



**REPUBLIC OF KENYA
MINISTRY OF EDUCATION**

JUNIOR SECONDARY SCHOOL CURRICULUM DESIGN

GRADE 7

PRE-TECHNICAL AND PRE-CAREER STUDIES for Learners with Hearing Impairment.

**KENYA INSTITUTE OF CURRICULUM DEVELOPMENT
2022**



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FOREWORD

Curriculum is a tool which a country employs to empower its citizens. The Kenya Institute of Curriculum Development in meeting its core mandate ‘*to develop curriculum and curriculum support materials*’ has spearheaded curriculum reforms in the education sector. The reforms are based on rigorous research, monitoring and evaluation activities conducted on the 8-4-4 system of education to inform the Competency-Based Curriculum through a phase-in phase-out model. The reforms were informed by the Summative Evaluation Survey (2009), Needs Assessment Study (2016) and the Task Force Report on Re-alignment of Education Sector (2012), 21st century learning and approaches, the East Africa Protocol on harmonisation of education, among many others.

The curriculum reforms aim at meeting the needs of the Kenyan society by aligning the curriculum to the Constitution of Kenya 2010, the Kenya Vision 2030 and the East African Protocol, among other policy requirements as documented by the Sessional Paper No. 1 of 2019 on ‘Reforming Education and Training in Kenya for Sustainable Development’. The reforms adopted the Competency-Based Curriculum (CBC) to achieve development of requisite knowledge, skills, values and attitudes that will drive the country’s future generations as documented by the Basic Education Curriculum Framework (BECF). Towards achieving the mission of Basic Education, the Ministry of Education has successfully and progressively rolled out curriculum implementation for Early Years Education and Foundation level, Grades 4,5 and Intermediate Level. The roll out for Grade 6, Junior Secondary (Grade 7-9), and Prevocational Level will subsequently follow.

It is my hope that the Curriculum designs for learners with Hearing Impairment in Grade 7 will guide the teachers, among other educational stakeholders, for progressive achievement of the curriculum vision which seeks to have engaged, empowered and ethical citizens.

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PREFACE

The Government of Kenya embarked on the national implementation of the Competency Based Curriculum in January, 2019 for Early Years Education (Pre-Primary 1 and 2, and Lower Primary Grade 1, 2 and 3) and Foundation Level. The implementation progressed to Upper Primary (Grade 4, 5 and 6) and Intermediate Level based on the reorganisation of the Basic Education structure. Grade 7 curriculum furthers implementation of the Competency-Based Curriculum to Junior Secondary education level. This level marks the zenith of Middle School education whose main feature is to offer a broad opportunity for the learner to explore talents, interests and abilities before selection of pathways and tracks in Senior Secondary education level. This is similar to the Pre-vocational and Vocational Level.

The Grade 7 curriculum designs for learners with Hearing Impairment in the respective learning areas will enable the development of 21st Century competencies. Ultimately, this will lead to the realisation of the vision and mission of the Competency-Based Curriculum as documented in the Basic Education Curriculum Framework (KICD, 2017).

It is my hope that all Government agencies among other stakeholders in education will use the designs to guide effective and efficient implementation of the learning activities as well as provide relevant feedback on various aspects of the curriculum. Successful implementation of the Grade 7 curriculum for learners with Hearing Impairment will be a significant milestone towards realisation of the curriculum mission ‘Nurturing Every Learner’s Potential’

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ACKNOWLEDGEMENT

The Kenya Institute of Curriculum Development (KICD) Act Number 4 of 2013 (Revised 2019) mandates the Institute to develop curricula and curriculum support materials for basic and tertiary education and training, below the university. The curriculum development process for any level involves thorough research, international benchmarking, and robust stakeholder engagement. Through this systematic and consultative process, KICD conceptualised the Competency Based Curriculum (CBC) as captured in the Basic Education Curriculum Framework (BECF). The CBC responds to the demands of the 21st Century and the aspirations captured in the Constitution of Kenya 2010, Kenya Vision 2030, East African Commission Protocol and the United Nations Sustainable Development Goals.

The Kenya Institute of Curriculum Development has developed and adapted the Grade 7 curriculum designs for learners with Hearing Impairment taking cognisance of the tenets of the CBC, key among them being the need to ensure that learners are provided with learning experiences that call for higher order thinking, thereby ensuring they become engaged, empowered and ethical citizens as articulated in the BECF Vision. The Grade 7 designs for learners with Hearing Impairment also provide opportunities for learners to develop the core competencies as well as engage in Community Service Learning. The designs present assessment rubric linked to sub strands in the individual subjects. Teachers are encouraged to use varied assessment tools when assessing learners.

KICD obtains its funding from the Government of Kenya to enable the achievement of its mandate and implementation of the Government and Sector (Ministry of Education (MoE) plans. The Institute also receives support from development partners targeting specific programmes. The Grade 7 curriculum designs have been developed and adapted with the support of the World Bank through the Kenya Secondary Education Quality Improvement Program (SEQIP) commissioned by the MoE. The Institute is grateful for the support accorded to the process by the Government of Kenya, through the MoE and the development partners for the policy, resource, and logistical support.

I acknowledge the KICD curriculum developers and other staff, teachers and all the educators who participated, as panelists, in the development and adaption of the designs. I also appreciate the contribution of the Semi-Autonomous Government Agencies (SAGAs) and representatives of various stakeholders for their various roles in the development and adaptation of the Grade 7 curriculum designs.

My special thanks to the Cabinet Secretary, Ministry of Education; the Principal Secretary State Department of Early Learning and Basic Education; the Secretary, Teachers' Service Commission (TSC) and the Chief Executive Officer, Kenya National Examinations Council (KNEC) for their support in the process. Finally, I am grateful to the KICD Governing Council for their consistent guidance during the development and adaptation of the curriculum designs. The Institute assures all curriculum implementers, parents, and other stakeholders that the designs will ensure effective implementation of the CBC at Grade 7.

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TIME ALLOCATION

	Subject	Number of Lessons Per Week (40 minutes per lesson)
1.	English	5
2.	Kiswahili/KSL	4
3.	Mathematics	5
4.	Integrated Science	4
5.	Health Education	2
6.	Pre technical Studies	4
7.	Social Studies	3
8.	Religious Education (CRE/IRE/HRE)	3
9.	Business Studies	3
10.	Agriculture	3
11.	Life Skills Education	1
12.	Physical Education and Sports	2
13.	Optional Subject including Sign Language Skills	3
14.	Optional Subject	3
	Total	45

NATIONAL GOALS OF EDUCATION

Education in Kenya should:

i) Foster nationalism and patriotism and promote national unity.

Kenya's people belong to different communities, races and religions, but these differences need not divide them. They must be able to live and interact as Kenyans. It is a paramount duty of education to help young people acquire this sense of nationhood by removing conflicts and promoting positive attitudes of mutual respect which enable them to live together in harmony and foster patriotism in order to make a positive contribution to the life of the nation.

ii) Promote the social, economic, technological and industrial needs for national development.

Education should prepare the youth of the country to play an effective and productive role in the life of the nation.

a) Social Needs

Education in Kenya must prepare children for changes in attitudes and relationships which are necessary for the smooth progress of a rapidly developing modern economy. There is bound to be a silent social revolution following in the wake of rapid modernization. Education should assist our youth to adapt to this change.

b) Economic Needs

Education in Kenya should produce citizens with the skills, knowledge, expertise and personal qualities that are required to support a growing economy. Kenya is building up a modern and independent economy which is in need of an adequate and relevant domestic workforce.

c) Technological and Industrial Needs

Education in Kenya should provide learners with the necessary skills and attitudes for industrial development. Kenya recognizes the rapid industrial and technological changes taking place, especially in the developed world. We can only be part of this development if our education system is deliberately focused on the knowledge, skills and attitudes that will prepare our young people for these changing global trends.**Promote individual development and self-fulfilment**

Education should provide opportunities for the fullest development of individual talents and personality. It should help children to develop their potential interests and abilities. A vital aspect of individual development is the building of character.

iii) Promote sound moral and religious values.

Education should provide for the development of knowledge, skills and attitudes that will enhance the acquisition of sound moral values and help children to grow up into self-disciplined, self-reliant and integrated citizens.

iv) **Promote social equality and responsibility.**

Education should promote social equality and foster a sense of social responsibility within an education system which provides equal educational opportunities for all. It should give all children varied and challenging opportunities for collective activities and corporate social service irrespective of gender, ability or geographical environment.

v) **Promote respect for and development of Kenya's rich and varied cultures.**

Education should instil in the youth of Kenya an understanding of past and present cultures and their valid place in contemporary society. Children should be able to blend the best of traditional values with the changing requirements that must follow rapid development in order to build a stable and modern society.

vi) **Promote international consciousness and foster positive attitudes towards other nations.**

Kenya is part of the international community. It is part of the complicated and interdependent network of peoples and nations. Education should therefore lead the youth of the country to accept membership of this international community with all the obligations and responsibilities, rights and benefits that this membership entails.

viii. **Promote positive attitudes towards good health and environmental protection.**

Education should inculcate in young people the value of good health in order for them to avoid indulging in activities that will lead to physical or mental ill health. It should foster positive attitudes towards environmental development and conservation. It should lead the youth of Kenya to appreciate the need for a healthy environment.

