

Name _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

- 1) Why does warm weather decrease the range of an electric vehicle? 1) _____
 - A) Batteries do not function well at high temperatures.
 - B) Batteries have to supply the power needed to keep the interior of the vehicle cool.
 - C) Batteries must supply power to help keep the batteries themselves cool.
 - D) All of the above

- 2) An electric vehicle has a battery capacity of 20 kWh. What is its estimated range? 2) _____
 - A) 20 miles
 - B) 8 miles
 - C) 12 miles
 - D) 80 miles

- 3) During the summer months the range of a Nissan Leaf is less than in the winter. What could be the problem? 3) _____
 - A) The hot road surfaces create more drag on the special tires.
 - B) Hot air is thicker than cold air, causing drag.
 - C) High temperatures increase the resistance of the charging cable.
 - D) This is a normal condition.

- 4) Research shows that owner's range anxiety fades after about _____ of driving. 4) _____
 - A) a year
 - B) two weeks
 - C) a few days
 - D) nine months

- 5) At what temperature range do batteries work best? 5) _____
 - A) 0°F to 32°F (-18°C to 0°C)
 - B) 35°F to 65°F (2°C to 18°C)
 - C) 68°F to 78°F (20°C to 26°C)
 - D) 90°F to 110°F (32°C to 43°C)

- 6) The standard charging station plug is usually what SAE standard? 6) _____
 - A) J1777
 - B) J1772
 - C) J1930
 - D) J1427

- 7) Electric vehicles each use a(n) _____ for the charge cable connection. 7) _____
 - A) unique connector plug
 - B) adapter, depending on the voltage
 - C) standard SAE plug-in connector
 - D) 90 volt transformer

- 8) Two technicians are discussing a plug-in hybrid vehicle. Technician A says that the plug-in version operates the same as the normal standard hybrid version. Technician B says that the plug-in hybrid uses a smaller, lighter battery pack. Which technician is correct? 8) _____
- A) Technician A only
 - B) Technician B only
 - C) Both technicians
 - D) Neither technician
- 9) How can a plug-in electric hybrid vehicle be identified? 9) _____
- A) It has no spare tire.
 - B) It has two fuel doors, one for charging and one for gas.
 - C) By the type of headlight bulbs.
 - D) There will be a self-retracting charge cable.
- 10) Why must the charger cord be unreeled and laid out in a straight line when charging an EV or a PHEV? 10) _____
- A) To prevent heat buildup in the cable
 - B) To prevent electromagnetic interference
 - C) To allow the current to flow faster to the vehicle
 - D) All of the above