Name: \_\_\_\_­­­­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ School: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Fuel Cell & Energy Transformations Workshop**

The Law of Conservation of Energy says:

1. Energy cannot be \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_; it only changes \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

|  |  |  |
| --- | --- | --- |
|  | **Form of Energy** | **Example of Energy Form** |
| **N** |  |  |
| **C** |  |  |
| **M** |  |  |
| **E** |  |  |
| **R** |  |  |
| **T** |  |  |

1. Write the energy transformation equation for the no-battery-flashlight:

 **→ → + +**

1. What is a fuel cell?



*Courtesy of Ballard Power*

1. What are some advantages of fuel cells?
2. Where are fuel cells currently in use? How could they possibly be used in the future?
3. What are some challenges of fuel cells?
4. Write the energy transformation equation for the fuel cell car: