



# #10447 DRIVER'S EDUCATION: PART 11--BASIC VEHICLE ANATOMY

DEAF SUCCESS PRODUCTIONS, 2004  
GRADE LEVEL: 9-12  
9 MINUTES

## DESCRIPTION

Identifies the most common standard features in vehicles. Shows and labels each one--external, internal, and under the hood. ASL narrator; voiced in English.

## ACADEMIC STANDARDS

### Subject Area: Technology

- Standard: Knows the characteristics and uses of computer hardware and operating systems.
  - Benchmark: Knows features and uses of current and emerging technology related to computing (e.g., optical character recognition, sound processing, cable TV, cellular phones, ABS brakes).

### Subject Area: Life Work

- Standard: Makes effective use of basic tools.
  - Benchmark: Learns the proper use of new instruments by following instructions in a manual or by taking instructions from an experienced user.

### Subject Area: Self-Regulation

- Standard: Considers risks.
  - Benchmark: Knows potential safety hazards, and knows common strategies to avoid hazard or injury.

## INSTRUCTIONAL GOALS

1. To review the basic anatomy of vehicles.
2. To identify the vocabulary list of vehicle features.
3. To overview the three different classifications of vehicle features: external vehicle features, internal vehicle features, and engine features.

## VOCABULARY

### External Vehicle Features

- |                                  |                            |
|----------------------------------|----------------------------|
| 1. bumper guards                 | 6. fog lamps               |
| 2. center high-mounted stop lamp | 7. front bumper            |
| 3. door handle                   | 8. front hood              |
| 4. driver door                   | 9. front turn signal lamps |
| 5. driver window                 | 10. fuel hinged door       |

# C a p t i o n e d M e d i a P r o g r a m

- |                               |                                   |
|-------------------------------|-----------------------------------|
| 11. headlamps                 | 18. reverse lamps                 |
| 12. license plates depression | 19. sliding rear window           |
| 13. mufflers                  | 20. sunroofs                      |
| 14. passenger window          | 21. tail lamps                    |
| 15. rear bumper               | 22. wheels (covers and nut bolts) |
| 16. rear trunk                | 23. windshield window             |
| 17. rear window               | 24. windshield wipers             |

## Internal Vehicle Features

- |                                   |                                     |
|-----------------------------------|-------------------------------------|
| 1. air vents                      | 12. hood release handle             |
| 2. audio system                   | 13. horn                            |
| 3. back seats                     | 14. ignition                        |
| 4. brake pedal                    | 15. instrument panel cluster        |
| 5. brake release pedal            | 16. lamp controls                   |
| 6. comfort control                | 17. passenger seat                  |
| 7. cruise controls                | 18. rearview mirror                 |
| 8. driver seat                    | 19. shift lever                     |
| 9. gas pedal                      | 20. spare tire space saver          |
| 10. glove box                     | 21. turn signal/multifunction lever |
| 11. hazard warning flasher button |                                     |

## Engine Features

1. alternator
2. battery
3. brake fluid container
4. engine
5. engine air cleaner/filter
6. radiator
7. vehicle batteries
8. washer fluid container

## **BEFORE SHOWING**

The purpose of learning the basic vehicle anatomy is to help students make wise purchase and repair decisions. List the three groups of features (external, internal, and engine) on the board, instructing students to make notes during showing as to specific features under each.

## **AFTER SHOWING**

### **Applications and Activities**

1. Pass out copies of the vocabulary list included with this guide. Discuss each feature with the students.
2. Have the students research the work done by automobile manufacturers to improve design and safety. Background: Today's automobile manufacturers spend a great deal of time and money developing better protection for occupants in two areas: active and passive.
  - a. *Active* protection includes the technical features that control the vehicle more safely. Examples include cockpit design, onboard information systems, ABS brakes, suspension, steering, lighting, and engine-control systems.
  - b. *Passive* protection refers to the equipment that minimizes the risk of injury, such as bonded occupant restraint systems, stronger windows, defined crumple zones, roof cross members, solid "A" posts, and reinforced door sills.

## C a p t i o n e d M e d i a P r o g r a m

3. Discuss with students how most people do not understand how the automobile engine works. To most, it is a confusing jumble of metal, tubes, and wires. Break students into groups and have them research the following terms and others you can identify: "3.0 liter V-6," "dual overhead cams," "port fuel injection" "emission control," "crankshaft," "valve," "oil pan," and "rocker arm."

### RELATED RESOURCES

#### Captioned Media Program

- [\*Automotive Measurement: An Essential Skill\* #8230](#)
- [\*Henry Ford: Tin Lizzy Tycoon\* #8272](#)
- [\*Driver's Education: Part 3—Introduction to Control Devices\* #10452](#)
- [\*Driver's Education: Part 12—Basic Car Repair\* #10448](#)
- [\*Vehicle Safety: Be Prepared\* #10433](#)

To view more titles in the *Driver's Education* series and other related media, please connect to our Web site at <http://www.cfv.org/browsetitles.asp?sn=98>.

#### World Wide Web



The following Web sites complement the contents of this guide; they were selected by professionals who have experience in teaching deaf and hard of hearing students. Every effort was made to select accurate, educationally relevant, and "kid safe" sites. However, teachers should preview them before use. The U.S. Department of Education, the National Association of the Deaf, and the Captioned Media Program do not endorse the sites and are not responsible for their content.

#### • MAINTENANCE BASICS

<http://www.csa.com/global/articleindexsubcat/0,1395,1004010300,00.html>

Get advice about how to care for your car from the experts at AAA. Covers everything from tune-ups to tire treads.

#### • MAINTENANCE TIPS

[http://www.gm.com/automotive/parts\\_for\\_consumers/service\\_support/maintenance.htm](http://www.gm.com/automotive/parts_for_consumers/service_support/maintenance.htm)

Designed to provide information concerning key maintenance areas.