



**REPUBLIC OF KENYA**

**MINISTRY OF EDUCATION**

**JUNIOR SCHOOL CURRICULUM DESIGN**  
**PRE-TECHNICAL STUDIES FOR LEARNERS WITH HEARING IMPAIRMENT**  
**GRADE 7**



**KENYA INSTITUTE OF CURRICULUM DEVELOPMENT**

*A Skilled and Ethical Society*

First published 2022

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## **FOREWORD**

The Government of Kenya is committed to ensuring that policy objectives for Education Training and Research meet the aspirations of the Constitution of Kenya 2010, the Kenya Vision 2030, National Curriculum Policy 2019, the United Nations Sustainable Development Goals (SDGs) and the Regional and Global conventions to which Kenya is a signatory. Towards achieving the mission of Basic Education, the Ministry of Education (MoE) has successfully and progressively rolled out the implementation of the Competency Based Curriculum (CBC) at Pre-Primary, Primary and Junior School levels.

The implementation of Competency Based Curriculum involves monitoring and evaluation to determine its success. After the five-year implementation cycle, a summative evaluation of the primary education cycle was undertaken to establish the achievement of learning outcomes as envisaged in the Basic Education Curriculum Framework. The Government of Kenya constituted a Presidential working Party on Education Reforms (PWPER) in 2022 to address salient issues affecting the education sector. PWPER made far reaching recommendations for basic education that necessitated curriculum review. The recommendations of the PWPER, monitoring reports, summative evaluation, feedback from curriculum implementers and other stakeholders led to rationalization and review of the basic education curriculum.

The reviewed Grade 7 curriculum designs for learners with hearing impairment build on competencies attained by learners at Grade 6. Emphasis at this grade is the development of basic literacy, numeracy and skills for interaction with the environment.

The curriculum designs present National Goals of Education, essence statements, general and specific expected learning outcomes for the subjects as well as strands and sub strands. The designs also outline suggested learning experiences, key inquiry questions, core competencies, Pertinent and Contemporary Issues (PCIs), values, and assessment rubric.

It is my hope that all Government agencies and other stakeholders in Education will use the designs to plan for effective and efficient implementation of the CBC.

**HON. EZEKIEL OMBAKI MACHOGU, CBS**  
**CABINET SECRETARY,**  
**MINISTRY OF EDUCATION**

## **PREFACE**

The Ministry of Education (MoE) nationally implemented Competency Based Curriculum (CBC) in 2019. Grade one is the first grade of Primary education level while Grade 6 is the final grade of the level in the reformed education structure.

The reviewed Grade 7 curriculum furthers implementation of the CBC from Grade 6 in Primary level. The curriculum provides opportunities for learners to focus in a field of their choice to form a foundation for further education and training and/or gain employable skills. This is very critical in the realisation of the Vision and Mission of the on-going curriculum reforms as enshrined in the Sessional Paper No. I of 2019 whose title is: *Towards Realizing Quality, Relevant and Inclusive Education and Training for Sustainable Development* in Kenya. The Sessional Paper explains the shift from a content-focused curriculum to a focus on **nurturing every learner's potential**.

Therefore, the Grade 7 curriculum designs for learner with hearing impairment are intended to enhance the learners' development in the CBC core competencies, namely: Communication and Collaboration, Critical Thinking and Problem Solving, Creativity and Imagination, Citizenship, Digital Literacy, learning to Learn and Self-efficacy.

The curriculum designs provide suggestions for interactive and differentiated learning experiences linked to the various sub strands and the other aspects of the CBC. They also offer several suggested learning resources and a variety of assessment techniques. It is expected that the designs will guide teachers to effectively facilitate learners to attain the expected learning outcomes for Grade 7 and prepare them for smooth transition to Grade 8. Furthermore, it is my hope that teachers will use the adapted designs to make learning interesting, exciting and enjoyable.

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**PRINCIPAL SECRETARY**  
**STATE DEPARTMENT FOR BASIC EDUCATION**  
**MINISTRY OF EDUCATION**

## **ACKNOWLEDGEMENT**

The Kenya Institute of Curriculum Development (KICD) Act Number 4 of 2013 (Revised 2019) mandates the Institute to develop and review (*SNE adapt*) curricula and curriculum support materials for basic and tertiary education and training. The curriculum development process for

any level of education involves thorough research, international benchmarking and robust stakeholder engagement. Through a systematic and consultative process, the KICD conceptualised the Competency Based Curriculum (CBC) as captured in the Basic Education Curriculum Framework (BECF)2017, that responds to the demands of the 21<sup>st</sup> Century and the aspirations captured in the Constitution of Kenya 2010, the Kenya Vision 2030, East African Community Protocol, International Bureau of Education Guidelines and the United Nations Sustainable Development Goals (SDGs).

KICD receives its funding from the Government of Kenya to facilitate successful achievement of the stipulated 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 revised Grade 7 curriculum designs for learner with hearing impairment were developed and adapted with the support of the World Bank through the Kenya Primary Education Equity in Learning Programme (KPEELP); a project coordinated by MoE. Therefore, the Institute is very grateful for the support of the Government of Kenya, through the MoE and the development partners for policy, resource and logistical support. Specifically, special thanks to the Cabinet Secretary-MoE and the Principal Secretary – State Department of Basic Education,

I also wish to acknowledge the KICD curriculum developers and other staff, all teachers, educators who took part as panelists; the Semi-Autonomous Government Agencies (SAGAs) and representatives of various stakeholders for their roles in the development and adaptation of the Grade 7 curriculum designs for learners with hearing impairment In relation to this, I acknowledge the support of the Chief Executive Officers of the Teachers Service Commission (TSC) and the Kenya National Examinations Council (KNEC) for their support in the process of developing and adapting these designs. Finally, I am very grateful to the KICD Council Chairperson and other members of the Council for very consistent guidance in the process.

I assure all teachers, parents and other stakeholders that this curriculum design will effectively guide the implementation of the CBC at Grade 7 and preparation of learners with hearing impairment for transition to Grade 8.

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## NATIONAL GOALS OF EDUCATION

Education in Kenya should:

**1. 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.

**2. 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 the wake of rapid modernisation. 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 recognises 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.

**3. 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.



- 4. 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.
- 5. Promote social equity 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.
- 6. 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.
- 7. 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.
- 8. 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.

## LESSON ALLOCATION AT JUNIOR SCHOOL

S/ No.	Learning Area	No. of Lesson
1	English for Learners with Hearing Impairment	5
2	Kiswahili for Learners with Hearing Impairment /Kenyan Sign Language	4
3	Mathematics for Learners with Hearing Impairment	5
4	Religious Education	4
5	Integrated Science for Learners with Hearing Impairment	5
6	Agriculture for Learners with Hearing Impairment	4
7	Social Studies for Learners with Hearing Impairment	4
8	Creative Arts and Sports for Learners with Hearing Impairment	5
9	Pre- technical Studies for Learners with Hearing Impairment	4
10.	Pastoral/ Religious Instruction Programme	1
	<b>Total</b>	<b>41</b>

## LEARNING OUTCOMES FOR JUNIOR SCHOOL

By end of Junior 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. Practise 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 Studies for learners with hearing impairment is an integrated learning area at junior school comprising of Pre-Technical Studies, Business Studies and Computer Studies. It covers Foundations of Pre-Technical and Business Studies, Communication in the work environment, materials of production, tools of production and entrepreneurship. Learning experiences have been adapted and broken down to smaller deliverable steps to aid learners with hearing impairment acquire critical thinking, problem solving, creativity, innovation, communication, digital literacy and financial literacy skills which are considered for their personal life and the world of work.

This subject is critical at this level as evidenced by the KICD needs assessment report, Kenya vision 2030, Sessional 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 is also informed by the National ICT Policy of Kenya 2016 (revised 2020), UN Convention on rights of persons with disabilities, 2006 and the PWPER recommendations on the need for adaptation of the curriculum and assessment for learners with special needs and disabilities.

Pre-Technical Studies for learners with hearing impairment at the junior school level recognises that learning and development of competencies is influenced by social-cultural factors, developmental age, instructional opportunities and models as embraced by theories such as the Instructional Design Theory, Vygotsky's Social-Cultural Theory, Gardner's Multiple Intelligence Theory and Piaget's Theory of Cognitive Development. Others are accounting and entrepreneurship theories such as descriptive accounting theory, normative accounting theory and Innovation Theory by Schumpeter among others.

Further, this design has been adapted to ensure that learners who are Deaf and those with Hard of Hearing learn effectively. The adaptations include suggestions for provision of sign interpretation on aspects that require use of sound, use of digital devices with assistive technology, use of visual aids such as charts, maps and diagrams, use of hands-on activities, guided demonstrations, purposeful pairing and use of adapted learning resources. It has incorporated alternative learning outcomes and activities to enhance the acquisition of sign language vocabulary to learners with Hearing Impairments.

## **SUBJECT GENERAL LEARNING OUTCOMES**

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

1. Communicate effectively through the use of information and communication technology (ICT).
2. Select and use tools and materials in the production of goods and services.
3. Use financial and entrepreneurial competencies for prudent decision making.
4. Observe safety in the immediate environment to promote education for sustainable development.
5. Apply ICT skills to carry out activities in day-to-day life.
6. Create awareness on career choices in regard to career pathways and progression for self-development.

