

BATTERY OPEN-BOOK QUIZ

NAME: _____

DIRECTIONS: Please work through this quiz individually. You can refer to the battery PowerPoint slideshow on the website to help with some of the questions below.

1. The two main functions of a battery are: _____

2. Please describe what the alternator's purpose is: _____

3. How many cells make up a twelve volt battery? _____

4. What is the voltage of each of the cells in a twelve volt battery? Circle the correct answer.

1.5 volts

2.5 volts

1.2 volts

2.1volts

3 volts

5. Given the answer from the above question, calculate what voltage a fully charged battery should have. _____

6. Batteries convert _____ energy into _____ energy.

Pick the two correct word options from the word bank below.

Solar

Kinetic

Chemical

Wind

Electrical

7. Circle TRUE or FALSE: Batteries have acid in them, and it is mandatory to wear safety glasses when handling batteries in any manner.

8. After charging a battery, it could be filled with explosive gas. What type of gas is this? _____

9. What is one type of test we can perform on a battery to ensure that it is functioning properly? _____

10. Corrosion can be stopped and neutralized with _____ or _____. Pick the two correct word options from the work bank below.

Baking Soda

Baby Powder

Coca-Cola

Baking Powder

Battery Cleaner

11. Hot water is a quick and easy way to remove pre-existing _____ from the top of the battery terminals.

12. Battery tops need to be dry or else what will happen? Circle the correct answers.

- a) Voltage leak across terminals
- b) Battery will slowly discharge
- c) Nothing, battery will function normally
- d) Battery will explode
- e) Acid leakage over time

13. To show an understanding of how to properly disconnect and connect a battery, please circle the correct procedure.

- a) PNP
- b) NP
- c) PP
- d) NN
- e) NP
- f) All of the above are correct and safe to do

14. Describe what the proper steps are for jumpstarting a vehicle. (Where do the jumper cables get connected? _____

Why is it important to know the proper procedure for this? _____
