



KENYA INSTITUTE OF CURRICULUM DEVELOPMENT
A Skilled and Ethical Society

JUNIOR SCHOOL CURRICULUM DESIGN

PRE-TECHNICAL STUDIES

GRADE 8

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NATIONAL GOALS OF EDUCATION

Education in Kenya should:

1. Foster nationalism and patriotism and promote national unity.

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

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

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

a) Social Needs

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

b) Economic Needs

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

c) Technological and Industrial Needs

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

- 3. Promote individual development and self-fulfilment**
Education should provide opportunities for the fullest development of individual talents and personality. It should help children to develop their potential interests and abilities. A vital aspect of individual development is the building of character.
- 4. Promote sound moral and religious values.**
Education should provide for the development of knowledge, skills and attitudes that will enhance the acquisition of sound moral values and help children to grow up into self-disciplined, self-reliant and integrated citizens.
- 5. Promote social equity and responsibility.**
Education should promote social equality and foster a sense of social responsibility within an education system which provides equal educational opportunities for all. It should give all children varied and challenging opportunities for collective activities and corporate social service irrespective of gender, ability or geographical environment.
- 6. Promote respect for and development of Kenya's rich and varied cultures.**
Education should instil in the youth of Kenya an understanding of past and present cultures and their valid place in contemporary society. Children should be able to blend the best of traditional values with the changing requirements that must follow rapid development in order to build a stable and modern society.
- 7. Promote international consciousness and foster positive attitudes towards other nations.**
Kenya is part of the international community. It is part of the complicated and interdependent network of peoples and nations. Education should therefore lead the youth of the country to accept membership of this international community with all the obligations and responsibilities, rights and benefits that this membership entails.
- 8. Promote positive attitudes towards good health and environmental protection.**
Education should inculcate in young people the value of good health in order for them to avoid indulging in activities that will lead to physical or mental ill health. It should foster positive attitudes towards environmental development and conservation. It should lead the youth of Kenya to appreciate the need for a healthy environment.

LESSON ALLOCATION AT JUNIOR SCHOOL

S/No	Learning Area	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 is an integrated learning area comprising of Business, Computer and Technical Studies learning areas. It builds on the competencies acquired in Science and Technology, and other related learning areas at the Upper Primary School level. The learning area encompasses Foundations of Pre-Technical Studies, Communication in the Work Environment, Materials for Production, Tools and Production, and Entrepreneurship. These components aim to develop critical thinking, problem-solving, creativity, innovation, communication, digital literacy, and financial literacy skills, all considered essential in both personal life and the world of work.

This learning area is anchored in National Goals of Education No. 2 on providing the learners with the necessary skills and attitudes for industrial development, Kenya Vision 2030 on making education responsive to education needs, Sessional Paper No 1 of 2019, which recommend the promotion of technical and vocational education with an emphasis on Science, Technology, and Innovation (ST&I) in the school curriculum. It is also informed by the National ICT Policy of Kenya 2016 (revised 2020) which emphasises on use of ICT as a foundation for the creation of a more robust economy.

This subject aims at equipping learners with foundational knowledge, skills, attitudes, and values essential for the Science, Technology, Engineering, and Mathematics (STEM) and Social Science pathways at Senior School. At Senior School, students will select subjects such as Metal Technology, Wood Technology, Electrical Technology, Aviation Technology, Building Technology, Power Mechanics Technology, Leatherwork, Hairdressing & Beauty Therapy, Marine & Fisheries, Business Studies and Computer Science 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 communication technology and innovation.
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
1.0 Foundations of Pre-Technical studies	1.1 Fire and Data Safety
	1.2 Computer Hardware
	1.3 Consumer and Investor Protection
2.0 Communication	2.1 Business communication
	2.2 Plain scale drawing
	2.3 Visual programming
3.0 Materials for production	3.1 Composite Materials
	3.2 Ceramics
4.0 Tools and Production	4.1 Cutting Tools
	4.2 Production unit
5.0 Entrepreneurship	5.1 Bookkeeping
	5.2 Income and Budgeting
	5.3 Marketing goods and Services
	5.4 Saving and Investment

