

SCOPE AND SEQUENCE CHART

The Scope and Sequence Chart (SSC) presents the areas of the subject *Edukasyong Pantahanan at Pangkabuhayan* (EPP) and *Technology and Livelihood Education* (TLE), the units under each area, and the corresponding lessons to develop the learning competencies enumerated in the K to 12 curriculum. The SSC is organized into the following headings: Units/Lessons, Learning Competencies, Strategies and Techniques, Evaluation and Assessment Tools used, and Values Integration.

The SSC adopts the sequence by which the areas are presented in the curriculum guide from the Department of Education, as follows:

- ICT/Entrepreneurship
- Home Economics
- Agriculture
- Industrial Arts

ICT/ENTREPRENEURSHIP

Unit 1 The Modern Entrepreneur

<i>Unit/Lessons</i>	<i>K to 12 Curriculum Learning Competencies</i>	<i>Strategies and Techniques</i>	<i>Evaluation and Assessment Tools</i>	<i>Values Integration</i>
Lesson 1 Buying and Selling	<ul style="list-style-type: none"> Identify the sellers and buyers 	<ul style="list-style-type: none"> triad group discussion picture analysis lecture discussion group work analysis by example identification situational analysis 	<ul style="list-style-type: none"> book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> rubric 	Valuing the common good
Lesson 2 What to Sell and What to Buy	<ul style="list-style-type: none"> Produce simple products Buy and sell products based on needs 	<ul style="list-style-type: none"> group work and presentation brainstorming open discussion analysis by example situational analysis survey analysis 	<ul style="list-style-type: none"> book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> rubric 	Appreciation of common good

Lesson 3 Responsible Entrepreneurship	<ul style="list-style-type: none"> • Sell products based on needs and demands in school and community 	<ul style="list-style-type: none"> • <i>Pass-the-Ball</i> activity • lecture • discussion • making a graphic organizer • group work • interview activity • analysis of examples • situational analysis • comparison 	<ul style="list-style-type: none"> • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> • rubric • Performance Task • Summative Test 	Appreciation of the common good
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Unit 2 Technology for the Successful Entrepreneur

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<i>Unit/Lessons</i>	<i>K to 12 Curriculum Learning Competencies</i>	<i>Strategies and Techniques</i>	<i>Evaluation and Assessment Tools</i>	<i>Values Integration</i>
Lesson 1 Sharing Information Safely	<ul style="list-style-type: none"> • Post and share materials on wikis in a safe and responsible manner 	<ul style="list-style-type: none"> • role-play • board work • lecture and discussion • groupwork • graphic organizers 	<ul style="list-style-type: none"> • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Awareness of safety practices and courtesy in the use of technology and the internet
Lesson 2 Observing Safety in Sharing Online Blogs	<ul style="list-style-type: none"> • Post and share materials on blogs in a safe and responsible manner 	<ul style="list-style-type: none"> • lecture and discussion • group work 	<ul style="list-style-type: none"> • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Awareness of safety practices and courtesy in the use of technology and the internet
Lesson 3 Conducting Video and Audio Conferences Safely	<ul style="list-style-type: none"> • Participate in video and audio conferences in a safe and responsible manner 	<ul style="list-style-type: none"> • lecture and discussion • presentation of videos • hands-on practice • group work 	<ul style="list-style-type: none"> • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Awareness of safety practices and courtesy in the use of technology and the internet

