

Name \_\_\_\_\_

## Chasing Rainbows: The Magical Creation of Colors

### Multiple Choice Questions

1. What causes the separation of sunlight into its constituent colors to create a rainbow?
  - a) Reflection
  - b) Absorption
  - c) Dispersion
  - d) Refraction
  
2. What is the sequence of colors in a classic rainbow, starting from the outer edge and moving inward?
  - a) VIBGYOR
  - b) ROYGBIV
  - c) RGBVYIO
  - d) YORGBIV
  
3. Why do rainbows appear as semi-circular arcs in the sky instead of full circles?
  - a) Raindrops cannot form full circles.
  - b) The lower half of the rainbow is invisible.
  - c) Sunlight cannot bend in a full circle.
  - d) Rainbows are always semi-circular.
  
4. What causes the colors in a rainbow to spread out and form a distinct order?
  - a) Reflection off raindrops
  - b) Scattering of sunlight
  - c) Dispersion of light
  - d) Absorption of water
  
5. When does a double rainbow occur, and what is its distinguishing feature?
  - a) It occurs when sunlight passes through a single raindrop, and it has reversed colors.
  - b) It occurs when sunlight undergoes two internal reflections within a raindrop, and it has a fainter secondary rainbow inside the primary one.
  - c) It occurs when sunlight is scattered by clouds, and it has extra colors beyond the standard seven.
  - d) It occurs when sunlight refracts at a shallow angle, and it appears as a full circle.

