SCIENCE SCHEME OF WORK FOR PRIMARY SEVEN TERMS I, II AND III.

WK	PD	TOPIC	SUB TOPIC	CONTENT	COMPETENCES	METHODS	L/AIDS	L/T ACTS	SKILLS/ VALUES	REFERENCE (S)	REM
1	1	**THE SKELETAL AND MUSCULAR**	**The Skeleton**	- Definition of a skeleton. - Functions of a skeleton. - The types of skeleton. - The human skeleton - The four main parts of a human skeleton - NOTE: the human skeleton is made up of 206 bones. **Types of bones** - Long, short, flat, irregular and where they are found.	**By the end of the lesson, the learner should be able to:** - Define a skeleton - Mention types of a skeleton - List and describe the functions of the skeleton - Draw and name the parts of the human skeleton. - Identify the four major parts of the human skeleton. - List types of bones with examples - Define joints.	Discussion Discovery Demonstration Observation Question and answer Technique	Charts showing the human Skeleton Charts showing the types of bones.	Drawing Answering Both oral and written question	- Critical thinking -Effective communication - Appreciation Problem solving	Fountain primary Science Bk 4 pg 54 – 58 Comprehensive primary Science BK 4 pg 93 – 99 MK Inter Primary Science Bk 4 pgs 63 – 70 Basic primary Science BK pgs 72 – 75	

		SYSTEM		- Examples of each types **Joints** - Definition of joints - Types of joints (i) Description (ii) Examples (iii) Illustration (iv) Functions of the parts (v) Where they are found.	- Mention the two types of joints and give examples including where they are found. - Define muscles - Name the types of muscles and their examples - Identify the functions of the muscles in the body.					
				Muscles - Definition of a muscle. (muscles are fibrous tissues that are attached to bones in the body) **Types of muscles** (i) Voluntary and Involuntary (ii) draw voluntary muscles (iii) Examples Of each type of muscles. (iv) Functions of muscles **Posture** - Definition - Importance of a good posture - Dangers of bad posture	**By the end of the lessons, the learner should be able to** - Describe a posture - List the importance of a good posture - Identify the dangers of a bad body posture - List diseases and disorders related to the muscles and skeleton including their cause, prevention, control and treatment.		Charts showing the types of muscles	Drawing Answering Both oral and written question Drawing Answering Both oral and written question	- Critical thinking -Effective communication - Appreciation Problem solving - Critical thinking -Effective communication - Appreciation Problem solving	Basic primary Science BK pgs 72 – 75 MK Inter Primary Science Bk 4 pgs 63 – 70 Fountain primary Science Bk 4 pg 54 – 58	

				- Diseases and disorders related to the skeletal and muscular system. - How to maintain proper skeletal and muscular system.			Good Posture				
4	1, 2 & 3	**FORMS OF ENERGY**	**Electricity**	▪ Definition of energy ▪ Forms of energy. ▪ Definition of electricity ▪ Uses of electricity ▪ Advantages and disadvantages of electricity ▪ Dangers of using electricity ▪ Electricity appliances	**The Learner should be able to:-** **List down forms of energy**. ▪ Define energy. ▪ Define electricity. ▪ State the uses of electricity. ▪ Identify the advantages and disadvantages of using electricity ▪ Name the appliances that use electricity	▪ Guided discussion ▪ Question and answer ▪ Discovery	▪ CB illustrations	▪ Writing notes ▪ Listing uses of electricity	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ MK integrated scie bk7 ▪ Fountain integrated scie bk7 ▪ A comprehensive guide for integrated scie bk7	
	4 & 5			▪ Types of electricity. ▪ Forms of electricity ▪ Static electricity and current electricity ▪ Definition of static and current electricity. ▪ How to produce static electricity.	**The Learner should be able to:-** ▪ Name the forms of electricity and how they are produced ▪ Give the difference btn current and static electricity	▪ Explanation ▪ Discussion	▪ Rulers ▪ Paper ▪ Textbooks	▪ Naming forms of electricity	▪	▪ MK integrated scie bk7 ▪ Fountain integrated scie bk7 ▪ A comprehensive guide for integrated scie bk7	
	6 & 7	**FORMS OF**		▪ Examples of static electricity in nature ▪ Lightning and thunder ▪ Dangers of lightning ▪ How the dangers can be controlled	**The Learner should be able to:-** ▪ State 2 examples of static electricity ▪ Name the dangers of lightning ▪ Explain how lightning can be controlled	▪ Questioning ▪ Discussion ▪ Answering	▪ Textbooks ▪ BB sketches	▪ Taking notes ▪ Listening	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ MK integrated scie bk7 ▪ Fountain integrated scie bk7 ▪ A comprehensive guide for	

