Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Trace Evidence: Fiber Quiz**

**Matching**

1. Cotton
2. Acrylic
3. Hemp
4. