

Name _____

The Sun's Radiant Gift: How Solar Energy Reaches Earth

Short Answer Key

1. Nuclear fusion in the Sun's core is the process of hydrogen atoms fusing together to form helium, releasing a tremendous amount of energy in the form of electromagnetic radiation.
2. Dark-colored surfaces tend to absorb more sunlight and heat up, while light-colored surfaces reflect more sunlight, feeling cooler.
3. Photosynthesis utilizes solar energy to convert carbon dioxide and water into glucose and oxygen, providing food for organisms and driving the food chain.
4. Earth's atmosphere filters solar energy by allowing some wavelengths to pass through while absorbing or scattering others. This filtration is essential for protecting living organisms and maintaining a stable climate.
5. Solar energy is considered renewable because it is continually produced by the Sun and will be available for billions of years. This is significant for reducing dependence on finite fossil fuels and mitigating climate change.