LEARNING OUTCOMES FOR MIDDLE SCHOOL

By the end of Middle School, the learner should be able to:

1. Apply literacy, numeracy and logical thinking skills for appropriate self-expression.
2. Communicate effectively, verbally and non-verbally, in diverse contexts.
3. Demonstrate social skills, spiritual and moral values for peaceful co-existence.
4. Explore, manipulate, manage and conserve the environment effectively for learning and sustainable development.
5. Practice relevant hygiene, sanitation and nutrition skills to promote health.

6. Demonstrate ethical behaviour and exhibit good citizenship as a civic responsibility.
7. Appreciate the country's rich and diverse cultural heritage for harmonious co-existence.
8. Manage pertinent and contemporary issues in society effectively.
9. Apply digital literacy skills for communication and learning.

ESSENCE STATEMENT

Pre-Technical and Pre-Career studies for learners with Hearing Impairment is a subject that prepares the learner for the Technical & Engineering and Career & Technology Studies (CTS) which are tracks in the Science, Technology, Engineering and Mathematics (STEM) pathway. It is anchored on the recommendations by Session Papers No 1 of 2005 and No 1 of 2019 which recommended the promotion of technical and vocational education with an emphasis on Science, Technology and Innovation (ST&I) in the school curriculum.

It builds on the competencies acquired in Science & Technology and other related learning areas at upper primary school. The subject equips the learner with Hearing Impairment with foundational knowledge, skills, attitudes and values that are a prerequisite in order to specialise in subjects such as metalwork, woodwork, electricity, aviation technology, building construction, power mechanics, leatherwork, culinary arts, hairdressing & beauty therapy, marine & fisheries, manufacturing and media technology at senior school. Learning experiences have been adapted and broken down to smaller deliverable steps to suit learners with Hearing Impairment. The suggested methods of instruction include: Inquiry based learning (IBL), Project based learning (PBL), Problem based learning (PBL) and pedagogical content knowledge (PCK) where more emphasis has been put on total communication as a mode of instruction in order to benefit both learners who are deaf and hard of hearing.

The Pre-Technical and Pre-Career studies for learners with Hearing Impairment equips the learner with exploration, imagination, creativity, innovation and hands-on skills through projects and practical activities. Learners also acquire hands-on skills as they are exposed to programs in industries that the school collaborates with. After completing junior secondary school, the learner may select either the Technical and Engineering or CTS track in the STEM pathway at senior school. In making this choice, the learner's interests, abilities and personality will be considered.

LEARNING OUTCOMES FOR PRE-TECHNICAL AND PRE-CAREER STUDIES

By the end of junior secondary, the learner should be able to;

1. Make informed and meaningful career choices in technical and other career fields.
2. Apply competencies acquired in workshop safety to prevent accidents and save lives.
3. Use materials and safely dispose waste to promote education for sustainable development.
4. Apply acquired drawing skills to communicate effectively.
5. Apply the acquired competencies to select, use and maintain tools, equipment and materials to support community-based projects.
6. Use available energy resources to solve problems in the community.

STRAND 1.0: SAFETY

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question
<p>1.0 Safety</p>	<p>1.1 Personal safety (7 lessons)</p>	<p>By the end of the sub-strand, the learner should be able to;</p> <ul style="list-style-type: none"> a) identify potential hazards relating to personal safety in day-to-day life, b) demonstrate safety to self and others while performing tasks in the locality, c) handle tools and equipment safely while performing tasks in the locality, d) determine the general safety rules and regulations for a given task, e) recognize various careers related to safety, f) appreciate the role of safety in day-to-day life. 	<p>Learner is guided to:</p> <ul style="list-style-type: none"> ● Fingerspell and sign terms related to personal safety in day today life in pairs. ● Discuss the meaning of safety in groups. ● Use print and non-print media to identify potential hazards related to personal safety in groups. ● Role-play in groups on how to observe safety while performing simple tasks in the locality. ● Discuss the safety measures to observe when working with others while performing given tasks in groups. ● Brainstorm and develop a catalogue in pairs on general safety rules and regulations for handling tools and equipment while performing tasks in the locality. ● Role-play safety measures to demonstrate safety to self and others while performing tasks in groups. ● Use video/captioned video clips to observe how to handle tools and equipment safely while performing simple tasks. ● Practice how to handle tools and equipment safely while performing simple tasks in the locality. ● Explore and identify various careers related to safety. 	<ul style="list-style-type: none"> 1. Why is it important to observe safety while working with tools in the locality? 2. How do you ensure safety when performing tasks?

			<ul style="list-style-type: none"> ● Observe safety while performing different tasks in school and community such as safe use of tools while cleaning. 	
Core Competencies to be developed: <ul style="list-style-type: none"> ● Communication and Collaboration as learners discuss personal safety and carry out group activities. ● Imagination and creativity as learners role-play on safety when working with others. 				
Pertinent and Contemporary Issues (PCIs): <ul style="list-style-type: none"> ● Disaster risk reduction is encouraged as learners perform tasks while observing safety. ● Environmental protection skills are developed as learners take care of waste materials in the process of practising safety of self, others, tools and equipment. 		Values: <ul style="list-style-type: none"> ● Respect is developed as learners recognize the input of every member during discussions. ● Unity is developed as learners work together as a team. ● Responsibility: is enhanced as learners take care of tools and equipment 		
Links to other subjects: <ul style="list-style-type: none"> ● Health Education- as learners safely handle and dispose of waste materials in the community. ● KSL - as learners acquire new signs related to safety. ● Agriculture- as learners handle tools and equipment. 				
Non-formal activities to support learning Learners are encouraged to join health clubs in the school to practice safety measures. Learners to observe safety measures during sporting activities. Learners take a guided tour of a nearby workshop in the locality to observe how workers practice safety as they perform tasks.		Suggested modes of assessment <ul style="list-style-type: none"> ● Observation ● Written tests or exercise ● Oral and signed Questions ● Practical work 		
Suggested learning resources <ul style="list-style-type: none"> ● Digital devices such as computers, laptops, smart phones ● Signed video clips ● First aid kit ● Safety protective gears such as overalls, gloves, goggles, ● Hand tools such as chisels, knives, hammers, screw drivers 				

Assessment Rubric				
Criteria	Exceeds expectation	Meets expectation	Approaches expectation	Below expectation
Identifying potential hazards in relation to personal safety in dayto day life	Identifies with ease the potential hazards in relation to personal safety in day-to-day life	Identifies the potential hazards in relation to personal safety in day-to-day life	Identifies some potential hazards in relation to personal safety in day-to-day life	With guidance can identify potential hazards in relation to personal safety in day-to-day life
Demonstrating safety while performing given tasks	Confidently demonstrates safety while performing given tasks	Demonstrates safety while performing given tasks	Demonstrates safety while performing some of the given tasks	Has difficulties in demonstrating safety while performing given tasks
Observing safety while working with others in the locality	Always observes safety while working with others in the locality	Observes safety while working with others in the locality	Sometimes observes safety while working with others in the locality	Rarely observes safety while working with others in the locality
Handling tools safely while performing tasks in the locality	Correctly handles tools safely while performing tasks in the locality	Handles tools safely while performing tasks in the locality	Sometimes handles tools safely while performing tasks in the locality	Requires support in handling tools safely while performing tasks in the locality
Determining the general safety rules and regulations for a given task	Determines the general safety rules and regulations for a given task with ease	Determines the general safety rules and regulations for a given task	Can determine some general safety rules and regulations for a given task	Has difficulties in determining the general safety rules and regulations for a given task
Recognizing various careers related to safety.	Recognizes with ease various careers related to safety	Recognizes various careers related to safety.	Recognizes a few careers related to safety	With support, can recognize various careers related to safety

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question
1.0 Safety	1.2 Injuries (5 lessons)	By the end of the sub-strand, the learner should be able to; a) identify types of injuries that may occur in the locality, b) identify causes of injuries that may occur in the locality, c) relate the type of injury and the corresponding first aid requirements, d) apply safety measures to minimise injuries in the locality, e) recognize the careers related to first aid and management of injuries, f) appreciate the importance of observing safety to reduce injuries in day-to-day activities.	Learner is guided to: <ul style="list-style-type: none"> ● Fingerspell and sign with correct articulation terms related injuries. ● Watch video/captioned video clips showing types of injuries that occur in the locality. ● Identify types of injuries that may occur in the locality. (Cuts, burns, scalds, and minor fractures). ● Discuss and identify the causes of injuries at home, school and locality (such as sharp objects, poisoning, falls, lightning among others). ● Role-play first aid procedures on management of cuts, burns, scalds, and minor fractures. ● Discuss ways of preventing cuts, burns, scalds and minor fractures. ● Visit health facilities to observe the careers related to the management of injuries. ● Discuss ways in which they can reduce injuries while in school, at home or in the community. 	<ol style="list-style-type: none"> 1. Why is it important to observe safety while working with tools in the locality? 2. How can we minimise injuries at the workplace?
<p>Core Competencies to be developed:</p> <ul style="list-style-type: none"> ● Critical thinking and problem solving as learners discuss ways of preventing cuts, burns, scalds and minor fractures. ● Self-efficacy as learners expresses themselves during role playing on first aid and perform first aid. ● Digital literacy as learners uses digital devices to search and watch video/captioned video clips on safety practices while performing given tasks. 				