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 Fire and Data Safety (7 lessons)	By the end of the sub strand, the learner should be able to: <ol style="list-style-type: none"> explain the possible causes of fire in a work environment, describe ways of preventing fire in the environment, use firefighting techniques to stop fire in an environment, analyse threats to data in an electronic device, secure data in an electronic device, acknowledge the need for fire and data safety in day-to-day life. 	The learner is guided to: <ul style="list-style-type: none"> brainstorm on the possible causes of fire in a work environment (<i>flammable substances, electrical faults, combustible materials</i>), share experiences on ways of preventing fire in the environment, discuss firefighting techniques in the work environment, (<i>cooling, smothering, starving, interrupting</i>) role play firefighting techniques in work environment, demonstrate firefighting techniques to stop fire in an environment, search for information using available resources on the threats of data in an electronic 	<ol style="list-style-type: none"> Why is fire safety important? How is data secured in an electronic device?

			device and share their findings, <ul style="list-style-type: none"> ● discuss ways of securing data stored in an electronic device (<i>use of passwords, backup, anti-viruses</i>), ● secure data in an electronic device against possible threats (<i>use passwords; and scan electronic devices using antivirus</i>). 	
Core competencies to be developed: <ul style="list-style-type: none"> ● Critical Thinking and Problem Solving: Learner acquires active listening and communication skills when following simple instructions to complete tasks while role playing firefighting techniques in the work environment. ● Digital Literacy: Learner acquires skills of interacting with technology when using digital devices to secure electronic data in a user environment 				
Values: <ul style="list-style-type: none"> ● Responsibility: Learner engages in assigned roles and duties when securing electronic data in the workplace against possible threats. ● Respect: Learner appreciates diverse opinions when brainstorming on the threats of electronic data in the work environment. 				
Pertinent and Contemporary Issues (PCIs): <ul style="list-style-type: none"> ● Cyber Security: Learner enhances online safety when practising how to secure electronic data in the workplace environment. 				
Link to other subjects: <ul style="list-style-type: none"> ● The learner is able to relate fire safety to fire control measures in Integrated Science. 				

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
1.0 Foundations of Pre-Technical Studies	1.2 Computer Hardware (11 lessons)	By the end of the sub strand the learner should be able to: a) classify computer hardware devices in a user environment, b) use computer hardware devices to carry out a given task, c) value the importance of computer hardware devices in a user environment.	The learner is guided to: <ul style="list-style-type: none"> ● brainstorm and present on the meaning of the term ‘computer hardware’ ● use available resources to search for information on categories of computer hardware: input devices (<i>keying devices, pointing devices, scanning devices, voice input devices, touch screen, digitizer, digital cameras</i>), output devices (<i>hardcopy and softcopy</i>), storage devices (<i>fixed and removable devices</i>), ● discuss the categories of computer hardware devices in a user environment, ● match available devices to their respective categories, ● perform tasks using computer input, output and storage devices. 	How are computer hardware used?
<p>Core competencies to be developed: Critical Thinking and Problem Solving: learner develops skills of interpretation and inference when categorising computer hardware.</p>				

Values:

Peace: learner displays tolerance when performing tasks using computer hardware.