## SUMMARY OF STRANDS AND SUB STRANDS

<b>Strands</b>	<b>Sub Strands</b>	<b>Suggested Number of Lessons</b>
1.0 Foundations of Pre -Technical Studies	1.1 Introduction to Pre-Technical Studies	4
	1.2 Safety in the Immediate environment	6
	1.3 Computer Concepts	6
2.0 Communication in Pre-Technical studies	2.1 Introduction to Drawing	6
	2.2 Free-hand sketching	10
	2.3 ICT tools in Communication	8
3.0 Materials for Production	3.1 Introduction to Materials	6
	3.2 Metallic Materials	10
	3.3 Non-Metallic Materials	10
4.0 Tools and Production	4.1 Measuring and Marking Out Tools	18
	4.2 computer hardware	8
5.0 Entrepreneurship	5.1 Introduction to Entrepreneurship	8
	5.2 Production Unit	10
	5.3 Financial Goals	10
<b>Total Number of Lessons</b>		<b>120</b>

**Note:** The suggested number of lessons per Sub Strand may be less or more depending on the context.

## STRAND 1.0: FOUNDATIONS OF PRE -TECHNICAL STUDIES

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
<b>1.0 Foundations of Pre - Technical Studies</b>	<b>1.1 Introduction to Pre-Technical Studies</b>  (4 lessons)	By the end of the sub strand, the learner should be able to: a) sign key terminologies related to pre-technical studies as a learning area, b) identify the components of Pre-Technical Studies as a learning area, c) explain the role of Pre-Technical Studies in day- to-day life, d) embrace Pre-Technical Studies in career development.	<ul style="list-style-type: none"> <li>• In purposive groups, learners are guided to observe a demonstration on how to sign key terminologies related to pre-technical studies as a learning area</li> <li>• In purposive groups, learners are guided to list, fingerspell and sign key terminologies related to pre-technical studies.</li> <li>• In purposive groups, learners are guided to use print and non-print media to search for information on the components of pre-technical studies as a learning area.</li> <li>• Learners are guided to write summary notes on the components of pre-technical studies as a learning area and present in plenary. Provide the learners with supplementary notes on components of pre-technical and business studies.</li> </ul>	Why is Pre-Technical Studies important in day-to-day life?

			<p>Ensure the learners' sitting arrangement allows all of them to observe and interact with the presenter.</p> <ul style="list-style-type: none"> <li>• In purposive groups, learners are guided to use digital devices to search information or videos on the role of pre-technical studies in day-to-day life. When the digital devices are connected to the internet, caution learners on observing cyber ethics while conducting online searches.</li> <li>• In purposive groups, learners are guided to discuss and make summary notes on the role of pre-technical studies in day-to-day life and present in plenary. Ensure learners are seated in an appropriate arrangement that supports use of simultaneous communication during the discussions. Also, provide learners with guiding questions on the role of pre-technical studies in day-to-day life to moderate the discussion.</li> <li>• In purposive groups, learners are guided to debate on the role of</li> </ul>	
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			<p>pre-technical studies in day- to - day life. Ensure the debate is based on bilingual communication/simultaneous communication to suit both hard of hearing and deaf learners. Let the learners adopt proper seating arrangement preferable a horse shoe type of arrangement. Provide the learners with sign language interpretations where necessary.</p>	
<p><b>Core competencies to be developed:</b>  Communication and Collaboration: learner develops writing, signing/speaking, observing/listening and teamwork skills when listing, fingerspelling and signing key terminologies related to pre-technical studies.</p>				
<p><b>Values:</b></p> <ul style="list-style-type: none"> <li>• Unity: learner displays team spirit and collaboration with others when discussing and presenting the role of Pre-Technical Studies in day-to-day life.</li> <li>• Respect: learner displays tolerance for others’ opinions when debating on the role of Pre-Technical Studies in day-to-day life.</li> </ul>				
<p><b>Pertinent and Contemporary Issues (PCIs):</b>  Social cohesion is enhanced when debating on the role of Pre-Technical Studies.</p>				
<p><b>Link to Other Subjects:</b>  The learner is able to relate career to trade and economic activities in Social Studies.</p>				
<p><b>Suggested learning resources</b></p> <ul style="list-style-type: none"> <li>• Pre-Technical Studies handbook</li> </ul>				

- Digital devices such as; computers laptops, smart phones, tablets among others
- Relevant approved textbooks and reference materials
- Photographs and pictures
- Charts

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
<b>1.0 Foundations of Pre-Technical Studies</b>	<b>1.2 Safety in the Immediate Environment</b>  (6 lessons)	By the end of the sub strand, the learner should be able to: <ol style="list-style-type: none"> <li>a) sign terms related to potential safety threats found in the immediate environment,</li> <li>b) identify potential safety threats in the immediate environment,</li> <li>c) outline safety rules and regulations for a given situation,</li> <li>d) observe safety in the immediate environment,</li> <li>e) appreciate the importance of observing safety in the immediate environment.</li> </ol>	<ul style="list-style-type: none"> <li>• In purposive groups, learners are guided to watch signed video clips or demonstrations on how to sign terms related to potential safety threats found in the immediate environment.</li> <li>• In pairs, learners are guided to fingerspell and sign terms related to potential threats found in the immediate environment.</li> <li>• In purposive groups, learners are guided to use their personal experiences to discuss potential safety threats they may have encountered in class, at home, and in the school community. Ensure learners are seated in an appropriate arrangement that supports</li> </ul>	<ol style="list-style-type: none"> <li>1. Why is safety in the immediate environment important?</li> <li>2. How can online threats be safeguarded against?</li> </ol>

			<p>use of bi lingual/simultaneous communication. Also, provided learners with guiding questions on potential safety threat to moderate the discussion</p> <ul style="list-style-type: none"> <li>• In purposive groups, learners are guided to use print or digital media to search for information on potential hazards to personal safety in the immediate environment.</li> <li>• In purposive groups, learners are guided to use print or digital media to search for information on physical threats to digital devices (<i>theft, natural disasters, hardware failure</i>) and online threats in the immediate environment and list them (<i>cyberbullying, impersonation, phishing,</i></li> </ul>	
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			<p><i>hacking, friend requests from unknown people)</i></p> <ul style="list-style-type: none"> <li>• In purposive groups, learners are guided to share ideas and practice on how to keep personal and sensitive data from the public when online.</li> <li>• In purposive groups, learners are guided to discuss safety rules and regulations to observe when <i>performing tasks, handing materials and tools</i>). Provide the learners with guiding questions to moderate the discussion. Also, ensure appropriate seating arrangement to support bilingual communication.</li> <li>• In purposive groups, learners are guided to develop a chart on the rules and regulations applied in the work environment. Ensure the charts are legible and</li> </ul>	
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			<p>minimised texts to allow learners with hearing impairment to synthesise the information on the chart.</p> <ul style="list-style-type: none"> <li>• In purposive groups, learners are guided to role play on safety for self and others in the immediate environment. Ensure learners put on appropriate protective gears that can support the use of sign language as well.</li> </ul>	
<p><b>Core Competencies to be developed:</b></p> <ul style="list-style-type: none"> <li>• Learning to learn: learner develops skills of sharing learnt knowledge when taking turns with peers to share ideas on safety for self and others in the immediate environment.</li> <li>• Digital Literacy: learner develops skills of interacting with technology when searching for information on potential hazards to personal safety in the immediate environment.</li> </ul>				
<p><b>Values:</b></p> <ul style="list-style-type: none"> <li>• Respect: learner appreciates diverse opinions when sharing information with peers on the online threats.</li> <li>• Responsibility: learner engages in assigned roles when role playing on safety for self and others in the immediate environment.</li> </ul>				
<p><b>Pertinent and Contemporary Issues (PCIs):</b></p> <ul style="list-style-type: none"> <li>• Disaster Risk Reduction: learner observes safety when role playing on safety of self and others in the immediate environment</li> </ul>				

- **Safety and Security:** safety awareness is enhanced when sharing ideas and practices on how to protect personal data when online.

**Link to Other Subjects:**

Integrated Science when the learner observes safety when working in a science laboratory.

