

**7**

# Lesson Exemplar for TLE

**Quarter 4**

**Lesson**

**1**

**Lesson Exemplar for TLE Grade 7**  
**Quarter 4: Lesson 1 (Week 1)**  
**SY 2024-2025**

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**TLE /QUARTER 4/ GRADE 7**

<b>I. CURRICULUM CONTENT, STANDARDS, AND LESSON COMPETENCIES</b>	
<b>A. Content Standards</b>	The learners demonstrate an understanding of the concepts in industrial arts services.
<b>B. Performance Standards</b>	The learners perform mensuration and calculations following safety precautions.
<b>C. Learning Competencies and Objectives</b>	<p><b>Learning Competency</b> Discuss the services of Industrial Arts</p> <p><b>Learning Objectives</b></p> <ol style="list-style-type: none"><li>1. Reiterate the history of Industrial Arts</li><li>2. Enumerate the different areas in Industrial Arts</li><li>3. Discuss the role of industrial arts in career education</li><li>4. Determine career and business opportunities in industrial arts</li></ol>
<b>D. Content</b>	<ul style="list-style-type: none"><li>• History of Industrial Arts</li><li>• Areas in Industrial Arts</li><li>• Industrial Arts strand specializations</li><li>• Career and Business Opportunities in Industrial Arts<ul style="list-style-type: none"><li>-Construction, Electrical-electronics, and Automotive and small engine</li></ul></li></ul>
<b>E. Integration</b>	<p>Industrial arts contribute to personal development by fostering creativity, problem-solving, and manual skills. This lesson can be integrated and related to:</p> <p><b>SDG 5: Gender Equality:</b> This lesson will help learners realize that equality between men and women exists when both sexes can share equally in the distribution of power and influence, have equal opportunities for financial independence through work or through setting up businesses, enjoy equal access to education and the opportunity to develop personal ambitions.</p> <p><b>SDG 8—Decent Work and Economic Growth:</b> The lessons and activities in the exemplar enable the learners to discuss the services of industrial arts and expose them to various industrial and engineering technologies, improving their understanding of the industrial and engineered world.</p>

## II. LEARNING RESOURCES

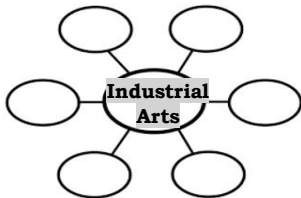
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- Free Stock Photos, PNGs, Templates & Mockups | rawpixel. (n.d.). Rawpixel. <https://www.rawpixel.com/search?page=1&path= topics&similar=6510007&sort=curated>
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- Operator maintenance: over 8,749 Royalty-Free Licensable stock Illustrations & Drawings | Shutterstock. (n.d.). Shutterstock. [https://www.shutterstock.com/search/operator-maintenance?image\\_type=illustration&page=2](https://www.shutterstock.com/search/operator-maintenance?image_type=illustration&page=2)
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Ribeiro, H. (2020, May 31). Professional worker laying tile repair work vector image on VectorStock. Pinterest. <https://in.pinterest.com/pin/660973682802329118/>

Tambus, A. (2018, June 18). Cartoon Welder Clipart Transparent Background, Cartoon Welders, Cartoon Clipart, Red Hat, Electric Welder PNG Image For Free Download. Pinterest. <https://in.pinterest.com/pin/cartoon-welder-clipart-transparent-background-cartoon-welders-cartoon-clipart-red-hat-electric-welder-png-image-for-free-download--699395017107053956/>

TESDA Official. (2023, December 15). Narito ang kwento ni Anna Liza at kung paano sya natulungan ng RCEF. [Video]. YouTube. [https://www.youtube.com/watch?v=29OGET\\_U3I8](https://www.youtube.com/watch?v=29OGET_U3I8)

The English Industrial Revolution and change to the landscape by Angus McBride. (n.d.). Pixels. <https://pixels.com/featured/the-english-industrial-revolution-and-change-to-the-landscape-angus-mcbride.html>