										integrated scie bk7	
	8	**ENERGY**		Current electricity ▪ Definition ▪ Types (i.e. DC & AC) ▪ Sources of energy for generating electricity (water, sun, fossil fuels), uranium hot springs.	**The Learner should be able to:-** ▪ Define current electricity ▪ Identify the types of current electricity ▪ Name energy resources for generating electricity	▪ Discussion ▪ Explanation ▪ Question and answer	▪ Charts ▪ Textbooks	▪ Writing ▪ Answering oral and written qns	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ MK integrated scie bk7 ▪ Fountain integrated scie bk7 ▪ A comprehensive guide for integrated scie bk7	
5	1			An electric circuit ▪ Definition of a circuit ▪ Types of circuits. ▪ Parts and uses of the circuit ▪ Flow of current and flow of electrons	**The Learner should be able to:-** ▪ Define a circuit ▪ Identify types of circuits ▪ Name the parts and uses of a circuit ▪ Differentiate btn flow of current and flow of electricity	▪ Discussion ▪ Explanation	▪ Cells ▪ Bulbs ▪ Wires	▪ Drawing ▪ Experimenting	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ MK integrated scie bk7 ▪ Fountain integrated scie bk7 ▪ Supplementary science std 8	
	2 & 3			▪ Symbols used in an electric circuit ▪ Energy changes in a circuit ▪ Cells (batteries)/ electrolytes ▪ Types of cells (prim & secondary)	**The Learner should be able to:-** ▪ Identify the symbols used in a circuit ▪ Mention the different energy changes in a circuit ▪ Identify types of cells ▪ Name the examples of cells	▪ Question and answer ▪ Discussion	▪ Charts ▪ Old cells	▪ Drawing ▪ Writing notes	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ MK integrated scie bk7 ▪ Fountain integrated scie bk7 ▪ Supplementary science std 8	
	4			▪ Parts of a cell and their uses ▪ Calculating the voltage of a circuit	**The Learner should be able to:-** ▪ Name the parts of a cell and their uses ▪ Do simple calculations on voltage	▪ Observation ▪ Discussion ▪ Discovery	▪ Old cells ▪ Charts	▪ Drawing ▪ Writing notes	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ MK integrated scie bk7 ▪ Fountain integrated scie bk7 ▪ Supplementary science std 8	

	5	**FORMS OF ENERGY**		Bulb ▪ Parts and their uses ▪ Energy changes in a bulb ▪ Reasons why a bulb may fail to work when the circuit is complete	**The Learner should be able to:-** ▪ Define a bulb ▪ Identify the parts of a bulb and their uses ▪ Give the reasons why bulbs may fail to work even when the circuit is complete	▪ Discussion ▪ Explanation ▪ Questioning	▪ Charts ▪ Textbooks ▪ BB sketches	▪ Observing ▪ Drawing ▪ Naming parts of a bulb	▪	▪ MK integrated scie bk7 ▪ Fountain integrated scie bk7 ▪ Supplementary science std 8	
	6			▪ Short circuits (definition) ▪ Causes and prevention	**The Learner should be able to:-** ▪ Explain short circuits ▪ State the causes and prevention of short circuits	▪ Explanation ▪ Discovery	▪ BB sketches ▪ Taking notes	▪ Taking notes	▪	▪ MK integrated scie bk7 ▪ Fountain integrated scie bk7 ▪ Supplementary science std 8	
	7			▪ Conductors (definition) ▪ Insulators (definition) ▪ Uses of conductors and insulators ▪ Examples of conductors and insulators	**The Learner should be able to:-** ▪ Define conductors and insulators ▪ Give examples of conductors and insulators ▪ Identify the uses of conductors and insulators	▪ Discussion ▪ Explanation ▪ Experimenting	▪ Wires ▪ Charts ▪ Plastics	▪ Carrying out experiments ▪ Taking notes	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ Fountain integrated scie Bk7 ▪ Supplementary science std 8	
	8			The electric torch ▪ How a torch works ▪ Reasons why a torch may fail to work ▪ Plugs and sockets	**The Learner should be able to:-** ▪ Identify the parts of a torch and their uses ▪ Give reasons why a torch may fail to work ▪ State the use of plugs and sockets	▪ Discussion ▪ Question and answer ▪ Observation	▪ Torches ▪ Cells ▪ Plugs ▪ Sockets	▪ Drawing ▪ Doing an experiment	▪	▪ Fountain integrated scie Bk7 ▪ Supplementary science std 8	

