

Animation Worksheet: Power Flow, Two-Mode Hybrid Transmission

Name: _____ Date: _____

1. A hybrid automatic transmission combines an internal combustion engine, a high-voltage battery, and one or more _____ to deliver power.
2. The abbreviation used in the video for an internal combustion engine is _____.
3. When the vehicle is in Electric Vehicle (EV) mode, the internal combustion engine is _____.
4. The high-voltage battery stores and supplies _____ electricity to the inverter.
5. The inverter changes the direct current from the battery into high-voltage _____ alternating current (AC) to power the electric motor.
6. When the engine is running, the transmission can combine power from both the engine and the electric motor to improve _____ or fuel efficiency.
7. During regenerative braking, the electric motor acts as a _____ to recover kinetic energy.
8. In summary, the system uses planetary gear sets and _____ to manage power distribution and enable smooth mode transitions.
9. The _____ and differential are responsible for sending torque directly to the vehicle's wheels.
10. The system handles _____ differences between the wheels when the vehicle is making a turn.