<p>Pertinent and Contemporary Issues (PCIs):</p> <ul style="list-style-type: none"> ● Education for sustainable development: safety is enhanced as learners discuss and engage in safety practices to avoid injuries in the locality. 	<p>Values:</p> <ul style="list-style-type: none"> ● Unity is developed as learners embrace teamwork in groups. ● Respect is acquired as learners recognize the input of every member in the group. ● Integrity is developed as learners collect, use, care for, and safely store items and equipment.
<p>Links to other subjects:</p> <ul style="list-style-type: none"> ● Integrated science - as learners discuss how to perform first aid on cuts and bruises. ● Computer science (ICT applications) - as learners watch videos/signed video clips on the types of injuries and first aid. ● Life skills - as learners help one another when handling cases on cuts and bruises. ● KSL - as learners fingerspell and sign with correct articulation terms related injuries. 	
<p>Non-formal activities to support learning</p> <ul style="list-style-type: none"> ● Learners are encouraged to join clubs and societies such as scouting, health clubs to practice safety measures to minimise injuries in the locality. ● Learners organise public debates on career choices. 	<p>Suggested modes of assessment</p> <ul style="list-style-type: none"> ● Oral and signed questions. ● Observation. ● Written test.
<p>Suggested learning resources</p> <ul style="list-style-type: none"> ● Digital devices such as laptops, smart phones. ● First aid kit. ● Workshop rules and regulations. ● Career brochures. ● Career magazines. 	

Assessment Rubric				
Criteria	Exceeds expectation	Meets expectation	Approaches expectation	Below expectation
Identifying types of injuries that may occur in the locality.	Identifies the types of injuries that may occur in the locality citing examples.	Identifies types of injuries that may occur in the locality.	Identifies some types of injuries that may occur in the locality.	Requires support to identify types of injuries that may occur in the locality.

Identifying causes of injuries that may occur in the locality.	Identifies causes of injuries that may occur in the locality citing examples.	Identifies causes of injuries that may occur in the locality.	Identifies some causes of injuries that may occur in the locality.	Requires support to identify causes of injuries that may occur in the locality.
Relating the types of injury and the corresponding first aid requirements.	Proficiently relates the types of injury and the corresponding first aid requirements.	Relates the types of injury and the corresponding first aid requirements.	Relates some types of injury and the corresponding first aid requirements.	Requires guidance to relate the types of injury and the corresponding first aid requirements.
Applying safety measures to minimise injuries in the locality.	Tactfully applies safety measures to minimise injuries in the locality.	Applies safety measures to minimise injuries in the locality.	Sometimes safety measures to minimise injuries in the locality.	Requires support in applying safety measures to minimise injuries in the locality.
Recognizing the careers related to first aid and management of injuries.	Easily recognizes careers related to first aid and management of injuries.	Recognizes the careers related to first aid and management of injuries.	Recognizes some of the careers related to first aid and management of injuries.	Has difficulties in recognizing the careers related to first aid and management of injuries.

STRAND 2.0: MATERIALS

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Questions
2.0Materials	2.1 Common materials (9 lessons)	By the end of the sub-strand, the learner should be able to; <ol style="list-style-type: none"> identify the common materials found in the locality, categorise the common materials in the locality into metals and non-metals, distinguish metallic and non-metallic materials in the locality, describe the physical properties of common materials found in the locality, recognize careers related to materials in the locality, embrace the importance of different materials found in the locality. 	Learner is guided to: <ul style="list-style-type: none"> Fingerspell and sign common materials found in the locality. Tour around the locality to identify, collect and record common materials. Watch video/captioned video clips on categorization and identification of physical properties of materials in groups. Use a chart to list the common materials in the locality. Sort and classify metallic and non-metallic materials in the locality in groups. Discuss the physical properties of materials in groups: (colour, texture, hardness, shape, fire resistance) in the locality. Carry out experiments in groups to investigate the physical properties of common materials in terms of colour, texture, hardness, shape and fire resistance. Discuss various careers related to materials. Tour the locality to explore various careers related to materials such as welding, carpentry, masonry among others. 	Why are materials important?

Core competencies to be developed; <ul style="list-style-type: none"> ● Digital literacy as learners interacts with digital devices to identify the uses of various materials. ● Communication and Collaboration as learners discuss the physical properties of materials in groups. ● Critical thinking and problem solving as learners identify different careers related to common materials in the locality. 	
Pertinent and Contemporary Issues (PCI's): <ul style="list-style-type: none"> ● Education for sustainable development: Disaster risk reduction is enhanced as learners appreciate characteristics of materials and classify them into safe and unsafe materials. 	Values: <ul style="list-style-type: none"> ● Unity is developed as learners work in groups ● Responsibility is developed as learners work with and care for different materials ● Respect is enhanced as learners acknowledge each other's contributions during group discussions
Links to other learning areas: <ul style="list-style-type: none"> ● Integrated Science - as learners investigate the physical properties of materials ● KSL - as learners sign common materials and their properties 	Non-formal activities as to support learning <ul style="list-style-type: none"> ● Learners take a guided tour of the locality to identify the various careers related to the use of common materials.
Suggested modes of assessment <ul style="list-style-type: none"> ● Observation ● Signed/oral questions ● Written assignments 	Suggested learning resources <ul style="list-style-type: none"> ● Digital devices such as smartphones, laptops ● career brochures ● local materials ● video clips ● photos

Assessment Rubric				
Criteria	Exceeds Expectation	Meets Expectation	Approaches Expectation	Below Expectation
Identifying the common materials found in the locality.	Identifies the common materials found in the locality with ease.	Identifies the common materials found in the locality.	Identifies some of the common materials found in the locality.	Requires support to identify the common materials found in the locality.
Categorizing the common materials in the locality.	Categorizes skillfully the common materials in the locality.	Categorizes the common materials in the locality.	Categorizes some of the common materials in the locality.	Categorizes some of the common materials in the locality with support.

Distinguishing metallic and non-metallic materials.	Tactfully distinguishes metallic and non-metallic materials.	Distinguishes metallic and non-metallic materials.	Distinguishes some of the metallic and non-metallic materials.	Has difficulties in distinguishing metallic and non-metallic materials.
Describing the physical properties of the common materials found in the locality.	Describes the physical properties of the common materials found in the locality with ease.	Describes the physical properties of the common materials found in the locality.	Describes some of the physical properties of the common materials found in the locality.	Needs support to describe the physical properties of the common materials found in the locality.

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Questions
2.0Materials	2.2 Metals (10 lessons)	By the end of the sub-strand, the learner should be able to; a) identify different types of metals in the locality, b) describe physical properties of ferrous and non-ferrous metals in the locality, c) identify the uses of metals in the locality, d) recognize careers related to use of metals, e) appreciate the importance of metals in the locality.	Learner is guided to: ● Fingerspell and sign terms related to metals in pairs. ● Develop a checklist for identifying different types of metals in groups. ● Use the checklist developed to sort metals as either ferrous or non-ferrous, magnetic or non-magnetic, conductors of heat and electricity). ● Watch video/captioned video clips on the various types of metals. ● Use charts to match different metal to their uses. ● Discuss the various uses of metals in the locality. ● Discuss careers related to metals under the guidance of a resource person(s). ● Fingerspell and sign careers related to metals.	1. Why are metals important?