III. TEACHING AND LEARNING PROCEDURE		NOTES TO TEACHERS
A. Activating Prior Knowledge	<b>DAY 1</b> <b>1. Short Review: Picture Analysis</b> <b>Directions:</b> Using a graphic organizer, trace the learners' prior knowledge of Industrial arts. Ask the learners to complete the picture about their idea of industrial arts.	<p>The teacher will use a graphic organizer to assess the student's knowledge of industrial arts.</p> <p>Prepare a set of questions for students to reflect on the graphic organizers.</p> <p>After the short review, the teacher must ask the students if they still have questions about industrial arts.</p>
	 <b>2. Feedback</b> After checking the students' answers, ask them if the idea of Industrial Arts is clear. Then, proceed to the History of Industrial Arts. <ul style="list-style-type: none"> <li>At least 5 volunteers should share their answers.</li> </ul>	
B. Establishing Lesson Purpose	<b>1. Lesson Purpose</b> At the end of the lesson, the students will be able to: <ul style="list-style-type: none"> <li>Trace down the history of Industrial Arts.</li> <li>Identify the different areas in Industrial arts.</li> <li>Emphasize the importance of the role of industrial arts in career education.</li> <li>Enumerate the different career and business opportunities in Industrial Arts.</li> </ul> <b>2. Unlocking Content Vocabulary</b> Definition of Terms: <ul style="list-style-type: none"> <li><b>Industrial Arts-</b> a subject taught in elementary and secondary schools that aims to develop manual skills and familiarity with tools and machines.</li> </ul>	<p>The teacher could either play the video containing the lesson purpose or ask the learners questions covering the Industrial Arts lesson.</p>

	<ul style="list-style-type: none"> <li>● <b>Industrial Arts Education</b> - an educational program that features the fabrication of objects in wood or metal using various hand, power, or machine tools.</li> <li>● <b>Career Education</b>- helps students develop the skills to evaluate potential career paths.</li> <li>● <b>Technology</b>- the branch of knowledge that deals with the creation and use of technical means and their interrelation with life, society, and the environment, drawing upon such subjects as industrial arts, engineering, applied science, and pure science.</li> <li>● <b>Work Simplification</b>- removing tasks from existing roles to make them more focused.</li> </ul>	
<b>C. Developing and Deepening Understanding</b>	<p><b>SUBTOPIC 1: History of Industrial Arts</b></p> <p><b>1. Explication</b></p> <p>Industrial arts are an educational program that features the fabrication of objects made in wood or metal using a variety of hand, power, or machine tools. Industrial arts education encompasses many hands-on skills and trades that prepare students for careers in various industries. Some common examples include woodworking, metalworking, automotive, welding, graphics design, and computer-aided drafting.</p> <p><b>History of Industrial Arts</b></p> <p>According to the Journal of Technology Education, industrial arts began as early as prehistoric times when humans first developed tools. Formal instruction for industrial arts arose during the late 1800s and consisted of manual training for trades in manufacturing. Industrial arts education became popular in the 1900s as an alternative for students seeking to learn a trade, known as vocational school. The purpose of industrial arts classes included teaching students' specific skills such as automobile repair or furniture design. Today, the meaning of industrial arts encompasses various technical specialties.</p> <p><b>Purpose of Industrial Arts</b></p> <p>The purpose of industrial arts incorporates societal factors such as technology with personal career development. A student trained in industrial art contributes to the advancement of society regardless of whether the career is in manufacturing or design. For example, a graduate of an industrial arts program focusing on machinery learns advanced safety techniques and methods of streamlining manufacturing. A design student creates new and advanced packaging for toys, which reduces waste.</p>	<p>The teacher will introduce the lesson. You can ask questions to students about their idea of Industrial arts.</p> <p>Let the student watch the video clip to understand the history better.  <a href="https://www.youtube.com/watch?v=VqCrHGiClcg">https://www.youtube.com/watch?v=VqCrHGiClcg</a></p> <p>Note: You may also let the student watch about the 4<sup>th</sup> Industrial Revolution so that they become aware of the current events and their possible effects on industrial arts.</p> <p>CNBC International. (2019, January 22). <i>What is the Fourth Industrial Revolution?   CNBC Explains</i>. YouTube.  <a href="https://www.youtube.com/watch?v=v9rZOa3CUC8">https://www.youtube.com/watch?v=v9rZOa3CUC8</a></p>

