

PHY100S – The Magic of Physics – Pre-Class Quiz 2

1. Energy is:

- A. Work.
- B. The ability to do work. **CORRECT**
- C. A macroscopic property of bodies due to their motion.
- D. Another name for heat.

2. The dietitian's Calorie is another unit for:

- A. Force
- B. Entropy
- C. Energy **CORRECT**
- D. Inertia

3. Consider the following true statements:

- I. Heat flows spontaneously from a hotter body to a colder body, not in the other direction.
- II. Any heat engine must be less than 100% efficient.
- III. The total disorganization of a system cannot decrease, but can increase.

Which of these are statements of the Second Law of Thermodynamics?

- A. I
- B. I & II
- C. II & III
- D. I, II & III **CORRECT**
- E. None of the above.