

Animation Worksheet: Active Grille Shutters

Name: _____ Date: _____

1. Automotive active grille shutters are aerodynamic components designed to optimize a vehicle's _____ and engine cooling.
2. They automatically _____ and _____ slats within the front grille to regulate airflow.
3. The shutter slats are movable horizontal or vertical _____ that control airflow.
4. An _____ motor moves the slats based on input from the vehicle's _____.
5. Shutters are _____ when there is a lower engine heat load to reduce _____ and maximize aerodynamic efficiency by pushing more air around the vehicle.
6. The shutters will _____ when airflow to the engine is required, such as when traveling up a steep grade, towing, or in other situations that engine temperatures rise above a certain level.
7. The shutters will _____ when maximum cooling needs are required.
8. Active grille shutters reduce _____, leading to better fuel economy.
9. The active grille shutter helps the engine reach _____ faster, especially in cold weather.
10. Active grille shutter technology is found in many modern vehicles, including sedans, _____, and trucks, particularly in hybrid and fuel-efficient models.