Unit 3 DRIVE TRAINS

Content Area: **Applied Technology**
Course(s):
Time Period: **Marking Period 1**
Length: **10 -15 class periods**
Status: **Published**

Summary of Unit

Students will expand on their knowledge of the automotive drive train. The learning experience will focus on the areas of front-wheel drive, rear-wheel drive, clutch, and differential operation. The students will be engaged in the disassembly and reassembly of major drive train components on live automobiles. They will learn how each assembly operates, how to diagnose common system complaints and the proper method of repair of each component or part. Removal and installation of major components, web-based research, task sheets, and textbook, will be part of the unit along with writing prompts, written tests, and group discussions.

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ESESSENTIAL QUESTIONS/ ENDURING UNDERSTANDINGS

Essential Questions

- A clutch is a major part of the drive train what does it do, how does it operate, and what are some symptoms of a clutch that is not operating properly?
- The transmission is responsible for the transmission of engine power to the axles, how does it do this and what are some problems that can occur?
- Transaxles and conventional transmissions have major differences what are they?

Enduring Understandings

- Students will understand the proper methods of diagnosing and repairing automotive drive train concerns and problems.
- They will understand the importance of using systematic diagnosis techniques in order to solve a problem and make a repair suggestion.

LEARNING PLAN

- Teacher-led discussions on different drive train components and their repair procedures.
- Hands-on Job Sheets on drive train components, location, operation, and repair.

- Use of the Drive train chapter in Modern Automotive Technology.
- Written tests and writing prompts on the automotive drive train.
- Group discussions and essential questions on drive trains throughout the lesson.

ASSESSMENT

Summative

Written tests

Hands-on Job Sheets

Written Essay

Formative

Verbal questioning during Hands-on Job Sheets

Visual Observations

Alternative

Student presentation on unit

Benchmark

Midterm/Final Exam

MATERIALS

Text Book; Modern Automotive Technology

Job Sheets

Visual aids

Videos

Shop vehicles

All Data Automotive Internet Program

Google

Electrical, Pneumatic, and Hydraulic tools

Various hand tools

Accomodations

https://docs.google.com/spreadsheets/d/1CvoX6NXdGUPtTPcEqPOsnWbqpDLS4Ego1W1eaIrGYTo/