The meaning behind the demand for people trained in industrial arts changes with the needs of the employing corporations. For example, the demand for industrial artists during the 1940s included people adept at shortwave radio design for use in World War II, according to the Encyclopedia of Chicago. Talented designers offer companies an edge over the competition and provide society with the desired technologically advanced products.

## 2. Worked Example

Class sharing:

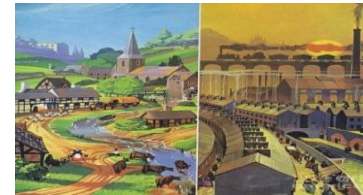
- How and why did the Industrial Revolution happen?
- What was the message of the Industrial Revolution?
- How did the 4th Industrial Revolution affect the Industrial Arts?

## 3. Lesson Activity: Picture Analysis

**Directions:** Based on the photo shown in the presentation, answer the following questions.

Guide Questions:

- a. What do you think is the message of the picture?
- b. Can you tell me more about the picture?
- c. How will you interpret the picture shown?
- d. What do you think of the idea or message of the picture?



## Day 2

### SUBTOPIC 2: Areas in Industrial Arts

#### 1. Explication: Name It!

**Directions:** Categorize the given areas in Industrial Arts based on the given picture.



Source: Free carpenter Clipart Images | FreeImages. (n.d.). Free Images. <https://www.freeimages.com/illustrations/clipart/carpenter>



Source: IconicBestiary. (2019, December 10). Electrician engineer man working with breaker and fuse box. . . iStock. <https://www.istockphoto.com/vector/engineer-man-working-with-breaker-and-fuse-box-gm1193095903-339230527?phrase=electrician+clipart>



Source: Ginny. (n.d.). Flat car mechanic PNG and Vector. Pngtree. <https://pngtree.com/so/car-mechanic-clipart>

After the activity, introduce the new lesson.

### Areas In Industrial Arts

Industrial Arts allow students to acquire insight into various technical and trade areas. Lab or shop classes are not designed to turn out tradespeople or technicians but

Proper citation of the video is needed to avoid copyright issues.

Note: You may use another image that will represent the same context.

Post the picture on the board, and let the students categorize the picture based on the areas of Industrial Arts.

Note: Please use pictures that promote gender equality, such as those of men and women working as carpenters or electricians.

to acquaint students with multiple occupations requiring mental and manual skills. Industrial art class experiences will have carry-over value later in life, in job situations, in consumer knowledge, or possibly in home maintenance. Vocational Building Trades allows students to explore twenty areas of pre-apprenticeship training for those considering construction as a career. Craftsmanship is not dead; it just must be taught and honored.

The Industrial Arts strand under the Technical-Vocational-Livelihood track provides students with the necessary knowledge and skills for employment. These include technical and manual skills in:

**1. Construction Sector**

- Construction Painting
- Furniture Making
- Carpentry
- Masonry
- Tile Setting
- Plumbing

**2. Electrical and Electronic Sector**

- Electrical Installation and Maintenance
- Electric Power Distribution Line Construction
- Transmission Line Installation and Maintenance
- Electronic Products Assembly and Servicing
- Mechatronics Servicing

**3. Heating, Ventilation, Air Conditioning and Refrigeration**

- Domestic Refrigeration and Air-conditioning Servicing

**4. Metals and Engineering Sector**

- Gas Metal Arc Welding
- Gas Tungsten Arc Welding
- Shielded Metal Arc Welding

**5. Automotives and Land Transportation Sector**

- Automotive Servicing
- Motorcycle/Small Engine Servicing
- Driving

Finishing a course in the Industrial Arts strand can give you requisites for Certificates of Competency and National Certificates on each subject if you pass the assessments from TESDA. Earning these certificates is essential, especially when looking for career opportunities in the electronics and trade industries.