Lesson 4 Understanding Online Surveys	<ul style="list-style-type: none"> • Explain the advantages and disadvantages of using online tools to gather data 	<ul style="list-style-type: none"> • <i>Human Bingo</i> activity • lecture • discussion • analysis by comparison • working in dyads 	<ul style="list-style-type: none"> • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Awareness of safety practices and courtesy in the use of technology and the internet
Lesson 5 Create an Online Survey Form	<ul style="list-style-type: none"> • Create an online survey form • Disseminate an online survey form 	<ul style="list-style-type: none"> • review of the past lesson • lecture • discussion • hands-on activities • group work 	<ul style="list-style-type: none"> • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Awareness of safety practices and courtesy in the use of technology and the internet
Lesson 6 Reporting the Results of the Online Survey	<ul style="list-style-type: none"> • Process online survey data 	<ul style="list-style-type: none"> • open discussion • lecture • discussion • working in triads • use of graphic organizers 	<ul style="list-style-type: none"> • Book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Awareness of ethical use of technology tools
Lesson 7 Using Advanced Functions of Microsoft Excel	<ul style="list-style-type: none"> • Use functions and formulas in an electronic spreadsheet tool to perform advanced calculations of numerical data 	<ul style="list-style-type: none"> • simple survey activity • hands-on activities 	<ul style="list-style-type: none"> • practice exercises • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Awareness of business ethics
Lesson 8 Sharing Ideas Through Video Conferences	<ul style="list-style-type: none"> • use audio and video conferencing tools to share ideas and work with others online 	<ul style="list-style-type: none"> • <i>Three Facts</i> activity • hands-on practice • triads activity 	<ul style="list-style-type: none"> • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Awareness of social media ethics

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Lesson 9 The Importance of E-Groups	<ul style="list-style-type: none"> • Use an e-group to share ideas and work with others 	<ul style="list-style-type: none"> • lecture and discussion • group work 	<ul style="list-style-type: none"> • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Awareness of social media ethics
Lesson 10 Creating Multimedia Presentations (Part 1)	<ul style="list-style-type: none"> • Use the advanced features of a slide presentation tool to create a multimedia presentation with text, graphics, and photos; hyperlinked elements; animation; and embedded audio and/or video 	<ul style="list-style-type: none"> • hands-on practice • group work 	<ul style="list-style-type: none"> • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	<p>Awareness of safety practices and courtesy in the use of technology and the internet</p> <p>Awareness of business ethics</p>
Lesson 11 Creating Multimedia Presentations (Part 2)	<ul style="list-style-type: none"> • Use the advanced features of a slide presentation to create a multimedia presentation with text, graphics, photos; hyperlinked elements; animation; and embedded audio and/or video. 	<ul style="list-style-type: none"> • lecture • discussion • hands-on practice • group work • working in dyads 	<ul style="list-style-type: none"> • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	<p>Awareness of safety practices and courtesy in the use of technology and the internet</p> <p>Awareness of business ethics</p>
Lesson 12 Using Windows Movie Maker	<ul style="list-style-type: none"> • Use the movie making software to create a multimedia presentation 	<ul style="list-style-type: none"> • lecture and discussion • hands-on practice • group work and presentation • use of a graphic organizer 	<ul style="list-style-type: none"> • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> • Performance Tasks • rubric • Summative Test 	Awareness of the ethical use of technology

ELEMENTARY AGRICULTURE

Unit 1 Planting and Propagating Trees and Fruit-Bearing Trees

<i>Unit/Lessons</i>	<i>K to 12 curriculum Learning competencies</i>	<i>Strategies and Techniques</i>	<i>Evaluation and Assessment Tools</i>	<i>Values Integration</i>
Lesson 1 Trees: Importance to Human Life	<ul style="list-style-type: none"> Discuss the importance of planting and propagating trees and fruit-bearing trees and marketing seedlings Explain the benefits derived from planting trees and fruit-bearing trees to families and communities 	<ul style="list-style-type: none"> exploring places and events related to the topic discussion community survey simple research using the internet pair work group work, discussion, and reporting group presentation 	<ul style="list-style-type: none"> rating scale for report presentation using rubric book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i>	Appreciating the environment Active collaboration with a group
Lesson 2 Who's Who in Orchard Growing	<ul style="list-style-type: none"> Discuss the importance of planting and propagating trees and fruit-bearing trees and marketing seedlings Identify successful orchard growers in the community or adjacent communities 	<ul style="list-style-type: none"> review of past lesson story presentations sharing of experiences working in triads sharing of the results of community surveys discussion group activity and presentation Q and A session visiting related websites for additional information 	<ul style="list-style-type: none"> rating report using rubric book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i>	Appreciation of the environment Active participation in group discussions Awareness of responsible use of technology and the internet

