	School:		**Grade Level:**	**7**
	Teacher:		**Learning Area:**	**TLE**
	Teaching Dates and Time:		**Quarter:**	**Fourth**
			Week:	**Week 1-Day 3**

I. CONTENT, STANDARDS AND LEARNING COMPETENCIES		***ANNOTATIONS***
A. CONTENT STANDARDS	The learners demonstrate an understanding of the concepts in industrial arts services.	
B. PERFORMANCE STANDARDS	The learners perform mensuration and calculations following safety precautions.	
C. LEARNING COMPETENCIES	**Learning Competency** Discuss the services of Industrial Arts	
D. LEARNING OBJECTIVES	**Learning Objectives** 1. Reiterate the history of Industrial Arts 2. Enumerate the different areas in Industrial Arts 3. Discuss the role of industrial arts in career education 4. Determine career and business opportunities in industrial arts	
I. CONTENT		
Industrial Arts strand specializations		
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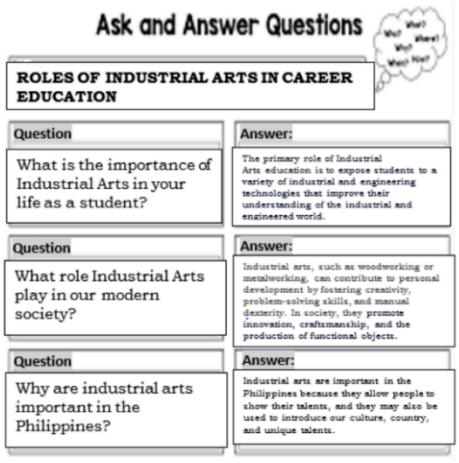
B. OTHER LEARNING RESOURCES		
III. TEACHING AND LEARNING PROCEDURE		
BEFORE/PRE-LESSON PROPER		
ACTIVATING PRIOR KNOWLEDGE	**Short Review** **Industrial Arts** is a field that focuses on the development of practical skills in various trades and technical disciplines. It includes several specialized areas, each contributing to different industries and everyday applications. 1. **Woodworking** – Involves crafting and building objects using wood, such as furniture and cabinets. 2. **Metalworking** – Focuses on shaping and fabricating metal materials through welding, forging, and machining. 3. **Electricity & Electronics** – Deals with electrical systems, wiring, and circuits used in homes, industries, and technology. 4. **Drafting** – The process of creating technical drawings and blueprints for engineering and architectural projects. 5. **Automotive Technology** – Involves the repair, maintenance, and enhancement of motor vehicles. 6. **Construction Technology** – Covers the planning and building of structures like houses, bridges, and roads. Each area plays a vital role in modern industries, offering valuable career opportunities and contributing to technological advancements. Understanding these fields helps students appreciate the importance of **hands-on skills,**	

	craftsmanship, and innovation in industrial arts.	
LESSON PURPOSE/INTENTION	**Lesson Purpose** The purpose of this lesson is to help students **understand the different specializations under the Industrial Arts strand** and how they relate to career pathways and industry needs. Through this lesson, students will: 1. **Identify** the various specializations under the Industrial Arts strand, such as **Automotive Servicing, Electrical Installation and Maintenance, Welding and Fabrication, Carpentry, Plumbing, and Machining**. 2. **Explain** the skills, tools, and applications of each specialization in real-world industries. 3. **Analyze** the importance of Industrial Arts specializations in economic development and technological progress. 4. **Explore** career opportunities in Industrial Arts and the qualifications needed for different technical professions. 5. **Apply** basic knowledge of safety protocols, techniques, and best practices in different specializations. By the end of the lesson, students will have a **deeper appreciation for hands-on technical skills** and understand how Industrial Arts specializations contribute to various industries, leading to potential career opportunities in vocational and technical fields.	
LESSON LANGUAGE PRACTICE	**Unlocking Content Vocabulary: Industrial Arts Strand Specializations** **1. Automotive Servicing 🚗🔧** 🔹 Definition: The repair, maintenance, and troubleshooting of vehicles such as cars and motorcycles. 🔹 Example: A mechanic uses diagnostic tools to check for engine problems in a car.	**Activity Idea: Vocabulary Match-Up** ● Provide students with **word cards** and **definition cards** and have them match the correct term with its meaning. ● Ask students to create **sentence examples** using

