=eDeCgTRFCbA	• Google Quiz: Diffusion, Osmosis, Active Transport.
DECEMBER 1-16 REVISION & END OF YEAR EXAMINATION					