



REPUBLIC OF KENYA
MINISTRY OF EDUCATION

JUNIOR SCHOOL CURRICULUM DESIGN

PRE-TECHNICAL STUDIES

GRADE 8

FOR LEARNERS WITH VISUAL IMPAIRMENT



KENYA INSTITUTE OF CURRICULUM DEVELOPMENT

A Skilled and Ethical Society

First published 2017

Revised 2024

All rights reserved. No part of this book may be reproduced, stored in a retrieval system or transcribed, in any form or by any means, electronic, mechanical, photocopy, recording or otherwise, without the prior written permission of the publisher.

ISBN:

Published and printed by Kenya Institute of Curriculum Development

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 eight curriculum designs for learners with visual impairments build on competencies attained by learners at Grade 7. 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,
MINISTRY OF EDUCATION

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 eight curriculum furthers implementation of the CBC from Grade seven. 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 eight 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 eight and prepare them for smooth transition to Grade nine. Furthermore, it is my hope that teachers will use the adapted designs to make learning interesting, exciting and enjoyable.

**DR. BELIO KIPSANG', CBS
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 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 eight 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 eight 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 eight and preparation of learners with visual impairments for transition to Grade nine.

PROF. CHARLES O. ONG'ONDO, PhD, MBS
DIRECTOR/CHIEF EXECUTIVE OFFICER
KENYA INSTITUTE OF CURRICULUM DEVELOPMENT

TABLE OF CONTENTS

FOREWORD	iii
PREFACE	iv
ACKNOWLEDGEMENT	v
NATIONAL GOALS OF EDUCATION	vi
LESSON ALLOCATION AT JUNIOR SCHOOL	vii
LEARNING OUTCOMES FOR JUNIOR SCHOOL	x
ESSENCE STATEMENT	xi
GENERAL LEARNING OUTCOMES	xii
SUMMARY OF STRANDS AND SUB STRANDS	xiii
STRAND 1.0 FOUNDATIONS OF PRE-TECHNICAL STUDIES	1
STRAND 2.0 COMMUNICATION IN PRE-TECHNICAL STUDIES.....	6
STRAND 3.0 MATERIALS FOR PRODUCTION	15
STRAND 4.0 TOOLS AND PRODUCTION	20
STRAND 5.0: ENTREPRENEURSHIP.....	24
APPENDIX 1: GUIDELINES FOR INTEGRATING COMMUNITY SERVICE LEARNING (CSL).....	35
APPENDIX 2: LIST OF ASSESSMENT METHODS, LEARNING RESOURCES AND NON-FORMAL ACTIVITIES.	37

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 instill 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	Number of Lessons
1.	English	5
2.	Kiswahili / Kenya Sign Language	4
3.	Mathematics	5
4.	Religious Education	4
5.	Social Studies	4
6.	Integrated Science	5
7.	Pre-Technical Studies	4
8.	Agriculture and Nutrition	4
9.	Creative Arts and Sports	5
Total		40

1 lesson is set aside for the Pastoral/Religious Instruction Programme.

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 for the 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

- a). Create awareness on career choices in regard to career pathways and progressions for self-development (self-development).
- b). Develop ability to Communicate effectively through the use of information and communication technology innovations.
- c). Apply the acquired competencies to select, use and maintain tools and materials in the production of goods and services.
- d). Make effective use of financial and entrepreneurial competencies for prudent decision making in generation of wealth.
- e). Apply acquired competencies on safety in the work environment to promote education for sustainable development.
- f). Demonstrate an understanding of values and Pertinent and Contemporary Issues affecting society
- g). Exhibit competencies in the use of digital skills in carrying out daily life activities.

SUMMARY OF STRANDS AND SUB STRANDS

Strands	Sub Strands	Suggested Number of Lessons
1.0 Foundations of Pre-Technical studies	1.1 Fire Safety	7
	1.2 Data Safety	11
2.0 Communication	2.1 Plane Geometry	4
	2.2 Dimensioning	7
	2.3 Plain scale drawing	6
	2.4 Visual programming	14
3.0 Materials for production	3.1 Composite Materials	7
	3.2 Ceramics	7
4.0 Tools and Production	4.1 Cutting Tools	15
	4.2 Computer Software	6
5.0 Entrepreneurship	5.1 Bookkeeping	12
	5.2 Income and Budgeting	9
	5.3 Marketing goods and Services	8
	5.4 Distribution of Goods and Services	7
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)
<p>1.0 Foundations of Pre-Technical Studies.</p>	<p>1.1 Fire Safety (7 lessons)</p>	<p>By the end of the sub strand, the learner should be able to:</p> <ol style="list-style-type: none"> identify the possible causes of fire outbreaks in the environment, explain ways of preventing fire outbreaks in the environment, extinguish fires in the environment using appropriate methods, acknowledge the need for fire safety in day-to-day life. 	<ul style="list-style-type: none"> Learner brainstorms on the meaning and importance of fire and make short notes. Learners are guided to discuss the possible causes of fire outbreaks in the environment (<i>flammable substances, electrical faults, combustible materials</i>). Learners are guided to share experiences on ways of preventing fire outbreaks in the environment. In groups, learners discuss fire fighting techniques in the work environment, (<i>cooling, smothering, starving, interrupting</i>). Learners are guided to role - play fire fighting techniques for extinguishing fire. Learners with blindness are given one on one demonstration on how to hold the fire extinguishers in case of fire outbreak. 	<p>Why is fire safety important?</p>
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> Critical thinking and problem solving: A learner follows simple instructions to complete tasks as they role play fire fighting techniques in the work environment. Digital literacy: A learner interacts with digital devices with assistive technology to secure electronic data in the work environment. 				
<p>Pertinent and Contemporary Issues (PCIs):</p> <ul style="list-style-type: none"> Safety and Security: A learner demonstrates basic safety habits while securing electronic data in the work environment. Disaster risk reduction: A learner calls for help where there is fire or injuries during role play on fire fighting techniques in a workplace. 				

Values:

- Responsibility: A learner observes safety precautionary measures during role play on firefighting techniques in the work environment.
- Respect: A learner appreciates diverse opinions as they brainstorm on the threats of electronic data in the work environment.

Link to other Learning Area:

Integrated Science: A learner is able to relate fire safety to fire control measures.

