



REPUBLIC OF KENYA
MINISTRY OF EDUCATION

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



KENYA INSTITUTE OF CURRICULUM DEVELOPMENT
A Skilled and Ethical Society

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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 rationalisation and review of the basic education curriculum.

The reviewed Grade seven curriculum designs for learners with visual impairments build on competencies attained by learners at Primary school level. Emphasis at this grade is the development of skills for exploration and making informed decisions on pathways based on careers.

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,
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PREFACE

The Ministry of Education (MoE) nationally implemented Competency Based Curriculum (CBC) in 2019. Grade seven is the first grade of Junior school while Grade 9 is the final grade of the level in the reformed education structure.

The reviewed Grade seven curriculum furthers implementation of the CBC from Primary Education 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 seven curriculum designs for learners with visual impairments 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 seven and prepare them for smooth transition to Grade eight. Furthermore, it is my hope that teachers will use the adapted designs to make learning interesting, exciting and enjoyable.

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ACKNOWLEDGEMENT

The Kenya Institute of Curriculum Development (KICD) Act Number 4 of 2013 (Revised 2019) mandates the Institute to develop and review 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 21st 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 seven curriculum designs for learners with visual impairments 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 panellists; the Semi-Autonomous Government Agencies (SAGAs) and representatives of various stakeholders for their roles in the development and adaptation of the Grade seven curriculum designs for learners with visual impairments 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 seven and preparation of learners with visual impairments for transition to Grade eight.

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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 FOR JUNIOR SCHOOL

S/ No.	Learning Area	Lesson
1.	English for Learners with Visual Impairment	5
2.	Kiswahili for Learners with Visual Impairment	4
3.	Mathematics for Learners with Visual Impairment	5
4.	Religious Education	4
5.	Integrated Science for Learners with Visual Impairment	5
6.	Agriculture & Nutrition for Learners with Visual Impairment	4
7.	Social Studies for Learners with Visual Impairment	4
8.	Creative Arts and sports for Learners with Visual Impairment	5
9	Pre- technical Studies for learners with Visual Impairment	4
10.	Pastoral/ Religious Instruction Programme	1
	Total	41

NOTE: Braille skills for learners with Blindness to be implemented as Non formal (Co-Curricular) Programmes

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 visual impairment is an integrated learning area at junior school comprising Pre-Technical Studies, Business Studies and Computer Studies. It covers Foundations of Pre-Technical Studies, Communication in the work environment, materials of production, tools and production and entrepreneurship. Learning experiences have been adapted and broken down into smaller deliverable steps to aid the learner with visual impairment. It is intended to equip the learner with 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 and the UN Convention on rights of persons with disabilities 2006. It is also informed by the National ICT Policy of Kenya 2016 (revised 2020) and the PWPER recommendations on the need for adaptation of curriculum and assessment of Special Needs Education.

Pre-Technical Studies for learners with visual 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.

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.
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 work 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

Strands	Sub Strands	Suggested Number of Lessons
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
Total Number of Lessons		120

STRAND 1.0: FOUNDATIONS OF PRE-TECHNICAL STUDIES

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
1.0 Foundations of Pre - Technical Studies.	1.1 Introduction to Pre-Technical Studies	By the end of the Sub Strand, the learner should be able to: a) identify the components of Pre-Technical Studies as a learning area, b) explain the role of Pre-Technical Studies in day-to-day life, c) embrace Pre-Technical Studies in career development.	<ul style="list-style-type: none"> ● Learner with low vision watches while a learner with blindness listens to an audio-visual clip on the components of Pre-Technical Studies. ● Learner brainstorms on the components of Pre-Technical Studies as a learning area and notes down their findings. ● Learner with low vision is guided to use a digital device with assistive technology or relevant print with appropriate colour contrast and font size, learner with blindness is guided to use a digital device with assistive technology or braille resources to search on the role of Pre-Technical Studies in day-to-day life. ● Learners discuss and present the role of Pre-Technical Studies in day-to-day life. ● In groups, learners debate on the role of Pre-Technical Studies in day-to-day life. 	Why is Pre-Technical Studies an important field of study?
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> ● Communication and collaboration: A learner develops writing, speaking, listening, reading and teamwork skills as they discuss and present on the role of Pre-Technical Studies. ● Critical thinking and problem solving: A learner develops open-mindedness and creativity skills as they brainstorm and discuss the 				

components of Pre-Technical Studies as a learning area.

- Digital literacy: A learner develops digital skills as they use digital devices with assistive technology to search for the role of Pre-Technical Studies.

Values:

- Unity: Learners display team spirit and collaboration with others as they discuss and present the role of Pre-Technical Studies in day-to-day life.
- Respect: Learners display tolerance and respect for each other's opinion as they debate on the role of Pre-Technical Studies in day-to-day life.

Pertinent and Contemporary Issues (PCIs):

Citizenship: Learners understand the importance of social cohesion as they debate on the role of Pre-Technical Studies.

Link to other Learning Area:

English: A learner uses English vocabulary to express themselves during presentation and debate.

Suggested learning resources:

- Smart phone.
- Digital devices with assistive technology.
- Print and Braille Pre-Technical Studies textbooks.
- Newspapers and Flash disk.

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
1.0 Foundations of Pre - Technical Studies.	1.2 Safety in the work environment	<p>By the end of the Sub Strand, the learner should be able to:</p> <ul style="list-style-type: none"> a) identify potential safety threats in a work environment, b) outline safety rules and regulations in the work environment, c) observe safety for self and others in a work environment, d) observe safety in a work environment. 	<ul style="list-style-type: none"> ● Learners brainstorm on potential physical and online safety threats in a work environment and make short notes. ● Learner with low vision is guided to make charts and pictures with appropriate colour contrast while learner with blindness are guided to make tactile charts and embossed pictures of safety threats in the workplace, to identify various potential threats in a work environment. ● Learner with low vision uses a digital device with assistive technology and print media with appropriate colour contrast and font size to search for information on threats in a work environment and list them (cyberbullying, fraud, phishing, eavesdropping, hacking, friend requests from unknown people), a learner with blindness uses a digital device with assistive technology and braille resources to search for information on threats in a work environment and list them (cyberbullying, fraud, phishing, eavesdropping, hacking, friend requests 	<ol style="list-style-type: none"> 1. Why is safety in the work environment important? 2. How do users safeguard themselves from online threats?