6	1 & 2	**FORMS OF ENERGY**		▪ Production of electricity – *motors, generators, dynamos, transformers* ▪ Measurement of power and electricity	**The Learner should be able to:-** ▪ State 2 ways of generating electricity ▪ Mention how power and electricity are measured	▪ Explanation ▪ Discussion	▪ Charts ▪ BB illustrations	▪ Taking notes ▪ Written exercise	▪	▪ MK integrated scie Bk7 ▪ Fountain integrated scie Bk7 ▪ Comprehensive guide to Integrated Scie	
	3 & 4		**Magnetism**	▪ Definition of a magnet and magnetism ▪ Magnetic and non magnetic materials ▪ Alloys – definition	**The Learner should be able to:-** ▪ Definition of a magnet ▪ Differentiate btn a magnet and magnetism ▪ Identify magnetic and non magnetic materials ▪ Explain alloys	▪ Discussion ▪ Explanation ▪ Questioning	▪ BB illustrations	▪ Taking notes ▪ Drawing ▪ Naming materials	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ MK integrated scie Bk7 ▪ Fountain integrated scie Bk7 ▪ Comprehensive guide to Integrated Scie	
	5			▪ Types of magnets (natural and artificial ▪ Properties of magnets	**The Learner should be able to:-** ▪ Identify properties of magnets ▪ Name types of magnets	▪ Discussion ▪ Explanation	▪ Magnets ▪ Charts	▪ Taking notes	▪	▪ MK integrated scie Bk7 ▪ Fountain integrated scie Bk7 ▪ Comprehensive guide to Integrated Scie	
	6			▪ Permanent and temporary magnets ▪ Examples of each type of magnet ▪ Magnetic lines of force ▪ Magnetic field ▪ Illustration of magnetic fields	**The Learner should be able to:-** ▪ Differentiate between temporary and permanent magnets ▪ Give examples of each type of magnet ▪ Define magnetic lines and magnetic field	▪ Discussion ▪ Question and answer ▪ Explanation ▪ Experimentation	▪ Charts ▪ Magnets	▪ Taking notes ▪ Demonstrating ▪ Drawing	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ MK integrated scie Bk7 ▪ Fountain integrated scie Bk7	

	7 & 8			▪ Ways of making magnets ▪ How to improve the strength of electro magnets ▪ Ways of demagnetizing a magnet ▪ Uses of magnets in daily life ▪ Devices which use magnets	**The Learner should be able to:-** ▪ Make simple magnets ▪ Identify examples of magnets made ▪ State the uses of magnets in daily life	▪ Explanation ▪ Experimentation ▪ Demonstration	▪ Magnets ▪ Cells ▪ Wires ▪ Magnetic materials	▪ Demonstrating ▪ Taking notes	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ Fountain integrated scie Bk7 ▪ Supplementary science std 8	
	1	**TOPICAL REVISION QUESTIONS AND DIAGRAMS**									
7	2	**THE ENVIRONMENT**	**Energy resources**	▪ Definition of environment ▪ Components of the environment ▪ Definition of energy, resource and energy resource ▪ Examples of energy resources	**The Learner should be able to:-** ▪ Define the tern environment ▪ Identify the components of the environment ▪ Differentiate btn energy and energy resource ▪ Name examples of energy resource	▪ Explanation ▪ Demonstration ▪ Discussion	▪ BB illustrations ▪ Sketches	▪ Taking notes ▪ Answering oral and written questions	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ MK integrated scie Bk7 ▪ Fountain integrated scie Bk7 ▪ Comprehensive guide to Integrated Scie	
	3			▪ Types of energy resources (renewable and non renewable) ▪ Examples of each type of energy resource ▪ Soil as a resource	**The Learner should be able to:-** ▪ Identify the types of energy resources ▪ Give the examples of each type of energy resource ▪ Explain how soil is a resource	▪ Discussion ▪ Question and answer ▪ Explanation	▪ BB sketches	▪ Answering oral qns ▪ Filling in exercise	▪	▪ MK integrated scie Bk7 ▪ Fountain integrated scie Bk7 ▪ Complete junior physics	
	4			▪ Fossil fuels as resources ▪ Definition of fossils ▪ Examples of fossils	**The Learner should be able to:-** ▪ Explain how minerals are energy resources	▪ Discussion ▪ Explanation	▪ Charts ▪ BB illustrations	▪ Taking notes	▪	▪ MK integrated scie Bk7 ▪ Supplementary science BK7	

