

Name _____

Energy-Efficient Technologies: Maximizing Power, Minimizing Waste

Open-Ended Response Answer Key

1. Improved insulation and sealing reduce heat loss in a home, leading to lower heating and cooling costs. Proper insulation in walls, roofs, and windows, along with sealing gaps and cracks, helps maintain a consistent indoor temperature.
2. Energy-efficient technologies contribute to reducing greenhouse gas emissions by using less energy from fossil fuels, ultimately slowing down climate change. This results in cleaner air, improved health, and a more sustainable future.
3. Energy-efficient appliances save money in the long run through reduced energy bills and may qualify for rebates or incentives. They also extend the lifespan of appliances, reducing replacement costs.
4. In a world where all vehicles are powered by renewable energy and are highly energy-efficient, air quality would improve significantly due to reduced emissions. Energy consumption would decrease, making transportation more sustainable and affordable. Additionally, transportation systems would rely on cleaner energy sources, reducing their environmental impact.