Pertinent and Contemporary Issues (PCIs):

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

Link to other subjects:

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



Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
1.0 Foundations of Pre-Technical Studies	1.3 Consumer and Investor Protection (4 lessons)	By the end of the sub-strand, the learner should be able to: <ol style="list-style-type: none"> a) explain the importance of consumer and investor protection in Kenya, b) analyse ways in which consumers and investors are protected in Kenya, c) explore the Government financial regulators in Kenya, d) protect oneself from exploitation. 	The learner is guided to: <ul style="list-style-type: none"> ● brainstorm and present on the meaning and importance of consumer and investor protection in Kenya, ● use available resources to search for information on the importance of consumer and investor protection in Kenya, ● share experiences on ways in which consumers and investors protect themselves, ● discuss and present on ways in which the Government protects consumers and investors. ● use print or digital media to search for information on ways in which non-Governmental organisations protect consumers' and investors' concerns in Kenya, ● engage a resource person to discuss ways in which non-Governmental organisations protect consumers' 	<ol style="list-style-type: none"> 1. Why does the Government protect consumers and investors? 2. How do consumers protect themselves from exploitation by traders?

			and investors' concerns in Kenya, <ul style="list-style-type: none"> ● read and analyse a case study on Government financial regulators in Kenya. 	
Core competencies to be developed: <ul style="list-style-type: none"> ● Learning to Learn: learner acquires skills of organising self-learning when searching for information on the importance of consumer and investor protection in Kenya. ● Communication and Collaboration: learner develops writing, speaking, listening and teamworking skills when discussing, brainstorming and presenting on consumer and investor protection. 				
Values: <ul style="list-style-type: none"> ● Respect: learner shows patience when brainstorming and presenting on the meaning and importance of consumer and investor protection in Kenya. ● Responsibility: learner shows resilience when searching for information on the importance of consumer and investor protection in Kenya. ● Unity: learner cooperates with other members when sharing experiences on ways in which consumers and investors protect themselves. 				
Pertinent and Contemporary Issues (PCIs): <ul style="list-style-type: none"> ● Consumer Rights: learner become aware of ways of protecting consumers and investors rights when sharing in groups 				
Links to other subjects: <p>The learner is able to relate the skills used in consumer rights to human rights in Social Studies.</p>				

Assessment Rubric				
Level	Exceeds expectations	Meets expectations	Approaches expectations	Below expectations
Indicator				
Ability to use firefighting techniques to stop fire in an environment	Uses four firefighting techniques to stop fire in an environment and assists peers	Uses four firefighting techniques to stop fire in an environment	Uses three firefighting techniques to stop fire in an environment with minimal assistance	Uses two or one firefighting technique to stop fire in an environment with a lot of assistance
Ability to apply measures to secure electronic data in the work environment	Applies more than three control measure to secure data in a computer	Applies three control measure to secure data in a computer	Applies two control measure to secure data in a computer	Applies one control measure to secure data in a computer
Ability to use computer hardware devices to carry out a task	Uses computer hardware devices to carry out a task and assists peers	Uses computer hardware devices to carry out a task	Uses computer hardware devices to carry out a task with minimal assistance	Uses computer hardware devices to carry out a task with a lot of assistance

STRAND 2.0: COMMUNICATION

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
2.0 Communication	2.1 Business Communication (7 lessons)	By the end of the sub strand, the learner should be able to: <ol style="list-style-type: none"> a) identify forms of communication in a work environment, b) explore the factors considered when selecting channels of communication, c) analyse ethical and unethical practices in business communication, d) recognize suitable channels of communication in a work environment 	The learner is guided to: <ul style="list-style-type: none"> ● brainstorm on forms and channels of communication in the work environment, ● use available resources to explore the channels of communication under each form, ● discuss and present the factors considered when selecting channels of communication, ● read and analyse a case study on ethical and unethical practices in communication. ● debate on ethical practices in communication. 	<ol style="list-style-type: none"> 1. Why is business communication important? 2. How do people communicate in a business environment?
Core competencies to be developed: <ul style="list-style-type: none"> ● Communication and Collaboration: learner acquires writing, listening, speaking and team working skills when discussing and brainstorming on forms and channels of communication. 				

- Learning to Learn: learner acquires organising self-learning skills when using available resources to explore the channels of communication under each form.
- Self Efficacy: learner develops effective communication skills when debating on ethical practices in communication.