			<p>from unknown people).</p> <ul style="list-style-type: none"> ● Learners share ideas and practices on how to keep personal and sensitive data from the public when online. ● Learners with low vision are guided to use digital devices with assistive technology or print with appropriate colour contrast and font size to search for information on safety rules and regulations in the work environment, learners with blindness are guided to use digital devices with assistive technology or braille resources to search for information on safety rules and regulations in the work environment. ● Learners discuss safety rules and regulations in a work environment. ● Learners with low vision write down rules and regulations in a work environment on flip charts, learners with blindness create tactile charts on the rules and regulations in a work environment. ● In groups learner's role play on safety for self and others in a work environment. Provide one on one demonstration for learners with blindness for tasks that require demonstration. 	
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Core competencies to be developed:

- Communication and Collaboration: A learner develops the skill to listen, speak and teamwork during group discussions, sharing ideas, brainstorming and demonstration on safety rules and regulations in a workplace. learner develops sharing learnt knowledge as she or he takes turns with peers in sharing ideas on safety for self and others in the work environment.
- Self-efficacy: A learner develops effective communication skills when taking turns to share information on the online threats experienced when using a computer.
- Digital literacy: A learner develops searching, evaluating, using and sharing digital information skills during the use of digital media with assistive technology to search for online threats in a work environment and list them (cyberbullying, fraud, phishing, eavesdropping, hacking, friend requests from unknown people).

Values:

- Love: Learners develop self-sacrifice and sharing skills during role play on safety for self and others in a work environment.
- Respect: Learners appreciate diverse opinions while sharing information with peers on the online threats experienced when using a computer.
- Responsibility: Learners observe safety while role playing on safety for self and others in a work environment.

Pertinent and Contemporary Issues (PCIs):

Socio-economic issues: Safety and security awareness is enhanced as learners share ideas and practices on how to keep personal and sensitive data while online.

Link to other Learning Area:

Integrated Science: A learner relates safety in the work environment to safety in a laboratory.

Suggested learning resources:

- Digital devices with assistive technology.
- Print and Braille Pre-Technical Studies textbooks.
- Embossed pictures, pictures, tactile charts and charts.

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
1.0 Foundations of Pre-Technical Studies.	1.3 Computer concepts	By the end of the Sub Strand the learner should be able to: <ol style="list-style-type: none"> a) explain the characteristics of a computer in a user environment, b) classify computers in a user environment, c) use different types of available computers with assistive technology in the user environment, d) acknowledge the importance of different types of computers in a user environment. 	<ul style="list-style-type: none"> ● Learner brainstorms on the meaning of the terms; computer, data and information and share with peers in class. ● Learner with low vision is guided to use a digital device with assistive technology or print with appropriate colour contrast and font size to search for the meaning of the terms; computer, data and information, learner with blindness uses a digital device with assistive technology or braille resources to search for the meaning of the terms; computer, data and information. ● In groups, learners discuss the characteristics of a computer (speed, accuracy, versatility, reliability, diligence, storage, consistency, automation, remembrance power, logic). ● Learners with low vision use available relevant print resources with appropriate colour contrast and font size to search and list the advantages and disadvantages of using computers in day-to-day life, learners with blindness use braille resources to search and list the advantages and disadvantages of using computers in day-to-day life. 	<ol style="list-style-type: none"> 1. Why are there different classes of computers? 2. How are computers classified?

			<ul style="list-style-type: none"> ● Learners with low vision are guided to download and watch audio-visual clips on classification of computers while learners with blindness are guided to download and listen to audio clips on classification of computers. ● In groups, learners discuss classification of computers (functionality, purpose and size) in a user environment and present for peer assessment. ● Learners match different types of computers with their respective classes. (Learners with blindness be paired with sighted learners) ● Learners is guided to use different types of available computers (calculator, mobile phone, tablet) with assistive technology in the user environment. Provide one on one demonstration for a learner with blindness on how to use an adapted calculator to perform arithmetic tasks. 	
<p>Core competencies:</p> <ul style="list-style-type: none"> ● Critical thinking and problem solving: A learner demonstrates open mind to new ideas and opinions as they brainstorm with peers on the meaning of the terms; computer, data and information. ● Communication and collaboration: A learner develops teamwork skills as they work with peers as a team in discussing the types of computers in a user environment. ● Digital literacy: A learner develops digital skills as they search for information on different types of computers and downloads audio-visual clips on classification of computers. 				
<p>Values:</p>				

Peace: Learners display tolerance during discussion on classification of computers.

PCIs:

Safety and security: Learners enhance cyber security as they access the internet, download and watch or listen to audio-visual clips on classification of computers.

Link to other Learning Area:

English: A learner applies English language terms as they interact and shares ideas, opinions and feelings during group activities.

Suggested learning resources:

- Print and Braille Pre-Technical Studies textbook.
- Smartphone.
- Computer.
- Calculator.
- Recorded Audio-visual clips.

Suggested Assessment Rubric

Level Indicator	Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Ability to explain the role of pre- technical studies in day- to- day life.	Explains 5 roles of pre-technical studies in day- to -day life.	Explains 4 roles of pre-technical studies in day- to -day life.	Explains 3 roles or pre-technical studies in day- to- day life.	Explains less than 3 roles of pre-technical studies in day- to -day life.
Ability to observe safety in the work environment.	Observes 8 safety measures in the work environment.	Observes 5 -7 safety measures in the work environment.	Observes 2 – 4 safety measures in the work environment.	Observes less than 2 safety measures in the work environment.
Ability to use different types of available computers with assistive technology in the user environment.	Uses 4 different types of available computers with assistive technology in the user environment.	Uses 3 different types of available computers with assistive technology in the user environment.	Uses 2 different types of available computers with assistive technology in the user environment.	Uses less than 2 different types of available computers with assistive technology in the user environment.