**Answer the following:**

**Directions:** Given the Job Opportunities, identify what area they belong to.



Source:

<https://cxotoday.com/cxo-bytes/empowering-women-in-the-indian-blue-collar-workforce-strategies-for-gender-equality/>

**Answer key:**

- Carpenter
- Electrician
- Automotive Technician/Automotive Mechanic

1. Mason
2. Sheild and Metal Arc Welder
3. Aircon Technician
4. Wiring Electrician
5. Tile Setter

## 2. Worked Example

Are you fascinated by using different tools to assemble things? Do you dream of becoming an inventor someday? The Industrial Arts strand can help you reach that dream! But what is it all about, and how can you benefit from it?

## 3. Lesson Activity: Brochure Making

**Directions:** Learners are asked to make a brochure promoting different areas in Industrial Arts. **(See worksheet for the activity which students will accomplish.)**

## DAY 3

### SUBTOPIC 3: Industrial Arts Strand Specializations

#### 1. Explication

Career choice involves some of the most important decisions of a person's life. It does much to determine his standard of living and, even more importantly, his style of life and much of his happiness. A decision as important as this should not be left to chance or have no basis in education. Adequate career choice demands a series of choices extending over a period, and industrial arts and career education have a vital role in facilitating these decisions and enabling them to be made rationally. The following is from an article on career education in The Dallas Times Herald.

Industrial arts provide an orientation to how people earn their livelihoods in occupations within technology. They acquaint the student with the nature, qualifications, purposes, and values of such occupations and help him see possible opportunities therein. Industrial arts also allow students to get exploratory, try-out experiences in basic industrial occupations.

The industrial arts activities aim to give the students a background in our industrial society. Career education plays an equally important role in the student's educational process. It involves the student in everyday life decisions and helps him to become a better-informed citizen in his community.

The Industrial Arts strand helps students develop their technical skills. These skills are helpful for industry jobs, including carpentry, automotive services, electronics, plumbing, welding, and many more. This strand aims to produce field experts skilled in various technical facets. Furthermore, the best specializations are in the Industrial Arts strand.

#### Answer key:

1. Construction Sector
2. Metals and Engineering
- 3 Heating, Ventilation, and Air conditioning
4. Electrical and Electronic Sector
5. Construction Sector

The teacher will ask the student to make a brochure promoting different areas in Industrial Arts.

Note: You may give other activities such as poster making, infographics, or infomercials.

#### V. Synthesis/Extended Practice/Differentiation

Areas where printers are unavailable, encourage learners to use cutout or calligraphy. If no cutouts are available; learners may draw

Play a video clip of success stories of Filipinos who graduated from TESDA.

Video link:

TESDA Official. (2023). Narito ang kwento ni Anna Liza at kung paano sya natulungan ng RCEF. *YouTube*.

[https://www.youtube.com/watch?v=29OGET\\_U3I8](https://www.youtube.com/watch?v=29OGET_U3I8)

The Technical Education and Skills Development Authority (TESDA) is the government agency that manages and supervises technical education and skills development (TESD) in the Philippines. It was created by Republic Act 7796, otherwise known as the “Technical Education and Skills Development Act of 1994.” TESDA is essential because it provides technical education and skills development training to individuals, helping them acquire the necessary skills for employment and livelihood opportunities.