Values

- Respect: learner shows humility when debating on ethical practices in communication.
- Unity: learner cooperates with other members of the team when discussing and presenting the factors considered when selecting channels of communication

Pertinent and Contemporary Issues (PCIs)

Social Cohesion: learner works together harmoniously with peers when debating on ethical practices in communication.

Link to other subjects:

The learner is able to relate the forms and channels of communication as a learner learns communication skills to English .

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
2.0 Communication	2.2 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.	The learner is guided to: <ul style="list-style-type: none"> • use print or digital media to search for information on plain scales • discuss the features of a plain scale • use drawing instruments to construct a plain scale • discuss how to read plain scales • use visual aids to identify drawings drawn to different scales • practice drawing plane figures to a given plain scale 	1. What is the importance of drawing figures to scale? 2. Why are plane figures drawn to scale?
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> • Learning to Learn: the learner acquires the skill to reflect on own work when practicing drawing of plane figures to a given plain scale. • Self-Efficacy: the learner acquires intrinsic self-motivation when drawing plane figures to scale. 				
<p>Values:</p> <ul style="list-style-type: none"> • Unity: the learner enhances cooperation with peers when discussing how to read plain scales • Responsibility: the 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 as the learner converts units of a plain scale



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Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
2.0 Communication	2.3 Visual Programming (14 lessons)	By the end of the sub strand the learner should be able to: <ol style="list-style-type: none"> identify types of visual programming applications used to solve problems in day-to-day life, explore the features of visual programming applications used in the work environment, create instructions to solve problems using visual programming application, value the importance of visual programming to solve problems in day-to-day life. 	The learner is guided to: <ul style="list-style-type: none"> brainstorm on the meaning of the terms ‘visual programming’ and ‘visual programming application’, use available resources to search for information on types of visual programming applications (<i>Educational, Multimedia, Video games</i>), brainstorm on examples of visual programming applications (<i>Microsoft MakeCode, Scratch, Sprite box</i>), launch and discuss the different features of visual programming applications (<i>input, processing, output, effects such as sound, animations and background</i>), Search for information on terminologies used in visual programming (<i>syntax, variables, input output statements, coding, coding blocks, sequence statement</i>, 	How are computer programs used in daily life?

			<p><i>repeating statement, selection statement, variable declarations)</i> and discuss with peers</p> <ul style="list-style-type: none"> ● use visual programming software to create instructions in the work environment. 	
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> ● Communication and Collaboration: Learner develops speaking, listening and teamworking skills when discussing the features of a visual programming application ● Critical Thinking and Problem Solving: Learner develops open mindedness and creativity skills when applying effects such as sound, animations, background in a program 				
<p>Value:</p> <p>Responsibility: Learner engages in assigned roles and duties when using visual programming software to create instructions in the work environment.</p>				
<p>Pertinent and Contemporary Issues (PCIs):</p> <p>Peer Education: learner enhances healthy inter and intra personal relationships with others when searching for information on terminologies used in visual programming and discussing with peers.</p>				
<p>Link to other subjects</p> <p>The learner is able to relate the skills used in visual programming to solving problems in Mathematics</p>				

Assessment Rubric				
Level Indicator	Exceeds expectations	Meets expectations	Approaches expectations	Below expectations
Ability to draw types of lines used in drawing	Draws four types of lines used in drawing	Draws three types of lines used in drawing	Draws two types of lines used in drawing	Draws at most one type of line used in drawing
Ability to use visual programming application to create instructions to solve problems in day-to-day life	Uses the visual programming application to create instructions to solve problems in day-to-day life and assists others	Uses visual programming application to create instructions to solve problems in day-to-day life	Uses visual programming application to create instructions to solve problems in day-to-day life with minimal assistance	Uses visual programming application to create instructions to solve problems in day-to-day life with a lot of assistance

