

Unit 1: Safety

Content Area: **Applied Technology**
Course(s):
Time Period: **Marking Period 1**
Length: **1 week**
Status: **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

July 2024

Essential Questions/Enduring Understandings

Essential Questions:

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 safe work habits, and how these understandings will be applied in all facets of their lives.

Students will understand the procedures to follow in the event an accident occurs.

OBJECTIVES: Students will know/Students will be skilled at...

Students will be skilled at.....

the 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.

Students will know.....

the safety procedures and danger areas of the shop

the location of all safety-related equipment

the proper disposal of hazardous materials

that safety is the number one priority in the shop

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 the shop, description of the equipment, and its proper use. The tour will include the location of fire extinguishers' emergency shut-offs and their proper use.

Modern Automotive Technology text and workbooks chapter 5

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

ASSESSMENTS

Formative:

assessment of essential questions

participate in class discussions regarding safety rules and procedures

job sheets

Summative: quizzes and unit tests on safety procedures and disposal of hazardous materials

Benchmark: Final / Midterm Exam

Alternative: Presentation on disposal of hazardous materials

MATERIALS

Text: Modern Automotive Technology [Core Book List](#)

Internet for research

Visual materials used to demonstrate safety

STANDARDS

ELA.L.SS.9–10.1	Demonstrate command of the system and structure of the English language when writing or speaking.
MATH.9-12.F.BF.A.1	Write a function that describes a relationship between two quantities.
ELA.L.KL.9–10.2	Apply knowledge of language to make effective choices for meaning, or style, and to comprehend more fully when reading, writing, speaking or listening.
ELA.L.VL.9–10.3.E	Verify the preliminary determination of the meaning of a word or phrase (e.g., by checking the inferred meaning in context or in a dictionary).
ELA.RL.CR.9–10.1	Cite a range of thorough textual evidence and make relevant connections to strongly support analysis of multiple aspects of what a literary text says explicitly and inferentially, as well as including determining where the text leaves matters uncertain.
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.
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.

INTEGRATED ACCOMODATION and MODIFICATIONS

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