

Name _____

The Sparkling Secrets of Stars

Short Answer Key

1. Nuclear fusion in a star's core produces energy by combining hydrogen atoms to form helium, releasing a tremendous amount of light and heat in the process.
2. Smaller stars like our sun expand into red giants as they age because the core's hydrogen fusion slows down, causing the outer layers to expand and cool.
3. The color of a star is determined by its temperature, with hotter stars appearing blue or white and cooler stars appearing red or orange.
4. Stars have played significant roles in human history and culture by guiding navigation, inspiring myths and stories, and serving as celestial markers for various events.
5. Astronomers study stars to learn about their life cycles, compositions, temperatures, and to understand the evolution of the universe. They use telescopes and other instruments to observe and collect data about stars.

