Initial Thoughts:
1. What do you think the “Law of Conservation of Energy” states?

Analysis Questions:
1. Which of the following diagrams accurately applies the Law of Conservation of energy to a toaster in use? Explain your choice.
   a. Electrical energy \(\rightarrow\) Thermal Energy
      \(\rightarrow\) Light
      \(\rightarrow\) Sound
   b. Chemical Potential energy \(\rightarrow\) Thermal Energy
      \(\rightarrow\) Light

2. Your friend tells you that a “generator makes electricity”. Do you agree or disagree with this statement? Explain why in terms of the Law of Conservation of Energy.

3. Your friend says that when she measured how much electricity was provided by a battery, it was less than the potential energy in the battery. She concluded that the transformation violated the Law of Conservation of Energy. Do you agree? Explain using the ideas of the Conservation of Energy.

4. Which energy is often called the “graveyard of kinetic energy” (Hint: It is the same energy that is always a result of an energy conversion due to friction) and why?

5. What is the efficiency of an engine that gives off/releases 70% of its energy as thermal energy?