**GRADE 9 RATIONALIZED PRE TECHNICAL STUDIES SCHEMES OF WORK TERM 1**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **WK** | **LSN** | **STRAND** | **SUB-STRAND** | **LESSON LEARNING OUTCOME** | **LEARNING EXPERIENCES** | **KEY INQUIRY QUESTION** | **LEARNING RESOURCES** | **ASSESSMENT** | **REFL** |
| 1 | 1 | Foundation of Pre-Technical Studies. | Safety on Raised Platforms. | By the end of the lesson, the learner should be able to:   1. Define the term Raised platforms. 2. Identify the types of raised platforms used in a work place. 3. Discuss the uses of the different types of raised platforms in a work place. 4. Appreciate the uses of the different raised platforms in a work place. | In groups or pairs,learners are guided to;  brainstorm and present the meaning of raised platforms in workplace.  observe pictures and identify the different types of raised platforms used in work place.  use digital devices or print resources to search for information on the uses of the identified raised platforms.  discuss the uses of the different raised platforms. | What is a raised platform in a workplace?  What are the uses of the raised platforms in a workplace? | Learner's book.  Lesson notes.  Digital devices.  Pictures.  Video clips. | Written questions.  Oral questions.  Assessment rubrics  Checklists. |  |
|  | 2 | Foundation of Pre-Technical Studies. | Safety on Raised Platforms. | By the end of the lesson, the learner should be able to:   1. State the risks associated with working on raised platforms. 2. Describe the risks associated with working on raised platforms. 3. Search internet for clips on the risks associated with working on raised platforms. 4. Acknowledge the risks associated with working on raised platforms. | In groups,learners are guided to:  brainstorm and present on the risks associated with working on raised platforms.  use digital or print resources to search for information and clips on risks associated with working on raised platforms.  discuss the risks associated with working on raised platforms.  prepare posters showing the risks associated with working on raised platforms. | What are the risks associated with working on raised platforms? | Learner's book.  Lesson notes.  Digital devices.  Video clips.  Pictures. | Oral questions.  Checklists.  Assessment rubrics.  Written tests. |  |
|  | 3 | Foundation of Pre-Technical Studies. | Safety on Raised Platforms. | By the end of the lesson, the learner should be able to:   1. Identify the safety measures to observe when working on raised platforms in work place. 2. Discuss the safety measures to observe when working on raised platforms in work place. 3. Prepare flashcards or posters on safety measures to observe when working on raised platforms. 4. Acknowledge the safety measures to observe when working on raised platforms. | In groups,learners are guided to:  brainstorm on the ways of minimizing risks related to working on raised platforms in work place.  observe a video clip on safety measures to observe when working on raised platforms.  discuss the ways of minimising risks related to working on raised platforms in workplace.  collaborate in preparing posters showing the safety measures to observe when working on raised platforms. | What are the safety measures should one observe when working on raised platforms in a workplace? | Learner's book.  Lesson notes.  Digital devices.  Posters.  Marker pens.  Video clips. | Oral questions.  Written questions.  Assessment rubrics.  Checklists. |  |
|  | 4 | Foundation of Pre-Technical Studies. | Safety on Raised Platforms. | By the end of the lesson, the learner should be able to:   1. State the need for observing safety while working on raised platforms in workplaces. 2. Discuss the importance of observing safety when working on raised platforms in work places. 3. Prepare flashcards showing the importance of observing safety when working on raised platforms in work places. 4. Appreciate the need for observing safety while working on raised platforms. | In groups,learners are guided to;  brainstorm and present the need for observing safety when working on raised platforms.  identify and discuss the importance of observing safety while working on raised platforms in workplace.  collaborate in making flashcards showing the importance of observing safety while working on raised platforms. | What is the importance of observing safety when working on raised platforms? | Learner's book.  Digital devices  Flashcards.  Lesson notes. | Written questions.  Checklists.  Assessment rubrics.  Oral questions. |  |
| 2 | 1 | Foundation of Pre-Technical Studies. | Safety on Raised Platforms. | By the end of the lesson, the learner should be able to:   1. Role play safety practices while working on raised platforms. 2. Enjoy role playing the safety practices while working on raised platforms. | In groups,learners to:  collaborate and share roles on role playing safety practices for working on raised platforms.  use digital devices to record themselves as they role play and peers to give feedback on the role play. | How do we ensure safety when working on raised platforms? | Digital devices.  Open Area.  Raised platforms e.g ladders. | Assessment rubrics.  Observation schedule.  Checklists. |  |