Suggested learning resources:

- Charts.
- tactile pictures and embossed diagrams, Realia [hose pipes].
- Digital devices with assistive technology.
- Print or Braille Pre-Tech studies Textbooks and other relevant materials.

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
1.0 Foundations of Pre-Technical Studies.	1.2 Data Safety (11 lessons)	By the end of the sub strand, the learner should be able to: <ol style="list-style-type: none"> outline the importance of data in an electronic device, explain threats to data in an electronic device, describe ways of protecting data in an electronic device, secure data in an electronic device, acknowledge the need for data safety in day-to-day life. 	<ul style="list-style-type: none"> Learners with low vision are guided to watch a video clip on meaning and importance of data in an electronic device. Learners with blindness are guided to listen to an audio-visual clip on the meaning and importance of data in an electronic device. In groups, learners are guided to brainstorm and present on the meaning of data and information in an electronic device. Learners are guided to use available resources to search for the importance of data in electronic devices, In pairs, learners are guided to discuss threats to data in electronic devices (<i>virus and unauthorised access</i>), In groups, learners discuss techniques of securing data in an electronic device (<i>use passwords; and scan electronic devices using antivirus</i>), Learners are guided to use appropriate techniques to secure data in an electronic device against possible threats. Give one on one demonstration to learners with blindness on activities that require use of vision. 	How is data protected in an electronic device?
Core competencies to be developed: <ul style="list-style-type: none"> Critical thinking and problem solving: A learner interprets and infer skills to categorise computer hardware. Digital literacy: A learner connects computers and its accessories using technology. 				
Values: Peace: A learner displays tolerance when performing tasks using computer hardware.				

Pertinent and Contemporary Issues (PCIs):

Mental Health: A learner relates well with others as they discuss the categories of computer hardware.

Link to other Learning Area:

A learner is able to relate the skills used to perform tasks using input, output and storage devices to all learning areas when using digital technology to search for information, download and watch videos.

Suggested Learning Resources:

- Computer and its accessories and Print and Braille text books.
- Digital devices with assistive technology.
- Electronic devices.

Suggested Assessment rubric

Level Indicator	Exceeds Expectation	Meets Expectation	Approaches Expectation	Below Expectation
Ability to identify possible causes of fire outbreak in the environment.	Identifies 5 possible causes of fire outbreak in the environment.	Identifies 4 possible causes of fire outbreak in the environment.	Identifies 3 possible causes of fire outbreak in the environment.	Identifies less than 3 possible causes of fire outbreak in the environment.
Ability to extinguish fires in the environment using appropriate methods.	Extinguishes fires in the environment using 5 appropriate methods.	Extinguishes fires in the environment using 4 appropriate methods.	Extinguishes fires in the environment using 3 appropriate methods.	Extinguishes fires in the environment using less than 3 appropriate methods.
Ability to explain the threats to data in an electronic device.	Explains 5 threats to data in an electronic device.	Explains 4 threats to data in an electronic device.	Explains 3 threats to data in an electronic device.	Explains less than 3 threats to data in an electronic device.
Ability to secure data in an electronic device using appropriate methods.	Secures data in an electronic device using 5 appropriate methods.	Secures data in an electronic device using 4 appropriate methods.	Secures data in an electronic device using 3 appropriate methods.	Secures data in an electronic device using less than 3 appropriate methods.

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-technical studies.</p>	<p>2.1 Plane Geometry (4 lessons)</p>	<p>By the end of the sub strand, the learner should be able to:</p> <ol style="list-style-type: none"> identify instruments used in drawing, explain the layout of a drawing environment, construct combined shapes applied in drawing, embrace the use of plane geometry in drawing. 	<ul style="list-style-type: none"> Learners are guided to discuss the instruments used in drawing (<i>set squares, drawing set, straight edges and pencils</i>). Learner with blindness is given various available drawing instruments to manipulate. Learner is guided to use print, braille and digital resources with assistive technology to search for information on setup of drawing paper (<i>drawing surface, margins, title page</i>). Learners discuss on how to draw combined shapes. Learner with blindness is provided with embossed diagrams of combined shapes to manipulate and identify the shapes. Learner with low vision is guided to use available resources to construct combined shapes. Learner with blindness is given one on one 	<p>How are combined shapes applied in day-to-day life?</p>

			demonstration and illustrate the combined shapes.	
Core competencies to be developed: <ul style="list-style-type: none"> ● Communication and collaboration: learner acquires team working skills when discussing how to draw combined shapes. ● Learning to learn: learner develops organising skills when using available resources to construct combined shapes. 				
Values: <ul style="list-style-type: none"> ● Respect: learner appreciates diverse opinions when discussing how to draw combined shapes. 				
Pertinent and Contemporary Issues (PCIs): <ul style="list-style-type: none"> ● Social cohesion: learners work together harmoniously when discussing how to draw combined shapes. 				
Link to other subjects: Mathematics: learner relates drawing skills to geometrical construction in Mathematics.				
Suggested Learning Resources: <ul style="list-style-type: none"> ● Print and Braille Pre-Technical Studies textbooks. ● Digital devices with assistive technology. ● Drawing books. ● Pencils. ● Geometrical instruments. ● Ruler. ● 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)
2.0 Communication in Pre-Technical Studies	2.2 Dimensioning (10 lessons)	<p>By the end of this sub strand, the learner should be able to:</p> <ol style="list-style-type: none"> a) identify the types of dimensioning in drawing, b) draw lines used for dimensioning in drawing, c) dimension given shapes in drawings, d) embrace the importance of dimensioning in drawing. 	<ul style="list-style-type: none"> • Learners are guided to discuss the term dimensioning as used in drawing and present in class. • Learner with low vision is guided to use visual aids to categorize the types of dimensioning in drawing (<i>linear, radial, angular, arc</i>). Learner with blindness is guided to use models to categorize the types of dimensioning in drawing (<i>linear, radial, angular, arc</i>). • Learner with low vision is guided to draw types of lines used in dimensioning while learner with blindness is guided to mould types of lines used in dimensioning. • In groups, learners are guided to discuss the forms of dimensioning as used in drawing (<i>parallel, chain and combined</i>). • Learner with low vision is guided to use appropriate techniques to dimension given shapes in drawings, Learner with blindness is guided to use 	<p>Why is dimensioning applied in drawings?</p>

