

The Sun's Secrets Answer Key

Comprehension Questions

1. Nuclear fusion, where hydrogen atoms combine to form helium.
2. The photosphere.
3. Auroras are colorful lights in the sky caused when solar wind particles collide with Earth's atmosphere near the poles.
4. Sunspots appear darker because they are cooler than the surrounding surface.
5. Scientists study the Sun's activity because solar wind and sunspots can affect satellites, communication systems, and power grids on Earth.

Critical Thinking Question

Answers will vary. Example: *The Sun is helpful because it provides energy, light, and warmth that make life on Earth possible. It also powers photosynthesis, which supports food chains. However, it can be harmful when solar storms damage satellites or disrupt power systems. Too much solar radiation can also pose risks to astronauts and technology.*