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 in the locality, relate composite materials to their use in a work environment, acknowledge the importance of composite materials used in the locality. 	The learner is guided to: <ul style="list-style-type: none"> use visual aids and realia to identify materials made of composites (<i>concrete, bricks, manufactured boards, stone, paper-mâché and plastic-coated paper</i>) and share with the peers, use print or digital media to search for information on the composition of composite materials and share with peers, discuss the constituent materials of composites, visit workplaces in the locality to explore the uses of composite materials, match composite materials to their uses in the work environment. 	<ol style="list-style-type: none"> How can composite materials be identified? Why are composite materials used in day-to-day life?
Core competencies to be developed: <ul style="list-style-type: none"> Communication and Collaboration: Learner acquires speaking, listening and teamworking skills when discussing the constituent materials of composites 				

- **Digital Literacy:** Learner acquires interacting with technology skills when using digital devices to search for information on the composition of composite materials

Values:

Peace: The learner portrays respect for diversity when visiting workplaces in the locality to explore the uses of composite materials

Pertinent and Contemporary Issues (PCIs):

Online Safety: The learner avoids harmful or illegal content when using digital media to search for information on the composition of composite materials

Link to other subjects:

The learner is able to relate the concepts of composite materials to non-metals in Integrated Science.

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
3.0 Materials for Production	3.2 Ceramic Materials (7 lessons)	By the end of the sub strand, the learner should be able to: <ol style="list-style-type: none"> identify common ceramic materials in the locality, describe the physical properties of ceramic materials in the locality, relate ceramic materials to their use in a work environment, acknowledge the importance of ceramic materials used in the locality. 	The learner is guided to: <ul style="list-style-type: none"> use visual aids and realia to identify items made of ceramic materials (<i>pottery, ceramic utensils, glass, shells</i>) collect items made of ceramic materials in the locality, investigate the physical properties of ceramic materials (<i>brittleness, fire resistance, heat resistance, water resistance, corrosion resistance</i>), visit workplaces in the locality to explore the uses of ceramic materials, use a chart to match ceramic materials to their uses in the work environment. 	How are ceramic materials used in day-to-day life?
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> Critical Thinking and Problem Solving: Learner acquires evaluation and decision-making skills when collecting items made of ceramic materials in the locality. Citizenship: 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: Learner engages in assigned roles and duties when collecting items made of ceramic materials in the locality. ● Unity: 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> <p>Safety: The learner observes safety precautions when investigating the physical properties of ceramic materials.</p>
<p>Link to other subjects:</p> <p>The learner is able to relate the skills learnt when identifying items made of ceramic materials to pottery in Creative Arts.</p>

Assessment Rubric				
Level Indicator	Exceeds expectations	Meets expectations	Approaches expectations	Below expectations
Ability to relate composite materials to their use in a work environment	Relates composite materials to their use in a work environment, citing examples	Relates composite materials to their use in a work environment	Relates some composite materials to their use in a work environment	Relates some composite materials to their use in a work environment with guidance
Ability to relate ceramic materials to their use in a work environment	Relates ceramic materials to their use in a work environment citing examples	Relates ceramic materials to their use in a work environment	Relates some ceramic materials to their use in a work environment	Relate some ceramic materials to their use in a work environment with guidance

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 Cutting Tools (15 lessons)	By the end of the sub strand, the learner should be able to: <ol style="list-style-type: none"> identify cutting tools used in the work environment, select cutting tools for given tasks in a workplace, use cutting tools to perform a given task, care for cutting tools in the work environment, recognise the importance of cutting tools in the work environment. 	The learner is guided to: <ul style="list-style-type: none"> use available resources to identify cutting tools in the work environment (<i>snips, chisels, handsaws, planes, hacksaws, scrappers, knives, strippers, cutters</i>), discuss the use of cutting tools in the work environment, use audio visual aids to observe the use of cutting tools in the work environment, demonstrate safe use of cutting tools to perform specific tasks, carry out given tasks using cutting tools, maintain and store cutting tools in the work environment. 	Why are cutting tools cared for?
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> Learning to Learn: 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:** Learner acquires evaluation and decision-making skills when demonstrating safe use of cutting tools in performing specific tasks.

