

Name _____

Renewable Energy Sources: Tapping into Kinetic and Potential Energy

Short Answer Key

1. Solar panels convert sunlight into electricity through the photovoltaic effect, where sunlight interacts with semiconductor materials to generate an electric current.
2. Hydropower systems use the kinetic energy of flowing water to turn turbines, which then generate electricity.
3. An example of biomass material is wood. It can be burned to release heat energy or converted into biofuels like wood pellets for heating.
4. Geothermal energy is derived from the Earth's internal heat, typically harnessed in regions with volcanic activity or hot springs.
5. Tidal power systems capture energy from ocean tides by utilizing the kinetic energy generated by the rise and fall of tides.