			<p>appropriate techniques to dimension given shapes.</p> <ul style="list-style-type: none"> Learners are guided to develop a portfolio of the various dimensioned drawings. 	
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> Communication and collaboration: learner acquires team working skills when discussing how to dimension drawings. Learning to learn: learner develops organising skills when dimensioning shapes. 				
<p>Values:</p> <ul style="list-style-type: none"> Responsibility: learner engages in assigned roles and duties when dimensioning shapes. Respect: learner appreciates diverse opinions when discussing how to draw dimension lines. 				
<p>Pertinent and Contemporary Issues (PCIs): Social cohesion: learners work together harmoniously when discussing how to dimension drawings.</p>				
<p>Link to other subjects Mathematics: learner relates dimensioning skills to measurement in Mathematics.</p>				
<p>Suggested Learning Resources.</p> <ul style="list-style-type: none"> Drawing papers. Pencils. Digital devices such as; computer, laptop, smart phone and tablet. Samples of free hand sketches. Three - dimensional realia. Plasticine. 				

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question
2.0 Communication in the work environment.	2.3 Plain Scale Drawing (6 lessons)	By the end of the sub strand, the learner should be able to: a) describe the features of a plain scale used in drawing, b) interpret a plain scale used in drawing, c) draw plane figures to a given scale, d) appreciate the use of plain scale drawing in the work environment.	<ul style="list-style-type: none"> • Learner is guided to use print, braille or digital media with assistive technology to search for information on plain scales. • Learners is guided to discuss the features of a plain scale and make short notes. • Learner with low vision uses drawing instruments to construct a plain scale. Learner with blindness manipulates different drawing instruments used to construct a plain scale. • In groups, learners discuss how to read plain scales. • Learners with low vision are guided to use visual aids to identify drawings drawn to different scales, while learners with blindness are guided to manipulate embossed diagrams of drawings drawn to different scales. • Learners with low vision are guided to practice drawing plane figures to a given plain scale. Learners with blindness manipulate embossed of drawings drawn to scales. 	How are plane figures drawn to scale?
Core competencies to be developed: <ul style="list-style-type: none"> • Learning to Learn: learner acquires the skill to reflect on own work when practicing drawing of plane figures to a given plain scale. • Self-Efficacy: learner acquires intrinsic self-motivation when drawing plane figures to scale. 				
Values: <ul style="list-style-type: none"> • Unity: learner enhances cooperation with peers when discussing how to read plain scales. • Responsibility: learner demonstrates self-drive when practicing drawing plane figures to a given plain scale. 				
Pertinent and contemporary issues (PCIs): Peer education and mentorship: learner develops inter personal relationship and group dynamics skills while discussing how to read plain scales.				
Link to Other Subjects:				

Mathematics: learner relates skills of scale drawing to linear scale in Mathematics.

Suggested Learning Resources.

- Drawing books.
- Pencils.
- Geometrical.
- Instruments.
- Ruler.
- Digital devices such as; computer, laptop, smartphone or tablets.

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question
2.0 Communication in the work environment.	2.4 Visual Programming (14 lessons)	By the end of the Sub Strand the learner should be able to: <ol style="list-style-type: none"> a) identify types of visual programming applications used to solve problems in day-to-day life, b) explore the features of visual programming applications used in the work environment, c) create instructions to solve problems using visual programming application, d) value the importance of visual programming to solve problems in day-to-day life. 	<ul style="list-style-type: none"> • Learners are guided to brainstorm on the meaning of the terms ‘visual programming’ and ‘visual programming application’ and shares findings with peers. • Learner uses available appropriate print or braille resources to search for information on types of visual programming applications (Educational, Multimedia, Video games). • Learners are guided to brainstorm on examples of visual programming applications (Microsoft Make Code, Scratch, Sprite box). • Learner launches and notes down the different features of visual programming applications (input, processing, output, effects such as sound, animations and background). • In groups, learners are guided to discuss terminologies used in visual programming (syntax, variables, input output statements, coding, coding blocks, sequence statement, repeating statement, selection statement, variable declarations). • Learner uses a programming software to create instructions in the work environment. 	How are computer programs used in daily life?
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> • Communication and Collaboration: A learner develops team working skills when discussing the features of a visual programming application. • Critical thinking and problem solving: A learner develops open mindedness and creativity skills when applying effects such as sound, animations, background in a program. 				

Value:

Responsibility: A learner engages in assigned roles and duties when using visual programming software to create instructions in the work environment.

Pertinent and Contemporary Issues (PCIs):

- Safety and Security: A learner practices responsible online behaviour when using digital devices to search for information on types of visual programming applications.
- Peer Education: A learner practises interpersonal relationships when brainstorming on the meaning of the terms ‘visual programming’ and ‘visual programming application’.

Link to other Learning Area:

A learner is able to relate the skills used in visual programming to solving problems in Mathematics.

Suggested learning resources:

- Appropriate print and braille Pre-Technical Studies textbook and other relevant materials.
- Digital devices with assistive technology.
- Digital apps.
- Productivity tools.
- Visual programming tools.
- Computer software (Operating System, Utility software and Application programs)
- Internet connectivity.

Suggested Assessment rubric

Level Indicator	Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Ability to construct combined shapes applied in drawing.	Constructs 7 combined shapes applied in drawing.	Constructs 5-6 combined shapes applied in drawing.	Constructs 3-4 combined shapes applied in drawing.	Constructs less than 3 combined shapes applied in drawing.
Ability to draw lines used for dimension in drawing.	Draws 5 lines used for dimension in drawing.	Draws 4 lines used for dimension in drawing.	Draws 3 lines used for dimension in drawing.	Draws less than 3 lines used for dimension in drawing.
Ability to draw plane figures to a given scale.	Draws 8 plane figures to a given scale.	Draws 6-7 plane figures to a given scale.	Draws 3-5 plane figures to a given scale.	Draws less than 3 plane figures to a given scale.
Ability to create instructions to solve problems using visual programming applications.	Creates 8 step by step instructions to solve problems using visual programming applications.	Creates 6-7 instructions to solve problems using visual programming applications.	Creates 4- 5 instructions to solve problems using visual programming applications.	Creates less than 4 instructions to solve problems using visual programming applications.