|  | 2 | Foundation of Pre-Technical Studies. | Safety on Raised Platforms: Assessment. | By the end of the lesson, the learner should be able to:   1. Attempt questions on the sub-strand. | In pairs or individually,learners are guided to answer assessment questions on the sub-strand: Safety on Raised Platforms. |  | Learner's Book.  Teacher's Assessment Questions. | Written questions.  Checklists.  Assessment rubrics. |  |
|  | 3 | Foundations of Pre-Technical Studies. | Self-Exploration and Career Development. | By the end of the lesson, the learner should be able to:   1. Differentiate between talents and abilities. 2. Identify the different talents and abilities that an individual may possess. 3. Search the internet for examples of talents and abilities an individual may have. 4. Acknowledge the different talents and abilities an individual may possess. | In groups,learners are guided to:  brainstorm and present the difference between talent and ability.  Identify the different talents and abilities an individual may have.  use digital or print resources to research on the difference between talents and abilities.  use digital devices to search for examples of talents and abilities and then prepare flashcards showing the talents and abilities. | What is the difference between talents and abilities?  What are the examples of talents and abilities can one possess in the community? | Learner's Book.  Lesson notes.  Flashcards.  Digital devices. | Written questions.  Digital devices.  Oral questions.  Checklists. |  |
|  | 4 | Foundation of Pre-Technical Studies. | Self-Exploration and Career Development. | By the end of the lesson,the learner should be able to:   1. Identify the ways of nurturing talents and abilities for business purposes. 2. Explain the ways of nurturing talents and abilities for business purposes. 3. Search the internet for information on ways of nurturing talents and abilities for business purposes. 4. Acknowledge the different ways of nurturing talents and abilities for business purposes. | In groups,learners are guided to;  use dictionary to search for the meaning of nurture.  use digital and print resources to research and identify the ways of nurturing talents and abilities for business purposes.  discuss the different ways of nurturing talents and abilities in the society.  prepare posters or flashcards showing the ways of nurturing talents and abilities. | What is to nurture a talent and ability?  How are talents and abilities nurtured? | Lesson notes  Digital devices.  Learner's Book.  Posters and Flashcards. | Written tests.  Oral questions.  Assessment rubrics.  Checklists. |  |
| 3 | 1 | Foundations of Pre-Technical Studies. | Self-Exploration and Career Development. | By the end of the lesson,the learner should be able to:   1. Identify the pathways in senior school. 2. Relate the different talents and abilities to career pathways in senior school. 3. Prepare a PowerPoint presentation showing a list of talents and abilities corresponding to career pathways in senior school. 4. Acknowledge how different talents and abilities corresponds to career pathways in senior school. | In groups,learners are guided to:  study a charts on different pathways in senior school.  identify the different career pathways in senior school.  collaborate in relating the different abilities and talents to the identified career pathways in senior school.  collaborate in making a list of talents and abilities and their corresponding career pathways in the senior school using PowerPoint presentations. | What are the career pathways in the senior school? | Learner's books.  Chart showing career pathways in senior school.  Lesson notes.  Digital devices.  Flashcards with different talents and abilities. | Written tests  Oral questions.  Checklists..  Assessment rubrics. |  |
|  | 2 | Foundation of Pre-Technical Studies. | Self-Exploration and Career Development. | By the end of the lesson,the learner should be able to:   1. Define the terms self -exploration and career development. 2. Discuss the importance of self-exploration for career development. 3. Search the internet for for information on the importance of self-exploration for career development. 4. Appreciate the need for self-exploration for career development. | In groups,learners are guided to:  use digital or print resources to search on the meaning of self-exploration and career development.  explain the meaning of self-exploration and career development for better understanding.  use digital devices to search for the importance of self-exploration for career development.  discuss their findings and share in class.  display talents and abilities through clubs and societies and other planned school fora. | Why is self-exploration necessary for career development? | Lesson notes  Digital devices.  Learner's book. | Checklists.  Written questions.  Oral questions.  Assessment rubrics. |  |