				▪ Uranium as an energy resource	▪ Define fossils ▪ Identify e.gs of fossils						
	5			▪ The sun as an energy resource ▪ Water as an energy resource ▪ Animals as energy resources ▪ Plants as energy resources	**The Learner should be able to:-** ▪ Identify the resources in the environment ▪ Explain how the examples above act as resources	▪ Guided discussion ▪ Explanation ▪ Question and answer	▪ BB sketches ▪ Textbooks	▪ Naming examples of resources ▪ Taking notes	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ MK integrated scie Bk7 ▪ Supplementary science BK7	
	6 & 7			Conservation ▪ Definition of conservation ▪ Different ways of conserving different energy resources ▪ Biogas production	**The Learner should be able to:-** ▪ Define the term conservation ▪ State different ways of conserving resources ▪ Explain how biogas is produced	▪ Questioning ▪ Explanation ▪ Discussion	▪ BB illustrations ▪ Textbooks ▪ Charts	▪ Answering qns orally ▪ Taking notes ▪ Drawing	▪	▪ MK integrated scie Bk7 ▪ Fountain integrated scie Bk7	
8	**1 & 2**	**THE ENVIRONMENT**	**Controlling and managing changes in the environment**	▪ Conservation ▪ Importance of conservation practices ▪ Environmental degradation ▪ Examples of environmental degradation	**The Learner should be able to:-** ▪ Define conservation ▪ State the importance of conservation practices ▪ Give examples of environmental degradation	▪ Explanation ▪ Discussion ▪ Question and answer	▪ BB illustrations ▪ Textbooks	▪ Writing notes	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ MK integrated scie Bk7 ▪ Fountain integrated scie Bk7	
	3 & 4			▪ Causes of environmental degradation ▪ Natural and artificial activities ▪ Effects of environmental degradation ▪ Measures to control degradation	**The Learner should be able to:-** ▪ Mention causes of environmental degradation ▪ Identify the effects of degradation ▪ State control measures	▪ Guided discussion	▪ Sketch illustrations	▪	▪	▪ MK integrated scie Bk7 ▪ Fountain integrated scie Bk7	
	5			Agro – forestry	**The Learner should be able to:-**	▪ Explanation	▪ Charts	▪ Answering oral	- Critical thinking	▪ Introduction to Biology	

				▪ Definition of agro-forestry ▪ Importance of agro-forestry ▪ Tree nursery beds ▪ Activities in the tree nursery bed and care	▪ Define agro-forestry ▪ Identify the importance of agro-forestry ▪ Explain how to make a tree nursery bed ▪ State the activities in the tree nursery bed	▪ Discussion ▪ Demonstration	▪ Textbooks	and written questions ▪ Taking notes	- Appreciation - Problem solving ▪ Effective communication	▪ Supplementary science std8	
	6	**THE ENVIRONMENT**		▪ Harvesting trees ▪ Conservation of wood ▪ Importance of rural electrification	**The Learner should be able to:-** ▪ State methods of harvesting trees for wood ▪ Name methods of conserving wood fuel ▪ State the importance of rural electrification	▪ Explanation ▪ Discussion	▪ Charts ▪ Textbooks	▪ Answering oral questions ▪ Explanation	▪	▪ Introduction to Biology ▪ Supplementary science std8	
	7 & 8		**ENVIRONMENTAL DEGRADATION**	<u>Land fragmentation and its definition</u> ▪ Causes of land fragmentation ▪ Soil conservation ▪ Importance of soil conservation and practices	**The Learner should be able to:-** ▪ Define land fragmentation ▪ Identify the causes of fragmentation ▪ State importance of soil conservation and practices	▪ Discussion ▪ Explanation	▪ Textbooks ▪ BB illustrations	▪ Discussing in groups ▪ Explanation of terms ▪ Taking notes	▪	▪ Fountain integrated science bk7 ▪ Supplementary science std 8	
9	**1 & 2**			<u>Wetlands</u> ▪ Definition of wetlands ▪ Examples of wetlands ▪ Importance of wetlands ▪ Wetland degradation ▪ Why people drain wetlands ▪ Effects of wetland drainage ▪ How wetlands can be protected	**The Learner should be able to:-** ▪ Define the term wetlands ▪ Name examples of wetlands ▪ State the importance of wetlands ▪ Give ways of controlling wetland abuse	▪ Discussion ▪ Question and answer	▪ CB sketches ▪ Textbooks ▪ BB illustrations	▪ Taking notes ▪ Answering	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ MK integrated scie Bk7 ▪ Fountain integrated scie Bk8	

