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Decoding Electric Vehicles: Battery Electric vs. Plug-In Hybrid

Multiple Choice Questions

1. What is the primary difference between a Battery Electric Vehicle (BEV) and a Plug-In Hybrid Electric Vehicle (PHEV)?

- a) BEVs have both an electric motor and an internal combustion engine.
- b) BEVs produce emissions when operating in gasoline mode.
- c) BEVs run exclusively on electricity, while PHEVs have both an electric motor and an internal combustion engine.

2. How do BEVs and PHEVs charge their batteries?

- a) Only BEVs can be charged using electric charging stations.
- b) Both BEVs and PHEVs can be charged using electric charging stations.
- c) PHEVs can only recharge their batteries using the gasoline engine.

3. What is one significant advantage of BEVs in terms of environmental impact?

- a) BEVs have a longer range than PHEVs.
- b) BEVs produce zero tailpipe emissions.
- c) BEVs have a backup gasoline engine.

4. What driving scenario is PHEV best suited for?

- a) Short trips with no need for gasoline.
- b) Long-distance trips with no need for electricity.
- c) Short and long trips with flexibility between electricity and gasoline.

5. Why is flexibility a key advantage of PHEVs?

- a) Because they have the fastest acceleration.
- b) Because they can be charged faster than BEVs.
- c) Because they can switch between electricity and gasoline power based on driving needs.