<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> ● Digital literacy as learners interact with digital devices as they watch video /signed video clips to identify the uses of various metals. ● Communication and Collaboration as learners discuss careers related to metals in groups. ● Critical thinking and problem solving as learners distinguish ferrous and non-ferrous metals and discuss the different uses of metals. 	
<p>Pertinent and Contemporary Issues (PCI's):</p> <ul style="list-style-type: none"> ● Education for sustainable development is acquired as learners sort and appreciate the uses of different metals. ● Disaster risk management is developed as learners learn how to recycle metals. 	<p>Values:</p> <ul style="list-style-type: none"> ● Unity is acquired as learners work in groups. ● Respect is enhanced as learners acknowledge each other's contribution during group discussions.
<p>Links to other Subjects:</p> <ul style="list-style-type: none"> ● Integrated Science - as learners group metals as either magnetic or non-magnetic. ● Computer science - as learners use digital media to watch video/signed video clips on types of metals. 	
<p>Non-formal activities to support learning</p> <ul style="list-style-type: none"> ● Learners take a guided tour of the locality to identify different types of metal and their uses. 	<p>Suggested modes of assessment</p> <ul style="list-style-type: none"> ● signed/oral Questions ● Observation ● Written test
<p>Suggested learning resources</p> <ul style="list-style-type: none"> ● Digital devices such as smartphones, laptops ● career brochures ● magazines ● video clips ● photos 	

Assessment Rubric				
Criteria	Exceeds Expectation	Meets Expectation	Approaches Expectation	Below Expectation
Identifying different types of metals found in the locality.	Identifies with examples different types of metals found in the locality.	Identifies different types of metals found in the locality.	Identifies some of the different types of metals found in the locality.	Needs assistance in identifying different types of metals found in the locality.

Describing the physical properties of ferrous and non-ferrous metals commonly found in the locality.	Describes and explains the physical properties of ferrous and non-ferrous metals commonly found in the locality.	Describes the physical properties of ferrous and non-ferrous metals commonly found in the locality.	Describes some of the physical properties of ferrous and non-ferrous metals commonly found in the locality.	Requires support to describe the physical properties of ferrous and non-ferrous metals commonly found in the locality.
Identifying the uses of metals found in the locality.	Identifies with ease the uses of metals found in the locality.	Identifies the uses of metals found in the locality.	Identifies some of the uses of metals found in the locality.	Needs assistance in identifying the uses of metals found in the locality.

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Questions
2.0 Materials	2.3 Non-metallic materials (10 lessons)	By the end of the sub-strand, the learner should be able to; a) distinguish between synthetic and natural non-metallic materials, b) categorise the non-metallic materials as either synthetic or natural non-metallic materials, c) describe physical properties of non-metallic materials in the locality, d) identify the uses of non-metallic materials in the locality, e) recognize careers related to the processing and use of non-metallic materials.	Learner is guided to: <ul style="list-style-type: none"> ● Fingerspell and sign terms related to non-metallic materials in pairs. ● Use both print and non-print media to develop a checklist on non-metallic materials. ● Use the checklist developed to sort and classify the materials as either synthetic or natural in groups. ● Carry out simple experiments to investigate the properties of non-metallic materials in groups. (Texture, hardness, shapes, fire resistance and colours) ● Watch video/captioned video clip showing properties on the various non-metallic materials. ● Discuss the various uses of non-metallic materials in the locality. ● Fingerspell and sign careers related to non-metallic materials. 	<ol style="list-style-type: none"> 1. How are metallic materials different from non-metallic materials? 2. Why are non-metallic materials important?

			<ul style="list-style-type: none"> ● Discuss careers related to non-metallic materials under the guidance of resource person(s). ● Tour the locality to identify different types of non-metallic materials. 	
	Project activity1 (12 lessons)	By the end of the sub-strand, the learner should be able to; <ul style="list-style-type: none"> a) identify a problem in their community which requires a solution using skills in the technical fields, b) describe how the problem affects the community, c) identify skills needed to solve the problems in the community. 	Learner is guided to: <ul style="list-style-type: none"> ● Use digital devices, life testimonies and moral stories to point out problems in the community that require solutions using skills in the technical field. ● Discuss in groups and point out a problem in their locality that requires immediate attention. ● Discuss how the problem affects the community. ● Suggest the technical skills that may be used to solve the identified problem. 	1. How can technical skills be used to solve problems in your locality?
Core competencies to be developed: <ul style="list-style-type: none"> ● Digital literacy as learners watches video/captioned video clips to identify the properties of various non-metallic materials. ● Communication and collaboration as learners discuss the various careers related to non-metallic materials in groups ● Critical thinking and problem solving as learners distinguish different non-metallic materials and discuss their various uses. 				
Pertinent and Contemporary Issues (PCI's): <ul style="list-style-type: none"> ● Education for sustainable development is developed as learners identify different non-metallic materials and appreciate their use in the locality ● Disaster risk management is developed as learners learn how to recycle non-metallic materials. 			Values: <ul style="list-style-type: none"> ● Unity is enhanced as learners work in groups ● Respect is enhanced as learners acknowledge each other's contribution during group discussions 	
Links to other subjects; <ul style="list-style-type: none"> ● Science and technology- as learners classify. non-metallic materials as either natural and synthetic ● Computer science- as learners use digital media to watch video/signed video clips on the physical properties of non-metallic materials 				

<p>Non-formal activities to support learning</p> <ul style="list-style-type: none"> ● Take a guided tour of the locality to identify different types of non-metallic materials. ● Learners are encouraged to join clubs like scouting club where they can interact with non-metallic materials 	<p>Suggested modes of assessment</p> <ul style="list-style-type: none"> ● observation ● written texts ● signed/oral questions
<p>Suggested learning resources</p> <ul style="list-style-type: none"> ● Digital devices such as laptops, tablets, smart phones. ● Career brochures. ● Career magazines 	

Assessment Rubric				
Criteria	Exceeds Expectation	Meets Expectation	Approaches Expectation	Below Expectation
Distinguishing between synthetic and natural non-metallic materials.	Distinguishes between synthetic and natural non-metallic materials citing examples.	Distinguishes between synthetic and natural non-metallic materials.	Attempts to distinguish between synthetic and natural non-metallic materials.	Distinguishes between synthetic and natural non-metallic materials with prompts.
Categorising the non-metallic materials as either synthetic or natural non-metallic materials.	Categorises with ease the non-metallic materials as either synthetic or natural non-metallic materials.	Categorises the non-metallic materials as either synthetic or natural non-metallic materials.	Categorise Some of the non-metallic materials as either synthetic or natural non-metallic materials.	Needs support to categorise the non-metallic materials as either synthetic or natural non-metallic materials.
Describing physical properties of non-metallic materials in the locality.	Easily describes the physical properties of non-metallic materials in the locality.	Describes physical properties of non-metallic materials in the locality.	Describes some of the physical properties of non-metallic materials in the locality.	Needs assistance in describing physical properties of non-metallic materials in the locality.
Identifying the uses of non-metallic materials in the locality.	Identifies the uses of non-metallic materials in the locality citing examples.	Identifies the uses of non-metallic materials in the locality.	Identify Some of the uses of non-metallic materials in the locality.	Needs support to identify the uses of non-metallic materials in the locality.

STRAND 3.0: TOOLS

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question
3.0 Tools	3.1 Household hand tools (9 lessons)	By the end of the sub-strand, the learner should be able to; <ol style="list-style-type: none"> a) identify household hand tools in the locality, b) categorise household hand tools according to their uses, c) use household hand tools to perform given tasks correctly, d) care and maintain household hand tools appropriately after use, e) recognize the careers related to household hand tools, f) appreciate the role of household tools in the community. 	Learner is guided to: <ul style="list-style-type: none"> ● Fingerspell and sign household hand tools used in the locality. ● Use realia and visual aids to identify household hand tools used in the locality (<i>such as knives, panga, broom among others</i>). ● Observe print and non-print media showing people working with different household hand tools. ● Draw household hand tools used in the locality. ● Use charts to categorise household hand tools according to use in groups. ● Role-play safe use and storage of household hand tools. ● Discuss the proper care, maintenance and safe storage of household hand tools. ● Discuss careers related to household hand tools. ● Collaborate with the teachers, and other members of the community to perform simple tasks using household hand tools. 	1. Why are household tools important?