- Workshop attires such as; overcoats, aprons, shoes, googles among others
- Career brochures, career magazines
- Digital devices such as; computers, laptops, smart phones, tablets among others

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
<b>1.0 Foundations of Pre-Technical Studies</b>	<b>1.3 Computer Concepts</b> (6 lessons)	By the end of the sub strand the learner should be able to: a) sign terms related to characteristics of computers in a user environment, b) explain the characteristics of a computer in a user environment, c) classify computers used in day-day life, d) use a computer to perform tasks in a user environment,	<ul style="list-style-type: none"> <li>• In purposive groups, learners are guided to use print and non-print media to search for terms related to characteristics of computers in a user environment.</li> <li>• In purposive groups, learners are guided to watch signed videos or demonstrations on how to sign terms related to characteristics of computers in a user environment.</li> <li>• In purposive groups, learners are guided to finger spell and sign terms related to</li> </ul>	<ol style="list-style-type: none"> <li>1. Why are computers classified differently?</li> <li>2. How are computers used in day-to- day life?</li> </ol>

		<p>e) acknowledge the importance of different types of computers used in day-day life.</p>	<p>characteristics of computers in a user environment.</p> <ul style="list-style-type: none"> <li>● In pairs, learners are guided to brainstorm on the meaning of the terms; computer, data and information,</li> <li>● Using appropriate sitting arrangement, learners are guided to discuss characteristics of a computer (<i>speed, accuracy, versatility, reliability, diligence, storage, consistency</i>). Ensure learners are provided with guiding questions during the discussion.</li> <li>● In purposive groups, learners are guided to watch a demonstration on how to download and watch a video clip on classification of computers.</li> <li>● In purposive groups, learners are guided to use digital devices to download and watch captioned video clips on classification of computers.</li> </ul>	
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			<p>Remind learners to observe cyber ethics while using the digital devices. Also, provide sign language interpretation in cases where videos are not captioned.</p> <ul style="list-style-type: none"> <li>● In purposive groups, learners are guided to discuss classification of computers (<i>functionality, purpose and size</i>) in a user environment,</li> <li>● In purposive groups, learners are guided to interact with different types of computers in the user environment to perform tasks.</li> </ul>	
<p><b>Core competencies to be developed:</b></p> <ul style="list-style-type: none"> <li>● Critical Thinking and Problem Solving: learner develops interpretation and inference skills while brainstorming on the meaning of the terms; computer, data and information.</li> <li>● Communication and Collaboration: learner develops speaking, listening and teamwork skills when discussing the classification of computers in a user environment.</li> </ul>				
<p><b>Values:</b></p> <p>Peace: learner displays patience with peers when discussing the classification of computers.</p> <p>Responsibility: learner shows accountability by caring for the print or digital media when interacting with different types of computers in the user environment to perform tasks</p>				

<p><b>Pertinent and Contemporary Issues (PCIs):</b> Cyber Security: learner observes online safety when downloading and watching a video clip on classification of computers.</p>
<p><b>Link to Other Subjects:</b> The learner is able to relate the skills of interacting with different types of computers to the use of a calculator in Mathematics.</p>
<p><b>Suggested learning resources</b></p> <ul style="list-style-type: none"> <li>• Course books,</li> <li>• Computer user manuals,</li> <li>• Internet,</li> <li>• video clips</li> <li>• Digital devices such as; computers, laptops, smart phones, tablets among others.</li> </ul>

<b>Suggested Assessment Rubric</b>				
<b>Level</b>	<b>Exceeds Expectations</b>	<b>Meets Expectations</b>	<b>Approaches Expectations</b>	<b>Below Expectations</b>
<b>Indicator</b>				
Ability to sign terms related to pre-technical studies as a learning area.	Signs a wide range of terms related to pre-technical studies accurately, demonstrating precise handshapes, movements, and expressions.	Signs terms related to pre-technical studies as a learning area accurately conveying the intended meaning clearly.	Signs terms related to pre-technical studies as a learning area with noticeable errors and inconsistencies in articulation.	Signs terms related to pre-technical studies, frequently making errors in handshapes, movements, or expressions.
Ability to explain the role of Pre-Technical Studies in day- to-day life	Comprehensively explains the role of Pre-Technical Studies in day- to-day life	Explains the role of Pre-Technical Studies in day- to-day life	Explains the role of Pre-Technical Studies	Explains the role of Pre-Technical Studies in day- to-day life omitting many details

			in day- to-day life omitting few details	
Ability to observe safety in the immediate environment	Consistently observes safety in the immediate environment	Often observes safety in the immediate environment	Occasionally observes safety in the immediate environment	Rarely observes safety in the immediate environment
Ability to use a computer to perform tasks in a user environment	Proficiently uses a computer to perform given tasks in a user environment	Uses a computer to perform of the tasks in a user environment	Uses a computer to perform some of the tasks in a user environment	Uses a computer to perform only a few of the tasks in a user environment

## STRAND 2: COMMUNICATION IN PRE-TECHNICAL STUDIES

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
<b>2.0 Communication in Pre-Technical Studies</b>	<b>2.1 Introduction to Drawing</b>  (10 lessons)	By the end of the sub strand, the learner should be able to: <ol style="list-style-type: none"> <li>a) sign term related to introduction to drawing as a mean of communication,</li> <li>b) explain the importance of drawing as a means of communication,</li> <li>c) distinguish between artistic and technical drawings used in technical fields,</li> <li>d) print numbers and letters of the alphabet as used in drawing,</li> <li>e) draw types of lines used in drawing,</li> <li>f) illustrate symbols and abbreviations used in drawing,</li> </ol>	<ul style="list-style-type: none"> <li>• In purposive groups, learners are guided to watch signed videos or demonstrations on how to sign terms related to drawing as a mean of communication.</li> <li>• In purposive groups, learners are guided to fingerspell and sign terms related to drawing as a mean of communication.</li> <li>• In purposive groups, learners use print and non-print media to discuss the importance of drawing as a means of communication. Ensure proper seating arrangement is observed.</li> <li>• In purposive groups, learners are guided to use print or online resources to</li> </ul>	How are drawings used in technical communication?

		<p>g) appreciate the role of drawing in communication.</p>	<p>search for information on artistic and technical drawing.</p> <ul style="list-style-type: none"> <li>• In purposive groups, learners are guided to use print and online resources to search for information on the distinctive characteristics of artistic and technical drawing. Remind learners the importance of observing cyber ethics while conducting online searches.</li> <li>• In purposive groups, learners are guided to observe a one-on-one demonstration on how to print numbers and letters of the alphabet.</li> <li>• In purposive groups, learners are guided to practice printing numbers and letters of the alphabet.</li> <li>• In purposive groups, learners are guided to use visual aids to search for information on the types of lines and their application</li> </ul>	
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			<p>in drawing (<i>thick and thin continuous, dashed and chain</i>).</p> <ul style="list-style-type: none"> <li>• In purposive groups, learners are guided to use digital devices to watch captioned videos on how to draw different types of lines used in drawing. Accompany the videos by sign language instructions in cases where they are not captioned.</li> <li>• In purposive groups, learners are guided to draw various types of lines (<i>thick and thin continuous, dashed and chain</i>)</li> <li>• In purposive groups, learners use print and non-print media to search for information on symbols and abbreviations often utilised in drawing.</li> <li>• In purposive groups, learners are guided to sketch basic symbols (<math>\emptyset</math>, <math>\Phi</math>, R, <math>\perp</math>, <math>\square</math>) and</li> </ul>	
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			<p>abbreviations (DRG, A/F, A/C, I/D, O/D) used in drawing</p> <ul style="list-style-type: none"> <li>• In purposive groups, learners are guided to use audio visual aids to study the application of symbols and abbreviations in drawing. Make the audios more audible. Also, ensure the audios are accompanied captions and sign language instructions.</li> </ul>	
<p><b>Core competencies to be developed:</b></p> <ul style="list-style-type: none"> <li>• Communication and Collaboration: the learner acquires speaking, listening and teamwork skills when brainstorming on the meaning of the terms ‘technical drawing’ and ‘artistic drawing’.</li> <li>• Digital Literacy: learner develops the skill of interacting with technology when using online resources to search for information on artistic and technical drawing.</li> </ul>				
<p><b>Values:</b></p> <ul style="list-style-type: none"> <li>• Respect: learner demonstrates etiquette during discussion of basic symbols and abbreviations used in drawing.</li> <li>• Responsibility: learner demonstrates accountability when using visual aids to search for information on the types of lines and their application in drawing.</li> </ul>				
<p><b>Pertinent and Contemporary Issues (PCIs):</b>  Safety and Security: the learner develops online safety skills during online search for information on different types of drawings used in the technical fields.</p>				
<p><b>Link to Other Subjects:</b></p>				

Creative Arts: learner enhances knowledge of artistic drawing when drawing various types of lines.

**Suggested learning resources**

- Drawing charts
- Drawing papers/books
- brochures and magazines
- Geometrical set



Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
<b>2.0 Communication in Pre-Technical Studies</b>	<b>2.2Free-hand sketching</b>  (10 lessons)	By the end of the sub strand, the learner should be able to: a) sign terms related to free hand sketching in communication. b) sketch lines using free-hand, c) sketch 2D shapes using free hand, d) appreciate the importance of free hand sketching in communication.	<ul style="list-style-type: none"> <li>• In purposive groups, learners are guided to watch signed video clips or demonstrations on how to sign terms related to free hand sketching in communication.</li> <li>• In purposive groups, learners are guided to fingerspell and sign terms related to free hand sketching in communication.</li> <li>• In pairs, learners are guided to use print and non-print media to discuss the meaning of free-hand sketching as used in Pre-Technical Studies,</li> <li>• In purposive groups, learners are guided to observe a one-on-one demonstration on how to use pencils and drawing papers to sketch lines.</li> <li>• In pairs, learners are guided to use pencils and drawing papers to sketch lines.</li> </ul>	Why is free-hand sketching important?

