

NATURAL SCIENCES

GRADE 9 TERM 1

Tracker



Week 1											
CAPS Concepts and Activities	CAPS Page no.	Year:					Year:				
		Class					Class				
		Date Completed					Date Completed				
Week 1 Lesson A											
Topic: Cells as the basic units of life Content & Concepts: Cell structure <ul style="list-style-type: none"> The cell is the basic structural and functional unit of all living organisms. Cells can be seen under a microscope (they are microscopic) Plant and animal cells have a cell membrane, cytoplasm, nucleus, and organelles such as mitochondria, vacuoles, and chloroplasts 	56										
Week 1 Lesson B											
Topic: Cells as the basic units of life Content & Concepts: Cell structure <ul style="list-style-type: none"> The cell membrane encloses the contents of the cell. It allows specific substances to pass in and out of the cell The cytoplasm is the jelly-like medium in which many chemical reactions take place The nucleus contains the DNA <ul style="list-style-type: none"> The nucleus is enclosed by a nuclear membrane (in plants and animals) DNA contains inherited characteristics, such as whether eyes are blue or brown DNA is unique to each person, this variation accounts for differences within spaces Mitochondria are responsible for respiration to release energy from food 	56										

Week 1 Lesson C											
<p>Topic: Cells as the basic units of life</p> <p>Content and Concepts: Differences between plant and animal cells</p> <ul style="list-style-type: none"> • Plant cells differ from animal cells <ul style="list-style-type: none"> ○ Plant and animal cells are enclosed by a cell membrane, and plant cells also have rigid cellulose cell walls to provide support for the plant ○ Plant cells also contain the organelles such as large vacuoles and chloroplasts. Chloroplasts contain chlorophyll to absorb light energy for photosynthesis. Vacuoles in plant cells have several functions including support and storage (vacuoles in animal cells are small and temporary or absent) 	56										
Reflection											
Year:											
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?					
						HOD:			Date:		
Year:											
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?					
						HOD:			Date:		

Week 2											
CAPS Concepts and Activities	CAPS Page no.	Year:					Year:				
		Class					Class				
		Date Completed					Date Completed				
Week 2 Lesson A											
Topic: Cells as the basic units of life Content and Concepts: Differences between plant and animal cells <ul style="list-style-type: none"> • Plant cells differ from animal cells <ul style="list-style-type: none"> ○ Plant and animal cells are enclosed by a cell membrane, and plant cells also have rigid cellulose cell walls to provide support for the plant ○ Plant cells also contain organelles such as large vacuoles and chloroplasts. Chloroplasts contain chlorophyll to absorb light energy for photosynthesis. Vacuoles in plant cells have several functions including support and storage (vacuoles in animal cells are small and temporary or absent) 	56										
Week 2 Lesson B											
Topic: Cells as the basic units of life Content and Concepts: Cells in tissues, organs and systems <ul style="list-style-type: none"> • Cells come in many different shapes and sizes • Cells are adapted to form specific functions, such as muscle cells which are specialised to contract and enable movement 	57										
Week 2 Lesson C											
Topic: Cells as the basic units of life Content and Concepts: Cells in tissues, organs and systems <ul style="list-style-type: none"> • Microscopic organisms such as bacteria, consist of a single cell. Macroscopic organisms such as humans, consist of large numbers of cells • Stem cells are cells that have the ability to divide and develop into many different cell types • A group of cells performing a specific function form a tissue, group of tissues make up an organ, and organs working together in groups form systems, systems make up an organism 	57										

Reflection			
Year:			
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?	What will you change next time? Why?		
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%; padding: 5px;">HOD:</td> <td style="width: 30%; padding: 5px;">Date:</td> </tr> </table>		HOD:	Date:
HOD:	Date:		
Year:			
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?	What will you change next time? Why?		
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%; padding: 5px;">HOD:</td> <td style="width: 30%; padding: 5px;">Date:</td> </tr> </table>		HOD:	Date:
HOD:	Date:		