|  | 3 | Foundations of Pre-Technical Studies. | Self-Exploration and Career Development. | By the end of the lesson,the learner should be able to:   1. Identify the career opportunities related to talents and abilities in Pre-Technical Studies. 2. Interview a resource person on the career opportunities related to talents and abilities in Pre-Technical Studies. 3. Acknowledge the career opportunities related to the talents and abilities in Pre-Technical Studies. | In groups,learners are guided to:  engage with a resource person on career opportunities related to talents and abilities in Pre-Technical Studies.  identify the career opportunities related to talents and abilities in Pre-Technical Studies.  discuss the career opportunities related to talents and abilities in Pre-Technical Studies. | What are the career opportunities related to talents and abilities in Pre-Technical Studies? | Resource person.  Digital devices  Learner's book.  Lesson notes. | Checklists.  Oral questions.  Written questions. |  |
|  | 4 | Foundation of Pre-Technical Studies. | Self-Exploration and Career Development. | By the end of the lesson,the learner should be able to:   1. Identify the ethical and unethical practices related to the use of talents and abilities. 2. Analyse the ethical and unethical practices related to the use of talents and abilities for business purposes. 3. Prepare educational posters showing the ethical and unethical practices related to use of talents and abilities. 4. Acknowledge the ethical and unethical practices related to use of talents and abilities in our life. | In groups,learners are guided to:  explain the meaning of ethical and unethical practices related to use of talents and abilities.  read and examine a case study on the ethical and unethical practices related to the use of talents and abilities.  identify and discuss the ethical and unethical practices related to the use of talents and abilities.  prepare educational potters with messages on ethical and unethical practices related to use of talents and abilities. | What are the ethical and unethical practices related to the use of talents and abilities? | Case Studies.  Lesson notes.  Digital devices  Learner's book. | Written questions.  Checklists.  Oral questions and presentation.  Assessment rubrics. |  |
| 4 | 1 | Foundations of Pre-Technical Studies. | Handling Hazardous Substances. | By the end of the lesson,the learner should be able to;   1. Identify the hazardous substances found in the environment. 2. Use digital devices to search for information on the hazardous substances in the environment. 3. Draw the symbols of the hazardous substances in the environment. 4. Acknowledge the hazardous substances in the environment. | In groups,learners are guided to;  brainstorm the meaning of hazardous substances and present in class.  study symbols of hazardous substances and identify the poisonous, flammable and corrosive symbols.  use print or digital resources to search for information on the hazardous substances in the environment.  discuss the hazardous substances in the environment.  draw the symbols of the poisonous, flammable and corrosive substances. | What are hazardous substances in the environment? | Lesson notes.  Digital devices.  Learner's Books.  Charts.  Pictures. | Oral questions.  Written questions.  Assessment rubrics.  Checklists. |  |
|  | 2 | Foundations of Pre-Technical Studies. | Handling Hazardous Substances. | By the end of the lesson,the learner should be able to:   1. Classify the hazardous substances found in the locality. 2. Use digital devices to prepare a table showing the classification of the hazardous substances in the locality. 3. Enjoying classifying the different hazardous substances found in the locality. | In groups,learners are guided to;  mention the hazardous substances found in the environment.  collaborate in grouping the hazardous substances into poisonous, corrosive or flammable.  use digital devices to prepare a table showing the grouping of the hazardous substances and present in class. | Which hazardous substances are found in the locality? | Lesson notes.  Hazardous substances in the environment.  Digital devices.  Learners book. | Checklists.  Oral questions.  Observation schedule.  Written questions. |  |
|  | 3 | Foundations of Pre-Technical Studies. | Handling Hazardous Substances. | By the end of the lesson,the learner should be able to:   1. Identify the safe ways of handling hazardous substances in the environment. 2. Describe the safe ways of handling hazardous substances in the environment. 3. Use digital devices to search for information and clips on safe ways of handling hazardous substances in the environment. 4. Acknowledge the safe ways of handling hazardous substances in the environment. | In groups,learners are guided to:  use print or digital resources to search for information on ways of handling hazardous substances in the environment.  discuss the safe ways of handling hazardous substances in the environment.  read and interpret instructions on the conditions for use of hazardous substances.  prepare posters showing the safe ways of handling hazardous substances in the environment. | How are hazardous substances handled?  Why are hazardous substances labelled? | Lesson notes.  Learner's book.  Hazardous substances.  Digital devices.  posters. | Checklists.  Observation.  Written questions.  Assessment rubrics. |  |