Values:

- **Responsibility:** learner observes safety precautions when using cutting tools available to perform given tasks.
- **Unity:** learner respects other people's opinions when discussing the use of cutting tools in the work environment.

Pertinent and Contemporary Issues (PCIs):

Safety: The learner observes safety when demonstrating safe use of cutting tools to perform specific tasks.

Link to other subjects:

The learner is able to relate the use of cutting tools to farm and kitchen tools and equipment in Agriculture and Nutrition.

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
4.0 Tools and Production	4.2 Production Unit (6 lessons)	By the end of the sub strand, the learner should be able to: <ol style="list-style-type: none"> explain the factors considered when locating a production unit, analyse the factors determining the size of a production unit, locate a production unit in a suitable area. 	The learner is guided to: <ul style="list-style-type: none"> discuss the meaning of the term ‘production unit’ and present to peers brainstorm and present the factors considered when choosing the location of a production unit 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>) use print or digital media to search for information on the factors that determine its size and share with peers 	How is the size of a production unit determined?

Assessment Rubric				
Level Indicator	Exceeds expectations	Meets expectations	Approaches expectations	Below expectations
Ability to analyse the factors determining the size of a business unit	Analyses four factors determining the size of a business unit citing examples	Analyses four factors determining the size of a business unit	Analyses two to three factors determining the size of a business unit	Analyses at most one factor determining the size of a business unit
Ability to use cutting tools to perform a given task	Uses cutting tools to perform a given task skilfully	Uses cutting tools to perform a given task	Uses some cutting tools to perform a given task	Uses some cutting tools to perform a given task with assistance
Ability to care for cutting tools in the work environment	Cares for cutting tools in the work environment Skilfully	Cares for cutting tools in the work environment	Cares for some cutting tools in the work environment	Cares for some cutting tools in the work environment with assistance

STRAND 5.0: ENTREPRENEURSHIP

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
5.0 Entrepreneurship	5.1 Bookkeeping (12 lessons)	By the end of the sub strand, the learner should be able to: a) explain the importance of bookkeeping in entrepreneurship, b) classify business transactions in bookkeeping, c) prepare simple financial statements for a business, d) keep financial records for effective decision making.	The learner is guided to: <ul style="list-style-type: none"> ● brainstorm and present the meaning of basic terms used in bookkeeping ● discuss the importance of bookkeeping for a business, ● calculate assets, liabilities and capital using the bookkeeping equation, ● read and analyse a case study on cash and credit transactions, ● determine the cost and price of a given product to calculate profit and loss, ● discuss the components of a statement of financial position, cash flow and income statement, ● draw and present simple statements of financial position, cash flow and income statement for a business. 	<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 statement prepared?

Core competencies to be developed:

- Critical Thinking and Problem-Solving: Learner acquires evaluation and decision-making skills when calculating assets, liabilities and capital using the bookkeeping equation.
- Self-Efficacy: Learner develops effective communication skills when discussing, presenting and preparing statements of financial position, cash flow and income.

Values:

- Peace: Learner works harmoniously with members of the team when brainstorming and presenting the meaning of basic terms used in bookkeeping.
- Responsibility: Learner performs tasks assigned when calculating assets, liabilities and capital using the bookkeeping equation.
- Respect: 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: learner enhances bookkeeping skills when drawing and presenting simple statements of financial position, cash flow and income statement for a business.

