

Name \_\_\_\_\_

## Beyond Solids, Liquids, and Gases: Exploring Other States of Matter

### Multiple Choice Questions

1. What is the fourth state of matter, commonly found in stars and lightning?
  - a) Liquid
  - b) Gas
  - c) Plasma
  - d) Bose-Einstein condensate
  
2. At what extremely low temperature does the Bose-Einstein condensate (BEC) occur?
  - a) 0°C (32°F)
  - b) 100°C (212°F)
  - c) Just above absolute zero
  - d) Room temperature
  
3. Fermionic condensate involves which type of particles?
  - a) Quarks and gluons
  - b) Electrons and protons
  - c) Bosons and photons
  - d) Neutrons and positrons
  
4. What unique property does a superfluid state exhibit?
  - a) Resistance to flow
  - b) Ability to freeze at low temperatures
  - c) Ability to climb up container walls without gravity
  - d) High electrical conductivity
  
5. In what early universe state did matter exist just microseconds after the Big Bang?
  - a) Solid state
  - b) Bose-Einstein condensate state
  - c) Quark-gluon plasma state
  - d) Gas state

