

Animation Worksheet: Three Connector Alternator

Name: _____ Date: _____

1. A three-terminal alternator is a common design used to convert _____ energy into electrical energy.
2. The alternator is responsible for charging the _____ and powering the vehicle's electrical systems while the engine is running.
3. The _____ battery cable connects the battery directly to the starter motor.
4. The positive battery cable also connects to the _____ and the ignition switch.
5. Terminal 1 on the alternator is connected to the _____ warning lamp located on the instrument panel.
6. When the key is turned on but the engine is _____, current flows from the battery through the ignition light to Terminal 1.
7. This small current "excites" the alternator by energizing the _____ field coil inside.
8. Terminal 2 is connected to a _____ 12V source, such as the ignition switch or directly to the battery.
9. The circuit from Terminal 2 allows the alternator's internal _____ to monitor system voltage.
10. Once the engine starts and the alternator begins generating power, the _____ should turn off because voltage appears on both sides of the bulb.