Link to other subjects:

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

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: a) identify sources of income for an individual, b) explain the importance of budgeting in day-to-day life, c) prepare a simple budget for personal finance management, d) explore ethical and unethical practices in budgeting, e) practice financial planning in income management.	The learner is guided to: ● share experiences on the meaning and sources of income for an individual, ● brainstorm and present on the importance of budgeting, ● discuss and present on ways of spending money wisely, ● prepare a simple personal budget, ● brainstorm on and present the ethical and unethical practices on income and budgeting.	1. Why is it important to prepare a personal budget? 2. What are the ethical issues in income and budgeting?
Core Competencies to be developed: <ul style="list-style-type: none"> ● Communication and Collaboration: Learner acquires writing, 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: Learner acquires evaluation skills when preparing a simple personal budget. 				
Values: <ul style="list-style-type: none"> ● Integrity: Learner develops ethical practices when budgeting and spending money. ● Responsibility: Learner performs tasks assigned when brainstorming and presenting on the importance of budgeting. ● Respect: 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: learner enhances financial skills when preparing a personal budget and wise spending of money.

Link to other subjects:

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



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Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
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: <ol style="list-style-type: none"> explain the importance of marketing to a business, analyse the sources of information about the market for its potential customers, explore factors considered when selecting a suitable market for goods and services, select tools to market goods and services, recognise suitable markets for goods and services. 	The learner is guided to: <ul style="list-style-type: none"> discuss and present the meaning and importance of marketing, interact with available resources on sources of information about the market and its potential customers, read and analyse a case study on factors considered when selecting a suitable market for goods and services, use print or digital media search and present information on ICT tools used in marketing of goods and services. 	<ol style="list-style-type: none"> How is the market of goods and services selected? Where can information about the market and its potential customers be sourced from?
<p>Core Competencies to be developed:</p> <ul style="list-style-type: none"> Communication and Collaboration: Learner acquires writing, speaking, listening and team working skills when discussing and presenting on the meaning and importance of marketing. Digital Literacy: Learner acquires skills of interacting with digital technology when searching and presenting information 				

on ICT platforms used in marketing of goods and services.

- Critical Thinking and Problem Solving: Learner acquires research and explanation skills when searching and presenting information on sources of information about the market and its potential customers.

Values:

- Respect: Learner shows regard for self and others when discussing and presenting on the meaning and importance of marketing.
- Responsibility: Learner shows accountability when searching and presenting information on ICT platforms used in marketing of goods and services.

Pertinent and Contemporary Issues (PCIs)

Safety: learner observes online safety when using print or digital media to search for information on ICT platforms used in marketing of goods and services

Link to other subjects:

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

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
5.0 Entrepreneurship	5.4 Saving and Investment (7 lessons)	By the end of the sub strand, the learner should be able to: a) explain the reasons for saving and investment in financial management, b) explore the methods of saving and investment for effective financial management, c) prepare a simple saving and investment plan for personal financial management, d) analyse ethical and unethical practices in saving and investing money, e) practice saving and	The learner is guided to: <ul style="list-style-type: none"> ● discuss and present on the meaning and reasons for saving and investment in financial management, ● brainstorm and present on methods of saving and investment for effective financial management, ● prepare a simple saving and investment plan, ● make money boxes for personal savings using locally available materials, ● share experiences on ethical and unethical practices on saving and investment, ● search for information on ethical and unethical practices on saving and investment from available resources and share with peers. 	1. Why is saving and investing important? 2. What are the ethical and unethical practices in saving and investing?

		investing for individual financial growth.		
Core Competencies to be developed: <ul style="list-style-type: none"> ● Learning to Learn: Learner develops collaborative and sharing skills when brainstorming and presenting on the methods of saving and investment. ● Critical Thinking and Problem Solving: Learner acquires evaluation and decision-making skills when preparing a simple saving and investment plan. ● Imagination and Creativity: Learner develops observation skills when constructing money boxes for personal savings using locally available materials. ● Self-Efficacy: Learner develops self-awareness and planning skills when preparing a simple saving and investment plan. 				
Values: <ul style="list-style-type: none"> ● Respect: Learner shows regard for the input of members when sharing experiences on ethical and unethical practices on saving and investment. ● Unity: Learner cooperates with others when sharing experiences on ethical and unethical practices on saving and investments. 				
Pertinent and Contemporary Issues (PCIs): Financial Literacy: learner enhances the financial skills when preparing a simple saving and investment plan,				
Link to other subjects: The learner is able to relate the skills learnt in preparing a simple saving and investment plan to calculations in Mathematics.				