	3			▪ Bio-diversity (definition) ▪ Importance of bio-diversity ▪ Extinction of endangered species ▪ Control of loss of bio-diversity	**The Learner should be able to:-** ▪ Define bio-diversity ▪ State the importance of bio-diversity ▪ Give 4 examples of endangered species	▪ Discussion ▪ Explanation ▪ Questioning	▪ Textbooks ▪ CB illustrations	▪ Taking notes ▪ Discussing in groups	▪	▪ Supplementary science std 8 ▪ MK integrated science Bk7	
	4 & 5	**THE ENVIRONMENT**		▪ Pollution (definition) ▪ Pollutants ▪ Examples of pollutants ▪ Types of pollution (air, water, soil, sound) ▪ Effects of pollution. ▪ Control measures of pollution	**The Learner should be able to:-** ▪ Tell the meaning of pollution ▪ Give examples of pollutants ▪ State the types of pollution ▪ Identify control measures of pollution	▪ Question and answer technique ▪ Discussion	▪ Polythene bags ▪ Chemicals ▪ Old bottles and tins	▪ Answering oral qns ▪ Taking notes	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ Supplementary science std 8 ▪ MK integrated science Bk7	
	6			▪ Management of solid wastes ▪ 5R's in waste management (Re-use, Reduce, Return, Refuse, Reject)	**The Learner should be able to:-** ▪ Define the term recycling ▪ Identify ways of waste management using the 5 R's	▪ Explanation ▪ Discussion	▪ Textbooks ▪ Polythene bags ▪ Jerrycans	▪ Defining ▪ Answering oral questions	▪	▪ MK integrated scie Bk7 ▪ Fountain integrated scie Bk7	
	7 & 8			▪ Way forward to overcome environmental problems in Uganda ▪ Roles of NEMA ▪ Community and environmental involvement	**The Learner should be able to:-** ▪ Identify ways to overcome environmental problems in Uganda ▪ State 2 roles of NEMA and roles of the community in environmental management	▪ Questioning technique ▪ Discussion	▪ Charts ▪ BB work ▪ Cut outs from newspapers	▪ Taking notes ▪ Filling in blanks ▪ Answering written questions	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ MK integrated scie Bk7 ▪ Fountain integrated scie Bk7	
		TOPICAL REVISION QUESTIONS AND DIAGRAMS									

19	**1**	**MATTER AND ENERGY**	**SIMPLE MACHINES**	- Meaning of machines - Types of machines - Complex machines - Simple machines - Advantages of machines - Terms used in machines (work, force, power)	**The Learner should be able to:** - Explain the term machine - State the different types of machines - State advantages of machines - Describe terms used in machines.	- Explanation - Discussion -	- C/board illustrations	- Taking notes	- Critical thinking - Appreciation - Problem solving - Effective communication	- Comprehensive Primary Science Bk 7.	-
	7		**LEVERS**	- Calculating work done. - Simple machines - Definitions - Terms used in simple machines. - (MA) velocity, ration, efficiency, load, effort, load, arm, effort arm, pivot (fulcrum) - Classification(order) of simple machines - Levers – pulleys - Wheel and axel – wedges - Screws, inclined plane (slope) **Levers:** - Definition - Classes of levers (1st 2nd, 3rd class levers) - Characteristics and examples of each class. - Advantages of each class.	**The Learner should be able to:** - Calculate work done in machines - Define different terms used in machines i.e. M.A, V.R Efficiency, load, effort, E.A, L.A - Name the different examples of simple machines. - Define levers - Mention different classes of levers - Identify the examples and characteristics of each class of levers.	- Discussion - Observation - Demonstration	- Charts - C/board illustration - Pulleys wheels gears rollers - Scissors - Pliers - Spades - Knives - Wheel barrow - Metal rods	- Writing - Drawing - Answering oral questions - Demonstrating how machines work	- Critical thinking - Appreciation - Problem solving - Effective communication	- Functional Primary Science Bk 7 - Comprehensive Primary Science Bk 7. - New Uganda Primary Integrated Science Bk 7	-

20	**2**			- Law of levers - Calculations on levers	**The Learner should be able to:** - State the law of levers - Carry out calculations on levers	- discussion - discovery	- C/board illustration	- Writing exercises on calculations	-	- MK integrated Primary Science Bk 7	-
	2		**INCLINED PLANES**	- **<u>Inclined plane:</u>** - Definition - Examples of inclined planes - Advantages of using slopes/inclined plane - Application in daily life	**The Learner should be able to:** - Define an inclined plane - State examples of inclined planes - Mention advantages of using slopes/inclined planes.	- Explanation - Discussion - Demonstration	- Planks - Strings - Stones - Tables	- Doing practical work	- Critical thinking - Appreciation - Problem solving - Effective communication	- Fountain Integrated Primary Science Bk 7	-
21	**2**	**MATTER AND ENERGY**		- Calculations on inclined planes.	**The Learner should be able to:** - Carry out calculations on planes	- Explanation - Practice drill - Discovery	- Chalk board illustrations and sketches	- Writing exercises	-	- Oxford Primary Science Bk 7	-
	1		**WEDGES**	- **<u>Wedges:</u>** - Definition of wedges - Examples of wedges - Advantages of using wedges - Application of wedges in daily life	**The Learner should be able to:** - Define a wedge - Mention the advantages of using screws - State examples of machines that use screws in daily life.	- Discussion - Explanation - Observation	- Screws - Charts - Nuts - Bolts - Charts	- Carrying out an experiment - Writing notes - drawing diagrams	- Critical thinking - Appreciation - Problem solving - Effective communication	- Functional Primary Science for Uganda Bk 7 - MK integrated Primary Science Bk. 7	-
	1		**SCREWS**	**Screws:** - Definition of screws - Advantages of using screws - Application of screws in daily life	**The Learner should be able to:** - Mention the advantages of using screws - State examples of machines that use screws in daily life	- discussion - explanation - observation	- screws - charts - nuts - bolts - charts	- carrying out an experiment - writing notes - drawing diagrams	- Critical thinking - Appreciation - Problem solving - Effective communication	- MK integrated Primary Science Bk 7 - Fountain Integrated Science Bk 7	-
22	**4**		**WHEEL AND AXLE**	**Wheel and axle:** - Definition	**The Learner should be able to:**	- Explanation - Discussion - Discovery	- Wheel - Bolts - Charts	- Group discussion	- Critical thinking - Appreciation	- Oxford Primary Science Bk 7	-