	2. Electrical Installation and Maintenance ⚡🔌 🔹 Definition: The process of installing, repairing, and maintaining electrical wiring, circuits, and systems in buildings and industrial settings. 🔹 Example: An electrician installs circuit breakers and wiring in a new house. **3. Welding and Fabrication** 🔥🔩 🔹 Definition: The process of joining metals together using heat and pressure to create strong structures and products. 🔹 Example: A welder uses a welding torch to fuse two metal sheets for a construction project. **4. Carpentry** 🏠🔨 🔹 Definition: The craft of cutting, shaping, and assembling wood to build furniture, cabinets, houses, and other wooden structures. 🔹 Example: A carpenter builds a wooden table using saws, hammers, and nails. **5. Plumbing** 🚰🔧 🔹 Definition: The installation and maintenance of pipes, faucets, and drainage systems that supply water and remove waste from buildings. 🔹 Example: A plumber repairs a leaking kitchen sink by replacing a damaged pipe. **6. Machining** ⚙🔩 🔹 Definition: The process of cutting, shaping, and assembling metal parts using machines such as lathes and milling machines. 🔹 Example: A machinist uses a lathe to shape metal rods for mechanical equipment. **7. Safety Protocols** 🦺⚠️ 🔹 Definition: Rules and guidelines followed in industrial workspaces to ensure the safety	each term in an industry-related scenario. ● Use **real tools or equipment** to make vocabulary learning more hands-on and engaging. Mastering these terms will help students **gain a strong foundation** in Industrial Arts specializations, preparing them for technical skills development and future career paths!

	of workers and prevent accidents. 🔹 Example: Wearing protective gear like gloves, helmets, and goggles is a basic safety protocol in workshops.	
DURING/LESSON PROPER		
READING THE KEY IDEA/STEM	**SUBTOPIC 3: Industrial Arts Strand Specializations** **1. Explicitation** 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,	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 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.)

	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. 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) • Electronic Products Assembly and Servicing (NC II) • Carpentry (NC II, NCIII) • Machining (NC I, NC II, NC III) • Construction Painting (NC II) • Masonry (NC II) • Driving (NC II) • Mechatronics Servicing (NC II) • Electric Power Distribution Line Construction (NC II) • Motorcycle/Small Engine Servicing (NC II)	

	• Electrical Installation and Maintenance (NC II) • Plumbing (NC I, NC II) • Furniture Making (Finishing) (NC II) • Shielded Metal Arc Welding (NC I, NCII) • Instrumentation and Control Servicing (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.)  	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 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
DEVELOPING and DEEPENING UNDERSTANDING OF THE KEY IDEA/STEM	**Activity Title: "Industrial Arts Career Expo"** **Materials Needed:** • Manila paper, markers, and printed images (for a physical poster) OR • Digital tools (Canva, PowerPoint, Google Slides) • Research materials (books, online resources) Activity Steps: 1. Group Formation & Specialization Assignment • Divide the class into **six groups**. • Assign each group **one Industrial Arts specialization**: 1. **Automotive Servicing** 🚗🔧 2. **Electrical Installation and Maintenance** ⚡🔌 3. **Welding and Fabrication** 🔩🔥 4. **Carpentry** 🏠🔨 5. **Plumbing** 🚰🔧 6. **Machining** ⚙️🔩 **2. Research & Poster/Presentation Creation** Each group will research and create a visual poster (physical or digital) that includes: ✅ Definition of their assigned specialization ✅ Common tools and equipment used (illustrations or images) ✅ Real-world applications (Where is this specialization used?) ✅ Career opportunities (Jobs related to this specialization) ✅ A Fun Fact about the field **3. Group Presentations**	

	• Each group presents their **findings and poster** to the class (**2-3 minutes per group**). • Other groups can ask **follow-up questions** or share additional insights. 4. Class Discussion & Reflection (10 minutes) • Discuss **how these specializations are interconnected** in various industries. • Ask students: • "Which specialization do you find most interesting and why?" • "How do these fields contribute to our economy and society?" • "What skills are important for success in these careers?"	
AFTER AFTER/POST-LESSON		
MAKING GENERALIZATIONS AND ABSTRACTIONS	Worksheet Synthesis/Extended What you have learned In a one sheet of paper write something you understand about the lesson we discussed today.	
EVALUATING LEARNING	**Instruction:** Read each question carefully and choose the **best answer** from the options provided. **1. Which Industrial Arts specialization involves the repair and maintenance of vehicles such as cars and motorcycles?** A. Machining B. Automotive Servicing C. Carpentry D. Welding and Fabrication **2. What is the main task of an electrician in the field of Electrical Installation and Maintenance?** A. Designing and creating blueprints for houses B. Installing and repairing wiring, circuits, and electrical systems	Answer: 1. B. Automotive Servicing 2. B. Installing and repairing wiring, circuits, and electrical systems 3. B. Welding torch 4. C. Machining 5. A. Wood

	C. Cutting and shaping wood for furniture D. Welding metal sheets together **3. Which tool is commonly used in Welding and Fabrication to join metal parts together?** A. Wrench B. Welding torch C. Screwdriver D. Saw **4. What Industrial Arts specialization focuses on cutting, shaping, and assembling metal parts using machines such as lathes and milling machines?** A. Plumbing B. Automotive Servicing C. Machining D. Carpentry **5. A carpenter specializes in which type of material?** A. Wood B. Metal C. Plastic D. Electrical wires	
ADDITIONAL ACTIVITIES FOR APPLICATION OR REMEDIATION (IF APPLICABLE)		
REMARKS		
REFLECTION		

Prepared by: **Reviewed by:**

_____ _____

Subject Teacher *Master Teacher/Head Teacher*