Lesson 3 Learning How to Plant Trees and Fruit Trees	<ul style="list-style-type: none"> • Use technology in the conduct of survey to find out the following: <ul style="list-style-type: none"> ○ elements to be observed in planting trees and fruit-bearing trees ○ market demand for fruits ○ sources of fruit bearing trees 	<ul style="list-style-type: none"> • use of meta cards • discussion • group work • presentation of findings using technology • Q and A session • self-evaluation 	<ul style="list-style-type: none"> • rating presentation using rubric • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i>	Appreciating the environment Active participation in group discussion Gathering data from different websites
Lesson 4 Know Your Orchard Trees	<ul style="list-style-type: none"> • Conduct a survey to identify: <ul style="list-style-type: none"> ○ types of orchard farms ○ trees appropriate for orchard gardening based on location, climate, and market demands 	<ul style="list-style-type: none"> • pair, discuss, and share activity • Q and A session • group activity • field trip to nurseries/ orchard farms • observation • interview • discussion of topics • reading session • analysis of trees/fruit trees • conducting community survey • research using the internet • group presentations 	<ul style="list-style-type: none"> • rating presentations using rubric • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i>	Appreciating the environment Showing appropriate behavior while on a field trip

Lesson 5 Planting, Propagating, and Caring for Seedlings	<ul style="list-style-type: none"> • Conduct a survey to identify <ul style="list-style-type: none"> ○ Types of orchard farms ○ proper way of planting/propagating trees and fruit-bearing trees (budding, marcotting, grafting) ○ sources of fruit-bearing trees ○ how to care for seedlings 	<ul style="list-style-type: none"> • dyad activity • group work and presentation • discussion • video presentation or • field trip to a school garden, nursery, or orchard 	<ul style="list-style-type: none"> • rating presentations using rubric • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Appreciating and caring for the environment Showing appropriate behavior while on a field trip Listening to and paying attention to demonstration
Lesson 6 Plan Your Orchard Garden	<ul style="list-style-type: none"> • Prepare a layout design of an orchard garden using the information gathered 	<ul style="list-style-type: none"> • dyad activity • use of meta cards • dyad presentation • group study and discussion followed by presentation • group and individual work 	<ul style="list-style-type: none"> • rating group outputs using rubrics • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Contributing to discussions Active participation in group work
Lesson 7 Execute Your Plan	<ul style="list-style-type: none"> • Propagate trees and fruit-bearing trees using scientific processes <ul style="list-style-type: none"> ○ Identify the appropriate tools and equipment in plant propagation and their uses 	<ul style="list-style-type: none"> • group presentation • field trip to orchard farms • group study • class discussion group and individual work • interview • presentation • graphic organizer 	<ul style="list-style-type: none"> • rating group and individual performance using rubrics • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Participating in discussion Listening to others ideas Participating in group work

	<ul style="list-style-type: none"> ○ Demonstrate scientific ways of propagating fruit-bearing trees ○ Observe healthy and safety measures in propagating fruit-bearing trees ● Perform systematic and scientific ways of caring for orchard trees/seedlings such as watering, cultivating, preparing, and applying organic fertilizer 			
Lesson 8 Preparing Organic Fertilizers and Pesticides	<ul style="list-style-type: none"> ● Perform systematic and scientific ways of caring for orchard trees and seedlings such as watering, cultivating, preparing, and applying organic fertilizers; <ul style="list-style-type: none"> ○ Use different ways of preparing organic fertilizer and pesticides ○ Explain the benefit of using organic fertilizer and locally made pesticides 	<ul style="list-style-type: none"> ● review ● group activities ● library or online research ● group presentations ● open forum ● dyad activity ● use of meta cards ● demonstration or video presentation of preparing organic pesticides and fertilizers 	<ul style="list-style-type: none"> ● rating group performance using rubrics ● book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	<p>Participation in group work</p> <p>Following safety measures while working</p>