STRAND 2:0 COMMUNICATION IN PRE-TECHNICAL STUDIES

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
<p>2.0 Communication in Pre-Tech Studies.</p>	<p>2.1 Introduction to Drawing</p>	<p>By the end of the sub strand, the learner should be able to:</p> <ol style="list-style-type: none"> a) explain the importance of drawing as a means of communication, b) distinguish between artistic and technical drawings used in technical fields, c) print numbers and letters of the alphabet as used in drawing, d) draw types of lines used in drawing, e) illustrate symbols and abbreviations used in drawing, f) appreciate the role of drawing in communication. 	<ul style="list-style-type: none"> • In groups, learners discuss the importance of drawing as a means of communication. • Learner brainstorms on the meaning of the terms ‘technical drawing’ and ‘artistic drawing’ and shares with peers. • Learners use print or digital resources with assistive technology to search for information on artistic and technical drawing. • Learners practice printing numbers and letters of the alphabet. • Learners use audio-visual aids to search for information on the types of lines and their application in drawing (<i>thick and thin continuous, dashed and chain</i>). • Learners with low vision draw various types of lines (<i>thick and thin continuous, dashed and chain</i>). Learners with blindness are provided with various embossed lines to manipulate 	<p>How are drawings used in technical communication?</p>

			<p>and interpret.</p> <ul style="list-style-type: none"> • Learners with low vision sketch basic symbols (\emptyset, Φ, R, \perp, \square) and abbreviations (DRG, A/F, A/C, I/D, O/D) used in drawing. Learners with blindness write the symbols in braille. • Learners use audio - visual aids to study the application of symbols and abbreviations in drawing. 	
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> • Communication and Collaboration: A learner acquires speaking, listening and teamwork skills when brainstorming on the meaning of the terms ‘technical drawing’ and ‘artistic drawing’. • Digital Literacy: learner develops the skill of interacting with technology when using online resources to search for information on artistic and technical drawing. 				
<p>Values:</p> <ul style="list-style-type: none"> • Respect: learner demonstrates etiquette during discussion of basic symbols and abbreviations used in drawing. • Responsibility: learner demonstrates accountability when using visual aids to search for information on the types of lines and their application in drawing. 				
<p>Pertinent and Contemporary Issues (PCIs): 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>Link to other Learning Area: Creative Arts: learner enhances knowledge of artistic drawing when drawing various types of lines.</p>				

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)
2.0 Communication in Pre-Tech Studies.	2.2 Free hand Sketching	By the end of the sub strand, the learner should be able to: a) sketch lines using free-hand, b) sketch 2D shapes using free hand, c) appreciate the importance of free hand sketching in communication.	<ul style="list-style-type: none"> • Learners brainstorm on free hand sketching and share with findings in class. • In groups, learners discuss the meaning of free-hand sketching as used in Pre-Technical Studies. • Learners with low vision use pencils and drawing papers to sketch lines. Learners with blindness are given one on one demonstration on how to model lines using free hand. • Learners with low vision use pencils and drawing papers to sketch two-dimensional shape. Learners with blindness model lines to sketch two dimensional shapes. • Learners use digital media with assistive technology such audio-visual clips to listen to or observe how free hand sketches express artistic ideas in different career fields. • Learners take photos of the sketches, drawings and modelled lines and two dimensional shapes for the development of portfolios. 	How important is free-hand sketching?
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> • Communication and Collaboration: A learner acquires speaking, listening and teamwork skills when brainstorming on the meaning of the terms ‘technical drawing’ and ‘artistic drawing’. • Digital Literacy: A learner develops the skill of interacting with technology when using online resources to search for information on artistic 				

and technical drawing.

Values:

- Respect: A learner demonstrates etiquette during discussion of basic symbols and abbreviations used in drawing.
- Responsibility: A learner demonstrates accountability when using visual aids to search for information on the types of lines and their application in drawing.

Pertinent and Contemporary Issues (PCIs):

Safety and Security: A learner develops online safety skills during online search for information on different types of drawings used in the technical fields.

Link to Other Subjects:

Creative Arts: as a learner illustrates artistic drawings.

Suggested Learning Resources:

- Drawing charts
- Smart phone or laptop with internet connectivity
- Assorted embossed lines used in drawing
- Drawing papers/books
- Brochures and magazines
- Geometrical set

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
2.0 Communication in Pre-Tech Studies.	2.3 ICT tools in Communication	By the end of the sub strand, the learner should be able to: a) explain the importance of ICT tools in communication, b) describe the ICT tools used in communication, c) use ICT tools to enhance communication, d) acknowledge the role of communication in Pre-Technical Studies.	<ul style="list-style-type: none"> ● Learners brainstorm and present on the meaning and importance of ICT tools in communication. ● Learners use print or digital media with assistive technology 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. ● Learner communicates using ICT tools with assistive technology (<i>send and receive; email, texts, calls, chats, audio, animations and video</i>). 	How are ICT tools used in communication?
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> ● Communication and Collaboration: A learner acquires speaking, writing, listening, and teamwork skills while brainstorming and presenting on the meaning and importance of ICT tools in communication. ● Learning to learn: A 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. ● Digital literacy: A learner develops skills of interacting with technology when using ICT tools to communicate. 				
<p>Values:</p> <ul style="list-style-type: none"> ● Respect: A learner shows open-mindedness when brainstorming and presenting the meaning and importance of ICT tools in communication. ● Responsibility: A learner shows accountability when handling ICT tools to communicate. 				

Pertinent and Contemporary Issues (PCIs):

Mental Health: A learner develops emotional awareness to relate well with peers when brainstorming and presenting on the meaning and importance of ICT tools in communication.

