## LESSON 1: USE AND CARE OF TOOLS AND MATERIALS

<table>
<thead>
<tr>
<th>Content Standard</th>
<th>Performance Standard</th>
<th>Learning Competencies</th>
<th>Project/Activities</th>
<th>Assessment</th>
<th>Duration</th>
</tr>
</thead>
</table>
| Demonstrate understanding of/on:  
  - Handicraft tools  
  - Uses of handicraft tools  
  - Handicraft materials | 1. Appropriate hand and power tools are selected and checked for their serviceability for the required tasks.  
  2. Hand and power tools are appropriately used for the tasks in line with company standards and procedures.  
  3. Materials are carefully selected for a specific craft. | LO1. Select and use appropriate tools for work. | Activity 1  
Demonstrating how to use appropriate hand and power tools.  
Activity 2  
Testing tools for serviceability and efficiency.  
Activity 2  
Identifying materials appropriate for a specific craft. | • Performance Test  
• Written test  
• Checklist | 4 hours |
|  
  - Occupational health and safety procedures in the workplace  
  - Operational hazards in the workplace | 1. Safety precautions, procedures and regulations are followed accordingly when using hand and power tools.  
  2. Operational hazards are identified in line with workplace procedures.  
  3. Awareness of safety | LO2. Follow safety and hazard control procedures. | Activity 1  
Simulating safety and hazard control procedures. | • Performance test  
• Written test | 4 hours |
**K to 12 TECHNOLOGY AND LIVELIHOOD EDUCATION**

**INDUSTRIAL ARTS – NOVELTY CRAFTS**
(Exploratory)

| • Safety precautions when using hand and power tools | precautions when using hand and power tools is observed. | LO3. Care of hand and power tools. | Activity 1
Demonstrating proper care and maintenance of hand and power tools

**Activity 2**
Labeling or marking defective or worn out tools and preparing a requisition form for replacement or repair |

• Performance test
• Written/practical exams
• Checklist |

| • Care and maintenance of hand and power tools |
| • Proper reporting procedures of defective or worn out tools |
| 1. Care of tools is properly done in accordance with established procedures. |
| 2. Tools are adjusted, tightened, and/or lubricated when necessary in accordance with manufacturer's instructions. |
| 3. Defective or worn out tools and tool components are identified, marked as required, and reported properly. |
| 4. Appropriate action is taken for the repair or replacement of the reported defective or worn out tools. |

| Activity 2
Labeling or marking defective or worn out tools and preparing a requisition form for replacement or repair |

**5 hours** |
# LESSON 2: CARRYING OUT MEASUREMENTS AND CALCULATIONS

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LO1.</strong> Obtain measurements for product/project</td>
<td>Measuring materials with appropriate measuring tool using the English system</td>
</tr>
<tr>
<td><strong>Activity 1</strong></td>
<td>Measuring materials with appropriate measuring tool using the English system</td>
</tr>
<tr>
<td><strong>LO2.</strong> Estimate approximate quantities</td>
<td>Calculating amount of materials needed for a certain product</td>
</tr>
<tr>
<td><strong>Activity 1</strong></td>
<td>Calculating amount of materials needed for a certain product</td>
</tr>
</tbody>
</table>

### Measuring devices
- Measurement is obtained in accordance with job specifications using appropriate measuring devices.
- System of measurements to be used is identified.

### Calculating and recording quantities of materials for work undertaken
- Measurements of quantities are estimated on product requirements.
- Simple calculations are carried out based on product requirements.
- Measurements are identified/recorded without errors.
- Quantities of materials suitable for work to be undertaken are calculated and recorded according to product specifications.

### Activity 1
- Calculating amount of materials needed for a certain product

### Time Allocation
- 2 hours

### Assessment
- Written test
- Performance test
## LESSON 3: PRACTICE OCCUPATIONAL HEALTH AND SAFETY PROCEDURES - FW

<table>
<thead>
<tr>
<th>Hazards and risks identification and control</th>
<th>Organizational safety and health protocol</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Workplace hazards and risks are identified and clearly explained.</td>
<td></td>
</tr>
<tr>
<td>2. Hazards/risks and its corresponding indicators are identified in with the company procedures.</td>
<td></td>
</tr>
<tr>
<td>3. Contingency measures are recognized and established in accordance with organizational procedures.</td>
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**LO1. Identity hazards and risks**