Industrial Arts strand specializations:

- Automotive Servicing (NC I, NC II)
- Carpentry (NC II, NCIII)
- Construction Painting (NC II)
- Driving (NC II)
- Electric Power Distribution Line Construction (NC II)
- Electrical Installation and Maintenance (NC II)
- Furniture Making (Finishing) (NC II)
- Instrumentation and Control Servicing (NC II)
- Electronic Products Assembly and Servicing (NC II)
- Machining (NC I, NC II, NC III)
- Masonry (NC II)
- Mechatronics Servicing (NC II)
- Motorcycle/Small Engine Servicing (NC II)
- Plumbing (NC I, NC II)
- Shielded Metal Arc Welding (NC I, NC II)
- Tile Setting (NC II)
- Transmission Line Installation and Maintenance (NC I)

## 2. Worked Example

Guide Questions:

1. What does TESDA stand for?
2. What is the role of TESDA in the country?

## 3. Lesson Activity: Asking Questions, Finding Answer!

**Directions:** Answer the following questions. Write your answer on the sheet provided. (Use this template provided.)

**Ask and Answer Questions**

ROLES OF INDUSTRIAL ARTS IN CAREER EDUCATION	
<b>Question</b>	<b>Answer:</b>
What is the importance of Industrial Arts in your life as a student?	The primary role of Industrial Arts education is to expose students to a variety of industrial and engineering technologies that improve their understanding of the industrial and engineered world.
<b>Question</b>	<b>Answer:</b>
What role Industrial Arts play in our modern society?	Industrial arts, such as woodworking or metalworking, can contribute to personal development by fostering creativity, problem-solving skills, and manual dexterity. In society, they promote innovation, craftsmanship, and the production of functional objects.
<b>Question</b>	<b>Answer:</b>
Why are industrial arts important in the Philippines?	Industrial arts are important in the Philippines because they allow people to show their talents, and they may also be used to introduce our culture, country, and unique talents.

Note: You may explore another related video.

Play a video clip about the benefits of the TESDA Course.

GMA Integrated News. (2022). TESDA courses, in demand lalo sa mga nais mag-abroad | 24 OrauTube.  
<https://www.youtube.com/watch?v=zy1vBbVAtOs>

(Note: You may explore another related video.)

## Answers:

1. The primary role of Industrial Arts education is to expose students to various industrial and engineering technologies that improve their understanding of the industrial and engineered world.
2. Industrial arts, such as woodworking or metalworking, can contribute to personal development by fostering creativity, problem-solving skills, and manual dexterity. In society, they promote innovation, craftsmanship, and

## Day 4

### SUBTOPIC 4: Career and Business Opportunities in Industrial Arts

#### 1. Explicitation: Game

**Directions:** Guess The Job from The Emoji. Based on the given emojis, guess the job shown in the presentation.



**Clue:** Their main duties include developing new products for companies or individuals, maintaining current products to enhance use, and designing new machines to improve an organization's efficiency.



**Clue:** They install and repair pipes and fixtures that carry water, gas, or other fluids in homes and businesses.



**Clue:** Perform basic care and maintenance, including changing oil, checking fluid levels, and rotating tires. Repair or replace worn parts, such as brake pads, wheel bearings, and sensors. Perform repairs to manufacturer and customer specifications. Explain automotive problems and repairs to clients.

Present and discuss the different career and job opportunities in Industrial Arts with the class.

Companies worldwide seek artists who can create furniture and decorations from wood, metal, plastic, and other industrial materials. These professionals may specialize in automotive design, industrial wall decor, industrial design research, or other related fields. If you're passionate about art and engineering, you can turn your interests into a rewarding career. The first step is to explore your job options and choose a degree program that fits your professional goals.

#### A. Construction Sector

Construction  
Painter

A skilled professional applies paint, coatings, and finishes to various surfaces in construction projects.



Source: <https://www.vecteezy.com/vector-art/3672784-happy-cute-beautiful-kid-boy-and-girl-painter-construction-worker->

the production of functional objects.

3. Industrial arts are essential in the Philippines because they allow people to show their talents, and they may also be used to introduce our culture, country, and unique talents

The teacher will let the students answer the job opportunities based on the given emojis.

After guessing the job, ask the student to explain the job.






Planetworm Riddles & Tests. (2020, December 15). Can you guess the job / profession from the emojis? | Emoji Guess Game. *YouTube*.

