**XPLORLABS LifeSmarts Quest: Battery Pre- and Post-Test – KEY**

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| --- | --- | --- | --- | --- | --- |
| 1 | The negative electrode in a battery: | 1. Cathode
 | 1. Anode
 | 1. Electrolyte
 | 1. Separator
 |
| 2 | Which of these parts is not found in a battery? | 1. Cathode
 | 1. Anode
 | 1. Filament
 | 1. Separator
 |
| 3 | Burns and life-threatening complications can occur if swallowed button batteries are not removed from the esophagus within: | 1. 3 hours
 | 1. 2 hours
 | 1. 1 hour
 | 1. 15 minutes
 |
| 4 | Which of the following is not a characteristic of most lithium batteries? | 1. Hold more energy
 | 1. Have a pretty long shelf life
 | 1. Hold a better charge
 | 1. Are not rechargeable
 |
| 5 | Scientific investigation is a method for developing explanations. These explanations are based on: | 1. Belief
 | 1. Dialogue
 | 1. Evidence
 | 1. Categories
 |
| 6 | The process of scientific inquiry begins with: | 1. Asking a question
 | 1. Doing research
 | 1. Performing an experiment
 | 1. Predicting results
 |
| 7 | Safety engineers test batteries because they concerned with how they react under laboratory conditions. True or false? | 1. TRUE
 | 1. FALSE
 |  |  |
| 8 | Which of the following is a correct statement about lithium ion batteries? | 1. Lithium ions move from positive to negative when charging
 | 1. Lithium ions move from positive to negative when discharging
 | 1. Lithium ions do not move during discharge
 | 1. Lithium ions only move during charge
 |
| 9 | The following are all results of battery thermal runaway except: | 1. Burning
 | 1. Melting
 | 1. Exploding
 | 1. Shocking
 |
| 10 | Thermal runaway occurs when the battery: | 1. Separator breaks down
 | 1. Is over charged
 | 1. Is completely drained
 | 1. Is stored too long
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