Assessment Rubric				
Level	Exceeds expectations	Meets expectations	Approaches expectations	Below expectations
Indicator				
Ability to classify business transactions in bookkeeping	Classifies two business transactions in bookkeeping citing examples for each	Classifies two business transactions in bookkeeping	classifies one business transactions in bookkeeping	Classifies utmost one business transactions in bookkeeping with prompt
Ability to prepare simple financial statements for a business	Prepares three simple financial statements for a business	Prepares three simple financial statements for a business	Prepares two simple financial statements for a business	Prepares at least one simple financial statement for a business
Analyses four sources of information about the market for its potential customers	Analyses four sources of information about the market for its potential customers citing examples	Analyses four sources of information about the market for its potential customers	Analyses two to three sources of information about the market for its potential customers	Analyses at most one source of information about the market for its potential customers
Ability to prepare a simple saving plan for personal finance management.	Prepares simple saving plan with four components for personal finance management highlighting examples	Prepares a simple saving plan with four components for personal finance management	Prepares a simple saving plan with two to three components for personal finance management	Prepares a simple saving plan with at most one component for personal finance

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	<p>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:</p> <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	<p>Designing a solution</p> <p>Learners create an intervention to address the challenge identified.</p>
Milestone 3	<p>Planning for the Project</p> <p>Learners share roles, create a list of activities to be undertaken, mobilise resources needed to create their intervention and set timelines for execution</p>
Milestone 4	<p>Implementation</p> <p>The learners execute the project and keep evidence of work done.</p>
Milestone 5	<p>Showcasing /Exhibition and Report Writing</p> <p>Exhibitions involve showcasing learners’ project items to the community and reflecting on the feedback</p> <p>Learners write a report detailing their project activities and learnings from feedback</p>
Milestone 6	<p>Reflection</p> <p>Learners review all project work to learn from the challenges faced.</p> <p>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>

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 and Data 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 textbooks ● workshop rules and regulations on fire safety ● Firefighting equipment ● Posters and flyers ● Charts and pictures ● Digital devices such as; desktop computer, laptop, smart phone, tablets 	<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 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
2.0 Communication	2.1 Business communication	<ul style="list-style-type: none"> ● Question and Answer ● Observation ● Written test ● Practical work 	<ul style="list-style-type: none"> ● posters ● photographs ● pictures ● Business Studies 	<ul style="list-style-type: none"> ● community sensitisation ● role playing

		<ul style="list-style-type: none"> ● Peer and self-assessment 	handbook <ul style="list-style-type: none"> ● Digital resources ● Approved Textbooks ● Charts, brochures 	<ul style="list-style-type: none"> ● drama and music festivals ● club and societies activities ● field visits ● project activities
	2.2 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.
	2.3 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 	<ul style="list-style-type: none"> ● Community presentations on how to navigate the visual programming applications ● sensitise communities on the use of visual programming

			<ul style="list-style-type: none"> ● video and audio clips 	<ul style="list-style-type: none"> ● 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 among others ● 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 among others ● 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, scrapers, knives, strippers and scissors. ● Digital devices such as; computer, laptop, smart phone, tablets 	Learners visit a nearby home to observe and record how cutting tools are used in the family and local community
	4.2 Production unit	<ul style="list-style-type: none"> ● 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 ● Workplaces in the society 	<ul style="list-style-type: none"> ● Field visits activities ● Business clubs
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 	<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 <i>piggy banks</i> 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 ● brochures ● 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 Saving and Investment	<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