|  | 4 | Foundations of Pre-Technical Studies. | Handling Hazardous Substances. | By the end of the lesson,the learner should be able to:   1. Handle hazardous substances safely in the environment. 2. Adhere to safety when handling any hazardous substance in the environment. | In groups or individually,learners are guided to:  practice safe handling of poisonous, flammable and corrosive substances in the environment.  use digital devices to record themselves as they practice and peers to give feedback. | How are hazardous substances handled? | Lesson notes.  Hazardous substances.  Digital devices. | Checklists.  Oral questions.  Observation schedule.  Peer Assessment. |  |
| 5 | 1 | Foundations of Pre-Technical Studies. | Handling Hazardous Substances. | By the end of the lesson,the learner should be able to:   1. State the importance of observing safety when handling hazardous substances. 2. Explain the importance of observing safety when handling hazardous substances. 3. Appreciate the importance of observing safety when handling hazardous substances. | In groups,learners are guided to;  brainstorm and present the importance of observing safety when handling hazardous substances.  search the internet or print resources for information on the importance of observing safety when handling hazardous substances.  discuss the importance of observing safety when handling hazardous substances and present in class. | What is the importance of observing safety when handling hazardous substances? | Lesson notes.  Learner's book.  Digital devices. | Oral questions.  Checklists.  Written questions.  Assessment rubrics. |  |
|  | 2 | Communication in Pre-Technical Studies. | Oblique Projection. | By the end of the lesson,the learner should be able to:   1. State the meaning of Oblique projection. 2. Identify the characteristics of oblique drawing in technical fields. 3. Use digital devices to search for information on characteristics of oblique drawing. 4. Acknowledge the features of oblique drawing. | In groups, learners are guided to:  search print media or digital devices for the meaning of oblique drawing.  use digital devices or textbook to search for information on the characteristics of oblique drawings.  discuss the characteristics of oblique drawings. | What are the features of oblique drawings? | Lesson notes  Digital devices.  Learner's books.  Drawings.. | Checklists.  Oral questions.  Observation.  Written questions. |  |
|  | 3 | Communication in Pre-Technical Studies. | Oblique Projection. | By the end of the lesson,the learner should be able to:   1. Differentiate between cavalier and cabinet in oblique projection. 2. Sketch given drawings in oblique projection. 3. Enjoy sketching drawings in oblique projection. | In pairs,or individually,learners are guided to;  use digital devices to search for information and pictures on cavalier and cabinet in oblique projection.  discuss the difference between cavalier and cabinet in oblique projection.  draw given drawings in oblique projection without using instruments (cavalier and cabinet)  share their drawings or sketches with peers for assessment. | What is the difference between cavalier and Cabinet in oblique projection? | Lesson notes.  Digital devices.  Learner's books.  Pictures.  Drawing books. | Checklists.  Assessment rubrics.  Drawing tests.  Peer assessment. |  |
|  | 4 | Communication in Pre-Technical Studies. | Oblique Projection. | By the end of the lesson,the learner should be able to:   1. Outline the steps for drawing shaped blocks in oblique projection using the cavalier projection. 2. Discuss the steps for drawing shaped blocks in oblique projection using cavalier projection. 3. Draw shaped blocks in oblique projection following the outlined steps. 4. Enjoy drawing the shaped blocks in oblique projection. | In groups,learners are guided and led in;  outlining the steps to follow while drawing shaped blocks in oblique projection.  discuss the steps to follow when drawing shaped blocks in oblique projection.(cavalier.)  demonstrate drawing shaped blocks in oblique projection.  draw shaped blocks in oblique projection and share with peers for assessment. |  |  |  |  |
| 6 | 1 | Communication in Pre-Technical Studies. | Oblique Projection. | By the end of the lesson,the learner should be able to:   1. Draw shaped blocks in the cavalier projection using drawing instruments. 2. Show interest in drawing shaped blocks in the cavalier projection. | In groups,in pairs or individually,learners are guided to;  use geometrical sets drawing instruments to draw shaped blocks in oblique projection using the cavalier projection.  share their drawings with peers for assessment. | How do you draw a shaped block in cavalier projection using drawing instruments? | Drawing books.  Learner's books.  Drawing instruments.  Digital devices. | Checklists.  Peer Assessment.  Drawing tests.  Assessment rubrics. |  |