**Activity 1**
Visiting a workplace to observe and evaluate hazards and risks and writing down contingency measures.

- **Written test**
- **3 hours**

<table>
<thead>
<tr>
<th>Effects of hazards in the workplace</th>
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</thead>
<tbody>
<tr>
<td>1. Effects of hazards are determined.</td>
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</tbody>
</table>

**LO2. Evaluate hazards and risks**

**Activity 1**
Group presentation on the effects of hazards in the work place.

- **Written test**
- **2 hours**

<table>
<thead>
<tr>
<th>Safety regulations</th>
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</thead>
<tbody>
<tr>
<td>Clean air act</td>
</tr>
<tr>
<td>Electrical and fire safety code</td>
</tr>
<tr>
<td>Waste management</td>
</tr>
<tr>
<td>Disaster preparedness and</td>
</tr>
</tbody>
</table>

| 1. OHS procedures for controlling hazards and risks are strictly followed. |
| 2. Procedures in dealing with workplace accidents, fire and emergencies are followed in accordance with the organization’s OHS policies. |

**LO3. Control hazards and risks**

**Activity 1**
Proper implementation of waste management

**Activity 2**
Practicing awareness on disaster

- **Performance test**
- **Written test**
- **10 hours**
<table>
<thead>
<tr>
<th>Activity</th>
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<tbody>
<tr>
<td>Activity 3</td>
<td>Simulation – applying appropriate assistance in case of emergency in the workplace</td>
</tr>
</tbody>
</table>

### LESSON 4: CREATING DESIGN AND PLAN FOR A SIMPLE PROJECT

**Principles of Design**
- Color theory
- Detailed drawing

**Project planning**
- Materials
- Method
- Packaging
- Cost

<table>
<thead>
<tr>
<th>Activity</th>
<th>Description</th>
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<tbody>
<tr>
<td>Activity 1</td>
<td>Sketching design of project</td>
</tr>
<tr>
<td>Activity 2</td>
<td>Innovating design of project</td>
</tr>
</tbody>
</table>

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<tr>
<th>Activity</th>
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<tr>
<td>Activity 1</td>
<td>Making different types of organizers (box organizer, basket organizer, hanging organizer)</td>
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**LO1. Sketch simple project design**

1. Design for a simple project is sketched applying the principles of design
2. Specifications of design are detailed

**LO2. Produce simple project utilizing any available (recyclable) resources in the community like:**

1. Simple project is assembled following specific procedures and detailed design
2. Appropriate materials were carefully chosen based on available

**Performance test using Scoring Rubrics**

- 5 hours
- 13 hours
K to 12 TECHNOLOGY AND LIVELIHOOD EDUCATION

INDUSTRIAL ARTS – NOVELTY CRAFTS
(Exploratory)

<table>
<thead>
<tr>
<th>resources in the community</th>
<th>Tarpaulin</th>
<th>Plastic</th>
<th>Tin cans</th>
<th>Paper</th>
<th>Cartoons</th>
<th>Water hycinth</th>
<th>Dried twigs and branches</th>
<th>Coconut shell</th>
<th>bag organizer, purse organizer, and others</th>
</tr>
</thead>
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NOTE:

1. TESDA CBC will be followed.
2. Ideally, content can be “topical” form of statement.
3. Writers may add to the “Contents” and specify learning content if it is too broad/generic.
4. LOs should be strictly patterned from the TESDA CBC; any changes (adding/reducing/clustering) are not allowed.
5. Duration per each LO will be based on “HOW LONG THE CONTENTS WILL BE TAUGHT AND METHODOLOGIES ON TESDA CBC”; but the total duration must be good for ONE GRADING PERIOD WHICH IS EQUIVALENT TO 40 HOURS.
6. Projects/Activities can be based on a LESSON or clusters of units of competency.
7. “Pulling out and transfer” of contents from one LESSON to another can be done, if necessary, with reference to the Five (5) Common Competencies below.

The FIVE (5) COMMON COMPETENCIES:
1. Interpretation of drawings and plans
2. Use of hand tools and equipment
3. Calculations and mensurations
4. Maintenance of hand tools and equipment
5. Occupational Health and Safety (OHS)