<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> ● Communication and collaboration as learners discuss the use of household hand tools in the locality. ● Critical thinking and problem solving as learners choose and use the tools to solve a problem in the community. ● Digital literacy as learners uses digital devices to categorise tools. 	
<p>Pertinent and Contemporary Issues (PCI's):</p> <ul style="list-style-type: none"> ● Environmental protection is encouraged as learners use household hand tools to perform tasks correctly and also take care of and maintain them. ● Learner Support Programmes: Mentorship and peer education is enhanced as learners role-play on safe use and storage of household hand tools. 	<p>Values:</p> <ul style="list-style-type: none"> ● Responsibility is developed as learners take care of tools in the locality. ● Love is enhanced as learners share items as they practice use of tools. ● Respect is enhanced as learners recognize the contribution of every member during group discussions.
<p>Links to other subjects:</p> <ul style="list-style-type: none"> ● Computer science (ICT applications)- as learners download and watch video/signed video clips on the uses of household hand tools. ● Home science - as learners clean and store household hand tools. 	
<p>Non-formal activities as to support learning</p> <ul style="list-style-type: none"> ● Learners take a guided tour to the home science room, kitchen or a nearby workshop to interact with different household tools. ● Learners are encouraged to join home science clubs to interact with different household hand tools. 	<p>Suggested modes of assessment</p> <ul style="list-style-type: none"> ● Signed/oral questions ● Observation ● Practical work ● Peer assessment
<p>Suggested learning resources</p> <ul style="list-style-type: none"> ● Digital devices such as smartphones, laptops ● Household hand tools ● video clips ● photos ● magazines ● checklists 	

Assessment Rubric				
Criteria	Exceeds expectation	Meets expectation	Approaches expectation	Below expectation
Identifying household hand tools in the locality.	Identifies the household hand tools in the locality citing examples.	Identifies household hand tools in the locality.	Identifies some of the household hand tools in the locality.	Needs support to identify household hand tools in the locality.
Categorising household hand tools according to their uses.	Categorises with ease all the household hand tools according to their uses.	Categorises household hand tools according to their uses.	Categorises some of the household hand tools according to their uses.	Categorises household hand tools according to their uses with assistance.
Using household hand tools to perform given tasks correctly.	Creatively uses household hand tools to perform given tasks correctly.	Uses household hand tools to perform given tasks correctly.	Uses household hand tools to perform some of the given tasks correctly.	Requires support to use household hand tools to perform given tasks correctly.
Taking care and maintaining household hand tools appropriately after use.	Cares and maintains all the household hand tools after use always.	Cares and maintains the household hand tools appropriately after use.	Sometimes cares and maintains household hand tools appropriately after use.	Cares and maintains household hand tools after use through prompts.

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question
3.0 Tools	3.2 Farming hand tools (10 lessons)	By the end of the sub-strand, the learners should be able to; a) identify farming hand tools in the locality, b) categorise farming hand tools according to their uses, c) use farming hand tools safely to perform given tasks, d) care and maintain farming hand tools appropriately after use, e) recognize the careers related to farming hand tools,	Learner is guided to: <ul style="list-style-type: none"> ● Fingerspell and sign farming tools in the locality. ● Use realia and visual aids to identify farming hand tools used in the locality (<i>such as jembe, axe, spade among others</i>). ● Observe print and non-print media showing people working with different farming hand tools. 	Why are farming hand tools important?

		f) appreciate the importance of farming tools in the community.	<ul style="list-style-type: none"> ● Draw farming hand tools used in the locality ● Use charts to categorize farming hand tools according to use. ● Use farming hand tools in carrying out different farming activities and other related activities in the school. ● Observe a demonstration on care and maintenance of farm hand tools. ● Discuss proper care, maintenance and safe storage of farming hand tools. ● Discuss careers related to household hand tools. ● Collaborate with teachers and other members of the community to perform simple tasks using farming hand tools. 	
	Project activity 2 (12 lessons)	By the end of the sub-strand, the learner should be able to; a) suggest an item that may solve the problem identified in project activity 1, b) design the item that may be used to solve the problem identified in project activity 1, c) Prepare a cost estimate for the designed item.	Learner is guided to: <ul style="list-style-type: none"> ● Use digital devices to identify and discuss possible items that may be used to solve the identified problem. ● Identify appropriate items to solve the problem. ● Design the items that may solve the problem identified in project activity 1. ● Make a budget on the cost estimate for the designed item in groups. 	How can the items learnt be used to solve problems in your community?
Core competencies to be developed <ul style="list-style-type: none"> ● Communication and collaboration as learners discuss the use of farming tools in the locality 				

<ul style="list-style-type: none"> ● Critical thinking and problem solving as learners choose the farming tools to solve a problem in the community. ● Digital literacy as learners uses digital devices to identify and discuss possible items that may be used to solve problems in their locality. ● Learning to learn as learners search and download video/captioned video clips on farming hand tools 	
<p>Pertinent and Contemporary Issues (PCI's):</p> <ul style="list-style-type: none"> ● Service learning, parental empowerment and engagement: Community involvement is encouraged as learners collaborate with teachers, parents and guardians to perform simple tasks using farming hand tools. ● Education for sustainable development as learners use farming tools in carrying out farming at home and in school. 	<p>Values:</p> <ul style="list-style-type: none"> ● Responsibility is developed as learners take care of tools in the locality. ● Love is enhanced as learners share farming tools while carrying out farming practices at home and school. ● Respect Is acquired as learners appreciate the contribution of every member during group discussions.
<p>Links to other subjects</p> <ul style="list-style-type: none"> ● Agriculture – as learners practice care and maintenance of farming tools. ● Computer science - ICT applications as learners watch video/signed video clips on categorising farming hand tools. 	
<p>Non-formal activities as to support learning</p> <ul style="list-style-type: none"> ● Learners take guided tours to agricultural shows to observe how farming hand tools are used. ● Learners are encouraged to join 4K clubs in schools to practice use of farming hand tools. ● Learners take part in farming and other related activities in school. 	<p>Suggested modes of assessment</p> <ul style="list-style-type: none"> ● Observation ● Signed/oral questions ● Project work
<p>Suggested learning resources</p> <ul style="list-style-type: none"> ● Digital devices such as smartphones, laptops ● farm hand tools ● drawing charts ● Video/captioned video clips ● Photos 	

Assessment Rubric				
Criteria	Exceeds expectation	Meets expectation	Approaches expectation	Below expectation

Identifying Farming hand tools in the locality.	Identifies Farming hand tools in the locality citing examples.	Identifies farming hand tools in the locality.	Identifies some of the farming hand tools in the locality.	Needs guidance to identify farming hand tools in the locality.
Categorising Farming hand tools according to the uses.	Confidently categorises farming hand tools according to the uses.	Categorises farming hand tools according to the uses.	Categorises some of the farming hand tools according to the uses.	Needs support to categorise farming hand tools according to the uses.
Using Farming hand tools safely to perform given tasks	Uses Farming hand tools safely to perform given tasks with ease	Uses farming hand tools safely to perform given tasks	Uses some of the farming hand tools safely to perform given tasks	Has difficulties in using farming hand tools safely to perform given tasks
Taking care of and maintaining farming hand tools appropriately after use.	Always care for and maintain farming hand tools appropriately after use.	Cares for and maintains the farming hand tools appropriately after use.	Sometimes cares for and maintains farming hand tools appropriately after use.	Needs support to care for and maintain farming hand tools.

STRAND 4.0: DRAWING

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Questions
4.0 Drawing	4.1 Types of drawings (5 lessons)	By the end of the sub strand, the learner should be able to; <ol style="list-style-type: none"> identify different types of drawings used in the technical fields, distinguish between artistic and technical drawings, describe the use of artistic and technical drawings in different fields, recognize the application of drawings in various careers, appreciate the importance of drawing in day-to-day life. 	Learner is guided to: <ul style="list-style-type: none"> Search for different types of drawings used in the technical fields from both print and non-print media. Identify different types of drawings used in the technical field in groups. Use print and non-print media to explore the meaning of artistic and technical drawings. Use digital images and charts, to distinguish between artistic or technical drawings. discuss the use of artistic and technical drawings in groups. Discuss careers related to use of drawings. Identify objects at home, school or in the community where drawing has been used. 	<ol style="list-style-type: none"> How are drawings used in various careers? Why are drawings important in our day-to-day lives?
Core competencies to be developed: <ul style="list-style-type: none"> Communication and collaboration as learners discuss careers related to the use of drawings in different fields in day-to-day life. Digital literacy as learners uses video clips to search for information on artistic and technical drawing. Critical thinking and problem solving as learners discuss the use of drawings in different career fields. 				
Pertinent and Contemporary Issues (PCI's): <ul style="list-style-type: none"> Life skills: Decision making skills are acquired as learners make choices on the correct instruments to use in drawing. 			Values: <ul style="list-style-type: none"> Respect is developed as learners recognize the contribution of every member in group discussions Unity is developed as learners work in groups 	

<ul style="list-style-type: none"> ● Learner support programs: Mentorship and peer education is developed as learners work in groups 	
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Links to other subjects: <ul style="list-style-type: none"> ● Visual arts – as learners identify various drawings ● Computer science – as learners search for different types of drawings used in the technical fields from both print and non-print media. 	
Non-formal activities to support learning <ul style="list-style-type: none"> ● Learners are encouraged to join such clubs like technical education clubs where they discuss different types of drawings. ● Learners are guided to visit construction sites to observe working drawings. 	Suggested modes of assessment <ul style="list-style-type: none"> ● Oral and signed Question ● Observation ● Written test ● Practical drawing
Suggested learning resources <ul style="list-style-type: none"> ● Digital devices such as laptops, smart phones, computers ● Drawing tables ● Drawing papers/books ● Pencils ● T-squares ● Ruler/Straight edge ● Set squares ● Career brochures, ● Career magazines 	

Assessment Rubric				
Criteria	Exceeds expectation	Meets expectation	Approaches expectation	Below expectation
Identifying various types of drawings.	Identifies various types of drawings with ease.	Identifies various types of drawings.	Identifies some types of drawings.	Requires support to identify types of drawings.

