

**SUBJECT: SCIENCE AND ELEMENTARY TECHNOLOGY (SET)**

**NUMBER OF PERIODS PER WEEK: 6 PERIODS**

**GRADE: PRIMARY 6**

**DISTRIBUTION OF UNITS AND LESSONS IN WEEKS AND TERMS AS PER THE SYLLABUS**

**TERM 1**

<b>UNIT 1: MECHANICS AND BLACKSMITH TOOLS (8 PERIODS)</b>		
<b>Key unit Competence: To use and maintain mechanics and blacksmith tools safely</b>		
<b>WEEKS</b>	<b>Contents</b>	<b>Periods</b>
<b>Week 1</b>	1. The common Mechanics tools	2
	2. Use and maintenance of mechanics tools	1
	3. Dangers and precautions when using mechanics tools	1
	4. The common Blacksmith tools	1
	5. Use and maintenance of blacksmith tools	1
<b>Week 2</b>	6. Dangers and precautions when using blacksmith tools	1
	<b>7. Assessment and remediation</b>	1
	<b>UNIT 2: SIMPLE MACHINES (10 PERIODS)</b>	
<b>Key unit Competence: To classify simple machines and levers</b>		
<b>Week 3</b>	1. Definition of simple machine and difference between Simple machine and other materials /tools	2
	2. Types and characteristics of simple machines	2
	3. Introduction to Levers: Definition, Parts of levers	2
	4. Classes of levers	2
	5. Dangers and Safety in the use of simple machines	1

	<b>6. Assessment and remediation</b>	1
<b>Week 4</b>	<b>UNIT 3: OBJECTS PRODUCTION (12 PERIODS)</b>	
	<b>Key unit Competence: To make toys, utility and learning objects</b>	
	1. Making toys (dolls and animals) using clay	2
	2. Making toys using wires	1
	3. Making socks in threads	1
<b>Week 5</b>	4. Making scarf in threads	2
	5. Making hat in threads	1
	6. Making gloves in threads	1
	7. Making regular polygons in paper	1
	8. Making solids in paper	1
	9. Maintenance of utility and learning objects	1
<b>Week 6</b>	<b>10. Assessment and remediation</b>	1
	<b>UNIT 4: WRITING SKILLS (17 PERIODS)</b>	
	<b>Key unit Competence: To perform write activity</b>	
	1. Identification of elements of Gnome environment	1
	2. Work with a document	2
<b>Week 7</b>	3. Folder management	1
	4. Identification of elements of Abiword window	2
	5. Text formatting	1
	6. Spread sheet environment	2
	7. Create, save and open a workbook Cell basics	1
<b>Week 8</b>	8. Modifying columns, rows and cells	1
	9. Formatting a cell	1
	10. Worksheet Basics	2
	11. Mathematical operators basics	2
	<b>12. Assessment and remediation</b>	1
	<b>UNIT 5: COMPUTER RESEARCH (11 PERIODS)</b>	

	<b>Key unit Competence: To Explore and use search engines</b>	
	1. Introduction to search engine	1
<b>Week 9</b>	2. Search engine techniques	2
	3. Types of search engines	2
	4. Example and search engines	2
<b>Week 10</b>	5. Search information using different search engine	2
	<b>6. Assessment and remediation</b>	2
	<b>UNIT 6: PROGRAMMING FOR CHILDREN (25 PERIODS) 1<sup>ST</sup> Part of 8 periods</b>	
	<b>Key unit Competence: To design and construct geometric shapes using Turtle Art Activity and design different projects in scratch and use Etoys Activities</b>	
	<b>Contents</b>	<b>Periods</b>
	1. Displaying text and numbers	2
<b>Week 11</b>	2. Displaying image and audio	2
	3. Drawing irregular polygons in turtle art	2
	4. Programming animations and computing in Scratch	2
<b>Week 12&amp;13</b>	<b>TERM 1 EXAMS</b>	

## **TERM 2**

<b>UNIT 6: PROGRAMMING FOR CHILDREN (2<sup>nd</sup> part of 17 periods)</b>		
<b>Key unit Competence: To design and construct geometric shapes using Turtle Art Activity and design different projects in scratch and use Etoys Activities</b>		
<b>Weeks</b>	<b>Contents</b>	<b>Periods</b>
<b>Week 1</b>	5. Scratch project	2
	6. Working with stage in Scratch	2
	7. Creating animated stories in Scratch	2
<b>Week 2</b>	8. Determining angles and shapes	2
	9. Determining areas and working out averages	2

	10. Identification of elements of Etoys environment	2
<b>Week 3</b>	11. Adding drawings to the book and painting the background	2
	12. Etoys projects and animation	2
	<b>13. Assessment and remediation</b>	1
	<b>UNIT 7: AIR POLLUTION (10 PERIODS)</b>	
	<b>Key unit Competence: To explain the phenomenon of air pollution, its consequences and management</b>	
	1. Definition of air pollution and common air pollutants	1
<b>Week 4</b>	2. Sources of common air pollutants	3
	3. Consequences of polluted air	3
<b>Week 5</b>	4. Protection of air against pollutants	2
	<b>5. Assessment and remediation</b>	1
	<b>UNIT 8: ANIMALS (14 PERIODS)</b>	
	<b>Key unit Competence: To explain and practice effective management of goats and cows</b>	
		1. Characteristics of a good cowshed/ goat shelter
	2. Types of cattle and goat breeds	2
<b>Week 6</b>	3. Characteristics of cattle and goat breed to rear	2
	4. Proper feeding of cows and goats	2
	5. Cattle health sanitation conditions	2
<b>Week 7</b>	6. Common diseases of cattle/goat	2
	7. Importance of cattle/goat farming	2
	<b>8. Assessment and remediation</b>	1
	<b>UNIT 9: PLANT REPRODUCTION (10 PERIODS)</b>	
<b>Key Unit Competence: To describe the parts of a flower and explain the process of sexual and asexual reproduction in plants</b>		
	1. Identification parts of a complete flower	1
<b>Week 8</b>	2. Definition of plant reproduction	2
	3. Sexual reproduction of flowering plants	2
	4. Asexual reproduction methods	2