			<ul style="list-style-type: none"> <li>• In pairs, learners are guided to use pencils and drawing papers to sketch two-dimensional shape. Ensure learners are provided with a one-on-one demonstration on how to use pencils and drawing papers to sketch two-dimensional shape.</li> <li>• In purposive groups, learners are guided to use digital media, to observe how free hand sketches express artistic ideas in different career fields,</li> <li>• In purposive groups, learners are guided use cameras to take photos of the sketches and drawings for the development of portfolios. Provide the learner with a one-on-one demonstration on how to use a camera.</li> </ul>	
<p><b>Core competencies to be developed:</b></p> <ul style="list-style-type: none"> <li>• Communication and collaboration: learner acquires speaking, listening and teamwork skills when discussing the meaning of free-hand sketching as used in Pre-Technical Studies.</li> <li>• Digital literacy: learner develops the skill of interacting with technology when using digital media to observe how free hand sketches express artistic ideas in different career fields</li> </ul>				
<p><b>Values:</b></p>				

- Respect: learner demonstrates etiquette during discussion of the meaning of free-hand sketching as used in Pre-Technical Studies
- Responsibility: learner demonstrates accountability when using digital media, to observe how free hand sketches express artistic ideas in different career fields

**Pertinent and Contemporary Issues (PCI's):**

Safety and Security: learner develops online safety skills when using digital media to observe how free hand sketches express artistic ideas in different career fields.

**Links to other learning areas:**

Creative arts: learner enhances skill of artistic drawing when using pencils and drawing papers to create lines.

**Suggested learning resources**

- Drawing charts
- Drawing pencils,
- Drawing papers/books

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
<b>2.0 Communication in Pre-Technical Studies</b>	<b>2.3 ICT tools in Communication</b> (6 lessons)	<p>By the end of the sub strand, the learner should be able to:</p> <ol style="list-style-type: none"> <li>sign terms related to ICT tools used in communication.</li> <li>explain the importance of ICT tools in communication,</li> <li>describe the ICT tools used in communication,</li> <li>use ICT tools to enhance communication,</li> <li>acknowledge the role of communication in Pre-Technical Studies.</li> </ol>	<ul style="list-style-type: none"> <li>In purposive groups, learners are guided to watch signed video clips or demonstrations on how to sign terms related to ICT tools used in communications.</li> <li>In pairs, learners are guided to fingerspell and sign terms related to ICT tools used in communication.</li> <li>In purposive groups, learners are guided to use print or digital media to search for information on ICT tools used in communication (<i>email, mobile phone, computers, video and web conferencing tools, social networking and online collaboration</i>) and present the findings.</li> <li>In pairs, learners are guided to brainstorm and present on</li> </ul>	<p>How are ICT tools used in communication?</p>

			<p>the meaning and importance of ICT tools in communication,</p> <ul style="list-style-type: none"> <li>● In pairs, learners are guided to communicate using ICT tools. (<i>send and receive; email, texts, calls, chats, audio, animations and video</i>). Provide a one-on-one demonstration on how to use ICT tools.</li> </ul>	
<p><b>Core competencies to be developed:</b></p> <ul style="list-style-type: none"> <li>● Communication and Collaboration: learner acquires speaking, writing, listening, and teamwork skills while brainstorming and presenting on the meaning and importance of ICT tools in communication.</li> <li>● Learning to learn: learner acquires skills of organizing own learning and collaborating with others when using print or digital media to search for information on ICT tools used in communication.</li> <li>● Digital literacy: learner develops skills of interacting with technology when using ICT tools to communicate.</li> </ul>				
<p><b>Values:</b></p> <ul style="list-style-type: none"> <li>● Respect: learner shows open-mindedness when brainstorming and presenting the meaning and importance of ICT tools in communication.</li> <li>● Responsibility: learner shows accountability when handling ICT tools to communicate.</li> </ul>				
<p><b>Pertinent and Contemporary Issues (PCIs):</b> Mental Health: learner develops emotional awareness to relate well with peers when brainstorming and presenting on the meaning and importance of ICT tools in communication.</p>				
<p><b>Link to Other Subjects:</b></p>				

The learner is able to relate communication concepts to communication skills in English.

**Suggested learning resources**

- Digital devices such as; computers, laptops, smart phones, tablets among others.
- Internet.
- Social media applications.

**Suggested Assessment Rubric**

<b>Level Indicator</b>	<b>Exceeds expectation</b>	<b>Meets expectation</b>	<b>Approaches expectation</b>	<b>Below expectation</b>
Ability to sign terms related to introduction to drawing as a mean of communication	Sign terms related to introduction to drawing as a mean of communication with exceptional accuracy demonstrating signing proficiency.	Signs terms related to introduction to drawing as a mean of communication accurately conveying the intended meaning clearly.	Signs terms related to introduction to drawing as a mean of communication with noticeable errors and inconsistencies in articulation.	Signs terms related to introduction to drawing as a mean of communication inaccurately and lacks clarity in articulation.
Ability to explain the importance of drawing as a means of communication	Comprehensively explains the importance of drawing as a means of communication	Explains the importance of drawing as a means of communication	Explains the importance of drawing as a means of communication leaving out a few details	Explains the importance of drawing as a means of communication leaving out many details

Ability to sketch 2D shapes using free hand.	Sketches 2D shapes using free hand with exceptional clarity	Sketches 2D shapes using free hand.	Sketches 2D shapes using free hand with a few unclear details	Sketches 2D shapes using free hand with many unclear details
Ability to use ICT tools to enhance communication	Proficiently uses ICT tools to enhance communication	Uses ICT tools to enhance communication	Uses some of the ICT tools to enhance communication	Uses only a few of the ICT tools to enhance communication

**STRAND 3: MATERIALS FOR PRODUCTION**

<b>Strand</b>	<b>Sub Strand</b>	<b>Specific Learning Outcomes</b>	<b>Suggested Learning Experiences</b>	<b>Suggested Key Inquiry Question(s)</b>
<b>3.0 Materials for Production</b>	<b>3.1 Introduction to Materials</b>  (6 lessons)	By the end of the sub strand, the learner should be to: a) sign terms related to introduction to materials in production, b) identify materials used in production, c) distinguish between metallic and non-metallic materials found in the locality, d) describe sustainable ways of using materials in production, e) appreciate the importance of materials in production.	<ul style="list-style-type: none"> <li>• In purposive groups, learners are guided to watch signed video clips or demonstrations on how to sign terms related to introduction to materials.</li> <li>• In pairs, learners are guided to fingerspell and sign terms related to introduction to materials in production.</li> <li>• In purposive groups, learners are guided to discuss and present on the meaning of materials used in production. Ensure a seating arrangement that supports total communication is adopted during the discussion. Also, provide learners with guiding questions to moderate the discussions.</li> <li>• In purposive groups, learners are guided to use print or digital media to search for information on materials used in production and share with peers,</li> <li>• In purposive groups, learners tour the</li> </ul>	How are materials used sustainably?



			<p>school compound to collect different types of materials within the school. Allow learners to collect this material, prior to the lesson.</p> <ul style="list-style-type: none"> <li>• In purposive groups, learners are guided to discuss the differences between metallic and non-metallic materials,</li> <li>• In purposive groups, learners are guided to sort out materials collected in the school as either metallic or non-metallic.</li> <li>• In purposive groups, learners are guided to use print and online resources to search for ways materials can be used in production.</li> <li>• In purposive groups, learners are guided to brainstorm and present sustainable ways of using materials they collected in the school in production.</li> <li>• In purposive groups, learners are guided to discuss and make a presentation on importance of materials used in production.</li> </ul>	
<p><b>Core competencies to be developed:</b></p> <ul style="list-style-type: none"> <li>• Self-Efficacy: learner develops effective communication skills when discussing and presenting the differences between metallic and non-metallic materials.</li> </ul>				

- **Critical Thinking and Problem Solving:** learner develops explanation, evaluation and decision-making skills while sorting out materials in the locality as either metallic or non-metallic.

**Values:**

- **Responsibility:** learner shows accountability as they use print or digital media to search for information on materials used in production.
- **Peace:** learner displays tolerance and respect for diversity when discussing and presenting the importance of materials used in production.

**Pertinent and Contemporary Issues (PCIs):**

- **Environmental Education:** learner acquires skills of protecting natural resources when brainstorming and presenting sustainable ways of using materials in production.

**Link to Other Subjects:**

Social Studies: learner enhances knowledge on economic activities such as mining, fishing and trade as they search for information on materials used in production.