				- Examples of wheel and axle eg wind lass, steering wheel, etc - Advantages of using the wheel and axle. - Application of wheels and axle in daily life	- Define a wheel and axle. - Mention examples of machines that use the wheel and axle - Identify the advantages of using the wheel and axle.			- Taking notes - Drawing - Answering oral questions	- Problem solving - Effective communication	- Comprehensive Primary Science Bk 7	
2 3			**WHEELS AND BELTS**	**Wheels and belts:** - Definition - Examples of machines that use conveyor belts e.g. sewing machines, vehicles, factories, quarries, etc - **Gears/toothed wheels** - Importance - Examples of machines that use gears eg watches, gear box in vehicles, etc - Rotation of two or more gear wheels in contact.	**The Learner should be able to:** - Define conveyor belts - Mention machines that use conveyor belts - Mention examples of machines that use gears/toothed wheels - State the advantage of using conveyor belts, gears and toothed wheels.	- Discussion - Explanation - Demonstration - Observation - Discovery - Application	- Wheels (pulleys) - Rubber bands - Charts - Toothed wheels - chalk boards sketches	- taking notes - drawing diagrams	- Critical thinking - Appreciation - Problem solving	- Comprehensive Primary Science Bk 7 - Oxford Primary Science Bk 7	-
	4		**PULLEYS**	**Pulleys** Definition of pulleys - Types of pulleys (single) Fixed, movable pulleys) - Block and tackle - Characteristics of each type - Mechanical advantage of each type - Advantages of using each type - Application of pulleys in daily life - Single fixed pulley (1st class lever) - Single movable pulley (2nd class lever)	**The Learner should be able to:** - Define the term "pulley" - Mention examples of pulley types - Describe the characteristics of each pulley system. - Identify the advantage of using any of the given pulley systems. - Calculate for effort on pulley systems.	- Explanation - Discussion - Question and answer - Discovery	- Pulley blocks - Charts - Chalk board illustrations	- Taking notes - Doing some practical work - Demonstrating how pulleys work - Writing an exercise	- Critical thinking - Appreciation - Problem solving	- Functional Primary Science for Uganda Bk 7 - Oxford Primary Science Bk 7	-

24	**2**		**FRICTION**	**Friction:** - definition - Types of friction eg: limiting, static - dynamic/rolling - viscosity - advantages/disadvantages of friction - ways of increasing/reducing friction - topical questions	**The Learner should be able to:** - Define friction - Mention the different types of friction - Identify the advantages/disadvantages of friction - State different ways of increasing/reducing friction in machines - Answer the topical questions.	- Discussion - Explanation - Demonstration - Experiment ation	- Chart - Bicycle - Rollers - Grease - Oil - Ball bearings	- Observing parts of a bicycle - Taking notes - Drawing diagrams	- Critical thinking - Appreciation - Problem solving	- Functional Primary Science for Uganda Bk 7 - Comprehensive Science Bk 7	-
	4	**BODY SYSTEMS**	**EXCRETORY SYSTEMS**	- Definition of excretion - Excretory organs and their products eg. **A – The skin:** - Structure and function of different parts. - Uses of the skin - Skin diseases - Care for the skin **B – kidneys:** - Structure and function of the kidney parts - Functions of the kidney - Diseases of the kidney & Care of the kidneys	**The Learner should be able to:** - Define the term excretion - Mention the excretory organs and their waste products - Name different parts of the skin and give their functions - Name different parts of the skin and give their functions - Name different parts of the kidney and give their functions - name diseases of the skin and the kidney	- discussion - explanation - question and answer - discussion	- charts - chalk board sketches and illustrations - pupils texts - taking notes - drawing diagrams	- Taking notes - Drawing diagrams - Taking note	- Critical thinking - Appreciation - Problem solving	- Fountain Integrated Primary Science Bk 7 - New Uganda Primary Integrated Science Bk 7	-
	4		**EXCRETORY SYSTEM**	**C - The lungs:** - The structure and function of parts of the lungs - Importance of the lungs - Diseases of the lungs - Care for the lungs **D - The Liver:**	**The Learner should be able to:** - Name the different parts of the lungs and give their functions - Identify the diseases of the lungs - State ways of caring for the lungs.	- Explanation - Discussion - Question and answer - Discussion - Explanation - Discovery	- Charts - Model lungs - Pupils texts - Charts - Chalk board sketches	- Taking notes - Drawing and labeling diagrams - Taking notes	- Critical thinking - Appreciation - Problem solving	- Oxford Primary Science Bk 7 - MK Integrated Primary Science Bk 7	-