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 Composite materials (7 lessons)	By the end of the Sub Strand, the learner should be able to: <ol style="list-style-type: none"> identify composite materials in the locality, describe the composition of composite materials found within the locality, relate composite materials to their use in a work environment, acknowledge the importance of composite materials used in the locality. 	<ul style="list-style-type: none"> Learner is guided to use audio-visual aids and realia to identify materials made of composites. Learner with blindness is provided with tactile concrete or bricks to manipulate and interpret, (concrete, bricks, manufactured boards, stone, papier-mâché and plastic-coated paper). Learner is guided to use braille, print media or digital with assistive technology to search for information on the composition of composite materials. In groups, learners discuss the constituent materials of composites used in the locality. In groups, learners visit workplaces in the locality to explore the uses of composite materials. Learners with low vision are guided to match composite materials to their uses in the work environment. Learners with blindness are given verbal description of the composite materials and list down their uses in the work place. 	<ol style="list-style-type: none"> How can composite materials be identified? Why are composite materials important to society?
Core competencies to be developed: <ul style="list-style-type: none"> Communication and collaboration: A learner acquires team working skills when discussing the constituent materials of composites. Digital literacy: A learner demonstrates interactive skills when using digital devices with assistive technology to search for information on the composition of composite materials. 				
Values:				

- **Peace:** A learner displays respect for diversity when visiting workplaces in the locality to explore the uses of composite materials.
- **Love:** A learner respects others as they take turns in discussions on the constituent materials of composites used in the locality.

Pertinent and Contemporary Issues (PCIs):

- Internet safety and security: A learner avoids harmful or illegal content while using digital media to search for information on the composition of composite materials.
- Learner support: A learner improves ability to manage time when visiting workplaces in the locality to explore the uses of composite materials.

Link to other Learning Area:

A learner relates the use of terms such as constituent materials of the composites to language skills in English.

Suggested Learning Resources:

- Composite materials.
- Immediate or local environment.
- Digital device with assistive technology.
- Print and Braille Pre-Technical Studies.

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
3.0 Materials for production.	3.2 Ceramics (7 lessons)	By the end of the Sub Strand, the learner should be able to; a) identify common ceramic materials in the locality, b) describe the physical properties of ceramic materials in the locality, c) relate ceramic materials to their use in a work environment, d) Acknowledge the importance of ceramic materials used in the locality.	<ul style="list-style-type: none"> ● Learner with low vision uses visual aids to identify items made of ceramic materials while a learner with blindness manipulates tactile realia to identify items made of ceramics (pottery, ceramic utensils, glass, and shells). ● Learner with low vision collect items made of ceramic materials in the locality. Learner with blindness is paired with a sighted peer to collect items. ● Learner uses a digital device with assistive technology or relevant print and braille resources to search for and present the physical properties of ceramic materials (brittleness, fire resistance, heat resistance, water resistance, corrosion resistance). ● Learner visits a workplace in the locality to explore the uses of ceramic materials. Learner with blindness is paired with a sighted peer during the visit and explore the uses of ceramic materials. ● Learners matches ceramic materials to their uses in the work environment. 	<ol style="list-style-type: none"> 1. How are ceramic materials identified? 2. Why are ceramic materials important to society?
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> ● Critical thinking and problem solving: A learner acquires evaluation and decision making skills when collecting items made of ceramic materials in the locality. 				

<ul style="list-style-type: none"> ● Citizenship: A learner demonstrates social cultural sensitivity and awareness when visiting workplaces in the locality to explore the uses of ceramic materials.
<p>Values:</p> <ul style="list-style-type: none"> ● Responsibility: A learner engages in assigned roles and duties when collecting items made of ceramic materials in the locality, ● Unity: A learner collaborates with others when using a chart to match ceramic materials with their use in the work environment.
<p>Pertinent and Contemporary Issues (PCIs):</p> <ul style="list-style-type: none"> ● Safety: A learner identifies potential dangerous materials when investigating the physical properties of ceramic materials. ● Learner protection: A learner takes care of himself or herself while collecting items made of ceramic materials in the locality.
<p>Link to other Learning area: A learner is able to relate the skills learnt when identifying items made of ceramic materials to pottery in Creative Arts.</p>
<p>Suggested learning resources:</p> <ul style="list-style-type: none"> ● Realia [pottery, ceramic utensils, glasses, shells]. ● Immediate or local environment. ● Digital devices with assistive technology.

Suggested Assessment Rubric

Level Indicator	Exceeds expectation	Meets expectation	Approaches expectation	Below expectation
Ability to describe the composition of composite materials in the locality	Describes the 3 components of composite materials in the locality	Describes 2 component of composite materials in the locality	Describes 1 component of composite materials in the locality	Describes 1 of the component of composite materials in the locality with assistance
Ability to relate composite materials to their uses in a work environment.	Relates 8 composite materials to their uses in a work environment.	Relates 6-7 composite materials to their uses in a work environment.	Relates 3-5 composite materials to their uses in a work environment.	Relates less than 3 composite materials to their uses in a work environment.
Ability to identify common ceramic materials in the locality.	Identifies 6 common ceramic materials in the locality.	Identifies 4-5 common ceramic materials in the locality.	Identifies 2-3 common ceramic materials in the locality.	Identifies less than 2 common ceramic materials in the locality.
Ability to relate ceramic materials to their uses in a work environment.	Relates 6 ceramic materials to their uses in a work environment.	Relates 4-5 ceramic materials to their uses in a work environment.	Relates 2-3 ceramic materials to their uses in a work environment.	Relates less than 2 ceramic materials to their uses in a work environment.