	<p>towards sustainable develop</p> <ul style="list-style-type: none"> ○ Observe healthy and safety measures in formulating fertilizer and organic pesticides ○ Keep record of growth and progress of seedlings 			
<p>Lesson 9 Marketing to Expansion</p>	<ul style="list-style-type: none"> • Market fruits and seedlings by: <ul style="list-style-type: none"> ○ applying scientific knowledge and skills in identifying fruits and seedlings ready for sale ○ keeping updated record of trees and seedlings for sale ○ planning marketing strategies for orchard trees/seedlings ○ using online marketing of orchard trees/seedlings ○ preparing flyers or brochures • Develop plan for expansion of planting trees and seedling production 	<ul style="list-style-type: none"> • sharing session • discussion • group work • group presentation • Q and A sessions • pair work • individual work 	<ul style="list-style-type: none"> • analysis of data and situation • answering questions • rating group performance • book exercises <ul style="list-style-type: none"> <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> • Summative Test 	<p>Sharing one's ideas Listening to other's ideas Participation in group work</p>

Unit 2 Animal Raising

<i>Unit/Lessons</i>	<i>K to 12 curriculum Learning competencies</i>	<i>Strategies and Techniques</i>	<i>Evaluation and Assessment Tools</i>	<i>Values Integration</i>
Lesson 1 Facts About Animal Raising	<ul style="list-style-type: none"> • Conduct a survey to find out: <ul style="list-style-type: none"> ○ persons in the community whose occupation is animal raising (four legged-animal) or fish raising ○ stories of successful entrepreneurs in animal/fish raising ○ the kinds of four-legged animals/fish being raised as means of livelihood ○ possible hazards that animal raising can cause to people and the community ○ market demands for four-legged animals/fish products and by products ○ direct consumers or retailers ○ benefits that can be derived from animal/fish raising 	<ul style="list-style-type: none"> • survey • field trip to animal farms • discussion of data gathered from field trip • group activity • use of graphic organizer • online research • Q and A session • group activity 	<ul style="list-style-type: none"> • Rating presentation/ performance using rubric • Book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Appreciation of farm animals Appreciation of community helpers

Lesson 2 Plan Your Animal-Raising Project	<ul style="list-style-type: none"> • Plan for the family's animal raising project. <ul style="list-style-type: none"> ○ Identify animals to be raised as alternative source of income for the family (e.g goat, hogs, fish) ○ Prepare list of needed materials to start the project ○ Prepare schedule of work for raising, caring, processing, and marketing of products and by-products ○ Record potential income, expenses, and gains 	<ul style="list-style-type: none"> • cooperative planning for an animal raising project • discussion • group activities and presentations • use of graphic organizer • online research • Q and A session • individual activity • dyad activity 	<ul style="list-style-type: none"> • rating project plans using rubrics • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	<ul style="list-style-type: none"> • Cooperation and team work • independent work
Lesson 3 Raising Your Four-legged Animals/Fish	<ul style="list-style-type: none"> • Implement your plan on animal/fish raising <ul style="list-style-type: none"> ○ Monitor growth and progress of your animals ○ Keep an updated record of growth/progress ○ expand/enhance your knowledge of four-legged animal/fish-raising using the internet 	<ul style="list-style-type: none"> • visit to farms • pair activity • discussions group activities and presentations • sharing session • reporting • use of meta cards • individual activities • Q and A session • lesson synthesis 	<ul style="list-style-type: none"> • rating group performance using rubrics • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	<ul style="list-style-type: none"> • Monitoring project activities • Participating in group work • Independent work