**Suggested learning resources**

- Pre-Technical Studies handbook
- Digital devices such as; computers, laptops, smart phones, tablets among others
- Metallic and non-metallic materials
- Relevant approved textbooks and reference materials
- Photographs and pictures
- Charts

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
<b>3.0 Materials for Production</b>	<b>3.2 Metallic Materials</b>  (10 lessons)	By the end of the sub strand, the learner should be able to: <ol style="list-style-type: none"> <li>a) sign terms related to metallic materials used in production,</li> <li>b) identify types of metallic materials used in the immediate environment,</li> <li>c) describe the physical properties of metallic materials found in the immediate environment,</li> <li>d) relate metallic materials to their use in the immediate environment,</li> <li>e) appreciate the use of metallic materials in production.</li> </ol>	<ul style="list-style-type: none"> <li>• In purposive groups, learners are guided to use print and digital devices to identify key terms related to metallic materials used in a work environment.</li> <li>• In pairs, learners are guided to list, fingerspell and sign terms used in metallic materials used in a work environment.</li> <li>• In purposive groups, learners are guided to use print or digital media to search for information on metallic materials,</li> <li>• In purposive groups, learners are guided to prepare a checklist for identifying types of metallic materials (<i>steel, aluminium, copper</i>),</li> <li>• In purposive groups, learners are guided to watch a demonstration on how to examine the physical properties of metallic materials.</li> </ul>	How are metallic materials used in day-to-day life?

			<ul style="list-style-type: none"> <li>• In pairs, perform practical activities to examine the physical properties of metallic materials (<i>magnetism, conductivity of heat and electricity, appearance</i>). Where possible, pair a learner who is Deaf with Hard of hearing learners.</li> <li>• In purposive groups, learners are guided to discuss the physical properties of metallic materials,</li> <li>• In pairs, learners are guided to develop a chart matching metallic materials to their use in the immediate environment. Ensure the charts are of large print and minimised texts to allow learners with hearing impairment ample time to synthesize the information.</li> </ul>	
<p><b>Core competencies to be developed:</b></p>				

<ul style="list-style-type: none"> <li>• Digital Literacy: learner develops skills of interacting with technology when searching for information on metallic materials.</li> <li>• Communication and Collaboration: learner acquires speaking, listening, and teamwork skills when discussing the uses of metallic materials.</li> </ul>
<p><b>Values:</b></p> <ul style="list-style-type: none"> <li>• Unity: learner displays team spirit and collaboration with others while discussing the uses of metallic materials.</li> <li>• Responsibility: learner shows accountability by caring for the print or digital media when searching for information on metallic materials.</li> </ul>
<p><b>Pertinent and Contemporary Issues (PCIs):</b> Peer Education and Mentorship: the learner develops inter-personal relationships when performing practical activities to examine the physical properties of metallic materials.</p>
<p><b>Link to Other Subjects:</b> Integrated Science: learner enhances knowledge on properties of materials during discussion of physical properties of metallic materials.</p>
<ul style="list-style-type: none"> <li>• Metallic materials (steel, aluminium, copper)</li> <li>• brochures and magazines</li> <li>• Digital devices such as; computer, laptop, smart phone, tablets among others</li> </ul>

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
<b>3.0 Materials for Production</b>	<b>3.3 Non-Metallic Materials</b>  (10 lessons)	By the end of the sub strand, the learner should be able to: a) sign terms related to non-metallic materials used for production. b) identify non-metallic materials found in the locality, c) categorise non-metallic materials as either synthetic or natural, d) describe the physical properties of non-metallic materials found in the locality, e) relate non-metallic materials to their uses in the locality, f) appreciate the use of non-metallic materials in production.	<ul style="list-style-type: none"> <li>• In purposive groups, learners are guided to use print and non-print media to search of terms related to non-metallic materials used for production.</li> <li>• In purposive groups, learners are guided to watch signed videos or demonstrations on how to sign terms related to non-metallic materials used for production.</li> <li>• In pairs, learners are guided to fingerspell and sign terms related to non-metallic materials used for production.</li> <li>• In purposive groups, learners are guided to use print and non-print media to search for information on the meaning and characteristics of non-metallic materials.</li> <li>• Learners are guided to write summary notes on the meaning and characteristics of non-metallic materials. Ensure</li> </ul>	Why are non-metallic materials important?

			<p>learners are provided with supplementary notes on meaning and characteristics of non-metallic materials</p> <ul style="list-style-type: none"> <li>• In purposive groups, learners are guided to tour the school compound to collect non-metallic materials. Remind learners on the safety precautions observed when collecting non-metallic materials around the school compound</li> <li>• In purposive groups, learners are guided to sort non-metallic materials as either synthetic or natural.</li> <li>• In purposive groups, learners are guide to observes a demonstration, signed video, video with captions, or animations on how to examine physical properties of non-metallic materials.</li> <li>• In pairs, learners are guided to perform practical activities to examine the physical properties of non-metallic</li> </ul>	
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			<p>materials (<i>colour, texture, hardness, fire resistance</i>),</p> <ul style="list-style-type: none"> <li>• I purposive groups, learners are guided to develop a chart matching non- metallic materials to their use in the locality. Let the chats be clear and of minimal texts.</li> </ul>	
<p><b>Core competencies to be developed:</b></p> <ul style="list-style-type: none"> <li>• Critical Thinking and Problem Solving: learner develops evaluation and decision skills when sorting non-metallic materials as either synthetic or natural.</li> <li>• Creativity and Imagination: learner develops observation skills when performing practical activities to examine the physical properties of non-metallic materials.</li> </ul>				
<p><b>Values:</b></p> <ul style="list-style-type: none"> <li>• Peace: learner displays respect for self and peers when discussing non-metallic materials.</li> <li>• Unity: learner displays team spirit and collaboration with others when performing practical activities to examine the physical properties of non-metallic materials.</li> </ul>				
<p><b>Pertinent and Contemporary Issues (PCI's):</b>  Personal Safety and Security: learner observes safety precautions when performing practical activities to examine the physical properties of non-metallic materials.</p>				
<p><b>Link to Other Subjects:</b>  Integrated Science: learner enhances knowledge on use of matter during the matching of non- metallic materials to their use in the locality.</p>				
<ul style="list-style-type: none"> <li>• Non-Metallic materials (wood, plastics, ceramic, paper, rubber, glass, cement, stone)</li> <li>• Brochures and magazines</li> </ul>				



- Digital devices such as; computer, laptop, smart phone, tablets among others Digital devices such as; computer, laptop, smart phone, tablets among others

<b>Suggested Assessment Rubric</b>				
<b>Level</b> <b>Indicator</b>	<b>Exceeding expectation</b>	<b>Meets expectation</b>	<b>Approaching expectation</b>	<b>Below expectation</b>
Ability to sign terms related to materials used for production.	Signs terms related to metallic materials with exceptional accuracy demonstrating signing proficiency.	Signs terms related to materials used for production with accuracy demonstrating signing proficiency.	Signs terms related to materials used for production with noticeable errors and inconsistencies in articulation.	Signs terms related to materials used for production inaccurately and lacks clarity in articulation.
Ability to identify materials used in production	Identifies materials used in production citing applications	Identifies materials used in production	Identifies materials used in production citing some applications	Identifies materials used in production citing a few applications
Ability to describe the physical properties of metallic materials found in the immediate environment	Describes the physical properties of metallic materials found in the immediate environment citing examples	Describes the physical properties of metallic materials found in the immediate environment	Describes some of the physical properties of metallic materials found in the immediate environment	Describes only a few of the physical properties of metallic materials found in the immediate environment
Ability to relate non-metallic materials to their uses in the locality,	Relates non-metallic materials to their uses in the locality conclusively	Relates non-metallic materials to their uses in the locality	Relates some of the non-metallic materials to their uses in the locality	Relates a few of the non-metallic materials to their uses in the locality

## STRAND 4: TOOLS AND PRODUCTION

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
<b>4.0 Tools and Production</b>	<b>4.1 Measuring and Marking Out Tools</b>  (18 lessons)	By the end of the sub strand, the learner should be able to: a) sign measuring and marking out tools used to perform tasks in a work environment, b) identify measuring and marking out tools used to perform tasks, c) select measuring and marking out tools for a given task, d) use measuring and marking out tools to perform a given task, e) care for measuring and marking out tools to minimise damage, f) recognise the importance of measuring	<ul style="list-style-type: none"> <li>• In purposive groups, learners watch signed videos clips, animations or observe a demonstration on how to sign measuring and marking out tools used to perform tasks,</li> <li>• In purposive groups, learners are guided to fingerspell and sign measuring and marking out tools used to perform tasks</li> <li>• In purposive groups, learners are guided to use visual aids and realia to identify and select measuring and marking out tools in the work environment.  <i>(Tape measure, steel rule, divider, try-square, callipers, weighing balance, marking gauge, measuring cylinder, plumb bob, stop watch,</i> </li> </ul>	<ol style="list-style-type: none"> <li>1. Why are measuring and marking out tools important in day-to- day life?</li> <li>2. How are measuring and marking out tools used when performing tasks?</li> </ol>