STRAND 4.0 TOOLS AND PRODUCTION

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
<p>4.0 Tools and production.</p>	<p>4.1 Cutting tools (15 lessons)</p>	<p>By the end of the Sub Strand, the learner should be able to:</p> <p>a) identify cutting tools used in the work place,</p> <p>b) select cutting tools for given tasks in a workplace,</p> <p>c) use cutting tools to perform a given task, care for cutting tools in the work environment,</p> <p>d) recognise the importance of cutting tools in the work environment.</p>	<ul style="list-style-type: none"> ● Learner is guided to use visual or audio-visual aids and realia to identify cutting tools in the work environment (snips, chisel, handsaw, planes, hacksaw, scrappers, knives, strippers, cutters). Learner with blindness is guided to manipulate different cutting tools available alongside verbal description for familiarisation. ● In groups, learners are guided to discuss the use of cutting tools in the work environment and present their findings. ● Learner with low vision is guided to watch while learners with blindness listens to audio-visual clips on uses of cutting tools in the work environment. ● Learner is guided to demonstrates safe use of cutting tools to perform specific tasks. Learner with blindness is given one on one demonstration on how to appropriately handle different cutting tools to perform specific tasks in the work environment. ● Learner carries out given tasks using cutting tools. Learners with blindness are guided on how to appropriately hold specific cutting tools and perform specific tasks in the work environment. ● Learner with low vision cleans, lubricates hinges and joints, sharpen, maintain and store cutting tools in the work environment. Learner with blindness is paired with their sighted peer to clean, lubricate hinges and 	<ol style="list-style-type: none"> 1. How are cutting tools used? 2. How do we care for cutting tools?

			joints, sharpen, maintain and store cutting tools in the work environment alongside verbal description.	
Core competencies to be developed:				
<ul style="list-style-type: none"> • Learning to learn: A learner acquires the skill of working collaboratively with others when discussing the use of cutting tools in the work environment. • Critical Thinking and Problem Solving: A learner acquires evaluation and decision making skills when demonstrating safe use of cutting tools in performing specific tasks. 				
Values:				
<ul style="list-style-type: none"> • Responsibility: A learner observes safety precautions when using cutting tools available to perform given tasks and maintains them after the tasks. • Unity: A learner respects other people’s opinions when discussing the use of cutting tools in the work environment. 				
Pertinent and Contemporary Issues (PCIs):				
<ul style="list-style-type: none"> • Safety and security: A learner adheres to simple safety rules when demonstrating safe use of cutting tools to perform specific tasks. • Mental health: A learner relates well with others when discussing the use of cutting tools in the work environment. • Peer Education: A learner practices cutting skills when carrying out given tasks using cutting tools. 				
Link to other Learning Area:				
A learner is able to relate the use of cutting tools to farm and kitchen tools and equipment in Agriculture and Nutrition.				
Suggested Learning Resources:				
<ul style="list-style-type: none"> • Print and Braille Pre-Technical Studies. • Realia [chisel, handsaw, cutters, knives]. • Digital devices with assistive technology. 				

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)

<p>4.0 Tools and Production.</p>	<p>4.2 Computer Software (6 lessons)</p>	<p>By the end of the sub strand, the learner should be able to:</p> <ol style="list-style-type: none"> identify the categories of computer software used in a workplace, explain the functions of different application software in the workplace, use computer software to perform tasks in day-to-day life, acknowledge the importance of application software in the workplace. 	<ul style="list-style-type: none"> Learner brainstorms on the meaning of the term ‘computer software’ and presents findings to peers. Learner with low vision watches video clips while learner with blindness listens to audio-visual clips on identification and functions of different application software in the workplace. Learners use available resources to search for information about different computer software. In groups, learners discuss and present categories of computer software (<i>system software, application software</i>). Learner brainstorms on the functions of different application software (<i>word processing, presentation, spreadsheets</i>), and present findings in class. Learner performs tasks using different application software (<i>word processing, presentation, spreadsheet</i>). Learner with blindness are given one on one demonstration on how to handle different application software appropriately. 	<ol style="list-style-type: none"> Why is computer software important? How are computer software used in day-to-day life?
<p>Core competencies developed:</p> <ul style="list-style-type: none"> Digital Literacy: learner develops creating with technology skills when performing tasks using different application software. Learning to Learn: learner develops relationships by sharing what they have learnt with peers when discussing categories of computer software. 				
<p>Values:</p> <ul style="list-style-type: none"> Integrity: learner exhibits fairness by giving equal opportunities to peers when brainstorming functions of application software. 				

<p>Pertinent and Contemporary Issues (PCIs):</p> <ul style="list-style-type: none"> Peer Education and Mentorship: learner develops interpersonal relationships while they brainstorm on the functions of different application software.
<p>Pertinent and Contemporary Issues (PCIs):</p> <ul style="list-style-type: none"> Peer Education and Mentorship: learner develops interpersonal relationships while they brainstorm on the functions of different application software.
<p>Suggested Learning Resources:</p> <ul style="list-style-type: none"> Computer software applications. Approved Pre-tech grade 8 textbooks. Internet connectivity. Video and audio clips. Charts and pictures.

Level Indicator	Exceeds expectation	Meets expectation	Approaches expectation	Below expectation
Ability to identify cutting tools used in the work environment.	Identifies 5 cutting tools used in the work environment.	Identifies 4 cutting tools used in the work environment.	Identifies 3 cutting tools used in the work environment.	Identifies less than 3 cutting tools used in the work environment.
Ability to use cutting tools to perform a given task in the work environment.	Uses 5 cutting tools to perform a given task in the work environment.	Uses 4 cutting tools to perform a given task in the work environment.	Uses 3 cutting tools to perform a given task in the work environment.	Uses less than 3 cutting tools to perform a given task in the work environment.
Ability to explain the functions of different system and application software in the workplace.	Explains 5 functions of different system and application software in the workplace.	Explains 4 functions of different system and application software in the workplace.	Explains 3 functions of different system and application software in the workplace.	Explains less than 3 functions of different system and application software in the workplace.
Ability to use computer software to perform tasks in day-to-day life.	Uses 5 computer software to perform tasks in day-to-day life	Uses 4 computer software to perform tasks in day-to-day life.	Uses 3 computer software to perform tasks in day-to-day life.	Uses less than 3 computer software to perform tasks in day-to-day life.