Lesson 4 Harvesting/Capturing Animals	<ul style="list-style-type: none"> • Manage marketing of four-legged animals/fish that you raised by: <ul style="list-style-type: none"> ○ discussing indicators for harvesting/capturing four-legged animals/fish ○ demonstrate skill in harvesting/capturing four-legged animal/fish 	<ul style="list-style-type: none"> • observing farm animals being captured or harvested • open discussion • group activity and presentation • Q and A session • story telling • individual work 	<ul style="list-style-type: none"> • rating group performance using rubrics • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	<ul style="list-style-type: none"> • Showing observant behavior during field trips • Taking notes during observation • Cooperativeness
Lesson 5 Marketing and Expanding Your Venture	<ul style="list-style-type: none"> • Manage marketing of four-legged animals/fish raised by: <ul style="list-style-type: none"> ○ Preparing a marketing strategy by asking help from others or using the internet ○ marketing four-legged animals/fish harvested/ captured ○ computing the income earned from marketed products ○ preparing plans for expansion of four-legged animal/fish raising venture 	<ul style="list-style-type: none"> • pair work • field trip to a public market • sharing session • group study and presentation • Q and A session • pair work • use of meta cards • group work • role-playing • group demonstration 	<ul style="list-style-type: none"> • rating group participation and demonstration • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> • Summative Test 	<ul style="list-style-type: none"> • Understanding presentation of topics • Preparing a presentation • Planning with the family

HOME ECONOMICS

Unit 1 Home Management

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<i>Unit/Lessons</i>	<i>K to 12 Curriculum Learning Competencies</i>	<i>Strategies and Techniques</i>	<i>Evaluation and Assessment Tools</i>	<i>Values Integration</i>
Lesson 1 Knowing Your Family Resources	<ul style="list-style-type: none"> Identify family resources and needs (human, material, non material) <ul style="list-style-type: none"> list of family resources list of basic and social needs 	<ul style="list-style-type: none"> role-play discussion group work and presentation 	<ul style="list-style-type: none"> book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Appreciating family resources and needs
Lesson 2 Understanding Family Income	<ul style="list-style-type: none"> Enumerate sources of family income 	<ul style="list-style-type: none"> open discussion group activity and presentation analysis individual activity open discussion 	<ul style="list-style-type: none"> book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Appreciating family income sources
Lesson 3 Budgeting the Family Income	<ul style="list-style-type: none"> Allocate budget effectively for basic and social needs such as <ul style="list-style-type: none"> food and clothing, shelter and education, and social needs such as social and moral obligations, (birthdays, baptism, etc.) family activities, school affairs 	<ul style="list-style-type: none"> presentation/discussion group activity and presentation open discussion budget comparison individual activity 	<ul style="list-style-type: none"> book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Appreciating family budget

	<ul style="list-style-type: none"> ○ savings/ emergency budget (health, house repair, etc.) 			
Lesson 4 Preparing a Feasible and Practical Budget	<ul style="list-style-type: none"> ● Prepare a feasible and practical budget <ul style="list-style-type: none"> ○ Manage family resources efficiently ○ Prioritizes needs over wants 	<ul style="list-style-type: none"> ● discussion ● group activity ● analysis ● decision making 	<ul style="list-style-type: none"> ● book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Rational decision making Prioritization

