

Name _____

The Mighty Sun: Our Stellar Neighbor

Short Answer Key

1. The two primary gases that make up the majority of the Sun's composition are hydrogen and helium.
2. Nuclear fusion is the process by which hydrogen atoms in the core of the Sun combine to form helium, releasing an immense amount of energy. It occurs in the core of the Sun.
3. Sunspots form as cooler areas on the Sun's surface due to magnetic activity. They can be associated with solar flares and coronal mass ejections.
4. The Sun's energy is crucial for driving weather patterns, supporting photosynthesis in plants, and maintaining Earth's overall climate.
5. The Sun is expected to continue shining for about another 5 billion years before it expands into a red giant and eventually becomes a white dwarf. This transition may have significant effects on the solar system, potentially engulfing some inner planets.