		<p>and marking out tools when performing tasks.</p>	<p><i>ammeter, voltmeter, dot punch, scribe, pencil, marking knife)</i></p> <ul style="list-style-type: none"> <li>• In pairs, learners are guided to choose the appropriate measuring and marking out tools to perform a given task,</li> <li>• In purposive groups, learners are guided to use digital devices to watch captioned video clips on how to use measuring and marking out tools to perform specific tasks. In cases where videos are not captioned, ensure learners are supported by sign language interpretation. Also, the videos pause to allow the learner ample time to follow and interpret the videos.</li> <li>• In purposive groups, learners are guided to practise how to use measuring and marking out tools to perform specific tasks.</li> <li>• In purposive groups, learners are guided to use print and non-print media to search for information on care for and maintaining measures for measuring and marking out</li> </ul>	
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			<p>tools, under the tutelage of a resource person.</p> <ul style="list-style-type: none"> <li>Learners write a report on how to care for and maintain measuring and marking out tools in the work environment.</li> </ul>	
<p><b>Core competencies to be developed:</b></p> <ul style="list-style-type: none"> <li>Critical Thinking and Problem Solving: learner develops explanation, evaluation and decision-making skills when choosing the appropriate measuring and marking out tools to perform a given task.</li> <li>Self-Efficacy: learner develops self-awareness skills by showing a concerted attention to detail when performing specific tasks using measuring and marking out tools.</li> </ul>				
<p><b>Values:</b></p> <ul style="list-style-type: none"> <li>Respect: learner shows open-mindedness when discussing the use of measuring and marking out tools in the immediate environment.</li> <li>Responsibility: learner shows accountability by caring for measuring and marking out tools in the immediate environment.</li> </ul>				
<p><b>Pertinent and Contemporary Issues (PCIs):</b></p> <p>Disaster Risk Reduction: learner avoids situations that can lead to injuries when caring for measuring and marking out tools in the immediate environment.</p>				
<p><b>Link to Other Subjects:</b></p> <p>Mathematics: learner enhances the skill of measurement when performing specific tasks using measuring and marking out tools.</p>				
<p><b>Suggested learning resources</b></p> <ul style="list-style-type: none"> <li>Measuring tools (Tape measure, steel rule, callipers, weighing balance, stop watch, ammeter, voltmeter)</li> <li>Marking out tools (divider, try-square, marking gauge, dot punch, scribe, pencil, marking knife) in the immediate environment</li> </ul>				

- Brochures and magazines
- Digital devices such as; computer, laptop, smart phone, tablets among others

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
<b>4.0 Tools and Production</b>	<b>4.2 Computer Hardware</b>  (14 lessons)	By the end of the sub strand the learner should be able to: a) sign terms related to computer hardware in a user environment, b) classify computer hardware devices in a user environment, c) use computer hardware devices to carry out a given task, d) value the importance of computer hardware devices in a user environment.	<ul style="list-style-type: none"> <li>● Learner is guided to watch signed video clip or a demonstration on how to sign terms related to computer hardware in a user environment.</li> <li>● In purposive groups, learners are guided to fingerspell and sign terms related to computer hardware in a user environment.</li> <li>● In pairs, learners are guided to brainstorm and present on the meaning of the term ‘computer hardware.</li> <li>● In purposive group, learners are guided to use available resources to search for information on categories of computer hardware: input devices (<i>keying devices, pointing devices, scanning devices, voice input devices, touch screen, digitizer, digital cameras</i>)</li> <li>● In purposive group, learners are guided to use available resources</li> </ul>	How are computer hardware used?

			<p>to search for information on categories of computer hardware: output devices (<i>hardcopy and softcopy</i>), storage devices (<i>fixed and removable devices</i>),</p> <ul style="list-style-type: none"> <li>● In purposive groups, learners are guided to develop a chart matching available devices to their respective categories.</li> <li>● In purposive groups, learners are guided to perform various tasks using computer input, output and storage devices.</li> </ul>	
<p><b>Core competencies to be developed:</b></p> <ul style="list-style-type: none"> <li>● Communication and collaboration: learner acquires speaking, writing, listening, and teamwork skills when brainstorming and presenting on the meaning of the term ‘computer hardware’</li> <li>● Critical Thinking and Problem Solving: learner develops skills of interpretation and inference when categorising computer hardware.</li> </ul>				
<p><b>Values:</b></p> <ul style="list-style-type: none"> <li>● Peace: learner displays tolerance when performing tasks using computer hardware.</li> <li>● Responsibility: learner shows accountability when using available resources to search for information on categories of computer hardware.</li> </ul>				
<p><b>Pertinent and Contemporary Issues (PCIs):</b> Peer Education and Mentorship: learner enhances leadership skills when discussing the categories of computer hardware devices in a user environment.</p>				



**Link to other subjects:**

Integrated Science: learner enhances skills of connecting electric devices when connecting hardware devices.

**Suggested learning resources**

- Measuring tools (Tape measure, steel rule, callipers, weighing balance, stop watch, ammeter, voltmeter)
- Marking out tools (divider, try-square, marking gauge, dot punch, scribe, pencil, marking knife) in the immediate environment
- Brochures and magazines
- Digital devices such as; computer, laptop, smart phone, tablets among others

<b>Suggested Assessment Rubric</b>				
<b>Level</b> <b>Indicator</b>	<b>Exceeds expectation</b>	<b>Meets expectation</b>	<b>Approaches expectation</b>	<b>Below expectation</b>
Ability to sign terms related to tools and production.	Signs terms related to tools and production. with exceptional accuracy demonstrating signing proficiency.	Signs terms related to tools and production. accurately conveying the intended meaning clearly.	Signs terms related to tools and production with noticeable errors and inconsistencies in articulation.	Signs terms related to tools and production. inaccurately and lacks clarity in articulation.
Ability to identify measuring and marking out tools used to perform tasks	Identifies measuring and marking out tools used to perform tasks distinctively	Identifies measuring and marking out tools used to perform tasks	Identifies measuring and marking out tools used to perform tasks leaving out a few	Identifies measuring and marking out tools used to perform tasks leaving out many
Ability to use measuring and marking out tools to perform a given task	Uses measuring and marking out tools to perform a given task with high precision	Uses measuring and marking out tools to perform a given task	Uses measuring and marking out tools to perform a given task with a few errors	Uses measuring and marking out tools to perform a given task with many errors
Ability to use computer hardware devices to carry out a given task,	Proficiently uses computer hardware devices to carry out a given task	Uses computer hardware devices	Uses some of the computer hardware	Uses only a few of the computer hardware

		to carry out a given task	devices to carry out a given task	devices to carry out a given task
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## STRAND 5: ENTREPRENEURSHIP

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
5.0 Entrepreneurship	<b>5.1 Introduction to Entrepreneurship</b> (4 lessons)	By the end of the sub strand, the learner should be able to: a) sign terms related to introduction to entrepreneurship b) explain the importance of entrepreneurship in the community, c) describe the qualities of an entrepreneur in business, d) explore sources of business ideas for a business venture, e) appreciate the role of entrepreneurship in a community.	<ul style="list-style-type: none"> <li>• In purposive groups, learners are guided to use print and non-print media to search for key terms related to entrepreneurship.</li> <li>• In purposive groups learners are guided to watch signed videos or demonstrations on how to sign terms related to introduction to entrepreneurship.</li> <li>• In pairs, learners are guided fingerspell and sign terms related to introduction to entrepreneurship.</li> <li>• In purposive groups, learners are guided to brainstorm and present the meaning of the term's 'entrepreneur' and 'entrepreneurship,</li> <li>• Using appropriate sitting arrangement that supports</li> </ul>	1. Why is entrepreneurship important in the community? 2. What are the qualities of an entrepreneur?

			<p>bilingual communication, learners are guided to discuss and present on the importance of entrepreneurship in the community,</p> <ul style="list-style-type: none"><li>• In purposive groups, learners are guided to use print or digital resources to search for information on qualities of an entrepreneur,</li><li>• In purposive groups, learners are guided to conduct self-assessment on entrepreneurial qualities.</li><li>• In purposive groups, learners are guided to use print and non-print media to search for and present the meaning and sources of business ideas,</li><li>• In purposive groups, learners are guided to discuss the role of entrepreneurship in a community.</li></ul>	
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**Core Competencies to be developed:**

- Communication and collaboration: learner acquires speaking, writing, listening, and teamwork skills when brainstorming and presenting on the meaning the meaning of the terms ‘entrepreneur’ and ‘entrepreneurship’.
- Critical Thinking and Problem Solving: learner acquires evaluation and decision-making skills when conducting self-assessment on entrepreneurial qualities.

**Values:**

- Unity: learner displays team spirit when discussing and presenting the importance of entrepreneurship to an individual and community.
- Responsibility: learner engages in use available resources to search for and present the meaning and sources of business ideas.

**Pertinent and Contemporary Issues (PCIs):**

- Financial Literacy: learner develops entrepreneurial skills when conducting self-assessment on entrepreneurial qualities.

**Link to Other Subjects:**

- Social Studies: learner enhances knowledge on trading activities when discussing the role of entrepreneurship in a community.