Unit 2 Sewing Household Linens

ii	<i>Unit/Lessons</i>	<i>K to 12 Curriculum Learning Competencies</i>	<i>Strategies and Techniques</i>	<i>Evaluation and Assessment Tools</i>	<i>Values Integration</i>
	Lesson 1 Knowing the Tools for Sewing	<ul style="list-style-type: none"> ● Classify the tools and materials according to their use (measuring, cutting, sewing) 	<ul style="list-style-type: none"> ● triad activity ● discussion ● lecture ● group work and presentation 	<ul style="list-style-type: none"> ● peer evaluation ● book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Participating in group work
	Lesson 2 Preparing the Project Plan	<ul style="list-style-type: none"> ● Prepare a project plan for household linens ● Identify supplies/materials and tools needed or the project 	<ul style="list-style-type: none"> ● triad activity ● discussion ● group discussion ● pair work ● presentations 	<ul style="list-style-type: none"> ● making own plan and self rating using rubrics or checklist ● book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Finishing one's work on time
	Lesson 3 Sewing Creative Household Linens	<ul style="list-style-type: none"> ● Sew creative and marketable household linens as means to augment the family income 	<ul style="list-style-type: none"> ● discussion ● group activity ● presentations ● mini-exhibit ● individual activity 	<ul style="list-style-type: none"> ● Rating finished product using rubrics ● Book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Following project plan, finishing work as planned

		<ul style="list-style-type: none"> Assess the quality of the finished products 			
Lesson 4 Marketing Products	Finished	<ul style="list-style-type: none"> Market finished household linens in varied ways <ul style="list-style-type: none"> Package product for sale creatively/ artistically Prepare creative packages using local materials Labels packaged products Computes costs, sales, and gains with expertise Use technology in advertising products Monitor and keep record of production and sales 	<ul style="list-style-type: none"> discussion group activity individual activity presentations 	<ul style="list-style-type: none"> rating of group work book exercises <ul style="list-style-type: none"> <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> Summative Test 	Effective group member Doing one's responsibility in group work

Unit 3 Food Preservation

<i>Unit/Lessons</i>		<i>K to 12 Curriculum Learning Competencies</i>	<i>Strategies and Techniques</i>	<i>Evaluation and Assessment Tools</i>	<i>Values Integration</i>
Lesson 1 Understanding Preservation	Food	<ul style="list-style-type: none"> Explain the benefits derived from food preservation/ processing 	<ul style="list-style-type: none"> <i>guessing game</i> discussion lecture group activity and presentation 	<ul style="list-style-type: none"> book exercises <ul style="list-style-type: none"> <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Appreciation of the benefits derived from food preservation

Lesson 2 The Food Preservation Process	<ul style="list-style-type: none"> • Explain the different ways of preserving food (drying, salting, freezing, and processing) • Conduct an inventory of foods that can be preserved or processed using any of the processing methods 	<ul style="list-style-type: none"> • lecture and discussion individual and group work • research • presentations 	<ul style="list-style-type: none"> • Reporting • Book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Appreciation of the benefits derived from food preservation
Lesson 3 Tools and Equipment Used in Food Preservation	<ul style="list-style-type: none"> • Identify the tools or utensils and equipment used in preserving food • Use tools or utensils and equipment and their substitutes in food preservation or processing • Prepare plans for preserving or processing food 	<ul style="list-style-type: none"> • lecture and discussion • group work • presentation • observation • interview 	<ul style="list-style-type: none"> • assessment of group plan • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Appreciation of the benefits derived from food preservation
Lesson 4 Skills and Principles Applied in Preserving Food	<ul style="list-style-type: none"> • apply principles and skills involved in food preservation or processing by <ul style="list-style-type: none"> ◦ selecting food to be preserved or processed based on availability of raw materials, market demands, and trends in the community 	<ul style="list-style-type: none"> • group presentation • lecture • discussion • group activity • market survey • actual food preservation process 	<ul style="list-style-type: none"> • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Observing safety, health practices, and cleanliness

	<ul style="list-style-type: none"> ○ observing safety rules in food preservation or processing ○ conducting a simple research to determine market trends and demands in preserved or processed foods and assess preserved or processed food as to their quality using rubrics. 			
Lesson 5 Marketing Processed Food	<ul style="list-style-type: none"> • Market preserved or processed food in varied/creative ways with pride • Package product for sale creatively and artistically • Prepare creative packages and use local materials • Package products artistically and label them • Compute costs, sales, and gains • Use technology in advertising products • Keep record of production and sales 	<ul style="list-style-type: none"> • presentation • group work • discussion • computing cost, sales and gains preparing tech-assisted advertising • record keeping 	<ul style="list-style-type: none"> • rating group work using rubric • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> • Summative Test 	Creativity, appreciating the work of others

