

Name \_\_\_\_\_

## The Sparkling Secrets of Stars

### Multiple Choice Questions

1. What are the primary elements that make up stars?
  - a) Carbon and oxygen
  - b) Hydrogen and helium
  - c) Iron and nickel
  - d) Oxygen and nitrogen
  
2. What is nuclear fusion, and where does it occur in a star?
  - a) A process that turns hydrogen into helium in the outer layers of a star
  - b) A process that turns helium into hydrogen in the core of a star
  - c) A process that turns hydrogen into helium in the core of a star
  - d) A process that turns hydrogen into carbon in the outer layers of a star
  
3. What happens to smaller stars, like our sun, as they near the end of their life cycle?
  - a) They explode in supernovae.
  - b) They become white dwarfs.
  - c) They turn into black holes.
  - d) They transform into red giants.
  
4. What determines the color of a star?
  - a) Its size
  - b) Its age
  - c) Its temperature
  - d) Its distance from Earth
  
5. Why have stars played a significant role in human history?
  - a) Because they are made of rare elements
  - b) Because they are the brightest objects in the sky
  - c) Because they have guided travelers and inspired stories
  - d) Because they are the oldest objects in the universe