STRAND 5.0: ENTREPRENEURSHIP

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Questions
<p>5.0 Entrepreneurship.</p>	<p>5.1 Book-keeping (12 lessons)</p>	<p>By the end of the Sub Strand, the learner should be able to:</p> <ul style="list-style-type: none"> a) explain the basic terms used in book-keeping, b) explain the importance of bookkeeping, c) classify business transactions in book-keeping, d) prepare simple financial statements for a business, e) keep financial records for effective decision making. 	<ul style="list-style-type: none"> • Learner is guided to brainstorm and presents the meaning of basic terms and importance of book-keeping for a business. • Learner is guided to calculate assets, liabilities and capital using the book-keeping equation. Learner with blindness is provided with adapted calculators for the task. • Learner with low vision is guided to watch while a learner with blindness listens to an audio-visual clip on a case study on cash and credit transactions. • Learner is guided to read and analyses a case study on cash and credit transactions and write notes. • Learner is guided to determine the cost and price of a given product to calculate profit and loss. Learner with blindness is provided with adapted calculators for calculation. • Learners are guided to discuss the components of a statement of financial position, cash flow and income statement and take notes. • Learner with low vision is guided to draw a simple statement of financial position, (cash flow, income, revenue, 	<ol style="list-style-type: none"> 1. Why is bookkeeping important to a business? 2. How are the statements of financial position, cash flow and income prepared?

			statement of changes in equity, profit and loss and statement of retained earnings) for a business while learner with blindness is guided to make a simple statement of financial position, (cash flow, income, revenue, statement of changes in equity, profit and loss and statement of retained earnings) for a business with low value figures written below each sub-title. Provide adapted calculators for learner with blindness.	
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> • Learning to learn: A learner acquires skills of organising, self-learning and works collaboratively when preparing statements of financial position, cash flow and income. • Critical thinking and problem-solving: A learner acquires evaluation and decision-making skills when calculating assets, liabilities and capital using the book-keeping equation. • Communication and collaboration: A learner develops writing, speaking, listening, reading and teamwork skills when discussing, brainstorming and presenting on the components of statements of financial position, cash flows and income. • Self-efficacy: A learner develops effective communication skills when discussing, presenting and preparing statements of financial position, cash flow and income. 				
<p>Values:</p> <ul style="list-style-type: none"> • Peace: A learner works harmoniously with members of the team when brainstorming and presenting the meaning, basic terms and importance of book-keeping for a business in learning activities. • Responsibility: A learner performs tasks assigned when discussing the components of a statement of financial position, cash flows and income statement. • Respect: A learner shows regard for the input of every member of the team when discussing the components of a statement of financial position, cash flow and income statement. 				

Pertinent and Contemporary Issues (PCIs):

- Financial literacy: A learner enhances book-keeping skills when drawing and presenting simple statements of financial position, cash flow and income for a business
- Career Guidance: A learner identifies career opportunities when brainstorming and presenting basic terms and importance of bookkeeping for a business.

Link to other Learning Area:

A learner is able to relate the skills used in calculating assets, liabilities and capital to calculations in Mathematics.

Suggested Learning Resources:

- Print or Braille Pre-Technical Studies Textbook and other relevant materials.
- Adapted calculators.
- Advanced Oxford English Dictionary.
- Recorded audio-visual clips.
- Braille samples of balance sheets or profit and loss accounts.
- Digital devices with assistive technology.

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
5.0 Entrepreneurship.	5.2 Income and Budgeting (9 lessons)	By the end of the Sub Strand, the learner should be able to; <ol style="list-style-type: none"> identify sources of income for an individual, explain the importance of budgeting in day-to-day life, prepare a simple budget for personal finance management, explore ethical and unethical practices in budgeting, appreciate the importance of financial planning in income management. 	<ul style="list-style-type: none"> Learner with low vision is guided to watch while a learner with blindness listens to an audio-visual clip on meaning and different sources of income for an individual. In groups, learners are guided to role plays different income generating activities. Learners are guided to share experiences on the meaning and sources of income for an individual. Learner is guided to brainstorm and presents on the importance of budgeting to peers. Learners are guided to discuss and present in class on ways of spending money wisely. Learner is guided to prepares a simple personal budget and shares with peers for peer assessment. Learners engage a resource person in discussions and present the ethical and unethical practices on income and budgeting. 	<ol style="list-style-type: none"> Why is it important to prepare a personal budget? How important are ethical issues in Income and budgeting?
Core competencies to be developed: <ul style="list-style-type: none"> Communication and collaboration: A learner acquires writing, reading, speaking, listening and team working skills when sharing experiences, brainstorming and presenting on the sources of income and importance of budgeting. 				

- Critical thinking and problem solving: A learner acquires evaluation skills when preparing a simple personal budget.

Values:

- Integrity: A learner develops ethical practices when budgeting and spending money.
- Responsibility: A learner performs tasks assigned when brainstorming and presenting on the importance of budgeting.
- Respect: A learner appreciates diverse opinions of others when sharing experiences on the meaning and sources of income for an individual.

Pertinent and Contemporary Issues (PCIs):

- Financial literacy: A learner develops book-keeping skills when preparing a simple personal budget.
- Mental health: A learner relates well with others when discussing and presenting on ways of spending money wisely.

Link to other Learning Area:

A learner is able to relate the skills used in preparing a simple personal budget to calculations in Mathematics.

Suggested Learning Resources:

- Approved appropriate print or braille Pre-Technical Studies textbooks and other relevant materials.
- Digital resources with assistive technology.
- Resource person.

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Questions
5.0 Entrepreneurship.	5.3 Marketing of goods and services (8 lessons)	By the end of the Sub Strand, the learner should be able to: a) explain the importance of marketing to a business, b) analyse the sources of information about the market for its potential customers, c) explore factors considered when selecting a suitable market for goods and services, d) select ICT platforms for marketing goods and services, e) recognise suitable markets for goods and services.	<ul style="list-style-type: none"> ● Learners brainstorm and present in class the meaning and importance of marketing. ● Learner with low vision is guided to watch while learner with blindness listens to an audio-visual documentary or interact with available resources on sources of information about the market for its potential customers and take notes. ● Learners are guided to engage a resource person, ask and answer questions, read and analyse a case study on factors considered when selecting a suitable market for goods and services. ● Learner is guided to use a digital device with assistive technology or relevant and appropriate print and braille textbooks to search, present information and select ICT platforms used in marketing of goods and services. 	<ol style="list-style-type: none"> 1. How is the market for goods and services selected? 2. How do we source information about the market and its potential customers?
Core competencies to be developed: <ul style="list-style-type: none"> ● Communication and collaboration: A learner acquires writing, speaking, listening, reading and team working skills when brainstorming 				

and presenting on the meaning and importance of marketing.

- Digital literacy: A learner acquires skills of connecting and interacting with digital technology when searching and presenting information on ICT platforms used in marketing of goods and services.
- Critical thinking and problem solving: A learner acquires research and explanation skills when searching and presenting information on sources of information about the market and its potential customers.