<https://www.youtube.com/watch?v=wipXsbFTX-U>

Note: Please emphasize that Industrial arts programs are not solely confined to junior and senior high schools with the sole aim of training technicians; they also serve as a viable pathway for students aspiring to pursue engineering careers.



#### Answer key:

1. Engineer
2. Plumber




		Apply paint, stain, and coatings to walls, ceilings, buildings, large machinery and equipment, bridges, and other structures.	<a href="#">standing-and-posing-holding-color-brush-with-color-bucket-and-painting-with-stairs</a>
	Carpenter	A skilled craftsman who performs carpentry. Carpenters work with wood to construct, install, and maintain buildings, furniture, and other objects.	 <p>Source: <a href="https://www.vecteezy.com/vector-art/3672789-happy-cute-beautiful-kid-boy-and-girl-carpenter-construction-worker-standing-and-posing-holding-tools-cutter-handsaw-with-wooden-board">https://www.vecteezy.com/vector-art/3672789-happy-cute-beautiful-kid-boy-and-girl-carpenter-construction-worker-standing-and-posing-holding-tools-cutter-handsaw-with-wooden-board</a></p>
	Mason	A mason is a skilled tradesperson who builds structures with brick, stone, concrete blocks, and other masonry materials.	 <p>Source: Free Stock Photos, PNGs, Templates &amp; Mockups   rawpixel. (n.d.). Rawpixel. <a href="https://www.rawpixel.com/search?page=1&amp;path=topics&amp;similar=6510007&amp;sort=curated">https://www.rawpixel.com/search?page=1&amp;path=topics&amp;similar=6510007&amp;sort=curated</a></p>
	Tile Setter	They lay and set tiles to create decorative wall, mural, and floor designs. Cut and fitted tiles around obstacles and openings using hand and power cutting tools and prepared, measured, and marked surfaces to be covered.	 <p>Source: Ribeiro, H. (2020, May 31). Professional worker laying tile repair work vector image on VectorStock. Pinterest. <a href="https://in.pinterest.com/pin/660973682802329118/">https://in.pinterest.com/pin/660973682802329118/</a></p>
	Plumber	A tradesperson who specializes in installing and maintaining systems used for potable (drinking) water, sewage, and drainage in plumbing systems.	 <p>Source: <a href="https://www.vecteezy.com/vector-art/6461875-cute-boy-and-girl-technician-character-holding-spanner-and-screwdriver-vector-cartoon">https://www.vecteezy.com/vector-art/6461875-cute-boy-and-girl-technician-character-holding-spanner-and-screwdriver-vector-cartoon</a></p>
	<b>B. Electrical and Electronics Sector</b>		
	Wiring Electrician	A wiring electrician is responsible for installing, repairing, and maintaining electrical wiring systems in various settings, such as residential, commercial, and industrial buildings.	 <p>Source: Electrician Wiring Electrical Connection - Vector Image. (n.d.). Wwnnapik.com. Retrieved February 26, 2024, from <a href="https://www.wannapik.com/vectors/1173">https://www.wannapik.com/vectors/1173</a></p>

### 3. Mechanic

The teacher should cite realistic examples of the job opportunities.


Mechatronics Technician	Installed, configured, and tested the industry's automated machinery and computer-controlled mechanical systems.	 <p>Source: <a href="https://www.shutterstock.com/search/operator-maintenance?image_type=illustration&amp;page=2">Operator maintenance: over 8,749 Royalty-Free Licensable stock Illustrations &amp; Drawings   Shutterstock. (n.d.). Shutterstock. <a href="https://www.shutterstock.com/search/operator-maintenance?image_type=illustration&amp;page=2">https://www.shutterstock.com/search/operator-maintenance?image_type=illustration&amp;page=2</a></a></p>
Electronic Technician	An electronic technician is responsible for installing, maintaining, repairing, and troubleshooting electronic equipment and systems.	 <p>Source: <a href="https://www.pinterest.com/pin/7751997233436357/">https://www.pinterest.com/pin/7751997233436357/</a></p>