				- General functions of the liver - Diseases of the liver - Control/prevention of the diseases - Care for the liver.				- Drawing diagrams and labeling			
10	1	**FORMS OF ENERGY**	**Light**	▪ Definition of light ▪ Sources of light ▪ Natural sources of light and examples ▪ Artificial sources of light and examples ▪ Uses of light	**The Learner should be able to:-** ▪ Define the term light ▪ Name the different sources of light ▪ Give examples of natural and artificial sources ▪ State 4 uses of light	▪ Discussion ▪ Question and answer	▪ Charts ▪ CB illustrations	▪ Taking notes ▪ Listing examples of light sources	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ MK integrated scie Bk7 ▪ Fountain integrated scie Bk7	
	2			▪ Transmission of light – how light travels ▪ Experiments on transmission of light	**The Learner should be able to:-** ▪ Explain how light travels ▪ Carry out simple experiments on transmission of light	▪ Explanation ▪ Experimentation ▪ Discovery	▪ Torches ▪ Cells ▪ Cardboard ▪ CB sketches	▪ Carrying out experiments ▪ Taking notes	▪	▪ MK integrated scie Bk7 ▪ Fountain integrated scie Bk7	
	3	**FORMS OF ENERGY**		<u>Beams of light</u> ▪ Types of beams ▪ Effects of light on different materials (opaque, translucent and transparent materials)	**The Learner should be able to:-** ▪ Define the term "beams" of light ▪ Name the types of beams ▪ State the effect of light on different materials	▪ Discussion ▪ Explanation ▪ Demonstration	▪ Polythene paper ▪ Oil ▪ Cells ▪ Torches ▪ CB illustrations	▪ Discussing in groups ▪ Taking notes	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ MK integrated scie Bk7 ▪ Fountain integrated scie Bk7	
	4 & 5			▪ <u>Shadows</u> – definition ▪ How shadows are formed ▪ Characteristics of shadows ▪ Eclipses – definition ▪ How eclipses are formed.	**The Learner should be able to:-** ▪ Define the term "shadow" ▪ Explain how shadows are formed ▪ Identify the characteristics of shadows	▪ Discussion ▪ Explanation ▪ Demonstration	▪ Charts ▪ Torches ▪ Cells ▪ CB illustrations	▪ Taking notes ▪ Drawing diagrams	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ MK integrated scie Bk7 ▪ Fountain integrated scie Bk7	

				▪ What affects the size of shadows	▪ Explain what shadows are and how they are formed						
	6			▪ Effect of light on shinny objects ▪ Types of reflection ▪ Laws of reflection ▪ Calculations on reflection ▪ Importance of reflection.	**The Learner should be able to:-** ▪ State the effect of light on shinny objects ▪ List 3 laws of reflection ▪ Carry out calculations on reflection correctly	▪ Explanation ▪ Question and answer	▪ Charts ▪ CB illustrations	▪ Taking notes ▪ Drawing diagrams	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ MK integrated scie Bk7 ▪ Fountain integrated scie Bk7	
	7 & 8			▪ Characteristics of images formed in a plane mirror ▪ Illustrations on the characteristics of images on a plane mirror ▪ Uses of plane mirrors	**The Learner should be able to:-** ▪ Identify the characteristics of images formed on a plane mirror ▪ State at least 4 uses of plane mirrors in daily life	▪ Discussion ▪ Experimentation ▪ Question and answer	▪ Charts ▪ Plane mirrors	▪ Taking notes ▪ Carrying out experiments	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ Complete junior physics ▪ Supplementary science std8	
11	**1**			▪ Curved mirrors and their examples ▪ Characteristics of images on curved mirrors ▪ Common uses of curved mirrors in daily life	**The Learner should be able to**:- ▪ List the examples of curved mirrors ▪ State 2 characteristics of curved mirrors ▪ Give at least 2 uses of curved mirrors in daily life	▪ Explanation ▪ Discussion	▪ Curved mirrors ▪ Charts	▪ Writing notes ▪ Listing ▪ Drawing	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ Complete junior physics ▪ Supplementary science std8	
	2	**FORMS OF**		▪ <u>Refraction</u> – definition ▪ Effects of refraction of light ▪ Experiments on refraction of light ▪ Mirages	**The Learner should be able to:-** ▪ Explain the term refraction ▪ List the effects of refraction of light ▪ Carry out simple experiments on refraction of light	▪ Question and answer ▪ Discussion	▪ Mirrors ▪ Charts ▪ CB illustrations	▪ Taking notes ▪ Drawing ▪ Performing	▪	▪ Complete junior physics ▪ Supplementary science std8	