Values:

- Respect: A learner shows regard for self and others by taking turns when discussing and presenting on the meaning and importance of marketing.
- Peace: A learner displays tolerance when discussing and presenting on the meaning and importance of marketing.
- Responsibility: A learner shows accountability when selecting ICT platforms used in marketing of goods and services.

Pertinent and Contemporary Issues (PCIs)

- Financial Literacy: A learner enhances marketing skills when reading and analysing a case study on factors considered when selecting a suitable market for goods and services.
- **Safety and Security:** A learner observes online safety guidelines when using digital devices to select ICT platforms used in marketing of goods and services.

Link to other Learning Area:

A learner is able to relate the skills learnt in marketing to barter trade in Social Studies.

Suggested Learning Resources:

- Digital devices with assistive technology.
- Relevant recorded audio-visual clips or aids.
- Resource person.
- Print or Braille Pre-Technical Studies Textbooks and other resource materials.

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Questions
5.0 Entrepreneurship.	5.4 Distribution of goods and services (7 lessons)	By the end of the sub strand, the learner should be able to: a) explain the role of intermediaries in the distribution of goods and services, b) illustrate the channels for distributing different goods and services in business, c) analyse ethics in distribution of goods and services, d) value the need for distribution of goods and services in the community.	<ul style="list-style-type: none"> ● Learners are guided to discuss and present the meaning of channels of distribution and role of intermediaries in distribution of goods and services. ● Learner is guided to search from available resources the role of intermediaries in distribution of goods and services to the consumer, ● Learner with low vision is guided to search and watches video clips on channels for distributing different goods and services. Learner with blindness is guided to listen to audio-visual clips on channels for distributing different goods and services. ● Learner with low vision is guided to prepare a chart on channels for distribution of different goods and services. Learner with blindness is 	<ol style="list-style-type: none"> 1. How is the distribution of goods and services carried out in day-to-day life? 2. Which ethical issues influence distribution of goods and services?

			<p>guided to create tactile charts on channels for distributing different goods and services.</p> <ul style="list-style-type: none"> • Learners are guided to read and discuss stories on different distribution channels for goods and services. • In groups, learners debate on ethical and unethical practices on distribution of goods and services. 	
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> • Learning to learn: A learner develops collaborative skills and team spirit during brainstorming and presentations on the methods of saving and investment. • Critical thinking and problem solving: A learner acquires evaluation and decision-making skills when preparing a simple saving and investment plan. • Imagination and creativity: A learner develops observation skills when constructing money boxes for personal savings using locally available materials. • Self-efficacy: A learner develops self-awareness and planning skills when preparing a simple saving and investment plan. 				
<p>Values:</p> <ul style="list-style-type: none"> • Integrity: A learner chooses to do the right thing as they develop ethical practices in saving and investment. • Respect: A learner shows regard for the input of members while sharing experiences on ethical and unethical practices on saving and investment. • Responsibility: A learner engages in assigned roles and duties as they carry out tasks assigned during learning activities. • Unity: A learner co-operates with others when sharing experiences on ethical and unethical practices on saving and investments. 				
<p>Pertinent and Contemporary Issues (PCIs):</p> <ul style="list-style-type: none"> • Financial literacy: A learner enhances financial planning skills during preparation of a simple saving and investment plan. • Peer Education: A learner enhances skills in sharing experiences on ethical and unethical practices on saving and investment. 				

Link to other Learning Area:

A learner is able to relate the skills learnt in preparing a simple saving and investment plan to calculations in Mathematics.

Suggested Learning Resources:

- Approved Pre-tech grade 8 textbooks.
- Digital devices with assistive technology.
- Brochures.
- Pictures.
- Charts, tactile charts.
- Flyers.
- Brochures.
- Newspapers.
- Magazines.

Suggested Assessment Rubric

Level Indicator	Exceeds expectation	Meets expectation	Approaching expectation	Below expectation
Ability to prepare simple financial statements for a business.	Prepares 5 simple financial statements for a business.	Prepares 4 simple financial statements for a business.	Prepares 3 simple financial statements for a business.	Prepares less than 3 simple financial statements for a business.
Ability to identify sources of income for an individual.	Identifies 5 sources of income for an individual	Identifies 4 sources of income for an individual	Identifies 3 sources of income for an individual	Identifies less than 3 sources of income for an individual
Ability to select ICT platforms for marketing goods and services.	Selects ICT 5 platforms for marketing goods and services.	Selects 4 ICT platforms for marketing goods and services.	Selects 3 ICT platforms for marketing goods and services.	Selects less than 3 ICT platforms for marketing goods and services.
Ability to illustrate the channels for distributing different goods and services in business.	Illustrates 5 channels for distributing different goods and services in business.	Illustrates 4 channels for distributing different goods and services in business.	Illustrates 3 channels for distributing different goods and services in business.	Illustrates less than 3 channels for distributing different goods and services in business.

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

Introduction

In Grade 8, learners will undertake an integrated Community Service Learning (CSL) project of choice from a single or combined subject. The CSL project will enable the learner to apply knowledge and skills from other subjects to address a problem in the community. The implementation of the integrated CSL project will take a Whole School Approach, where all members of the school community including teachers, school administration, parents/guardians/ local community and support staff. It will be a collaborative effort where the teacher of Social Studies coordinates and works with other subject teachers to design and implement the integrated CSL projects. The teachers will select a theme drawn from different Learning Areas and the broader categories of Pertinent and Contemporary Issues (PCIs) for the CSL project. It should also provide an opportunity for development of core competencies and nurturing of values. Learners will undertake one common integrated class CSL project following a 6-step milestone approach as follows:

Milestone	Description
Milestone 1	Problem Identification Learners study their community to understand the challenges faced and their effects on community members. Some of the challenges in the community can be: <ul style="list-style-type: none">● environmental degradation● lifestyle diseases, communicable and non-communicable diseases● poverty● violence and conflicts in the community● food security issues
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	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
Milestone 6	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.

NOTE: The milestones will be staggered across the 3 terms of the academic calendar.

Assessment of CSL integrated Project

Assessment for the integrated CSL project 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 project. It will focus on 3 components namely: skills from various learning areas applied in carrying out the project, core competencies developed and values nurtured.

APPENDIX 2: LIST OF ASSESSMENT METHODS, LEARNING RESOURCES AND NON-FORMAL ACTIVITIES.

