Unit 1 Safety

Content Area: Applied Technology

Course(s): Time Period:

Marking Period 1

Length: Status: 1-2 weeks Published

Summary/Introduction

Students will learn basic safety protocol for the automotive shop, including but not limited to the location of safety equipment, such as the emergency shut-offs, fire extinguishers, fire blankets, eye wash station, and first aid kit. They will learn the safe use of automobile lifts, jacks, jack stands, goggles, and other shop-related equipment.

The goal of this unit is to teach basic safety rules and procedures that are essential for a positive experience in the automotive shop. By making students aware of the dangers and accidents that can occur, students will be better equipped to avoid and foresee possible accidents. Students will be made aware of the dangers while working in the shop and how to recognize and avoid mishaps. The possible dangers are fires, physical injuries, chemical burns, electrocution, etc..

Revised July 2025

Essential Questions

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What is the importance of developing good safety habits?

Why is it important to know the dangers of the shop and the procedures if an accident occurs?

What are the safety procedures to follow when working in and around shop equipment?

Enduring Understandings

Students will understand the importance of following safety procedures while engaged in shop activities.

Objectives

Students will know.....

the safety procedures and danger areas of the shop

how to practice shop safety procedures

the location of all safety related equipment

the proper disposal of hazardous materials

safety is the number one priority in the shop

Students will be skilled at.....

use of personal safety attire will prevent personal injury

the proper use of automotive equipment is essential to preventing accidents

the proper disposal of waste produced in the automotive shop to minimize contamination of the environment.

performing a hands on demonstration of the location and use of safety equipment

demonstrating safe work habits.

Learning Plan

Preview the essential questions and connect to learning throughout the unit

Instructor led discussion on the importance of safe work habits and why good safety habits should be developed early. Discussion will also focus on what safe work habits are and how to practice them.

Tour of shop, description of equipment and its proper use. Tour will include location of fire extinguishers emergency shut offs and their proper use.

Modern Automotive Technology text and work books chapter 5

Hands on Job Sheets on automotive shop procedures and proper use of equipment

Assessment

Formative:

assessment of essential questions

participate in class discussions regarding safety rules and procedures

Job sheets

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Summative:

quizzes

unit test on safety procedures and disposal of hazardous materials

Benchmark:

Final Exam

Alternative:

Presentation on disposal of hazardous materials

MATERIALS

Text: Modern Automotive Technology

Internet for research

Videos - united streaming

Visual materials used to demonstrate safety

Standards

| ELA.K-12.1 | Developing Responsibility for Learning: Cultivating independence, self-reflection, and responsibility for one's own learning. |
|---------------------|---|
| ELA.R | Reading |
| ELA.W | Writing |
| CS.9-12.8.1.12.AP.3 | Select and combine control structures for a specific application based upon performance and readability, and identify trade-offs to justify the choice. |
| CS.9-12.8.1.12.AP.5 | Decompose problems into smaller components through systematic analysis, using constructs such as procedures, modules, and/or objects. |
| CS.9-12.8.1.12.CS.3 | Compare the functions of application software, system software, and hardware. |
| CS.9-12.8.1.12.CS.4 | Develop guidelines that convey systematic troubleshooting strategies that others can use |

| | to identify and fix errors. |
|----------------------|---|
| CS.9-12.8.2.12.EC.1 | Analyze controversial technological issues and determine the degree to which individuals, businesses, and governments have an ethical role in decisions that are made. |
| SOC.K-2.D1.1.K-2 | Explain why the compelling question is important to the student. |
| SOC.K-2.D1.3.K-2 | Identify facts and concepts associated with a supporting question. |
| SOC.K-2.D2.Civ.1.K-2 | Describe roles and responsibilities of people in authority. |
| SOC.K-2.D2.Civ.2.K-2 | Explain how all people, not just official leaders, play important roles in a community. |
| WRK.9.2.12.CAP.2 | Develop college and career readiness skills by participating in opportunities such as structured learning experiences, apprenticeships, and dual enrollment programs. |
| WRK.9.2.12.CAP.4 | Evaluate different careers and develop various plans (e.g., costs of public, private, training schools) and timetables for achieving them, including educational/training requirements, costs, loans, and debt repayment. |
| WRK.9.2.12.CAP.5 | Assess and modify a personal plan to support current interests and post-secondary plans. |
| | Constructing Compelling Questions |

INTEGRATED ACCOMODATIONS AND MODIFICATIONS

https://docs.google.com/spreadsheets/d/1AckQSTINShzlM-rDV5YKYUFm2WMCxJQiS10rEZ4jCC8/edit?usp=sharing