Link to Other Subjects:

English: A learner is able to relate communication concepts to communication skills.

Suggested Learning Resources

- Pre-Technical Studies grade 7 curriculum design
- Pre-Technical Studies grade 7 teacher's handbook
- Digital devices with assistive technology

Suggested Assessment Rubric

Level / Indicator	Exceeds expectation	Meets expectation	Approaches expectation	Below expectation
Ability to describe ICT tools used in communication.	Describes 8 ICT tools used in communication.	Describes 6-7 ICT tools used in communication.	Describes 3-5 ICT tools used in communication.	Describes less than 3 ICT tools used in communication.
Ability to use Internet and ICT tools to enhance communication.	Uses Internet and 8 ICT tools to enhance communication.	Uses Internet and 6- 7 ICT tools to enhance communication.	Uses Internet and 3-5 ICT tools to enhance communication.	Uses Internet and less than 3 ICT tools to enhance communication.
Ability to sketch or model 2D shapes using free hand.	Sketches or models 8 2D shapes using free hand.	Sketches or models 6-7 2D shapes using free hand.	Sketches or models 3-5 2D shapes using free hand.	Sketches or models less than 3 2D shapes using free hand.

STRAND 3:0 MATERIALS FOR PRODUCTION

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
3.0 Materials for production.	3.1 Introduction to Materials	By the end of the sub strand, the learner should be to: a) identify materials used in production, b) distinguish between metallic and non-metallic materials found in the locality, c) describe sustainable ways of using materials in production, d) appreciate the importance of materials in production.	<ul style="list-style-type: none"> • Learner brainstorms the meaning of materials used in production and makes notes. • Learners discuss and present on the meaning of materials used in production. • Learners use print or digital media with assistive technology to search for information on materials used in production and share with peers. • In groups, learners discuss the differences between metallic and non-metallic materials. • Learner sorts out materials in the locality as either metallic or non-metallic. • Learner brainstorms and present in class sustainable ways of using materials in production. • In groups, learners discuss and make a presentation on importance of materials used in production. 	How are materials used sustainably?

Core competencies to be developed:

- **Self-Efficacy:** A learner develops effective communication skills when discussing and presenting the differences between metallic and non-metallic materials.
- **Critical Thinking and Problem Solving:** A learner develops explanation, evaluation and decision-making skills while sorting out materials in the locality as either metallic or non-metallic.

Values:

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

Link to other Learning Area:

Social Studies: A 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 grade 7 curriculum design
- Pre-Technical Studies grade 7 teacher's handbook
- Digital devices such as; computer, laptop, smart phone or tablets.

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
3.0 Materials for production.	3.2 metallic materials	By the end of the sub strand, the learner should be able to: a) identify types of metallic materials used in the immediate environment, b) describe the physical properties of metallic materials found in the immediate environment, c) relate metallic materials to their use in the immediate environment, d) appreciate the use of metallic materials in production.	<ul style="list-style-type: none"> ● Learner prepares a checklist for identifying types of metallic materials. (steel, aluminium, copper). ● Learners with low vision perform experiments to examine the physical properties of metallic materials. Learners with blindness use an adapted tester that produces a sound once there is conductivity of heat or electricity to examine the physical properties of metallic materials. (magnetism, conductivity of heat and electricity, appearance). ● Learners with low vision download and watch an audio-visual clip simulating physical properties of metallic materials, while learners with blindness download and listen to audio-visual clips simulating physical properties of metallic materials. ● Learners match metallic materials to their use in the work environment. 	Why are metallic materials important in day-to-day life?
Core competencies to be developed:				

- Digital literacy: A learner develops interacting skills when downloading and watching a video clip simulating physical properties of metallic materials.
- Communication and collaboration: A learner acquires speaking, listening, and teamwork skills during discussion and sharing of their findings with peers on the various uses of metallic materials in the locality.

Values:

- Unity: Learners display team spirit and collaboration with others during discussion and sharing of their findings with peers on the various uses of metallic materials in the locality
- Responsibility: Learners show accountability by completion of a chart to match metallic materials to their use in the work environment.

Pertinent and Contemporary Issues (PCIs):

Peer education and mentorship: Learners develop interpersonal relationships while sharing findings with peers on various uses of metallic materials in the locality.

Link to other learning areas:

Integrated Science: A learner learns about the periodic table in classification of metals.

Suggested Learning Resources:

- Print and Braille Pre-Technical Studies Textbook.
- Metallic materials.
- Source of heat and electricity.

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
3.0 Materials of production.	3.3 Non-metallic materials.	<p>By the end of the Sub Strand, the learner should be able to:</p> <ol style="list-style-type: none"> identify non-metallic materials found in the locality, categorise non-metallic materials as either synthetic or natural, describe the physical properties of non-metallic materials found in a work environment, relate non-metallic materials to their uses in a work environment, Value the use of non-metallic materials in society. 	<ul style="list-style-type: none"> Learner prepares a checklist for identifying types of non-metallic materials (wood, stone, plastics, paper, rubber, cement, glass, ceramics). Learners with low vision sort non-metallic materials and categorise them as either synthetic or natural. Learners with blindness touch, manipulate or listen to verbal descriptions on non-metallic materials and categorise them as either synthetic or natural. Learners with low vision perform experiments. Learners with blindness touch or manipulate or listen to verbal descriptions to examine the physical properties of non-metallic materials (colour, texture, hardness, fire resistance). Learner matches non-metallic materials to their use in the work environment. 	How are non-metallic materials used in the work environment?

Core competencies to be developed:

- Communication and collaboration: A learner acquires speaking, listening, and teamwork skills when sorting non-metallic materials as either synthetic or natural.
- Learning to learn: A learner acquires skills of organising own learning and works collaboratively with others when sharing a chart developed to match non-metallic materials to their use in the work environment

Values:

- Responsibility: Learners show accountability by engaging in the sorting of non-metallic materials as either synthetic or natural.
- Unity: Learners display team spirit and collaboration with others when performing experiments to examine the physical properties of non-metallic materials (colour, texture, hardness, fire resistance).