INDUSTRIAL ARTS

Unit 1 Enhancing and Decorating Products

<i>Unit/Lessons</i>	<i>K to 12 Curriculum Learning Competencies</i>	<i>Strategies and Techniques</i>	<i>Evaluation and Assessment Tools</i>	<i>Values Integration</i>
Lesson 1 Decorating and Enhancing Finished Products	<ul style="list-style-type: none"> • Discuss the importance and methods of enhancing/decorating bamboo, wood, and metal products • Demonstrate creativity and innovativeness in enhancing and decorating bamboo, wood, and metal products 	<ul style="list-style-type: none"> • field trip to a market • group work • discussion • Q and A activities • use of realia, metacards • presentations • individual work 	<ul style="list-style-type: none"> • rating presentations using rubrics • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Performing one's task in a group
Lesson 2 Enhanced or Decorated Products: Market Trends and Processes	<ul style="list-style-type: none"> • Conduct simple survey using technology and other data- gathering method to determine: <ul style="list-style-type: none"> ○ market trends on products made of bamboo, wood, and metal ○ customers products preference of products ○ Types/sources of innovative finishing materials, accessories, and designs 	<ul style="list-style-type: none"> • pair/ group work • interviews • presentation • Q and A session • individual work • peer assessment • triad activity 	<ul style="list-style-type: none"> • assessment of presentations using rubrics • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Good manners in the conduct of interview Participation in group work

	<ul style="list-style-type: none"> • Discuss the effects of innovative finishing materials and creative accessories on marketability of products 			
Lesson 3 Planning Your Project	<ul style="list-style-type: none"> • Construct project plan <ul style="list-style-type: none"> ◦ consider deliberate policies on sustainable development in the constructing the project plan • Apply skills in sketching, outlining, and drawing as you construct your project plan • List things that you do to support the 5Rs principle 	<ul style="list-style-type: none"> • review of previous lesson • triad activity and presentation • discussion • pair, group, and individual work 	<ul style="list-style-type: none"> • rating presentations using rubrics • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Listening and paying attention to group presentations
Lesson 4 Constructing Your Project	<ul style="list-style-type: none"> • Construct project plan • Consider deliberate policies on sustainable development in constructing the project plan • Demonstrate resourcefulness and management skills in the use of time, materials, money, and effort 	<ul style="list-style-type: none"> • analysis of sample plan • pair, dyad, triad, and group work and presentation • group/self assessment 	<ul style="list-style-type: none"> • rating group output using rubrics • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	<p>Giving constructive comments</p> <p>Appreciating and accepting comments</p> <p>Expressing one's own ideas</p>

	<ul style="list-style-type: none"> • Assess the quality of enhanced product using rubrics • Refine product based on assessment made 			
Lesson 5 Marketing Your Products	<ul style="list-style-type: none"> • Market products <ul style="list-style-type: none"> ○ Apply creative packaging and labeling techniques ○ Apply technology and other means of product marketing ○ Compute income from sales ○ Prepare plan for mass production or creating new product 	<ul style="list-style-type: none"> • review of past lesson • sharing of experiences • discussion • group work • interview • output presentations • class exhibit 	<ul style="list-style-type: none"> • rating outputs using rubric or checklist • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> • Summative Test 	Participation in group work

