### What’s Your Potential?

**Parent Information**
The Law of Conservation of Energy tells us that energy cannot be created or destroyed. It can only be transformed into other forms. The two main forms of energy are potential and kinetic. Potential energy is stored, while kinetic energy is the energy of motion. Work happens when energy is transferred, and power is the rate at which the transfer happens.

**Benchmark**
SC.6.P.11.1 Explore the Law of Conservation of Energy by differentiating between potential and kinetic energy. Identify situations where kinetic energy is transformed into potential energy and vice versa.

**Objective**
Student will be able to describe the two basic types of energy, explain the relationship between energy, work and power.

**Duration**
1 day (student will make observations throughout the day)

**Materials**
- Blank Data Table (attached)
- Pen or pencil

**Procedures**
1. Print out the attached Data Table (or copy it into your science notebook)
2. Keep your data table with you all day, and write down as many examples as you can see of potential energy and kinetic energy.
3. At the end of the day, review your data.

**Discussion Questions:**
1. What kinds of situations had the most examples of potential energy?
2. Did you see any examples of work? (Remember, work is the transfer or use of energy)
3. Power is the rate that energy is being used. Which situation had the most power? Which situation had the least power?

**FCAT Practice**
1. When you do work on an object, energy is _________________ from you to the object.
   - A. Released
   - B. Transferred
   - C. Added
   - D. Subtracted
   
   **Answer:** B

2. The Law of Conservation of Energy states that energy cannot be _______________ or _______________.
   - A. Added, subtracted
   - B. Removed, replaced
   - C. Created, destroyed
   - D. Transferred, translated

**Extra Help**
Check out this website for more fun facts and activities about energy!
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