Week 3											
CAPS Concepts and Activities	CAPS Page no.	Year:					Year:				
		Class					Class				
		Date Completed					Date Completed				
Week 3 Lesson A											
Topic: Systems in the human body Content & Concepts: Body systems <ul style="list-style-type: none"> • The human body consist of several integrated systems working together including the following • Digestive system: breaks down food into dissolved nutrients that can be absorbed into the blood stream and transported to cells throughout the body <ul style="list-style-type: none"> ○ The main processes include ingestion, digestion, absorption and egestion ○ The main components include mouth, oesophagus, stomach, intestines and liver ○ Health issues include ulcers, anorexia nervosa, diarrhoea, liver cirrhosis 	57										
Week 3 Lesson B											
Topic: Systems in the human body Content & Concepts: Body systems <ul style="list-style-type: none"> • Circulatory system: brings nutrients and oxygen to cells and removes waste products <ul style="list-style-type: none"> ○ The main processes include circulating blood between the heart and lungs, and circulating blood between heart and rest of body ○ The main components include the heart, blood vessels (arteries, veins, capillaries), blood ○ Health issues include high blood pressure, heart attacks and strokes 	57										

Week 3 Lesson C												
Topic: Systems in the human body Content & Concepts: Body systems <ul style="list-style-type: none"> • Respiratory system: is responsible for supplying oxygen and removing carbon dioxide <ul style="list-style-type: none"> ○ The main processes include breathing (inhalation and exhalation), gaseous exchange (diffusion) and respiration ○ The main components include the nose and mouth, trachea, and other air passageways, lungs, blood ○ Health issues include asthma, lung cancer, bronchitis, asbestosis 	58											
Reflection												
Year:												
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?						
						HOD:				Date:		
Year:												
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?						
						HOD:				Date:		

Reflection			
Year:			
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?	What will you change next time? Why?		
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%; padding: 5px;">HOD:</td> <td style="width: 30%; padding: 5px;">Date:</td> </tr> </table>	HOD:	Date:
HOD:	Date:		
Year:			
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?	What will you change next time? Why?		
	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%; padding: 5px;">HOD:</td> <td style="width: 30%; padding: 5px;">Date:</td> </tr> </table>	HOD:	Date:
HOD:	Date:		

Reflection	
Year:	
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?	What will you change next time? Why?
	HOD: <input type="text"/>
Year:	
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?	What will you change next time? Why?
	HOD: <input type="text"/>

Week 6											
CAPS Concepts and Activities	CAPS Page no.	Year:					Year:				
		Class					Class				
		Date Completed					Date Completed				
Week 6 Lesson A											
Topic: Human reproduction Content & Concepts: Reproductive organs <ul style="list-style-type: none"> Male reproductive organs include penis, sperm duct (vas deferens), testes (produces sperm cells), scrotum and urethra Female reproductive organs include vagina, uterus, ovaries (contain egg cells/ova) and oviducts (Fallopian tubes) 	59										
Week 6 Lesson B											
Topic: Human reproduction Content & Concepts: Stages of reproduction <ul style="list-style-type: none"> Once a month, one of the ovaries releases a ripe egg in a process called ovulation In preparation for a fertilised egg, the uterus develops a thick layer of blood If fertilisation does not take place, menstruation occurs Menstruation is the breakdown of the thick layer of blood in the uterus, which is released through the vagina The menstrual cycle is usually a 28-day cycle During copulation, the erect penis is inserted into the vagina and semen is released (ejaculation) Fertilisation is the fusion of the sperm and egg, producing a zygote 	60										

Week 6 Lesson C										
<p>Topic: Human reproduction Content & Concepts: Stages of reproduction</p> <ul style="list-style-type: none"> • If fertilisation takes place, the fertilised egg is implanted in the blood layer in the uterus and pregnancy results • The developing embryo/foetus is attached to the uterus wall by the placenta which plays a vital role in feeding and removing waste from the foetus • The stage of pregnancy in humans (gestation) is about 40 weeks • Pregnancy can be prevented by using contraceptives such as condoms to prevent the sperm reaching the egg • Condoms also prevent the transmission of HIV/AIDS and other STDs (sexually transmitted diseases), if used effectively. 	60									
Reflection										
Year:										
<p>Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?</p>						<p>What will you change next time? Why?</p>				
						HOD:			Date:	
Year:										
<p>Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?</p>						<p>What will you change next time? Why?</p>				
						HOD:			Date:	

