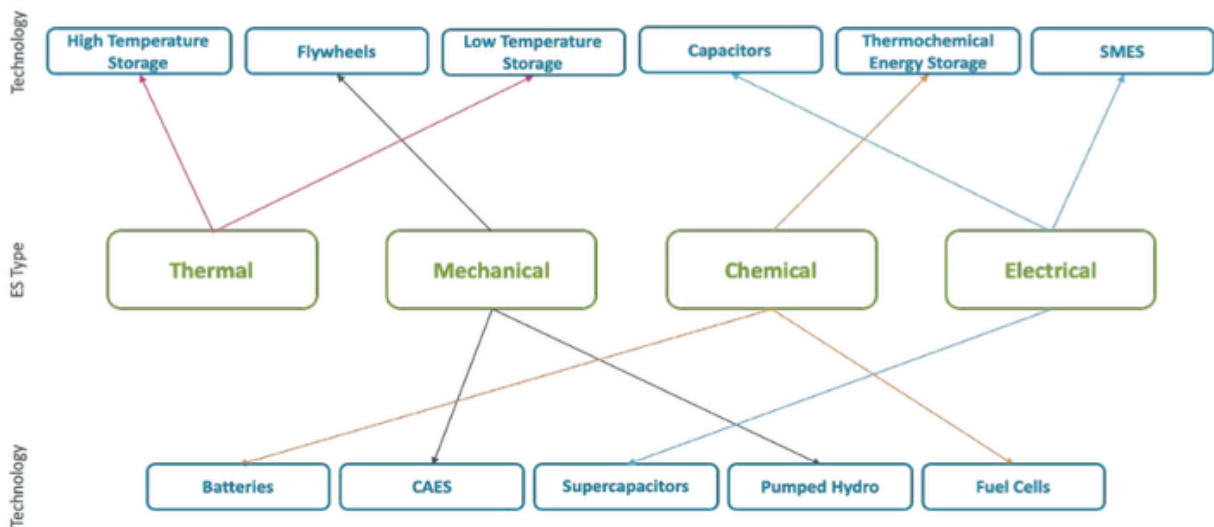


Energy Storage Match

Re-Energy
Answer Key
Grade Level 7-12



Match the technology (small blue blocks) to the type of energy storage (large green blocks).



What is the energy conversion of each storage type?

- 1. Thermal Energy Storage:** Thermal energy storage converts electricity into heat. The energy is either heated or cooled and is used later for heating or power. Thermal energy storage is most common in buildings. Technologies include high and low temperature energy storage.
- 2. Mechanical Energy Storage:** Mechanical energy storage converts electricity into kinetic energy-the energy of motion. Technologies include flywheels, pumped hydro, and compressed air energy storage (CAES).
- 3. Chemical Energy Storage:** Chemical energy storage stores electricity in the form of chemicals, which then undergo a reaction to produce electricity from the electrons. Technologies include batteries, fuel cells and thermochemical energy storage.
- 4. Electrical Energy Storage:** Electrical energy storage also produces a current due to electron flow, but it does not produce electrons like in chemical energy storage. Technologies include super capacitors and super conducting magnetic energy storage (SMES).