|  | 2 | Communication in Pre-Technical Studies. | Oblique Projection. | By the end of the lesson,the learner should be able to:   1. Outline the steps for drawing shaped blocks in cabinet projection. 2. Discuss the steps for drawing shaped blocks in cabinet projection. 3. Practice drawing shaped blocks in cabinet projection. 4. Desire to draw shaped blocks in cabinet projection. | In groups,learners are guided to;  observe a clip on drawing shaped blocks in cabinet projection.  outline the steps for drawing shaped blocks in cabinet projection.  discuss the steps followed in drawing shaped blocks in cabinet projection.  practice drawing shaped blocks in cabinet projection. | How do you draw shaped blocks in cabinet projection? | Lesson notes  Digital devices.  Video clips.  Samples of drawings in cabinet projection.  Learner's book.  Drawing books. | Checklists.  Assessment rubrics.  Drawing tests.  Observation. |  |
|  | 3 | Communication in Pre-Technical Studies. | Oblique Projection. | By the end of the lesson,the learner should be able to:   1. Draw shaped blocks in cabinet projection using drawing instruments. 2. Enjoy drawing shaped blocks in cabinet projection using drawing instruments. | In pairs or individually,learners are guided to:  use geometrical set drawing instruments to draw shaped blocks in oblique projection; cabinet  share their drawings with peers for assessment. | How do you draw shaped blocks in cabinet projection? | Learner's books.  Drawing books.  Drawing instruments. | Checklists.  Assessment rubrics.  Peer Assessment. |  |
|  | 4 | Communication in Pre-Technical Studies. | Oblique Projection. | By the end of the lesson,the learner should be able to:   1. State the applications of oblique projection in drawing. 2. Discuss the uses of oblique drawings in our day to day life. 3. Walk around the locality to observe use of oblique drawings. 4. Appreciate the applications of oblique projection in drawing. | In groups,pairs,learners are guided to:  use digital and print resources to search for information on the applications of oblique projection in drawing.  discuss the uses of the oblique projection in our daily life  walk around the locality to observe the use of oblique drawings. | How are oblique drawings used in technical fields? | Learner's books.  Lesson notes.  Digital devices.  Surrounding environment. | Observation.  Assessment rubrics.  Checklists.  Written questions. |  |
| 7 | 1 | Communication in Pre-Technical Studies. | Visual Programming. | By the end of the lesson,the learner should be able to:   1. Identify the application areas of visual programming software in solving problems. 2. Explain the application areas of visual programming software in solving problems. 3. Search the internet for information on application areas of visual programming. 4. Acknowledge the application areas of visual programming. | In groups,learners are guided to;  use print or digital resources to search for information on the application areas of visual programming.  identify the application areas of visual programming.  discuss the application areas of visual programming software. | What are the application areas of visual programming? | Lesson notes.  Computer learner's book.  Digital devices. | written tests.  Checklists.  Assessment rubrics.  Oral questions. |  |
|  | 2 | Communication in Pre-Technical Studies. | Visual Programming. | By the end of the lesson,the learner should be able to:   1. Outline the steps for creating an application using visual programming software for solving problems in day to day life 2. Use digital devices to search for clips or information on creating an application using visual programming software. 3. Desire to develop applications using visual programming software. | In groups,learners are guided to:  use digital devices to search and watch video clips on how to develop an application using visual programming software (games, stories and animations)  outline the steps to follow in creating application using visual programming software (games, stories and animations)  discuss the steps to follow in creating application using visual programming software (games, stories) | How are applications developed using visual programming software? | Lesson notes.  Video clips.  Digital devices.  Computer learner's book. | Checklists.  Oral questions.  Assessment rubrics.  Written tests. |  |
|  | 3-4 | Communication in Pre-Technical Studies. | Visual Programming. | By the end of the lesson,the learner should be able to:   1. Create an application using visual programming software for solving problems in day to day life. 2. Enjoy creating applications using the visual programming softwares. | In groups,pairs or individually,learners are guided to:  use digital devices to develop interactive stories, games and animations using the visual programming software.  share their developed stories,games and animations with peers. | How are applications developed using visual programming software? | Digital devices.  Video clips.  Projector.  Computer learner's book | Project.  Portfolios.  Checklists.  Peer Assessment. |  |