### C. Automotives and Land Transportation Sector


Automotive Mechanic	Perform basic care and maintenance, including changing oil, checking fluid levels, and rotating tires. Repair or replace worn parts, such as brake pads, wheel bearings, and sensors. Perform repairs to manufacturer and customer specifications. Explain automotive problems and repairs to clients.	 <p>Source: <a href="https://www.istockphoto.com/vector/auto-mechanic-man-and-woman-and-tires-gm1461236323-495247783">https://www.istockphoto.com/vector/auto-mechanic-man-and-woman-and-tires-gm1461236323-495247783</a></p>
Automotive Service Technician	The main job is to diagnose and repair vehicle problems. Advise customers on work performance and working closely with other mechanics.	 <p>Source: <a href="https://www.istockphoto.com/illustrations/mechanic-customer">1,300+ Mechanic Customer Stock Illustrations, Royalty-Free Vector Graphics &amp; Clip Art - iStock. (n.d.). www.istockphoto.com. <a href="https://www.istockphoto.com/illustrations/mechanic-customer">https://www.istockphoto.com/illustrations/mechanic-customer</a></a></p>
Driver	To safely transport cargo or passengers from one location to another, they must follow traffic laws and correctly route themselves, ensuring enough gas	 <p>Source: <a href="https://www.shutterstock.com/image-vector/illustration-man-driving-delivery-truck-261120866">Illustration Man Driving delivery truck Stock Vector (Royalty Free) 261120866   Shutterstock. (n.d.). Shutterstock. <a href="https://www.shutterstock.com/image-vector/illustration-man-driving-delivery-truck-261120866">https://www.shutterstock.com/image-vector/illustration-man-driving-delivery-truck-261120866</a></a></p>

	is always in the tank for their destination.	
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#### D. Heating, Ventilation, Air Conditioning and Refrigeration

Refrigerator and aircon Technician	Installed, maintained, repaired, and overhauled residential central air conditioning systems, commercial and industrial refrigeration and air conditioning systems, and combined heating, ventilation, and cooling systems.	 <p>Source: MariaGisina. (2023, April 6). Repairman fixing air conditioner, flat cartoon vector illustration. . . iStock. <a href="https://www.istockphoto.com/vector/repairman-fixing-air-conditioner-flat-cartoon-vector-illustration-isolated-gm1480111623-507893569?phrase=industrial+refrigeration+technician">https://www.istockphoto.com/vector/repairman-fixing-air-conditioner-flat-cartoon-vector-illustration-isolated-gm1480111623-507893569?phrase=industrial+refrigeration+technician</a></p>
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#### E. Metals and Engineering Sector

Welder	A welder is a skilled tradesperson specializing in joining materials, typically metals, through welding.	 <p>Source: Tambus, A. (2018, June 18). Cartoon Welder Clipart Transparent Background, Cartoon Welders, Cartoon Clipart, Red Hat, Electric Welder PNG Image For Free Download. Pinterest. <a href="https://in.pinterest.com/pin/cartoon-welder-clipart-transparent-background-cartoon-welders-cartoon-clipart-red-hat-electric-welder-png-image-for-free-download--699395017107053956/">https://in.pinterest.com/pin/cartoon-welder-clipart-transparent-background-cartoon-welders-cartoon-clipart-red-hat-electric-welder-png-image-for-free-download--699395017107053956/</a></p>
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#### 2. Worked Example

- Ask the students to share about the jobs or professions that align with Industrial Arts.
- Let them share their dos and don'ts about the job.
- Facilitate the discussion.

#### 3. Lesson Activity

**A. Directions:** Being a young professional, you need to present the career and the job opportunities that you chose and present them with the job description. Dress up based on the job. You need notebooks.

Note: Please be guided by the rubric provided **See Learning Activity Sheet #2**

**B. Directions:** Match the Job Description in column A to the Job Title in column B. Write the letter of the answer in the space provided. **See Learning Activity Sheet #3**

#### Lesson Activity:

**(A.)** The teacher will let the students answer the activity in their notebooks.

#### **(B.) Answer Key:**

1. C
2. A
3. B
4. E
5. D

Let the students freely express their selves on the reflection. This will help us with our future activities.

