

**Curriculum Content Science/Biology**  
**FORM THREE**

<b>LEARNING OUTCOMES</b>	<b>CONTENT SCOPE</b>	<b>SUGGESTED TEACHING AND LEARNING STRATEGIES</b>	<b>SUGGESTED ASSESSMENT STRATEGIES</b>
<b>Human Body Systems: The Excretory System : 3.1</b>			
3.1.1 Identify the excretory organs and their excretory products	<ul style="list-style-type: none"> <li>• Excretion is the process by which organisms get rid of metabolic waste</li> <li>• The kidneys produce urine</li> <li>• The lungs remove carbon dioxide</li> <li>• Sweat glands in the skin produce sweat</li> <li>• The liver gets rid of nitrogen by producing urea, which is excreted in urine</li> </ul>	<ul style="list-style-type: none"> <li>• Use charts/models to identify organs concerned with excretion and their location in the body</li> </ul>	<ul style="list-style-type: none"> <li>• Construct table of organs and their excretory products</li> </ul>

<b>3.2</b> <b>Human Body Systems: The Reproductive System</b>			
3.2.1 Outline the structure of the human male and female reproductive systems and the function of the parts.	<ul style="list-style-type: none"> <li>• Reproduction allows for the continuation of the species.</li> <li>• The female reproductive system consists of ovaries, uterus, fallopian tubes, cervix, and vagina.</li> <li>• The male reproductive system consists of testes, scrotum, sperm ducts, and penis.</li> <li>• Ovaries produce ova and the testes produce sperms. These are specialized reproductive cells.</li> </ul>	<ul style="list-style-type: none"> <li>• View video clip on reproductive system.</li> <li>• Classroom discussions with reference to charts or "KWL"</li> </ul>	<ul style="list-style-type: none"> <li>• Students annotate diagrams to identify the structure and function of the male and female reproductive system.</li> <li>• Structured questions</li> </ul>

<b>3.3</b> <b>Communicable Diseases of the Reproductive System</b>			
3.3.1 Identify the different types of Communicable Diseases of the Reproductive System	Herpes, Gonorrhoea, chlamydia, syphilis Human papilloma virus, HIV	<ul style="list-style-type: none"> <li>• Power point on research on the various types of communicable diseases of the reproductive system</li> <li>• Presentations by health officer or medical practitioner</li> </ul>	<ul style="list-style-type: none"> <li>• Prepare a pamphlet for distribution to student body including highlighted international days of recognition.</li> </ul>
3.3.2 Explain the transmission of HIV (Human immunodeficiency virus).	<ul style="list-style-type: none"> <li>• HIV (Human immunodeficiency virus) infection is a chronic disease that progressively damages the body's immune system resulting in AIDS (Acquired immunodeficiency syndrome).</li> <li>• HIV lives only within cells and body fluids, not outside the body.</li> </ul>	<ul style="list-style-type: none"> <li>• Teacher utilizes resource personnel from the health sector to discuss communicable sexually transmitted diseases.</li> <li>• Use stories from newspapers, magazines, etc. to stimulate discussions and list the</li> </ul>	<ul style="list-style-type: none"> <li>• Design a brochure on HIV for dissemination to the student body.</li> <li>• Perform a puppet show/ design a cartoon strip for use in HIV education within the school.</li> </ul>

	<ul style="list-style-type: none"> <li>• The three main routes of transmission are: <ul style="list-style-type: none"> <li>❖ Specific kinds of sexual contact, especially unprotected anal or vaginal intercourse.</li> <li>❖ Direct exposure to infected blood.</li> <li>❖ From an HIV-infected woman to her offspring during pregnancy, childbirth, or breastfeeding.</li> </ul> </li> </ul>	<p>positive behaviors that help avoid HIV infection.</p>	
<p>3.3.3 Discuss strategies for protecting oneself against HIV infection.</p>	<ul style="list-style-type: none"> <li>• Making careful choices about sexual activities reduces the risk of contact with HIV.</li> <li>• Strategies may include : <ul style="list-style-type: none"> <li>○ Abstinence</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Role-play situations that may be responsible for the transmission of communicable sexually transmitted diseases and highlight methods of protecting oneself.</li> </ul>	<ul style="list-style-type: none"> <li>• Compose a calypso, rap, poem, skit, etc. to reflect strategies for protecting yourself from HIV infection.</li> <li>• Role-play situations that show compassion when dealing with</li> </ul>

	<ul style="list-style-type: none"> <li>○ Avoidance of exchange of body fluids.</li> <li>○ Protected sex</li> <li>○ Limit the number of partners</li> <li>○ Get tested for HIV regularly</li> <li>○ Avoid sharing needles or syringes.</li> </ul>		persons infected with HIV
<b>3.4</b> <b>Environmental Impact of Human Activities</b>			
3.4.1 Explain the impact of human activities on the local and global environment	<ul style="list-style-type: none"> <li>• Causes of alteration of the environment: <ul style="list-style-type: none"> <li>❖ Industrialization.</li> <li>❖ Urbanization.</li> <li>❖ Use/misuse of genetically modified products.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Work in groups to research a topic and do a presentation, e.g., on the effects of one of man's activities on the environment.</li> <li>• Dramatize the consequences, in 30 years,</li> </ul>	<ul style="list-style-type: none"> <li>• Design posters to educate the public on one of these worldwide environmental concerns.</li> <li>• Student projects: <ul style="list-style-type: none"> <li>○ Research agencies, policies and laws in</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>❖ The deliberate or accidental introduction/removal of endemic species to new habitats.</li> <li>• Consequences of alteration of the environment: <ul style="list-style-type: none"> <li>❖ Deforestation.</li> <li>❖ Habitat destruction.</li> <li>❖ Species depletion</li> </ul> </li> <li>• Habitats can be preserved by: <ul style="list-style-type: none"> <li>❖ Establishment and protection of national nature reserves (local examples)</li> <li>❖ Developing and enforcing laws to minimize adverse impact on environment (refer to responsible agencies)</li> </ul> </li> </ul>	<p>of human activities if it goes unchecked.</p> <ul style="list-style-type: none"> <li>• View photographs or a documentary on a local environmental concern and discuss how the problems can be addressed.</li> <li>• Organize activities to promote environmental awareness, e.g., displays, lectures by students for World Environment Day on June 5th each year.</li> <li>• Field trip to any site of interest.</li> <li>• Role-play an exchange between a game warden and a poacher in a game sanctuary.</li> </ul>	<p>Trinidad and Tobago to monitor and guide conservation initiatives.</p> <ul style="list-style-type: none"> <li>○ Debate topics related to conservation vs industrialization.</li> <li>○ Prepare a speech aimed at educating the public on the value of hunting only during the fixed season, when hunting is allowed, and of not hunting the protected species.</li> <li>○ Tabulate items we use on a daily basis and identify the natural resources that are used to make each item.</li> </ul>
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