

# SEXUALITY EDUCATION RELATED TOPICS IN SCIENCE

## Upper Primary

Topic	Pupils will be able to
Cycles in animals	<ul style="list-style-type: none"> <li>○ show an understanding that living things reproduce to ensure continuity of their kind and that many characteristics of an organism are passed on from parents to offspring</li> <li>○ recognise the process of fertilisation in the sexual reproduction of humans</li> </ul>

## Lower Secondary Science: Express/Normal Academic (E/NA) and Normal Technical (NT)

Topic:	Pupils will be able to	
<b>Sexual reproduction in human beings</b>		
Puberty Changes	E/NA	<ul style="list-style-type: none"> <li>○ state some of the physical changes that occur during puberty and early adolescence</li> </ul>
	NT	<ul style="list-style-type: none"> <li>○ interpret and communicate data on the physical changes that occur during puberty and early adolescence</li> </ul>
Male And Female Reproductive System	E/NA	<ul style="list-style-type: none"> <li>○ describe briefly the structures and functions of human male and female reproductive systems</li> </ul>
	NT	<ul style="list-style-type: none"> <li>○ describe the functions of the various parts of the human male and female reproductive systems</li> </ul>
Menstrual Cycle And Fertilisation	E/NA	<ul style="list-style-type: none"> <li>○ describe briefly the menstrual cycle and fertilisation</li> <li>○ recognise that heredity is a process where genetic information is transmitted from one generation to another</li> <li>○ recognise that in sexual reproduction a new individual is formed through the union of an egg and a sperm</li> <li>○ recognise that a new individual formed through sexual reproduction receives genetic information from its mother (via the egg) and its father (via the sperm)</li> </ul>
	NT	<ul style="list-style-type: none"> <li>○ describe briefly the menstrual cycle and fertilisation</li> </ul>
Birth Control (Contraception)	E/NA	<ul style="list-style-type: none"> <li>○ describe briefly a temporary and a permanent method of birth control</li> </ul>

**Topic:****Sexual reproduction in human beings****Pupils will be able to**

	NT	<ul style="list-style-type: none"> <li>○ compare a temporary and a permanent method of birth control</li> </ul>
Sexually Transmitted Infections (e.g. gonorrhoea & AIDS)	E/NA	<ul style="list-style-type: none"> <li>○ state the harmful consequences of sexually transmitted infections like syphilis, gonorrhoea and AIDS</li> </ul>
	NT	<ul style="list-style-type: none"> <li>○ appreciate the harmful consequences of sexually transmitted infections like syphilis, gonorrhoea and AIDS</li> </ul>
Consequences Of Abortion And Pre-Marital Sex	E/NA	<ul style="list-style-type: none"> <li>○ evaluate the consequences and issues relating to abortion and pre-marital sex</li> </ul>
	NT	<ul style="list-style-type: none"> <li>○ appreciate the consequences relating to abortion &amp; pre-marital sex</li> </ul>
Facilitated Reproduction	NT	<ul style="list-style-type: none"> <li>○ show an awareness of some forms of facilitated reproduction in humans, e.g. in vitro fertilisation and artificial insemination</li> </ul>

**“O” level Biology; “O” level Science (Biology); “N” level Science (Biology)****Topic:****Reproduction****Pupils will be able to**

Male and Female Reproductive Systems

- identify on diagrams, the male reproductive system and give the functions of: testes, scrotum, sperm ducts, prostate gland, urethra and penis
- identify on diagrams, the female reproductive system and give the functions of: ovaries, oviducts, uterus, cervix and vagina.

**Topic:****Reproduction****Pupils will be able to**

Menstrual Cycle; Fertilisation and Development of Zygote

- describe briefly the menstrual cycle with reference to the alternation of menstruation and ovulation, the natural variation in its length, and the fertile and infertile phases of the cycle with reference to the effects of progesterone and estrogen only
- describe fertilisation and early development of the zygote simply in terms of the formation of a ball of cells which becomes implanted in the wall of the uterus
- state the functions of the amniotic sac and the amniotic fluid (*For "O" Level Biology Only*)
- describe the functions of the placenta and umbilical cord in relation to exchange of dissolved nutrients, gases and excretory products (structural details are not required) (*For "O" Level Biology Only*)

HIV Infection: Its Spread and Methods of Control

- discuss the spread of human immunodeficiency virus (HIV) and methods by which it may be controlled.

**"A" level Biology****Topic: Genetics of viruses and bacteria****Pupils will be able to**

The genetics of viruses

- Describe the reproductive cycles of retroviruses e.g. HIV
- Explain how viral infections cause disease in animals e.g. mammals, through the disruption of host tissue and functions (e.g. HIV and T helper cells)