| 8 | **MID-TERM** | | | | | | | | |
| 9 | 1-2 | Communication in Pre-Technical Studies. | Visual Programming. | By the end of the lesson,the learner should be able to;   1. Develop interactive stories,games and animations using visual programming software. 2. Embrace the use of visual programming in the day to day life. | In pairs or individually,learners are guided to;  use scratch or sprite to create interactive stories,games and animations.  present their creations in class.  practice using visual programming applications to solve problems in day to day life. | what types of visual programming applications can you use to create games, stories and animations? | Lesson notes  Digital devices: Laptops, Tablets.  Video clips | Portfolios.  Projects.  Assessment rubrics.  Checklists. |  |
|  | 3 | Materials for Production. | Wood. | By the end of the lesson,the learner should be able to:   1. Identify the types of wood used in production. 2. Use digital or print resources to search for information on the types of wood used in production. 3. Acknowledge the different types of wood used in production. | In groups,learners are guided;  use print or digital resources to search for information on types of wood.  identify the types of wood used in production and their examples.  discuss the different types of wood used in production. | What types of wood are used in production? | Lesson notes.  Learner's Textbook.  Digital devices.  Pictures. | Written questions.  Oral questions.  Checklists.  Assessment rubrics. |  |
|  | 4 | Materials for Production. | Wood. | By the end of the lesson,the learner should be able to:   1. Identify the physical characteristics of soft and hard wood used in production. 2. Use digital devices to search for information on the physical characteristics of soft and hard wood. 3. Acknowledge the physical characteristics of soft and hard wood that makes them suitable for production. | In groups,learners are guided to;  use digital or print resources to search information on the physical characteristics of hard and soft wood.  identify the physical characteristics of hard and soft wood.  discuss the physical characteristics of hard and soft wood.  observe the surrounding environment to look for hardwood and softwood trees.  prepare posters or flashcards showing the physical characteristics of hard and soft wood. | What are the physical characteristics of hard and soft wood? | Lesson notes.  Learner's Textbook.  Digital devices.  Posters and flashcards. | Checklists.  Oral questions  Written questions.  Assessment rubrics |  |
| 10 | 1 | Materials for Production. | Wood. | By the end of the lesson,the learner should be able to:   1. Identify the physical properties to use in classifying woods used in production. 2. Classify wood used in production according to the physical properties. 3. Enjoy classifying the different types of wood used in material production. | In groups,learners are guided to;  state the physical properties to use in classifying wood as either soft wood or hard wood.  use a checklist to sort wood as either softwood or hardwood.  present their classification table of wood according to the physical properties. | What criteria will you use to classify the different types of wood used in material production? | Lesson notes.  Learner's Textbook.  Digital devices.  Classification tables. | Written questions.  Checklists.  Assessment rubrics.  Oral questions. |  |
|  | 2 | Materials for Production | Wood | By the end of the lesson,the learner should be able to:   1. Identify the methods used in wood preparation. 2. Describe the conversion method as a method of wood preparation. 3. Search the internet for information and clips on the conversion method of wood. 4. Appreciate the conversion method in wood preparation. | In groups,learners are guided to;  brainstorm on the methods used in wood preparation.  identify the methods used in wood preparation.  use digital devices to search for information and clips on the conversion method of wood preparation.  discuss the the conversion method in wood preparation. | What is the importance of conversion method in wood preparation? | Lesson notes.  Digital devices.  Learner's Textbook.  Video clips. | Written tests.  Oral questions.  Assessment rubrics.  Oral discussion.  Checklists. |  |