Week 7											
CAPS Concepts and Activities	CAPS Page no.	Year:					Year:				
		Class					Class				
		Date Completed					Date Completed				
Week 7 Lesson A											
Topic: Circulatory and respiratory systems Content & Concepts: Breathing, gaseous exchange, circulation and respiration <ul style="list-style-type: none"> Oxygen is inhaled in a process called breathing In the lungs gases are exchanged (gaseous exchange) between the alveoli and the surrounding capillaries by the process of diffusion 	61										
Week 7 Lesson B											
Topic: Circulatory and respiratory systems Content & Concepts: Breathing, gaseous exchange, circulation and respiration <ul style="list-style-type: none"> Oxygenated blood is transported (circulation) from the lungs to the left side of the heart where it is pumped under high pressure to the body through the arteries [arteries transport oxygenated blood, except for pulmonary arteries] 	61										
Week 7 Lesson C											
Topic: Circulatory and respiratory systems Content & Concepts: Breathing, gaseous exchange, circulation and respiration <ul style="list-style-type: none"> Arteries subdivide to form capillaries which are in close contact with the body cells. Here, gaseous exchange occurs and oxygen moves into the cells by the process of diffusion 	61										
Reflection											
Year:											
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?					
						HOD:			Date:		

NECT LEARNING PROGRAMME: NATURAL SCIENCES
GRADE 9 TERM 1 TRACKER

Year:	
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?	What will you change next time? Why?
	HOD:

Reflection	
Year:	
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?	What will you change next time? Why?
	HOD: <input type="text"/>
Year:	
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?	What will you change next time? Why?
	HOD: <input type="text"/>

Week 9											
CAPS Concepts and Activities	CAPS Page no.	Year:					Year:				
		Class					Class				
		Date Completed					Date Completed				
Week 9 Lesson A											
Topic: Digestive System Content & Concepts: Healthy diet <ul style="list-style-type: none"> A healthy diet (eating plan) requires different components including proteins, carbohydrates, fats and oils, vitamins and minerals, fibre and water Disorders of the digestive system can be related to inappropriate eating plans 	62										
Week 9 Lesson B											
Topic: Digestive System Content & Concepts: The alimentary canal <ul style="list-style-type: none"> The alimentary canal is composed of the mouth, oesophagus, stomach, small intestine, large intestine, rectum and anus The structure of each part of the alimentary canal is adapted to its function 	62										
Week 9 Lesson C											
Topic: Digestive System Content & Concepts: The alimentary canal <ul style="list-style-type: none"> Digestion is the breakdown of food into a usable dissolved form. There are two types of digestion: <ul style="list-style-type: none"> Mechanical digestion involves the physical breaking, crushing and mashing of food Chemical digestion involves the mixing food with digestive enzymes and hydrochloric acid 	62										
Reflection											
Year:											
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?					
						HOD:			Date:		

NECT LEARNING PROGRAMME: NATURAL SCIENCES
GRADE 9 TERM 1 TRACKER

Year:	
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?	What will you change next time? Why?
	HOD: Date:

Week 10											
CAPS Concepts and Activities	CAPS Page no.	Year:					Year:				
		Class					Class				
		Date Completed					Date Completed				
Week 10 Lesson A											
Topic: Revision	56-62										
Week 10 Lesson B											
Topic: Revision	56-62										
Week 10 Lesson C											
Topic: Revision	56-62										
Reflection											
Year:											
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?					
						HOD:			Date:		
Year:											
Think about and make a note of: What went well? What did not go well? What did the learners find difficult or easy to understand or do? What will you do to support or extend learners? Did you cover all the work set for the week? If not, how will you get back on track?						What will you change next time? Why?					
						HOD:			Date:		