Distinguishing between artistic and technical drawings.	Easily distinguishes between artistic and technical drawings.	Distinguishes between artistic and technical drawings.	Distinguishes between artistic and technical drawings with prompts.	Has difficulties in distinguishing between artistic and technical drawings.
Describing the uses of artistic and technical drawing as used in various fields.	Easily describes the uses of artistic and technical drawing as used in various fields.	Describes the uses of artistic and technical drawing as used in various fields.	Describes some of the uses of artistic and technical drawing as used in various fields with prompts.	Has difficulties in describing the uses of artistic and technical drawing as used in various fields.

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Questions
4.0 Drawing	4.2 Drawing instruments and equipment (5 lessons)	By the end of the sub strand, the learner should be able to; a) identify drawing instruments and equipment used in technical drawing, b) describe the use of drawing instruments and equipment in technical drawing, c) draw lines and shapes using drawing instruments and equipment, d) demonstrate proper care and maintenance of drawing instruments and equipment, e) appreciate the use of drawing instruments and equipment in various careers.	Learner is guided to: <ul style="list-style-type: none"> ● Finger spell and sign drawing instruments and equipment in technical drawing. ● Use print and non-print media to identify and name the various drawing instruments and equipment. ● Use realia and video clips, to discuss the use of various drawing instruments and equipment in groups. ● Fingerspell and sign different lines and shapes used in technical drawings. ● Use drawing instruments to draw given lines and shapes in pairs. ● Discuss on how to care for and maintain drawing instruments and equipment in groups. ● Observe a demonstration on care and maintenance of drawing instruments and equipment. 	<ol style="list-style-type: none"> 1. How are drawing instruments and equipment used? 2. Why is it important to care for and maintain drawing instruments and equipment?

			<ul style="list-style-type: none"> ● demonstrate proper care, maintenance and storage of the drawing instruments used in drawing lines and shapes in pairs. ● Discuss uses of drawing instruments in various careers fields in groups. ● Tour a nearby workshop where drawing instruments and equipment are used and write a report. 	
Core competencies to be developed: <ul style="list-style-type: none"> ● Communication and collaboration as learners work in groups on care and maintenance of drawing instruments and equipment. ● Learning to learn as learners use and maintain technical drawing instruments and equipment. ● Digital literacy as learners use digital device to discuss use of instruments and equipment in drawing. 				
Pertinent and Contemporary Issues (PCI's):pr <ul style="list-style-type: none"> ● Life skills: Decision making skills are acquired as learners make choices on the correct instruments and equipment to use in drawing. ● Learner support programs: Mentorship and peer education is developed as learners discuss care and maintenance of drawing tools and equipment in groups 			Values: <ul style="list-style-type: none"> ● Responsibility is enhanced as learners take care of drawing instruments. ● Respect is enhanced as learners recognize and appreciate the contribution of every member in group discussions. 	
Links to other subjects: <ul style="list-style-type: none"> ● Visual arts - as learners draw shapes. ● Mathematics - as learners perform geometrical constructions. ● Computer science - as learners watch video clips and signed video clips to discuss construction of shapes 				
Non-formal activities as to support learning <ul style="list-style-type: none"> ● Learners take a guided tour of a nearby workshop or a TVET institution to observe and record drawing instruments and equipment. They also observe how these tools and equipment are used. 			Suggested modes assessment <ul style="list-style-type: none"> ● Signed and oral Questions ● Observation ● Written test ● Practical work 	
Suggested learning resources <ul style="list-style-type: none"> ● Digital devices like laptops, smart phones ● Drawing tables ● Drawing papers/books 				

- T-squares
- Ruler/Straight edge
- Set squares
- Pencils

Assessment Rubric				
Criteria	Exceeds expectation	Meets expectation	Approaches expectation	Below expectation
Identifying drawing instruments and equipment.	Identifies and names drawing instruments and equipment.	Identifies drawing instruments and equipment.	Identifies some of the instruments and equipment.	Needs support to identify drawing instruments and equipment.
Describing the uses of drawing instruments and equipment.	Easily describes the uses of drawing instruments and equipment.	Describes the uses of drawing instruments and equipment.	Describes some of the uses of drawing instruments and equipment.	Has difficulties in describing the use of drawing instruments and equipment.
Drawing lines and shapes using drawing instruments and equipment.	Draws lines and shapes with ease using drawing instruments and equipment.	Draws lines and shapes using drawing instruments and equipment.	Draws some of the lines and shapes using drawing instruments and equipment.	Needs support to draw lines and shapes using drawing instruments and equipment.
Caring for and maintaining drawing instruments and equipment.	Always cares for and maintains drawing instruments and equipment.	Cares for and maintains the drawing instruments and equipment.	Cares for and maintains the drawing instruments and equipment through prompts.	Has difficulties in caring for and maintaining drawing instruments and equipment.

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Questions
4.0. Drawing	4.3 Free hand sketching (10 lessons)	By the end of the sub strand, the learner should be able to; a) sketch lines using free hand, b) sketch two dimensional shapes using free hand, c) sketch still life objects in perspective,	Learner is guided to: ● Sketch lines using free hand. ● Use index finger to illustrate different types of lines. ● Use pencils and drawing papers to sketch two-dimensional shapes.	Why is free hand sketching important?

		<p>d) recognize the use of free hand sketches in expression of artistic ideas in different career fields,</p> <p>e) appreciate the importance of free hand sketching in day-to-day life.</p>	<ul style="list-style-type: none"> ● Identify different pencil grades like H, 2H, 3H for technical drawing and 2B, 3B, 4B for artistic drawing. ● Discuss why different pencils are used in artistic drawing. ● Discuss different sizes of drawing papers like A₀, A₁, A₂, A₃. ● Use realia, to sketch still life objects. ● Discuss perspective drawing. ● Use digital media to observe how free hand sketches express artistic ideas in different career fields. ● Take photos of the sketches and drawings for the development of portfolios in groups. 	
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> ● Communication and collaboration as learners discuss in groups how different pencil grades are used. ● Learning to learn as learners use free hand sketches to sketch still life objects. ● to make sketches and drawings. ● Digital literacy as the learners observes photographs, videos/signed videos on the use of drawings. ● Critical thinking and problem solving as learners discuss how different pencil grades are used in free hand sketches. 				
<p>Pertinent and Contemporary Issues (PCI's):</p> <ul style="list-style-type: none"> ● Life skills: Decision making skills are acquired as learners make choices on the correct instruments and equipment to use in drawing. ● Learner support programs: Mentorship and peer education is developed as learners work together in groups. 			<p>Values:</p> <ul style="list-style-type: none"> ● Responsibility is enhanced as learners take care of drawing instruments. ● Respect is acquired as learners recognize the contribution of every member in group discussions. 	
<p>Links to other subjects:</p> <ul style="list-style-type: none"> ● Visual arts - as learners draw objects using free hand sketches 				
<p>Non-formal activities as to support learning</p>			<p>Suggested modes of assessment</p> <ul style="list-style-type: none"> ● Signed and oral Questions ● Observation 	

<ul style="list-style-type: none"> • Learners take a guided tour of a nearby fine art or cultural centre to observe and record how free hand sketches are done and how they are used in the family and local community. • Learners are encouraged to participate in artistic paintings in the school. 	<ul style="list-style-type: none"> • Written test
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Suggested learning resources

- Drawing tables
- Drawing papers/books
- Pencils
- Career brochures
- Career magazines
- Digital devices such as; computer, laptop, smart phone, tablets among others
- Samples of free hand sketches

Assessment Rubric

Criteria	Exceeds expectation	Meets expectation	Approaches expectation	Below expectation
Sketching lines using free hand.	Easily sketches the lines using free hand.	Sketches lines using free hand.	Sketches some lines using free hand.	Needs support to sketch lines using free hand.
Sketching two dimensional shapes using free hand.	Easily sketches two dimensional lines using free hand.	Sketches two dimensional shapes using free hand.	Sketches some two-dimensional shapes using free hand.	Has difficulties in sketching two dimensional shapes using free hand.
Sketching still life objects in perspective.	Easily sketches still life objects in perspective.	Sketches still life objects in perspective.	Sketches some still life objects in perspective.	Requires support to sketch still life objects in perspective.

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Questions
4.0 Drawing	4.4 Geometrical construction (10 lessons)	By the end of the sub strand, the learner should be able to; a) construct different angles in plane geometry,	Learner is guided to: <ul style="list-style-type: none"> • Sign different angles and triangles in plane geometry in pairs. 	1. How are geometric construction drawings done?

