

Name \_\_\_\_\_

## Convection: The Dance of Heat and Cold

### Multiple Choice Questions

1. What is convection?
  - a) The process of heat transfer through radiation
  - b) The process of heat transfer through the movement of fluids
  - c) The process of heat transfer through direct contact
  - d) The process of heat transfer through conduction
  
2. In the cocoa example, why does the hot cocoa rise to the top of the cup?
  - a) Because it's becoming less dense as it cools down
  - b) Because it's absorbing heat from the bottom of the cup
  - c) Because it's getting heavier as it gets hotter
  - d) Because it's attracted to the surface of the cup
  
3. How does convection impact weather patterns?
  - a) It causes earthquakes and tsunamis
  - b) It forms rainbows in the sky
  - c) It drives the movement of air masses, creating wind and precipitation
  - d) It makes the days shorter and nights longer
  
4. What role does convection play in the ocean?
  - a) It has no impact on the ocean
  - b) It creates underwater volcanoes
  - c) It helps distribute heat around the globe, affecting climate and weather patterns
  - d) It turns the ocean water into ice
  
5. What happens to the air near the Earth's surface when it gets heated by the Sun during the day?
  - a) It becomes denser and sinks
  - b) It becomes lighter and rises
  - c) It becomes invisible
  - d) It stays in place