**Suggested learning resources**

- Digital devices such as; computers, laptops, smart phones, tablets among others
- Relevant approved textbooks and reference materials
- Photographs and pictures
- Charts

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
5.0 Entrepreneurship	<b>5.2 Production Unit</b>  (6 lessons)	By the end of the sub strand, the learner should be able to: a) sign terms related to production unit as used in entrepreneurship, b) explain the factors considered when locating a production unit, c) analyse the factors determining the size of a production unit, d) value the importance of locating a production unit in a suitable area.	<ul style="list-style-type: none"> <li>● In purposive groups, learners are guided to use print and non-print media to search for terms related to production unit as used in entrepreneurship.</li> <li>● In purposive group, learners are guided to fingerspell and sign terms related to production unit as used in entrepreneurship. Provide learners with one-on-one demonstration on how the terms are signed.</li> <li>● In purposive groups, learners are guide to discuss the meaning of the term ‘production unit’ and present to peers,</li> <li>● In purposive groups, learners are guided to brainstorm and present the factors considered when choosing the location of a production unit,</li> <li>● In purposive groups, learners are guided to visit the local</li> </ul>	How is the size of a production unit determined?

			<p>community to assess the factors that influenced the location of a particular production unit. (<i>Posho mill, salon, barber shop, welding, cybercafé</i>). Ensure learners are provided with sign language instruction. Also, learners can interact with the community through writing.</p> <ul style="list-style-type: none"> <li>● Learners are guided to write a summarized report on the factor that influence the location of the product unit they visited.</li> </ul>	
<p><b>Core competencies to be developed:</b></p> <ul style="list-style-type: none"> <li>● Communication and collaboration: learner acquires speaking, writing, listening, and teamwork skills when discussing and presenting on the meaning of the term ‘production unit’.</li> <li>● Critical Thinking and Problem Solving: learner acquires interpretation and inference skills when visiting the local community to assess the factors that influenced the location of a particular production unit.</li> </ul>				
<p><b>Values:</b></p> <ul style="list-style-type: none"> <li>● Responsibility: learner shows accountability when using print or digital media to search for information on the factors that determine its size and share with peers.</li> <li>● Respect: learner shows regard for the input of every member when brainstorming and presenting on the factors considered when choosing the location of a production unit.</li> </ul>				
<p><b>Pertinent and Contemporary Issues (PCIs):</b>  Financial Literacy: learner develops entrepreneurial skills when brainstorming and presenting the factors considered when choosing the location of a production unit.</p>				



**Link to Other Subjects:**

Social Studies: learner enhances knowledge on trade when brainstorm on factors considered when choosing the location of a production unit.

**Suggested learning resources**

- Approved textbooks
- Digital devices,
- Brochures
- Pictures
- Charts

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
<b>5.0 Entrepreneurship</b>	<b>5.3 Financial Goals</b>  (10 lessons)	By the end of the sub strand, the learner should be able to: a) sign terms related to financial goals in financial management, b) explain the importance of setting goals in financial management, c) analyse the factors to consider when setting financial goals, d) formulate financial goals for individual development, e) observe financial discipline in financial management.	<ul style="list-style-type: none"> <li>• In purposive groups, learners are guided to use print and non-print media to search for key terms related to financial goals in financial management.</li> <li>• In purposive groups, learners are guided to watch signed videos or demonstrations on how to fingerspell and sign terms related to financial goals in financial management.</li> <li>• In pairs, learners are guided to fingerspell and sign terms related to financial goals in financial management.</li> <li>• In purposive groups, learners are guided to use print and non-discuss and present the meaning and importance of setting goals in financial management.</li> <li>• In purposive groups, learners</li> </ul>	<ol style="list-style-type: none"> <li>1. Why is it important for an individual to set financial goals?</li> <li>2. What are the factors to consider when setting financial goals?</li> </ol>

			<p>discuss and present the importance of financial discipline.</p> <ul style="list-style-type: none"> <li>• In purposive groups, learners are guided to brainstorm and present on the factors to consider when setting financial goals.</li> <li>• In purposive groups, learners use print or digital media to search for information on setting financial goals.</li> <li>• In purposive group, learners are guided to set Specific Measurable Achievable Realistic and Time bound (SMART) financial goals. Provide learners with one-on-one demonstration on how to develop a SMART financial goal.</li> </ul>	
<p><b>Core competencies to be developed:</b></p> <ul style="list-style-type: none"> <li>• Self-Efficacy: learner acquires the skill of task execution when setting SMART financial goals.</li> <li>• Critical Thinking and Problem Solving: learner acquires interpretation and inference skills when brainstorming on the factors to consider when setting financial goals.</li> </ul>				

<p><b>Values:</b></p> <ul style="list-style-type: none"> <li>• Responsibility: learner engages in assigned roles and duties when discussing and presenting on the meaning and importance of goal setting as used in financial management.</li> <li>• Respect: learner shows regard for the input of every member when brainstorming and presenting on the factors to consider when setting financial goals.</li> </ul>
<p><b>Pertinent and Contemporary Issues (PCIs):</b>  Financial Literacy: learner acquires financial skills when setting SMART financial goals.</p>
<p><b>Link to Other Subjects:</b>  Social Studies: learner enhances skills of personal goal setting when setting SMART financial goals.</p>
<p><b>Suggested learning resources</b></p>
<p><b>Suggested Assessment Rubric</b></p> <ul style="list-style-type: none"> <li>• Digital devices such as; computers, laptops, smart phones, tablets among others</li> <li>• Relevant approved textbooks and reference materials</li> <li>• Photographs and pictures</li> <li>• Charts</li> </ul>

<b>Level Indicator</b>	<b>Exceeds expectation</b>	<b>Meets expectation</b>	<b>Approaches expectation</b>	<b>Below expectation</b>
Ability to sign terminologies related to concepts of entrepreneurship.	Signs terminologies related to concepts of entrepreneurship with exceptional accuracy demonstrating signing proficiency.	Signs terminologies related to concepts of entrepreneurship accurately conveying the intended meaning clearly.	Signs terminologies related to concepts of entrepreneurship with noticeable errors and inconsistencies in articulation.	Signs terminologies related to concepts of entrepreneurship inaccurately and lacks clarity in articulation.
Ability to describe the qualities of an entrepreneur in business	Describes more than five qualities of an entrepreneur in business	Describes four to five qualities of an entrepreneur in business	Describes two to three qualities of an entrepreneur in business	Describes at most one qualities of an entrepreneur in business
Ability to explore sources of generating business ideas for a business venture	Explores three sources of generating business ideas for a business venture	Explores three sources of generating business ideas for a business venture	Explores two sources of generating business ideas for a business venture.	Explores at most one source of generating business ideas for a business venture.
Ability to analyse factors determining the size of a production unit,	Analyses more than four factors determining the size of a production unit,	Analyses four factors determining the size of a production unit,	Analyses two or three factors determining the size of a production unit,	Analyses at most one factor determining the size of a production unit,

## APPENDIX 1: GUIDELINES FOR INTEGRATING COMMUNITY SERVICE LEARNING (CSL) PROJECT

### Introduction

Community Service Learning (CSL) is an experiential learning strategy that integrates classroom learning and community service to enable learners reflect, experience and learn from the community. The CSL activity is hosted as a strand in Social Studies. The Social Studies teacher will be expected to coordinate teachers from other learning areas to carry out the integrated CSL class activity. Learners will be expected to apply knowledge, skills, attitudes and values from the different Learning Areas to undertake the integrated CSL class activity. Learners will undertake **one common** integrated class CSL activity following a 6-step milestone approach that is:

Milestone	Description
Milestone 1	<b>Problem Identification</b> Learners study their community to understand the challenges faced and their effects on community members.
Milestone 2	<b>Designing a solution</b> Learners create an intervention to address the challenge identified.
Milestone 3	<b>Planning for the Project</b> Learners share roles, create a list of activities to be undertaken, mobilise resources needed to create their intervention and set timelines for execution
Milestone 4	<b>Implementation</b> The learners execute the project and keep evidence of work done.

Milestone 5	<p><b>Showcasing /Exhibition and Report Writing</b>  Exhibitions involve showcasing learners’ project items to the community and reflecting on the feedback</p> <p>Learners write a report detailing their project activities and learnings from feedback</p>
Milestone 6	<p><b>Reflection</b>  Learners review all project work to learn from the challenges faced.  They link project work with academic concepts, noting how the concepts enabled them to do their project as well as how the project helped to deepen learning of the academic concepts.</p>

### **Assessment of CSL integrated Activity**

Assessment for the integrated CSL activity will be conducted formatively. The assessment will consider both the process and end product. This entails assessing each of the milestone stages of the integrated CSL class activity. It will focus on 3 components namely: skills from various learning areas applied in carrying out the activity, core competencies developed and values nurtured.