Strands	Sub Strands	Suggested Assessment Methods	Suggested Learning Resources	Suggested Non Formal Activities
1.0 Foundations of Pre-Technical studies	1.4 Fire Safety	<ul style="list-style-type: none"> • Question and Answer • Observation • Written test • Practical work • peer and self assessment 	<ul style="list-style-type: none"> • Approved Pre-technical studies grade 8 textbooks • Workshop rules and regulations on fire safety • Firefighting equipment • Posters and flyers • Charts, tactile charts and pictures 	<ul style="list-style-type: none"> • Role playing • Health club, First Aid clubs, St. John’s Ambulance • community sensitisation on fire, and data safety and best practices • Field visit activities
	1.2 Data Safety	<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"> • Digital devices such as: desktop computer, laptop, smart phone, tablets • Computer software such as antivirus • Online applications 	Debate on data safety during clubs
<ul style="list-style-type: none"> • 2.0 Communication 	<ul style="list-style-type: none"> • 2.1 Plane Geometry 	<ul style="list-style-type: none"> • Question and answer • Observation • Written test • Practical work 	<ul style="list-style-type: none"> • Drawing charts • Drawing papers/books • Brochures and magazines • Geometrical set 	Learners visit nearby workplaces to observe how different combined shapes and how they are used in the community

		<ul style="list-style-type: none"> • Peer and self-assessment 	<ul style="list-style-type: none"> • Handbook • Digital resources • Approved textbooks • Charts • Brochures 	
	2.2 Dimensioning	<ul style="list-style-type: none"> • Question and Answer • Observation • Written test • Practical work • Peer and self assessment • Portfolio 	<ul style="list-style-type: none"> • Drawing papers • Pencils • Digital devices such as; computer, laptop, smart phone, tablets among others • Samples of free hand sketches • Three - dimensional realia 	Learners Debate on importance of dimensioning during clubs and societies
	2.3 Plain scale drawing	<ul style="list-style-type: none"> • Question and answer • Observation • Written test • Practical work • Peer and self-assessment • Portfolio 	<ul style="list-style-type: none"> • Drawing books, • Pencils, • Geometrical instruments, • Ruler • Digital devices such as; computer, laptop, smart phone, tablets among others 	Learners visit a nearby workshop or a TVET institution to observe and record how plain scale drawing is done and how it is used in the locality.

	2.4 Visual programming	<ul style="list-style-type: none"> • Question and Answer • Observation • Written test • Practical work • peer and self-assessment • portfolio 	<ul style="list-style-type: none"> • Digital devices, • Apps • productivity tools, • visual programming tools, • computer software (OS, Utility software and Application programs) • Internet • Video and audio clips 	<ul style="list-style-type: none"> • Community presentations on • how to navigate the visual programming applications? • sensitise • communities on the use of visual programming • Club and society activities
3.0 Materials for production	3.1 Composite Materials	<ul style="list-style-type: none"> • Question and Answer • Observation • Written test • Practical work • Peer and self assessment • Portfolio 	<ul style="list-style-type: none"> • Concrete, bricks, • Manufactured boards, • Stone, paper-mâché and plastic-coated paper • Digital devices, • Approved books • Internet • Video, audio clips, • Models • Checklists 	Learners go round the compound and the nearby community and collect available composite materials and write down how each is used by the local community

	3.2 Ceramics	<ul style="list-style-type: none"> • Question and answer • Observation • Written test • Practical work • Peer and self assessment • Portfolio 	<ul style="list-style-type: none"> • Earthenware, stoneware and porcelain • Career brochures, career magazines • Digital devices such as; computer, laptop, smart phone, tablets 	Learners visit a nearby workshop to observe and record how ceramics are used to make different gadgets
4.0 Tools and Production	4.1 Cutting Tools	<ul style="list-style-type: none"> • Question and Answer • Observation • Written test • Practical work • Peer and self • Assessment • Portfolios 	<ul style="list-style-type: none"> • Snips, chisel, handsaw, planes, hacksaw, • Scrappers, knives, • Strippers and scissors. • Digital devices such as; computer, laptop, smart phone or tablets 	Learners visit a nearby home to observe and record how cutting tools are used in the family and local community
	4.2 Computer Software	<ul style="list-style-type: none"> • Rating scales • Rubrics • Questionnaires • Projects • Portfolios • Oral questions • Aural questions • Interview • Written tests • Anecdotal records • Observation schedules 	<ul style="list-style-type: none"> • Reference materials • Digital devices • Manilla papers • Internet • video clips, audio clips, models, • Computer software (Application programs) 	Create awareness to community members on how to select appropriate type of application software for their computers

5.0 Entrepreneurship	5.1 Bookkeeping	<ul style="list-style-type: none"> • Portfolio • Question and answer • Learner's profile • Written tests • Observation • Peer and self-assessment 	<ul style="list-style-type: none"> • Approved textbook • Digital resources • Resource persons • Sample financial records • Approved textbook • Digital resources • Resource persons • Sample financial records 	<ul style="list-style-type: none"> • Business clubs • School • Mentorship • Programs
	5.2 Income and Budgeting	<ul style="list-style-type: none"> • Portfolio • Question and answer • Learner's profile • Written tests • Observation • Peer and self assessment 	<ul style="list-style-type: none"> • Approved textbook • Digital resources • Resource persons • Sample personal budget template • Realia like piggy banks and money boxes 	<ul style="list-style-type: none"> • Business clubs • School • Mentorship • Programs

	5.3 Marketing goods and Services	<ul style="list-style-type: none"> ● Portfolio ● Question and answer ● Learner's profile ● Written tests ● Observation ● Peer and self assessment 	<ul style="list-style-type: none"> ● Approved textbooks ● Digital devices ● Brochures ● Pictures ● Charts ● Flyers ● Newspapers and Magazines 	<ul style="list-style-type: none"> ● Business clubs ● School mentorship programmes ● Academic field visits to local ● Markets ● Trade fairs and ● Shows
	5.4 Distribution of goods and services	<ul style="list-style-type: none"> ● Portfolio ● Question and answer ● Learner's profile ● Written Tests ● Observation ● Peer and Self assessment 	<ul style="list-style-type: none"> ● Approved textbooks ● Digital devices ● Brochures ● Pictures ● Charts ● Flyers ● Brochures ● Newspapers and magazines 	<ul style="list-style-type: none"> ● Academic field visits ● Business clubs and societies ● school mentorship programmes