Unit 2 Construction and Repair of Simple Electrical Gadgets and Furnishings

<i>Unit/Lessons</i>	<i>K to 12 Curriculum Learning Competencies</i>	<i>Strategies and Techniques</i>	<i>Evaluation and Assessment Tools</i>	<i>Values Integration</i>
Lesson 1 Electrical Gadgets, Tools, and Materials	<ul style="list-style-type: none"> • Identify the materials and tools in making simple electrical gadgets • Identify simple electrical gadgets and their uses (extension cord, door bell, plugs, lampshades, etc) 	<ul style="list-style-type: none"> • group activities and presentations • discussion • use of meta cards • picture analysis • use of technology to learn more about the topic 	<ul style="list-style-type: none"> • rating level of performance using rubric • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Care in the use of tools

	<ul style="list-style-type: none"> • Observe safety and health practices in making gadgets 			
Lesson 2 Safety and Health Practices in Making Electrical Gadgets	<ul style="list-style-type: none"> • Observe safety and health practices in making gadgets 	<ul style="list-style-type: none"> • group work and presentation • poster making activity 	<ul style="list-style-type: none"> • rating performance using checklist • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	<p>Participation in group work</p> <p>Observing safety and health practices</p>
Lesson 3 Constructing Simple Electrical Gadgets	<ul style="list-style-type: none"> • Prepare the protocols (processes) in making electrical gadgets • Assess the electrical gadgets based on the rubrics 	<ul style="list-style-type: none"> • Q and A activity • use of realia • group work • demonstration • using the internet in preparing project design 	<ul style="list-style-type: none"> • rating group output using rubrics • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	<p>Following procedures</p> <p>Finishing project on time</p> <p>Demonstrating creativity in the project</p>
Lesson 4 Doing Simple Repairs	<ul style="list-style-type: none"> • Repair simple gadget/furniture/furnishings at home and school by doing the following <ul style="list-style-type: none"> ○ gather data on how to do simple repairs using technology or other methods ○ repair broken furniture (chairs, cabinets, and tables) door knobs, lamp shades, and other products 	<ul style="list-style-type: none"> • Q and A session • demonstration • group work • hands-on activities 	<ul style="list-style-type: none"> • rating work done using rubrics • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> • Summative Test 	<p>Observing safety and health rules</p>

	<ul style="list-style-type: none"> ○ Assess repaired gadgets/ furniture/ furnishing as to its reusability and functionality using rubrics ○ Improve the repair you have undertaken 			
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Unit 3 Recycling of Waste Materials

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	Lesson 1 The Five S Principles	<ul style="list-style-type: none"> • Discuss the Five S principles: <ul style="list-style-type: none"> ○ sorting (<i>seiri</i>) ○ straightening (<i>seiton</i>) ○ systematic cleaning ○ shine (<i>seiso</i>) ○ standardizing (<i>seiketsu</i>) ○ service-sustaining (<i>shitsuke</i>) 	<ul style="list-style-type: none"> • analysis of news clippings and pictures • group work • discussion • Q and A session 	<ul style="list-style-type: none"> • rating performance using rubrics • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Observing rules of conduct in visiting homes
	Lesson 2 Recycling: Processes and Importance	<ul style="list-style-type: none"> • Identify recyclable products/waste materials made of wood, metal, paper, plastic, and others • Identifies recyclable products/ waste materials made of 	<ul style="list-style-type: none"> • analysis of the environment • analysis of data gathered • visit to a recycling facility • identifying actions that can be taken 	<ul style="list-style-type: none"> • rate presentations using rubrics • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> 	Critical thinking

	wood, metal, paper, plastic, and others • Explain the process and the importance of recycling	• pair work • discussion • group work		
Lesson 3 From Waste Materials to New Products	• Recycle the identified products/waste material into functional items (binding of used paper into notebook or memo pad; bottled plastic into lampshades, flowers, plants, etc.)	• pair or group work • environment scanning • sample product study/ analysis • creating new products through recycling • using technology to develop new ideas • product exhibit	• rating products developed using rubrics • book exercises <i>Apply Your Gains</i> <i>Examine Your Gains</i> <i>Enhance Your Skills</i> • Summative Test	Appreciating recycling