Pertinent and Contemporary Issues (PCI's):

Personal safety and security: Learners demonstrate basic safety habits when performing experiments to examine the physical properties of non-metallic materials.

Link to other learning areas:

Integrated Science: A learner explains the applications of common elements in day-to-day life.

Suggested Learning Resources:

- Print and Braille Pre-Technical Studies textbooks.
- Realia non-metallic materials.

Suggested Assessment Rubric				
Level Indicator	Exceeds Expectation	Meets Expectation	Approaches Expectation	Below expectation
Ability to describe sustainable ways of using materials in production.	Describes 5 sustainable ways of using materials in production.	Describes 4 sustainable ways of using materials in production.	Describes 3 sustainable ways of using materials in production.	Describes less than 3 sustainable ways of using materials in production.
Ability to relate metallic materials to their uses in an immediate environment.	Relates 8-9 metallic materials to their uses in an immediate environment.	Relates 6-7 metallic materials to their uses in an immediate environment.	Relates 3-5 metallic materials to their uses in an immediate environment.	Relates less than 3 metallic materials to their uses in an immediate environment.
Ability to describe physical properties of non-metallic materials in a work environment.	Describes 7 physical properties of non-metallic materials in a work environment.	Describes 5-6 physical properties non-metallic materials in a work environment.	Describes 3-4 physical properties of non-metallic materials in a work environment.	Describes less than 3 physical properties of non-metallic materials in a work environment.

STRAND 4:0 TOOLS AND PRODUCTION

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
4.0 Tools and Production	4.1 Measuring and Marking Out Tools	<p>By the end of the sub strand, the learner should be able to:</p> <ul style="list-style-type: none"> a) identify measuring and marking out tools in the work environment, b) select measuring and marking out tools for a given task, c) use measuring and marking out tools to perform a given task, d) care for measuring and marking out tools in the work environment, e) recognise the importance of measuring and marking out tools in the work environment. 	<ul style="list-style-type: none"> ● Learners use visual aids and realia to identify measuring (<i>Tape measure, steel rule, callipers, weighing balance, stop watch, ammeter, voltmeter</i>) and marking out tools (<i>divider, try-square, marking gauge, dot punch, scribe, pencil, marking knife</i>) in the work environment. Learners with blindness are given one on one demonstration on how to hold different measuring and marking tools while carrying out various tasks. ● In groups learners discuss the use of measuring and marking out tools in the work environment. ● Learners chooses an appropriate measuring and marking out tools to perform a given task. ● Learners use available relevant print or braille or adapted digital resources to search for information on the use of measuring and marking out tools to perform specific tasks. ● Learner demonstrates the use of measuring and marking out tools to perform specific tasks. ● Learners perform specific tasks using 	<ol style="list-style-type: none"> 1. Why are measuring and marking out tools important in a work environment? 2. How are measuring and marking out tools used in a work environment?

			<p>measuring and marking out tools. Learners with blindness are given one on one demonstration on how to appropriately hold and use a specific tool to perform a given task.</p> <ul style="list-style-type: none"> • Learner cares for and maintain measuring and marking out tools in the work environment. 	
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> • Critical Thinking and Problem Solving: A learner develops explanation, evaluation and decision-making skills when choosing the appropriate measuring and marking out tools to perform a given task. • Self Efficacy: A learner develops self-awareness skills by showing a concerted attention to detail when performing specific tasks using measuring and marking out tools. 				
<p>Values:</p> <ul style="list-style-type: none"> • Respect: A learner shows open-mindedness when discussing the use of measuring and marking out tools in the work environment. • Responsibility: A learner shows accountability by caring for and maintaining measuring and marking out tools in the work environment. 				
<p>Pertinent and Contemporary Issues (PCIs): Disaster Risk Reduction: Learner avoids situations that can lead to injuries when caring for and maintaining measuring and marking out tools in the work environment.</p>				
<p>Link to other Learning Area: Mathematics: A learner carries out geometric construction Integrated Science: A learner identifies laboratory tools and equipment</p>				
<p>Suggested Learning Resources:</p> <ul style="list-style-type: none"> • Measuring tools (<i>Tape measure, steel rule, callipers, weighing balance, stop watch.</i>) • Marking tools (<i>dividers, marking gauge, scriber, pencil, marking knife, try-square</i>) • Brochures and magazines. • Digital devices with assistive technology such as; computer, laptop, smart phone or tablet. 				

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
4.0 Tools and production.	4.2 Computer Hardware	<p>By the end of the sub strand the learner should be able to:</p> <p>a) classify computer hardware devices in a user environment,</p> <p>b) use computer hardware devices to carry out a given task,</p> <p>c) value the importance of computer hardware devices in a user environment.</p>	<ul style="list-style-type: none"> ● Learner brainstorm and present on the meaning of the term ‘computer hardware’ to peers. ● Learners use digital devices with assistive technology or any other 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>), output devices (<i>hardcopy and softcopy</i>), storage devices (<i>fixed and removable devices</i>). ● Learner matches available devices to their respective categories. Learners with blindness are given one on one demonstration on how to hold some of the hardware devices appropriately. ● Learners perform tasks using computer input, output and storage devices. Computer devices are connected to various assistive technology to suit each learner’s need. 	How are computer hardware devices used?
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> ● Communication and collaboration: A learner acquires speaking, writing, listening, and teamwork skills when brainstorming and presenting on the meaning of the term ‘computer hardware’. ● Critical Thinking and Problem Solving: learner develops skills of interpretation and inference when categorising computer hardware. 				

Values:

- Peace: A learner displays tolerance when performing tasks using computer hardware.
- Responsibility: learner shows accountability when using available resources to search for information on categories of computer hardware.

Pertinent and Contemporary Issues (PCIs):

Peer Education and Mentorship: A learner enhances leadership skills when discussing the categories of computer hardware devices in a user environment.

