

Name _____

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

1) List three operating conditions that would cause an electric vehicle to supply less than normal range.

2) What are the three levels of chargers?

3) What is the difference between a hybrid electric vehicle and a plug-in hybrid electric vehicle?

4) What are the advantages of using a higher capacity battery in a PHEV?

Answer Key

Testname: HYBRID4_SHORT17

- 1) The range of an electric vehicle depends on many factors, including:
 - Outside temperature
 - Terrain (driving in hilly or mountainous areas requires more energy from the battery)
 - Use of air conditioning and other electrical devices

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- 2) Level 1 uses 110- to 120-volt standard electric outlet (20 amp circuit)
 - Level 2 chargers use 220 to 240 volts to charge
 - level 3 chargers charge the vehicle using direct current (dc) at a rate up to 125 amperes.

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- 3) A plug-in hybrid electric vehicle (PHEV) is a vehicle that is designed to be plugged into an electrical outlet at night to charge the batteries. A hybrid electric vehicle (HEV) does not need to be plugged in to an electrical outlet because the motor/generator is able to keep the high-voltage charged.

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- 4) By charging the batteries in the vehicle, it can operate using electric power alone (stealth mode) for a longer time, thereby reducing the use of the internal combustion engine (ICE). The less the ICE is operating, the less fuel is consumed and the lower are the emissions.

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