<b>Week 9</b>	5. Reasons for plants reproduction	2
	<b>6. Assessment and remediation</b>	1
	<b>UNIT 10: SUSTAINABLE WASTE MANAGEMENT (10 PERIODS)</b>	
	<b>Key unit Competence: To apply garbage collection techniques and separate hazardous, organic and recyclable waste materials</b>	
	1. Classification of waste	2
	2. Sources of waste: Municipal, medical and agricultural	1
<b>Week 10</b>	3. Sources of waste: Automobiles and construction	2
	4. Sources of waste: Electronics and industrial	2
	5. Waste management techniques	2
<b>Week 11</b>	<b>6. Assessment and remediation</b>	1
	<b>UNIT 11: CIRCULATORY SYSTEM (12 PERIODS) 1<sup>st</sup> part</b>	
	<b>Key Unit Competence: To describe and explain the functioning of the circulatory system, its hygiene and maintenance</b>	
	1. Organs and main function of circulatory system	3
	2. Structure of the heart	2
<b>Week 12&amp;13</b>	<b>TERM 2 EXAMS</b>	

### **TERM 3**

<b>UNIT 11: CIRCULATORY SYSTEM (2<sup>nd</sup> part)</b>		
<b>Key Unit Competence: To describe and explain the functioning of the circulatory system, its hygiene and maintenance</b>		
<b>Weeks</b>	<b>Contents</b>	<b>Periods</b>
<b>Week 1</b>	3. The process of blood Circulation	1
	4. Blood vessels	1
	5. Components of blood	1
	6. Caring for our bodies and health	1
	7. Diseases/conditions of circulatory system	1

	8. Blood pressure measurement	1
<b>Week 2</b>	<b>9. Assessment and remediation</b>	1
	<b>UNIT 12: RESPIRATORY SYSTEM (10 PERIODS)</b>	
	<b>Key Unit Competence: To explain the mechanism of respiration</b>	
	1. Organs of the human respiratory system and their main function	2
	2. Mechanism of respiration (breathing)	2
	3. Good health practices and behaviors	1
<b>Week 3</b>	4. Diseases of respiratory system	2
	5. Suffocation	2
	<b>6. Assessment and remediation</b>	1
	<b>UNIT 13: REPRODUCTIVE SYSTEM (16 PERIODS)</b>	
	<b>Key unit Competence: To explain the function of male and female genital organs, the STIs and ways of preventing unplanned pregnancy</b>	
	1. Main function of reproductive system	1
<b>Week 4</b>	2. Male reproductive organs and their functions (External and internal organs)	2
	3. Female reproductive organs and their functions (External and internal organs)	2
	4. Preventing unplanned Pregnancy	2
	<b>Week 5</b>	5. Sexually transmitted infections
6. Means of transmission of common STIs/HIV		2
7. Prevention and treatment of common STIs/HIV		2
<b>Week 6</b>	8. Living Positively with HIV and AIDS	2
	<b>9. Assessment and remediation</b>	1
	<b>UNIT 14: ENERGY MANAGEMENT (12 PERIODS)</b>	
	<b>Key Unit Competence: To understand the use of energy and its transformations from one form to another</b>	
	1. Definition and forms of energy	2
<b>Week 7</b>	2. Energy transformation/energy conversion	1
	3. Importance of energy	2
	4. Sources of energy	2

	5. Renewable and non-renewable energy	2
<b>Week 8</b>	6. Advantage of using renewable energy	2
	<b>7. Assessment and remediation</b>	1
	<b>UNIT 15: MAGNETISM (11 PERIODS)</b>	
	<b>Key unit Competence: To explain and demonstrate the existence of magnetic forces and magnetic field</b>	
	1. Definition and Types of magnets	1
	2. Making a temporary magnet	2
<b>Week 9</b>	3. Characteristics of magnets	2
	4. Magnetic forces and magnetic materials	2
	5. Magnetic field	2
<b>Week 10</b>	6. Magnetic compass and uses of magnets	1
	<b>7. Assessment and remediation</b>	1
	<b>UNIT 16: STATES OF MATTER (10 PERIODS)</b>	
	<b>Key Unit Competence: To demonstrate and explain changes of state of matter</b>	
	1. Definition of matter and its states	2
	2. Properties of the three states of matter (in terms of shape and volume)	2
<b>Week 11</b>	3. Change of state in water	1
	4. Changes in states of water in the water cycle	2
	5. Transformation of states of matter	2
	<b>6. Assessment and remediation</b>	1
<b>Week 12&amp;13</b>	<b>TERM 3 EXAMS</b>	