Link to other subjects:

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

Suggested Learning Resources:

- Computer hardware.
- Digital devices with assistive technology.
- Approved Pre-Technical Studies grade 7 textbooks.
- Internet connectivity.
- Video and audio clips.
- Charts and pictures.

Suggested Assessment Rubrics				
Level Indicator	Exceeds expectation	Meets expectation	Approaches expectation	Below expectation
Ability to classify the measuring and marking out tools in the working environment.	Classifies 10 measuring and marking out tools in the working environment giving out their use.	Classifies 7-9 measuring and marking out tools in the working environment.	Classifies 4-6 measuring and marking out tools in the working environment.	Classifies less than 4 measuring and marking out tools in the working environment with assistance.
Ability to use measuring and marking out tools in the work environment.	Uses 7 measuring and marking out tools in the work environment.	Uses 5-6 measuring and marking out tools in the work environment.	Uses 3-4 measuring and marking out tools in the work environment.	Uses less than 3 measuring and marking out tools in the work environment.
Ability to use computer hardware devices to carry out a given task.	Uses 8 computer hardware devices to carry out a given task.	Uses 5-8 computer hardware devices to carry out a given task.	Uses 4-6 computer hardware devices to carry out a given task.	Uses less than 4 computer hardware devices to carry out a given task.

STRAND 5:0 ENTREPRENEURSHIP

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
5.0 Entrepreneurship.	5.1 Introduction to Entrepreneurship	By the end of the sub strand, the learner should be able to: <ol style="list-style-type: none"> a) explain the importance of entrepreneurship to an individual and community, b) describe the qualities of an entrepreneur in business, c) explore sources of business ideas for a business venture, d) analyse the factors considered when evaluating the viability of a business opportunity, e) evaluate the factors that enhance success in a business, f) practice entrepreneurship for self and community development. 	<ul style="list-style-type: none"> • Learner brainstorms and present the meaning of the terms ‘entrepreneur’ and ‘entrepreneurship’ in class. • In groups, learners discuss and present on the importance of entrepreneurship to an individual and community. • Learners download and watch or listen to an audio-visual clips or use available relevant print or braille resources to search for information on qualities of an entrepreneur. • Learners conduct self-assessment on entrepreneurial qualities. • Learners use digital devices with assistive technology or any other available relevant resources to search for and present the meaning and sources of business ideas. • Learners compile a list of business ideas and determine their viability as business opportunities. • Learners read, analyse and present a case study about the factors that enhance business success. 	<ol style="list-style-type: none"> 1. Why is entrepreneurship important in the community? 2. What are the qualities of an entrepreneur?

Core Competencies to be developed:

- Critical Thinking and Problem Solving: A learner acquires evaluation and decision-making skills when reading, analysing and presenting on a case study about the factors that enhance business success
- Citizenship: A learner acquires entrepreneurship skills by exploiting opportunities when compiling a list of business ideas and determining their viability

Values:

- Peace: A learner shows respect for self and others when brainstorming and presenting the meaning of ‘entrepreneur’ and ‘entrepreneurship’.
- Unity: A learner displays team spirit when discussing and presenting the importance of entrepreneurship to an individual and community.
- Responsibility: A learner engages in assigned roles and duties when analysing and reporting on a case study on the factors that enhance business success.

Pertinent and Contemporary Issues (PCIs):

- Financial Literacy: A learner develops entrepreneurial skills when conducting self-assessment on entrepreneurial qualities
- Career Guidance: A learner develops ability to identify personal skill gaps when conducting self-assessment on entrepreneurial qualities.

Link to other Learning Area:

Social Studies as a learner explores trading activities in the community.

Suggested Learning Resources:

- Pre-Technical Studies grade 7 curriculum design.
- Pre-Technical Studies grade 7 teacher’s handbook.
- Digital devices with assistive technology such as; computer, laptop, smart phone or tablet.
- Relevant approved textbooks and reference materials.
- Photographs and embossed pictures.
- Charts, tactile charts.

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
5.0 Entrepreneurship.	5.2 Production Unit	<p>By the end of the sub strand, the learner should be able to:</p> <p>a) explain the factors considered when locating a production unit,</p> <p>b) analyse the factors determining the size of a production unit,</p> <p>c) value the importance of locating a production unit in a suitable area.</p>	<ul style="list-style-type: none"> ● Learners watch or listen to an audio-visual clip on the meaning and factors to consider when locating a production unit. ● In groups learners discuss the meaning of the term ‘production unit’ and present to peers. ● Learner brainstorm and present in class the factors considered when choosing the location of a production unit. ● Learners visit the local community to assess the factors that influenced the location of a particular production unit (<i>Posho mill, salon, barber shop, welding, cybercafé</i>). Ensure safety of learners as they walk around and within the production unit. ● Learners use print or digital media with assistive technology to search for information on the factors that determine the size of the chosen production unit and share with peers. 	How is the size of a production unit determined?
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> ● Communication and collaboration: A learner acquires speaking, writing, listening, and teamwork skills when discussing and presenting on the meaning of the term ‘production unit’. ● Critical Thinking and Problem Solving: A learner acquires interpretation and inference skills when visiting the local community to assess the factors that influenced the location of a particular production unit. 				

Values:

- Responsibility: A learner shows accountability when using print or digital media to search for information on the factors that determine its size and share with peers.
- Respect: A 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.

Pertinent and Contemporary Issues (PCIs):

Financial Literacy: A learner develops entrepreneurial skills when brainstorming and presenting the factors considered when choosing the location of a production unit.

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:

- Print and Braille Pre-Technical Studies textbooks.
- Digital resources with assistive technology.
- Pre-Technical Studies grade 7 curriculum design.
- Pre-Technical Studies grade 7 teacher's handbook.
- Digital devices with assistive technology such as; computer, laptop, smart phone or tablet.
- Relevant approved textbooks and reference materials.
- Photographs and embossed pictures.
- Charts, tactile charts.

