

**Properties and Changes – Supplemental Worksheet**

1. Define the following:

- a) System
- b) Surroundings
- c) Universe
- d) State functions
- e) Extensive properties
- f) Intensive properties

2. True or False:

- a) The amount of Energy will depend on the initial and final states.
- b) A closed system exchanges energy and matter with the surrounding.
- c) Energy flows between the system and the surrounds, but remains constant.
- d) State function are always extensive.
- e) The ratio of 2 extensive properties is still an extensive property.

3. List measurements of state functions.

4. Do extensive properties or intensive properties reveal more about an unknown substance? Explain.

5. Does the energy change associated with a physical change depend on the initial and final states? Explain.