**APPENDIX 2: SUGGESTED ASSESSMENT METHODS, LEARNING RESOURCES AND NON-FORMAL ACTIVITIES**

<b>Strands</b>	<b>Sub Strands</b>	<b>Suggested Assessment Methods</b>	<b>Suggested Learning Resources</b>	<b>Suggested Non- Formal Activities</b>
<b>1.0 Foundations of Pre -Technical Studies</b>	<b>1.1 Introduction to Pre-Technical Studies</b>	<ul style="list-style-type: none"> <li>• Oral/ signed Question and Answer</li> <li>• Observation</li> <li>• Written test</li> <li>• Practical work</li> <li>• Peer and self-assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Pre-Technical Studies curriculum design</li> <li>• Pre-Technical Studies handbook</li> <li>• Digital devices such as; computers laptops, smart phones, tablets among others</li> <li>• Relevant approved textbooks and reference materials</li> <li>• Photographs and pictures</li> <li>• Charts</li> </ul>	<ul style="list-style-type: none"> <li>• Discuss the role of pre-technical studies in clubs and societies.</li> </ul>
	<b>1.2 Safety in the Immediate environment</b>	<ul style="list-style-type: none"> <li>• Oral/signed Question and Answer</li> <li>• Observation</li> <li>• Written test</li> </ul>	<ul style="list-style-type: none"> <li>• Workshop attires such as; overcoats, aprons, shoes, goggles among others</li> </ul>	<ul style="list-style-type: none"> <li>• Learners visit the locality to observe how workers practice safety as they perform tasks</li> </ul>

		<ul style="list-style-type: none"> <li>• Practical work</li> <li>• Peer and self-assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Career brochures, career magazines</li> <li>• Digital devices such as; computers, laptops, smart phones, tablets among others</li> </ul>	<ul style="list-style-type: none"> <li>• Debate in clubs and societies on safety in the immediate environment</li> </ul>
	<b>1.3 Computer Concepts</b>	<ul style="list-style-type: none"> <li>• Oral/signed Question and Answer</li> <li>• Observation</li> <li>• Written test</li> <li>• Practical work</li> <li>• Peer and self-assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Course books,</li> <li>• Computer user manuals,</li> <li>• Internet,</li> <li>• video clips</li> <li>• Digital devices such as; computers, laptops, smart phones, tablets among others.</li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrate how to use ICT tools (Calculators, Smartphones, Tablets, DVD players, Digital watches) during clubs and societies</li> </ul>
<b>2.0 Communication in Pre-Technical Studies</b>	<b>2.1 Introduction to Drawing</b>	<ul style="list-style-type: none"> <li>• Oral/signed Question and Answer</li> <li>• Observation</li> <li>• Written test</li> <li>• Peer and self-assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Drawing charts</li> <li>• Drawing papers/books</li> <li>• brochures and magazines</li> <li>• Geometrical set</li> </ul>	<ul style="list-style-type: none"> <li>• Learners visit the locality to observe how different types of drawings are done and how they are used in the community learners discuss on types of drawing in out of class school</li> </ul>

				programmes
	<b>2.2 Freehand sketching</b>	<ul style="list-style-type: none"> <li>• Checklist</li> <li>• Observation</li> <li>• Peer and self-assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Drawing charts</li> <li>• Drawing pencils,</li> <li>• Drawing papers/books</li> </ul>	<ul style="list-style-type: none"> <li>• Learners to practise freehand drawing during clubs</li> </ul>
	<b>2.3 ICT tools in communication</b>	<ul style="list-style-type: none"> <li>• Oral/signed Question and Answer</li> <li>• Observation</li> <li>• Written test</li> <li>• Peer and self-assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Digital devices such as; computers, laptops, smart phones, tablets among others.</li> <li>• Internet</li> <li>• Social media applications</li> </ul>	<ul style="list-style-type: none"> <li>• Social media charting</li> <li>• Video conferencing</li> </ul>
<b>3.0 Materials for Production</b>	<b>3.1 introduction to materials</b>	<ul style="list-style-type: none"> <li>• Oral/signed Question and Answer</li> <li>• Observation</li> <li>• Written test</li> <li>• Peer and self-assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Pre-Technical Studies handbook</li> <li>• Digital devices such as; computers, laptops, smart phones, tablets among others</li> <li>• Metallic and non-metallic materials</li> <li>• Relevant approved textbooks and reference materials</li> </ul>	<ul style="list-style-type: none"> <li>• Carry out activity involving sorting materials during clubs and societies</li> </ul>

			<ul style="list-style-type: none"> <li>• Photographs and pictures</li> <li>• Charts</li> </ul>	
	<b>3.2 Metallic Materials</b>	<ul style="list-style-type: none"> <li>• Oral/signed Question and Answer</li> <li>• Observation</li> <li>• Written test</li> <li>• Peer and self-assessment</li> <li>• Practical work</li> </ul>	<ul style="list-style-type: none"> <li>• Metallic materials (steel, aluminium, copper)</li> <li>• brochures and magazines</li> <li>• Digital devices such as; computer, laptop, smart phone, tablets among others</li> </ul>	<ul style="list-style-type: none"> <li>• Learners visit local community and collect metallic materials and write down how each is used by the local community</li> <li>• Discuss the uses of metallic materials in clubs and societies</li> </ul>
	<b>3.3 Non-Metallic Materials</b>	<ul style="list-style-type: none"> <li>• Oral/signed Question and Answer</li> <li>• Observation</li> <li>• Written test</li> <li>• Peer and self-assessment</li> <li>• Practical work</li> </ul>	<ul style="list-style-type: none"> <li>• Non-Metallic materials (wood, plastics, ceramic, paper, rubber, glass, cement, stone)</li> <li>• brochures and magazines</li> <li>• Digital devices such as; computer, laptop, smart phone, tablets among others</li> </ul>	<ul style="list-style-type: none"> <li>• Learners visit local community and collect non-metallic materials and write down how each is used by the local community</li> <li>• Discuss the uses of non-metallic materials in clubs and societies</li> </ul>

			Digital devices such as; computer, laptop, smart phone, tablets among others	
<b>4.0 Tools and Production</b>	<b>4.1 Measuring and Marking Out Tools</b>	<ul style="list-style-type: none"> <li>• Oral/signed Question and Answer</li> <li>• Observation</li> <li>• Written test</li> <li>• Peer and self-assessment</li> <li>• Practical work</li> </ul>	<ul style="list-style-type: none"> <li>• Measuring tools (Tape measure, steel rule, callipers, weighing balance, stop watch, ammeter, voltmeter)</li> <li>• Marking out tools (divider, try-square, marking gauge, dot punch, scribe, pencil, marking knife) in the immediate environment</li> <li>• brochures and magazines</li> <li>• Digital devices such as; computer, laptop, smart phone, tablets</li> </ul>	<ul style="list-style-type: none"> <li>• Learners visit locality to observe the use of measuring and marking out tools in performing different tasks</li> <li>• Discuss the uses of measuring and marking out tools in clubs and societies</li> </ul>

			among others	
	<b>4.2 computer hardware</b>	<ul style="list-style-type: none"> <li>• Oral/signed Question and Answer</li> <li>• Observation</li> <li>• Written test</li> <li>• Practical work</li> <li>• learner's profile</li> <li>• peer and self-assessment</li> <li>• portfolio</li> </ul>	<ul style="list-style-type: none"> <li>• computer hardware</li> <li>• Approved textbooks</li> <li>• Internet connectivity</li> <li>• video and audio clips</li> <li>• Charts and pictures</li> </ul>	<ul style="list-style-type: none"> <li>• community sensitisation on the use of computer hardware</li> <li>• Field visits</li> </ul>
<b>5.0 Entrepreneurship</b>	<b>5.1 Introduction to Entrepreneurship</b>	<ul style="list-style-type: none"> <li>• Oral/signed Question and Answer</li> <li>• Observation</li> <li>• Written test</li> <li>• Peer and self-assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Pre-Technical Studies curriculum design</li> <li>• Pre-Technical Studies handbook</li> <li>• Digital devices such as; computers, laptops, smart phones, tablets among others</li> <li>• Relevant approved textbooks and reference materials</li> <li>• Photographs and pictures</li> </ul>	<ul style="list-style-type: none"> <li>• Discuss business ideas and opportunities in financial literacy and other school clubs and societies</li> <li>• Organised and planned field visits in the local community to engage with entrepreneurs</li> <li>• Participate in a talk by a volunteer resource person on the qualities of an entrepreneur</li> <li>•</li> </ul>

			<ul style="list-style-type: none"> <li>• Charts</li> </ul>	
	<b>5.2 production unit</b>	<ul style="list-style-type: none"> <li>• Question and answer</li> <li>• learner's profile</li> <li>• written tests</li> <li>• observation</li> <li>• Peer and self-assessment</li> </ul>	<ul style="list-style-type: none"> <li>• Approved textbooks</li> <li>• Digital devices, brochures</li> <li>• pictures</li> <li>• charts</li> </ul>	<ul style="list-style-type: none"> <li>• Field visits activities</li> <li>• Business clubs</li> </ul>
	<b>5.3 Financial Goals</b>	<ul style="list-style-type: none"> <li>• Oral/signed Question and Answer</li> <li>• Observation</li> <li>• Written test</li> <li>• Peer and self-assessment</li> <li>• Practical work</li> </ul>	<ul style="list-style-type: none"> <li>• Pre-Technical Studies curriculum design</li> <li>• Pre-Technical Studies handbook</li> <li>• Digital devices such as; computers, laptops, smart phones, tablets among others</li> <li>• Relevant approved textbooks and reference materials</li> <li>• Photographs and pictures</li> <li>• Charts</li> </ul>	<ul style="list-style-type: none"> <li>• Discuss on factors to consider when setting financial goals in financial literacy and other school clubs and societies</li> <li>• Participating in a talk by a volunteer resource person setting financial goals</li> <li>• Posters with messages on SMART financial goals</li> </ul>