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
<p>5.0 Entrepreneurship.</p>	<p>5.3 Financial Goals</p>	<p>By the end of the Sub Strand, the learner should be able to:</p> <p>a) explain the importance of goal setting as used in financial management,</p> <p>b) analyse the factors to consider when setting financial goals,</p> <p>c) formulate financial goals for individual development,</p> <p>d) observe financial discipline in financial management.</p>	<ul style="list-style-type: none"> ● In groups, learners discuss and present the meaning and importance of goal setting as used in financial management. ● Learners brainstorm and present the factors to consider when setting financial goals. ● Learners uses available learning resources or digital devices with assistive technology to search for information on setting financial goals and write notes. ● Learners discuss and present the importance of financial discipline. ● Learners with low vision watch an audio-visual clip or other audio-visual aids on how to set Specific Measurable Achievable Realistic and Time bound (SMART) financial goals, set own SMART goals and present for peer assessment, while learners with blindness listen to an audio-visual clip or other audio-visual aids on how to set Specific Measurable Achievable Realistic and Time bound 	<ol style="list-style-type: none"> 1. Why is setting financial goals important? 2. How do we identify factors considered when setting financial goals?

			(SMART) financial goals, set own SMART goals and present for peer assessment.	
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> • Self-efficacy: A learner acquires effective communication skills during discussions and presentation on the meaning and importance of goal setting as used in financial management. • Critical thinking and problem solving: A learner acquires interpretation and inference skills when using available learning resources to search for information on setting financial goals. • Learning to learn: A learner acquires the skill of sharing learnt knowledge in discussions and presentations on the importance of financial discipline. 				
<p>Values:</p> <ul style="list-style-type: none"> • Responsibility: Learners engage in assigned roles and duties when discussing and presenting on the meaning and importance of goal setting as used in financial management, • Respect: Learners show regard for the input of every member when brainstorming and presenting on the factors to consider when setting financial goals. 				
<p>Pertinent and Contemporary Issues (PCIs): Financial Literacy: Learners acquire financial skills when setting Specific Measurable Achievable Realistic and Time bound (SMART) financial goals.</p>				
<p>Link to other Learning Areas: Social Studies: A learner learns about personal goals.</p>				
<p>Suggested Learning Resources:</p> <ul style="list-style-type: none"> • Print and Braille Pre-Technical Studies textbook. • Digital device with assistive technology. • Audio-visual aids. 				

Suggested Assessment Rubric				
Level Indicator	Exceeds expectation	Meets expectation	Approaches expectation	Below expectation
Ability to explore sources of business ideas for a business venture.	Explores 7 sources of business ideas for a business venture.	Explores 5-6 sources of business ideas for a business venture.	Explores 3-4 sources of business ideas for a business venture.	Explores less than 3 sources of business ideas for a business venture.
Ability to evaluate factors that enhance success in a business.	Evaluates 8 factors that enhance success in a business.	Evaluates 6-7 factors that enhance success in a business.	Evaluates 4 -5 factors that enhance success in a business.	Evaluates less than 4 factors that enhance success in a business.
Ability to analyse factors that determine the size of a production unit	Analyses 8 factors that determine the size of a production unit.	Analyses 6-7 factors that determine the size of a production unit.	Analyses 3-5 factors that determine the size of a production unit.	Analyses less than 3 factors that determine the size of a production unit.
Ability to formulate financial goals for individual development.	Formulates 5 financial goals for individual development.	Formulates 4 financial goals for individual development.	Formulates 3 financial goals for individual development.	Formulates less than 3 financial goals for individual development.

APPENDIX 1: GUIDELINES FOR INTEGRATING COMMUNITY SERVICE LEARNING (CSL) 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	Problem Identification Learners study their community to understand the challenges faced and their effects on community members.
Milestone 2	Designing a solution Learners create an intervention to address the challenge identified.
Milestone 3	Planning for the Project 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	Implementation The learners execute the project and keep evidence of work done.

Milestone 5	<p>Showcasing /Exhibition and Report Writing Exhibitions involve showcasing learners’ project items to the community and reflecting on the feedback Learners write a report detailing their project activities and learnings from feedback.</p>
Milestone 6	<p>Reflection 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

Strands	Sub Strands	Suggested Assessment Methods	Suggested Learning Resources	Suggested Non- Formal Activities
<p>1.0 Foundations of Pre -Technical Studies.</p>	<p>1.1 Introduction to Pre-Technical Studies</p>	<ul style="list-style-type: none"> • Question and Answer • Observation • Written test • Practical work • Peer and self-assessment 	<ul style="list-style-type: none"> • Pre-Technical Studies curriculum design • Pre-Technical Studies handbook • Digital devices such as; computer, laptop, smart phone or tablet • Relevant approved textbooks and • Reference materials • Photographs and pictures • Charts 	<p>Discuss the role of Pre-Technical studies in clubs and societies.</p>
	<p>1.2 Safety in the Work Environment</p>	<ul style="list-style-type: none"> • Question and answer • Observation • Written test • Practical work 	<ul style="list-style-type: none"> • Workshop attires such as; overcoats, aprons, shoes, goggles among others 	<ul style="list-style-type: none"> • Learners visit workplaces in the locality to observe how workers practise safety as they perform tasks. • Debate in clubs and societies on safety in the work environment.