		<p>b) construct different types of quadrilaterals,</p> <p>c) construct combined shapes in plane geometry,</p> <p>d) identify different career fields where the knowledge of geometrical construction could be applied in the locality,</p> <p>e) appreciate the importance of geometrical construction in everyday life.</p>	<ul style="list-style-type: none"> ● Use visual aids to discuss how to construct different angles in plane geometry. ● Observe a demonstration on construction of different angles in plane geometry. ● Practice construction of different angles and triangles in plane geometry. ● Practice construction of quadrilaterals in plane geometry. ● Sign the quadrilaterals in plane geometry. ● Practice construction of different sizes of circles in plane geometry. ● Practice construction of combined shapes. ● Apply geometry in different career fields. ● Use print and non-print media to identify different career fields where the knowledge of geometrical construction could be applied in the locality. ● Construct objects found in school, home and in the community using geometric construction. 	<p>2. How can geometrical construction be applied in our day-to-day life?</p>
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	Project activity 3 (13 Lessons)	By the end of the sub-strand, the learner should be able to; <ol style="list-style-type: none"> suggest the materials for making the item designed in project activity 2, gather the materials for making the item designed in project activity 2, store the prepared materials for making the item designed in project activity 2. 	Learner is guided to: <ul style="list-style-type: none"> Use visual aids to identify and discuss the materials used to make the item designed in project activity 2. Discuss how the materials are used in making the item. Find and collect the materials chosen. Keep the collected materials safely. 	How can local materials be used to solve the problems in your community?
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Core competencies to be developed:

- **Communication and collaboration** as learners discuss in groups the construction of a working diagram for the project.
- **Digital literacy** as learners observe video clips/signed video clips on how to construct different angles in plane geometry.
- **Critical thinking and problem solving** as learners relate the application of plane geometry to different careers.

<p>Pertinent and Contemporary Issues (PCI's):</p> <ul style="list-style-type: none"> ● Decision-making skills are acquired as learners effectively use drawing instruments. ● Life skills: self-esteem is developed as learners successfully engage in-group discussions. 	<p>Values:</p> <ul style="list-style-type: none"> ● Responsibility is developed as learners take care of drawing instruments ● Respect is enhanced as learners recognize the contribution of every member in group discussions
<p>Links to other subjects:</p> <ul style="list-style-type: none"> ● Visual Arts - as learners draw plane figures. ● Agriculture - as learners draw farm tools and equipment. ● Mathematics- as learners perform geometrical construction. 	
<p>Non-formal activities as to support learning</p> <ul style="list-style-type: none"> ● Learners are guided to visit a construction site within the locality to observe how working drawings are used. ● Learners take a guided tour of a TVET institution to observe and record how geometrical construction is done. 	<p>Suggested modes of assessment</p> <ul style="list-style-type: none"> ● Signed and oral Questions ● Observation ● Written test

<ul style="list-style-type: none"> ● Learners are encouraged to participate in construction activities at home. 	
Suggested learning resources <ul style="list-style-type: none"> ● Drawing tables ● Drawing papers/books ● Pencils ● Career brochures, ● Career magazines ● Digital devices such as; computer, laptop, smartphones, tablets among others 	

Assessment Rubric				
Criteria	Exceeds expectation	Meets expectation	Approaches expectation	Below expectation
Constructing angles in plane geometry.	Constructs angles in plane geometry with ease.	Constructs angles in plane geometry.	Constructs angles in plane geometry with little assistance.	Requires support to construct angles in plane geometry.
Constructing quadrilaterals in plane geometry.	Constructs quadrilaterals in plane geometry with ease.	Constructs quadrilaterals in plane geometry.	Constructs quadrilaterals in plane geometry with prompts.	Has difficulty in constructing quadrilaterals in plane geometry.
Constructing combined shapes in plane geometry.	Easily constructs combined shapes in plane geometry.	Constructs combined shapes in plane geometry.	Constructs combined shapes in plane geometry with minimal support.	Requires support to construct combined shapes in plane geometry.
Identifying career fields where the knowledge of geometrical construction could be applied.	Identifies different career fields where the knowledge of geometrical	Identifies career fields where the knowledge of geometrical	Identifies some career fields where the knowledge of geometrical construction could be applied.	Has difficulties identifying career fields where the knowledge of geometrical construction could be applied.

	construction could be applied with ease.	construction could be applied.		
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STRAND 5.0: ENERGY RESOURCES

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Questions
5.0 Energy Resources	5.1 Sources of energy (5 lessons)	By the end of the sub-strand, the learner should be able to; a) identify sources of energy within the locality, b) classify the sources of energy in the locality as either renewable or non-renewable, c) discuss the advantages and disadvantages of different sources of energy in the locality,	Learner is guided to: <ul style="list-style-type: none"> ● Use both print and non-print media to search for sources of energy. ● Name and sign the different sources of energy. ● Use flash cards to group various sources of energies as renewable and non-renewable. ● Name renewable and non-renewable sources of energy. 	1. Why is energy important to our day-to-day?

		<p>d) identify different careers which are related to energy in the locality,</p> <p>e) appreciate the importance of energy in our lives.</p>	<ul style="list-style-type: none"> ● Fingerspell and sign the renewable and non-renewable sources of energy. ● Discuss the advantages and disadvantages of the different sources of energy in groups. ● Discuss alternative sources of energy in the locality. ● Use digital devices to search for skills required for particular energy related careers. ● Tour the locality to identify different sources of energy and observe and record the various careers related to energy. ● Take a guided tour of the locality to ● Discuss the importance of energy to our everyday life. 	
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> ● Critical thinking and problem solving as learners discuss alternative sources of energy. ● Creativity and imagination as learners think about alternative sources of energy. ● Digital literacy as the learners searches for different sources of energy using both print and electronic media. ● Self-efficacy as learners expresses themselves during group discussions. ● Learning to learn as they search for information on sources of energy. 				
<p>Pertinent and Contemporary Issues (PCIs):</p> <ul style="list-style-type: none"> ● Environmental awareness is enhanced as learners identify the different sources of energy in the locality. ● Disaster risk management is promoted as learners identify the safe sources of energy for their own safety, safety of others and safety of the environment. 		<p>Values:</p> <ul style="list-style-type: none"> ● Responsibility is developed as learners listen to each other and as they discuss sources of energy in the locality. ● Patriotism is enhanced as learners take care of the environment by appreciating the sources of energy within the environment. ● Unity is enhanced as learners carry out learning activities together. ● Respect is developed as learners recognize each other’s contribution during group activities. 		

Links to other subjects: <ul style="list-style-type: none"> ● Computer science (ICT application)- as learners search for information on sources of energy. ● Integrated science - as learners discuss the different sources of energy. ● Life skills- as learners tour the locality to observe and record various careers related to energy. 	
Non-formal activities to support learning <ul style="list-style-type: none"> ● Learners visit a nearby source of energy to observe and record how energy is generated and its use in the family, business establishments and local community. 	Suggested modes of assessment <ul style="list-style-type: none"> ● Signed and oral Questions ● Observation ● Written test
Suggested learning resources <ul style="list-style-type: none"> ● Digital devices such as; computer, laptop, smart phone, tablets among others ● Flash cards ● Wind, Solar energy, Electric energy (DC/AC), Gas, Firewood, Coal among others (whichever is available in the locality) ● Career brochures, ● career magazines 	

Assessment Rubric				
Criteria	Exceeds expectation	Meets expectation	Approaches expectation	Below expectation
Identifying the sources of energy within the locality.	Easily identifies the sources of energy within the locality.	Identifies the sources of energy within the locality.	Identifies some sources of energy within the locality.	Needs support to identify the sources of energy within the locality.
Classifying the sources of energy as renewable or non-renewable.	Classifies the sources of energy as renewable or non-renewable citing examples.	Classifies the sources of energy as renewable or non-renewable.	Classifies some sources of energy as renewable or non-renewable.	Requires guidance to classify the sources of energy as renewable or non-renewable.
Discussing advantages and disadvantages of different sources of energy.	Discusses advantages and disadvantages of different sources of energy citing examples.	Discusses advantages and disadvantages of	Discusses some advantages and disadvantages of different sources of energy.	Needs support to discuss the advantages and disadvantages of different sources of energy.

		different sources of energy.		
Identifying different energy related careers.	Easily identifies different energy related careers.	Identifies different energy related careers.	Identifies some different energy related careers.	Requires support to identify different energy related careers.