		ENERGY			▪ Explain mirages and state their effects						
	3			▪ Lenses – definition ▪ Types of lenses and their examples ▪ Uses of lenses ▪ Differences between lenses.	**The Learner should be able to:-** ▪ Explain the meaning of lenses ▪ Identify the types of lenses and state their use in daily life ▪ Identify the differences between lenses.	▪ Explanation ▪ Experimentation	▪ Lenses ▪ Charts ▪ CB illustrations	▪ Taking notes	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ Complete junior physics ▪ Supplementary science std8	
	4			Optical instruments Definition ▪ Examples of optical instruments ▪ Uses of optical instruments ▪ How some of the instruments work	**The Learner should be able to:-** ▪ Give examples of some optical instruments ▪ Give uses of the named optical instruments and how they work	▪ Discussion ▪ Question and answer	▪ Some optical instruments ▪ CB sketches ▪	▪ Taking notes ▪ Drawing	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ Complete junior physics ▪ Supplementary science std8	
	5			▪ Dispersion of light (spectrum) ▪ Meaning of dispersion ▪ The rainbow ▪ How it is formed	**The Learner should be able to:-** ▪ Explain the dispersion of light ▪ State the meaning of spectrum ▪ ▪ Explain how a rainbow is formed	▪ Discussion ▪ Experimentation	▪ Charts ▪ CB illustrations	▪ Taking notes ▪ Drawing	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ Complete junior physics ▪ Supplementary science std8	
	6			▪ Colours of objects in white light ▪ Illustration using the colour wheel ▪ Primary, secondary and the complementary colours	**The Learner should be able to:-** ▪ State the effect of coloured light on different objects ▪ Explain how primary, secondary and complementary colours are formed	▪ Discussion ▪ Experimentation	▪ Different colours ▪ Motor ▪ Dry cells	▪ Drawing ▪ Note taking ▪ Mixing colours	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ Complete junior physics ▪ Supplementary science std8	

	7 & 8	**FORMS OF ENERGY**		The pinhole camera ▪ Characteristics of images formed in a pinhole camera ▪ How it works ▪ Making a pin hole camera.	**The Learner should be able to:-** ▪ Explain how a pinhole camera is made ▪ Name the characteristics of images formed un a pinhole camera ▪ Identify the parts of a lens camera and how it works	▪ Explanation ▪ Discussion	▪ Simple pinhole camera ▪ Old photographic camera	▪ Making simple pinhole camera ▪ Notes taking	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ Complete junior physics ▪ Supplementary science std8	
12	1 & 2			The human eye ▪ The structure and function of the parts ▪ Comparison btn the human eye and the camera ▪ Comparison of images formed in human eye and plane mirror.	**The Learner should be able to:-** ▪ Draw the human eye ▪ Name the different parts and give their uses ▪ State the similarities and the differences btn a lens camera and human eye	▪ Guided discussion ▪ Explanation	▪ CB illustrations ▪ Chart	▪ Drawing ▪ Taking notes	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ Complete junior physics ▪ Supplementary science std8	
	3 & 4			▪ Diseases and defects of the eye ▪ Prevention and treatment of the defects and diseases ▪ Care for the eye	**The Learner should be able to:-** ▪ Name the diseases and defects of the eye ▪ Explain how to prevent and treat the diseases ▪ State how to care for our eyes	▪ Discussion ▪ Explanation	▪ CB illustrations	▪ Note taking	- Critical thinking - Appreciation - Problem solving ▪ Effective communication	▪ Complete junior physics ▪ Supplementary science std8	
11	9	**INTERDEPENDENCE**	**ENVIRONMENT**	♠ Definition of environment. ♠ Components of environment. ♠ Classification of the components according to living and non- living. ♠ Description of	♠ Define environment ♠ Identify components of environment ♠ Describe interdependence. ♠ Describe how things depend on each other in our environment	Explanation Discussion Question and answer.				Fountain Primary Science bk 4 Pgs 42 - 51 Comprehensive Primary Science bk 4 Pg 83 – 87	

		OF **THINGS**		interdependence ♠ How living things depend on non- living things. ♠ How living things depend on each other. ♠ How animals depend on plants. (seed dispersal) ♠ How plants depend on animals. ♠ How animals depend on each other. (food chain / food web). i. Internal parasites. ii. External parasites. iii. Predators iv. Prey		Demonstration				MK Inter. Primary Science bk 4 Pgs 47 – 58	
				▪ Agro forestry ♠ Meaining ♠ Advantages ♠ Ways of Proper wood harvesting ♠ Ways of Proper wood treatment		▪	▪	▪	-	▪	