		<ul style="list-style-type: none"> • Peer and self-assessment 	<ul style="list-style-type: none"> • Career brochures and career magazines • Digital devices such as; computer, laptop, smart phone or tablet 	
	1.3 Computer Concepts	<ul style="list-style-type: none"> • Question and answer • Observation • Written test • Practical work • Peer and self-assessment 	<ul style="list-style-type: none"> • Course books • Computer user manuals • Internet • Video clips • Digital devices such as computer, laptop, smart phone or tablet 	Demonstrate how to use ICT tools (<i>Calculators, Smartphones, Tablets, DVD players, Digital watches</i>) during clubs and societies
2.0 Communication.	2.1 Introduction to Drawing	<ul style="list-style-type: none"> • Question and Answer • Observation • Written test • Peer and self-assessment 	<ul style="list-style-type: none"> • Drawing charts • Drawing papers/books • Brochures and magazines • Geometrical set 	<ul style="list-style-type: none"> • 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 programmes
	2.2 Free hand sketching	<ul style="list-style-type: none"> • Question and Answer • Observation • Written test 	<ul style="list-style-type: none"> • Drawing charts • Drawing papers/books • Brochures and magazines 	<ul style="list-style-type: none"> • Learners visit nearby workplaces to observe how different types of drawings are done and how they

		<ul style="list-style-type: none"> • Peer and self-assessment 	<ul style="list-style-type: none"> • Geometrical set 	<p>are used in the community</p> <ul style="list-style-type: none"> • Learners discuss on types of drawing in out of class school programmes
	2.3 ICT Tools used in communication	<ul style="list-style-type: none"> • Question and Answer • Observation • Written test • Peer and self-assessment 	<ul style="list-style-type: none"> • Digital devices such as; computer, laptop, smart phone or tablet • Internet • Social media applications 	<ul style="list-style-type: none"> • Social media charting • Video conferencing
3.0 Materials for Production	3.1 Introduction to Materials	<ul style="list-style-type: none"> • Question and Answer • Observation • Written test • Peer and self-assessment 	<ul style="list-style-type: none"> • Pre-Technical Studies curriculum design • Pre-Technical Studies handbook • Digital devices such as; computer, laptop, smart phone or tablet • Metallic and non-metallic materials • Relevant approved textbooks and reference materials • Photographs and pictures • Charts 	Carry out activity involving sorting materials during clubs and societies.

	3.2 Metallic Materials	<ul style="list-style-type: none"> • Question and Answer • Observation • Written test • Peer and self assessment • Practical work 	<ul style="list-style-type: none"> • Metallic materials (<i>steel, aluminium, copper</i>) • Brochures and magazines • Digital devices such as; computer, laptop, smart phone or tablet 	<ul style="list-style-type: none"> • Learners visit local community and collect metallic materials and write down how each is used by the local community. • Discuss the uses of metallic materials in clubs and societies.
	3.3 Non-Metallic Materials	<ul style="list-style-type: none"> • Question and Answer • Observation • Written test • Peer and self-assessment • Practical work 	<ul style="list-style-type: none"> • Non-Metallic materials (<i>wood, plastics, ceramic, paper, rubber, glass, cement, stone</i>) • Brochures and magazines • Digital devices such as; computer, laptop, smart phone, tablets • Digital devices such as; computer, laptop, smart phone or tablet 	<ul style="list-style-type: none"> • Learners visit local community and collect non-metallic materials and write down how each is used by the local community. • Discuss the uses of non-metallic materials in clubs and societies.
4.0 Tools and Production.	4.1 Measuring and Marking Out Tools	<ul style="list-style-type: none"> • Question and Answer • Observation • Written test • Peer and self-assessment • Practical work 	<ul style="list-style-type: none"> • Measuring tools (<i>Tape measure, steel rule, callipers, weighing balance, stop watch, ammeter, voltmeter</i>) • Marking out tools (<i>divider, try square, marking gauge, dot punch, scriber, pencil, marking knife</i>) in the work environment • Brochures and magazines • Digital devices such as; computer, laptop, smart phone or tablet 	<ul style="list-style-type: none"> • Learners visit local workplaces and observe the use of measuring and marking out tools in performing different tasks • Discuss the uses of measuring and marking out tools in clubs and societies

	4.2 Computer hardware	<ul style="list-style-type: none"> • Question and Answer • Observation • Written test • Practical work • learner's profile • peer and self-assessment • portfolio 	<ul style="list-style-type: none"> • Computer hardware • Approved textbooks • Internet connectivity • Video and audio clips • Charts and pictures 	<ul style="list-style-type: none"> • Community sensitisation on the use of computer hardware • Field visits
5.0 Entrepreneurship.	5.1 Introduction to Entrepreneurship	<ul style="list-style-type: none"> • Question and Answer • Observation • Written test • Peer and self assessment 	<ul style="list-style-type: none"> • Pre-Technical Studies curriculum design • Pre-Technical Studies handbook • Digital devices such as; computer, laptop, smart phone or tablet • Relevant approved textbooks and reference materials • Photographs and pictures • Charts 	<ul style="list-style-type: none"> • Discuss business ideas and opportunities in • Financial literacy and other school clubs and societies • Organised and planned field visits in the local community to engage with entrepreneurs • Participate in a talk by a volunteer resource person on the qualities of an entrepreneur
	5.2 Production Unit	<ul style="list-style-type: none"> • Question and Answer • Observation • Written test • Peer and self-assessment 	<ul style="list-style-type: none"> • Print and Braille Pre-Technical Studies textbooks • Digital resources with assistive technology • Pre-Technical Studies grade 7 curriculum design • Pre-Technical Studies grade 7 	Discuss factors that determine the size of the chosen production unit and share with peers

			<p>teacher's handbook</p> <ul style="list-style-type: none"> • Digital devices with assistive technology such as; computer, laptops, smart phone or tablet • Relevant approved textbooks and reference materials • Photographs and embossed pictures • Charts, tactile charts 	
	5.3 Financial Goals	<ul style="list-style-type: none"> • Question and Answer • Observation • Written test • Peer and self Assessment • Practical work 	<ul style="list-style-type: none"> • Pre-Technical Studies curriculum design • Pre-Technical Studies handbook • Digital devices with assistive technology such as; computer, laptop, smart phone or tablet • Relevant approved textbooks and reference materials • Photographs and pictures • Charts 	<ul style="list-style-type: none"> • Discuss on factors to consider when setting financial goals in Financial literacy and other school clubs and societies • Participating in a talk by a volunteer resource person setting financial goals • Posters with messages on SMART financial goals