## **Thermodynamics and Matter**



**Describe** the following terms.

energy (E) –

heat – (q)

work (w) –

enthalpy ( $\Delta H$ ) –

entropy (S) –

internal energy (U) -

state function -

**Explain** what is meant by the system and the surroundings.

**Describe** the 1<sup>st</sup> Law of Thermodynamics.

Describe the entropy.

**Use** the reaction below to answer the following questions.

2 H<sub>2 (g)</sub> + O<sub>2 (g)</sub> → 2 H<sub>2</sub>O (I)

\_\_\_\_\_ What are the products?

\_\_\_\_\_ Do the products or the reactants have higher entropy?

## "To be ignorant of what occurred before you were born is to remain always a child." - Cicero