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Questions
5.0 Energy Resources	5.2 Uses of energy (5 lessons)	By the end of the sub-strand, the learner should be able to; a) identify the different forms of energy in the locality, b) classify the different forms of energy into either kinetic or potential energy, c) identify the uses of different forms of energy in the locality, d) recognize the different types of careers which require the use of energy within the locality, e) appreciate the role of energy in day-to-day life.	Learner is guided to: <ul style="list-style-type: none"> ● Use print and non-print media to search for information on forms of energy in groups. ● Identify the different forms of energy. ● Name and sign different forms of energy. ● Use a chart to classify the different forms of energy as either kinetic or potential in groups. ● Discuss the uses of energy within the locality in groups. ● Watch video/captioned clips on different uses of energy. ● Visit the locality to observe and record different energy uses and careers related to uses of energy. 	1. How does energy affect our daily lives? 2. How is energy useful to our lives?
	Project activity 4 (13 lessons)	By the end of the sub-strand, the learner should be able to; a) identify the safety precautions to observe when working with tools to make the item designed in project activity 2,	Learner is guided to: <ul style="list-style-type: none"> ● Discuss the safety precautions to observe when working with tools to make the item designed in project activity 2. 	

		b) use appropriate tools to prepare the materials collected in project activity 3, c) use appropriate tools to make the item designed in project activity 2, d) display the item made others to see and appreciate.	<ul style="list-style-type: none"> ● Select and use appropriate tools to prepare the materials collected in project activity 3. ● Select and use appropriate tools to make the item designed in project activity 2. ● Display the item made for others to see and appreciate. 	
Core competencies to be developed: <ul style="list-style-type: none"> ● Critical thinking and problem solving as learners think of how to solve problems in the community using energy. ● Creativity and imagination as learners think about the various uses of energy within the localities. ● Digital literacy as learners watches video/captioned video clips and search for information online. ● Self-efficacy as learners expresses themselves during group discussions. 				
Pertinent and Contemporary Issues (PCIs): <ul style="list-style-type: none"> ● Self-awareness is enhanced as learners discuss the use of energies within the locality. ● Life skills: self-esteem is developed as learners discuss practical uses of energy within the localities. 			Values: <ul style="list-style-type: none"> ● Responsibility is developed as learners listen to each other as they discuss the catalogues on the types of energies. ● Unity is enhanced as learners carry out learning activities together. ● Respect is developed as learners recognize each other’s contribution during group activities. 	
Links to other subjects: <ul style="list-style-type: none"> ● Computer science (ICT applications) - as learners search for information on the internet and watch video clips. ● Integrated science - as learners discuss the different forms of energies. 				
Non-formal activities as to support learning <ul style="list-style-type: none"> ● Learners are guided to visit a nearby industry, business centres or any other manufacturing organization to observe and record how energy is used to generate products. 			Suggested modes of assessment <ul style="list-style-type: none"> ● Signed and oral Questions ● Observation ● Written test 	
Suggested learning resources <ul style="list-style-type: none"> ● Digital devices such as laptops, smartphones among others. ● Charts ● Career brochures ● career magazines 				

Criteria	Exceeds expectation	Meets expectation	Approaches expectation	Below expectation
Identify the different forms of energy in the environment.	Easily identifies the different forms of energy in the environment.	Identifies the different forms of energy in the environment.	Identifies some different forms of energy in the environment.	Needs guidance to identify the different forms of energy in the environment.
Classifying the different forms of energy as either kinetic or potential.	Classifies different forms of energy as either kinetic or potential citing examples.	Classifies the different forms of energy as either kinetic or potential.	Classifies some forms of energy as either kinetic or potential.	Has difficulties in classifying the different forms of energy as either kinetic or potential.
Identifying the uses of different forms of energy in the locality.	Correctly identifies uses of different forms of energy in the locality.	Identifies the uses of different forms of energy in the locality.	Identifies uses of different forms of energy in the locality with minimal assistance	Requires support to identify the uses of different forms of energy in the locality.

COMMUNITY SERVICE-LEARNING CLASS ACTIVITY

Community Service Learning (CSL) is an experiential learning strategy that integrates classroom learning and community service to enable learners to reflect, experience and learn from the community. The CSL project is expected to benefit the learner, the school and local community. Knowledge and skills on how to carry out a CSL project have been covered in Life Skills Education (LSE).

All learners with Hearing Impairment in Grade 7 will be expected to participate in a CSL class activity. The activity will give learners an opportunity to practice the CSL Project skills covered under LSE. This activity will be undertaken in groups where learners who are Deaf will be grouped with those who are Hard of Hearing (those with residual speech or hearing). Learners will be expected to apply the steps provided to carry out the CSL project.

The activity will take the form of a whole school approach, where the entire school community will be engaged in the learning process. Teachers will guide learners with Hearing Impairment to execute a simple school based CSL class activity. This activity can be done in 4-6 weeks outside the classroom time. The duration may be adjusted accordingly to accommodate learners with hearing impairment who may require more time to implement the CSL project.

CSL SKILLS TO BE COVERED

Research: Learners will develop research skills as they investigate PCIs to address, ways and tools to use in collecting data, analysing information and presenting their findings.

Communication: Learners will develop effective communication skills as they engage with peers and school community members. These will include listening actively and observing keenly, asking questions, and presentation skills using varied modes.

Citizenship: Learners will be able to explore opportunities for engagement as members of the school community and provide a service for the common good.

Leadership: Learners will develop leadership skills as they take up various roles within the CSL activity.

Financial Literacy Skills: Learners will consider how to source and utilise resources effectively and efficiently.

Entrepreneurship: Learners will consider ways of generating income through innovation for the CSL class activity.

Suggested PCIs	Specific Learning Outcomes	Suggested Learning Experiences (Customize to the focus of the grade)	Key Inquiry Questions
Learners will be guided to consider the various PCIs provided in the subject in Grade 7 and choose one suitable to their context and reality.	<p>By the end of the CSL class activity, the learner should be able to:</p> <ul style="list-style-type: none"> a) identify a problem in the school community through research; b) develop a plan to solve the identified problem in the community; 	<ul style="list-style-type: none"> ● In groups, learners brainstorm on pertinent and contemporary issues in the community that need attention. ● In groups, learners discuss various PCIs within the school community and identify the one that requires immediate attention giving reasons for their choice. ● In groups, learners discuss possible solutions to the identified issue and propose the most appropriate solution to the problem. 	<ol style="list-style-type: none"> 1. How does one determine community needs? 2. Why is it necessary to be part of a community?

	<p>c) design solutions to the identified problem;</p> <p>d) implement solution to the identified problem;</p> <p>e) share the findings to relevant actors;</p> <p>f) reflect on own learning and relevance of the project;</p> <p>g) appreciate the need to belong to a community.</p>	<ul style="list-style-type: none"> ● Learners brainstorm on the resources needed for the activity and source for them. ● In groups, learners discuss different methods and tools of collecting data and determine the ones suitable for the selected project. Learners with Hearing Impairment to be supported in preparation and selection of data collection methods and tools (questionnaires, focus group discussions and interviews). ● In groups, learners to develop appropriate tools for collecting data with the guidance of the teacher. ● In groups, learners collect data and record findings. Pair a learner who is deaf with a learner who is hard of hearing. In situations where learners cannot be paired, they should be supported by a sign language interpreter. Before releasing the learners to the field, the teacher should brief the learners on social etiquette and safety. ● In groups, learners discuss their findings, develop various reporting documents and use them to report on their findings. ● Based on the research report, learners implement a project to get solutions to the identified problem (Learners to be guided to adhere to safety precautions). ● Learners use feedback from peers and the school community to improve on the implementation of the project. ● In groups, learners discuss the successes, challenges faced while implementing the project activities and lessons learnt; write a report and share through various media to peers and the school community. ● Learners reflect on how the project enhanced learning while at the same time facilitating service to the school by providing solutions to the identified issue(s). 	
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SUGGESTED MODES OF ASSESSMENT	SUGGESTED LEARNING RESOURCES
<ul style="list-style-type: none"> ● Observation ● Oral/signed question 	<ul style="list-style-type: none"> ● Notebooks ● pens ● digital devices ● Written questionnaires ● cameras ● sign language interpreter ● portfolio <p>NB; Depending on the PCI the learners choose to address, they should be guided on learning resources specific to the PCI.</p>

Assessment Rubric				
Criteria	Exceeds Expectation	Meets Expectation	Approaches Expectation	Below Expectation
Identifying a problem in the school community through research.	Identifies a problem in the school community through research and seeks for solutions.	Identifies a problem in the school community through research.	Identifies a problem in the school community.	Identifies a problem in the school community with prompts.
Planning to solve the identified problem.	Plans to solve the identified problem through generated data and support peers.	Plans to solve the identified problem.	Plans to solve the identified problem with prompts.	Plans to solve the identified problem with support.

Designing solutions to the identified problem.	Designs solutions to the identified problem using relevant strategies.	Designs solutions to the identified problem.	Designs solutions to the identified problem with guidance.	Has challenges designing solutions to the identified problem.
Implementing solution to the identified problems.	Implements solution to the identified problem observing the necessary safety precautions.	Implements solution to the identified problem.	Implements solution to the identified problems with guidance.	Implements solution to the identified problems with support.
Sharing the findings to relevant actors.	Shares the findings to relevant actors recommending sustainable solutions.	Shares the findings to relevant actors.	Shares some findings with relevant actors.	Shares some findings to relevant actors with prompts.