<b>D. Making Generalizations</b>	<p><b>DAY 4</b></p> <p><b>1. Learners' Takeaways</b></p> <p><b>3-2-1 Game</b></p> <p>3 Things I learned. _____.</p> <p>2 New words I encounter _____.</p> <p>1 Question I have in mind _____.</p> <p><b>2. Reflection on Learning</b></p> <p><b>Important questions to reflect on.</b></p> <ol style="list-style-type: none"> <li>1. Why are industrial arts important in the Philippines?</li> <li>2. What role do Industrial Arts play in our modern society?</li> </ol>	<p>The teacher will ask the students about their takeaways from the discussions.</p> <p>The teacher may also ask about the importance of the topics/lessons in daily life.</p>
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IV. EVALUATING LEARNING: FORMATIVE ASSESSMENT AND TEACHER’S REFLECTION				NOTES TO TEACHERS
A. Evaluating Learning	1. Formative Assessment			<b>Answer Key:</b> 1. Refrigerator and Airon Mechanic 2. Tile Setter 3. Industrial Arts 4. Construction Painter 5. TESDA
	A. Identification			
	Directions: Answer the following questions using the words found in the box.			
	Refrigerator and Aircon Technician	TESDA	DOH Industrial Arts	
	Tile Setter	Construction Painter	DILG	
	_____ 1. They are responsible for installing, maintaining, repairing, and overhauling residential central air conditioning systems, commercial and industrial refrigeration and air conditioning systems, and combined heating, ventilation, and cooling systems.			
	_____ 2. They are the ones who lay and set tiles to create decorative walls, murals, and floor designs.			
	_____ 3. It is a subject taught in elementary and secondary schools that aims to develop manual skills and familiarity with tools and machines.			
	_____ 4. They apply paint, stain, and coatings to walls, ceilings, buildings, large machinery and equipment, bridges, and other structures.			
	_____ 5. The government agency is tasked to manage and supervise technical education and skills development (TESD) in the Philippines			

	<p><b>B. Essay (See the given worksheet)</b>  <b>Directions:</b> Reflect on the quotes given. Write your answer in your notebook.          (15 points each)</p> <p><b>“Talent is cheaper than table salt. What separates the talented individual from the successful one is a lot of hard work:</b></p> <p>_____</p> <p>_____</p> <p>_____</p>			
	<p><b>2. Homework</b>          The teacher will assign the students to make a caricature of their selected job opportunities or careers in Industrial Arts.</p>			
<b>B. Teacher's Remarks</b>	<i>Note observations on any of the following areas:</i>	<b>Effective Practices</b>	<b>Problems Encountered</b>	<p>The teacher may take note of some observations related to the effective practices and problems encountered after utilizing the different strategies, materials used, learner engagement and other related stuff.</p> <p>Teachers may also suggest ways to improve the different activities explored/ lesson exemplar.</p>
	<b>strategies explored</b>			
	<b>materials used</b>			
	<b>learner engagement/ interaction</b>			
	<b>others</b>			
<b>C. Teacher's Reflection</b>	<p><i>Reflection guide or prompt can be on:</i></p> <ul style="list-style-type: none"> <li>▪ <u>principles behind the teaching</u>  <i>What principles and beliefs informed my lesson?</i>  <i>Why did I teach the lesson the way I did?</i></li> <li>▪ <u>students</u>  <i>What roles did my students play in my lesson?</i>  <i>What did my students learn? How did they learn?</i></li> <li>▪ <u>ways forward</u>  <i>What could I have done differently?</i>  <i>What can I explore in the next lesson?</i></li> </ul>			<p>Teacher's reflection in every lesson conducted/ facilitated is essential and necessary to improve practice. You may also consider this as an input for the LAC/Collab sessions.</p>