|  | 3 | Materials for Production. | Wood. | By the end of the lesson,the learner should be able to;   1. Define the term seasoning as used in wood preparation. 2. Describe the seasoning method in wood preparation. 3. Search the internet for clips on the seasoning methods of wood. 4. Acknowledge the need for wood seasoning in wood preparation. | In groups,learners are guided to:  brainstorm and present the meaning of seasoning in wood preparation.  use digital or print resources to search for information on the seasoning of wood.  discuss the seasoning of wood as a method of wood preparation.  use digital devices to search and watch clips on methods used in seasoning of wood. | What are the benefits of wood seasoning?  What is seasoning as a method of wood preparation? | Lesson notes.  Digital devices.  Learner's Textbook.  Video clips. | Checklists.  Oral questions.  Assessment rubrics.  Written tests. |  |
|  | 4 | Materials for Production. | Wood. | By the end of the lesson,the learner should be able to:   1. Relate the types of wood to their uses in the community. 2. Discuss the uses of the different types of wood used in the locality. 3. Develop charts showing the types of wood and their uses. 4. Value the importance of wood in day to day life. | In groups,learners are guided to;  brainstorm on the uses of wood in different trades and present.  match the different types of wood to their uses.  discuss the uses of the different types of wood in the locality.  prepare charts showing the types of wood and their uses.  visit the locality to explore the uses of wood. | Why is wood important in day to day life? | Lesson notes.  Digital devices.  Charts.  Metre rule.  Marker pens.  Learner's textbook. | Checklists.  Peer Assessment.  Portfolios.  Written questions.  Oral questions.  Assessment rubrics. |  |
| 11 | 1 | Materials for Production. | Handling Waste Materials. | By the end of the lesson,the learner should be able to:   1. Identify the waste materials found in the environment. 2. Collect waste products in the school compound. 3. Sort the collected waste materials according to their materials. 4. Enjoy collecting and sorting the different types of waste products. | In groups,learners are guided to;  walk around the school compound to identify the waste materials.  collect the identified waste materials in the school compound.  sort the waste materials collected as either plastic,glass, metal, wood, electronic or construction waste.  store the sorted waste materials in cartons or sacks. | Which waste materials are found in the environment? | Lesson notes.  Digital devices.  School Environment.  Cartons.  Sacks. | Assessment rubrics.  Field Excursion.  Observation.  Checklists. |  |
|  | 2 | Materials for Production. | Handling Waste Materials. | By the end of the lesson,the learner should be able to:   1. Identify the ways of handling waste materials safely in the environment. 2. Describe ways of handling waste materials safely in the environment. 3. Search the internet for information on safe ways of handling waste materials. 4. Acknowledge the safe ways of handling waste materials in the environment. | In groups,learners are guided to;  brainstorm on the ways of handling waste materials safely in the environment.  use digital or print resources to search for information on safe ways of handling waste materials.  discuss the safe ways of handling waste materials. | How are waste materials handled in the locality? | Lesson notes.  Digital devices.  Learner's Textbook. | Checklists  Assessment rubrics.  Oral questions.  Written questions. |  |
|  | 3 | Materials for Production. | Handling Waste Materials. | By the end of the lesson,the learner should be able to:   1. Identify the methods of disposing waste materials in the environment. 2. Dispose waste materials using appropriate methods. 3. Acknowledge the need for disposing waste materials appropriately in the environment. | In groups,learners are guided to;  identify the methods used in disposing waste materials in the environment.  practice safe disposal of waste materials in the school environment (reusing, recycling, compost and burn) | How can we dispose waste materials in the environment? | Lesson notes.  Digital devices.  School Environment.  School Dust bin. | Checklists.  Assessment rubrics.  Written questions.  Observation schedule. |  |
|  | 4 | Materials for Production. | Handling Waste Materials. | By the end of the lesson,the learner should be able to:   1. State the importance of proper handling of waste materials in the environment. 2. Search the internet or print resources for information on importance of proper handling of waste materials in the environment. 3. Appreciate the need for proper handling of waste materials in the environment. | In groups,learners are guided to;  brainstorm on the importance of proper handling of waste materials in the environment.  use digital devices to search for information on the importance of proper handling of waste materials in the environment.  discuss the importance of proper handling of waste materials in the environment.  Prepare posters showing the importance of proper handling of waste materials. | Why is it important to handle waste materials properly in the environment? | Lesson notes.  Learner's Textbook.  Digital devices.  Posters. | Checklists.  Oral questions.  Written questions.  Assessment rubrics. |  |
| 12 | **REVISION & END OF TERM ASSESSMENT** | | | | | | | | |
| 13 | **CLOSURE OF SCHOOL** | | | | | | | | |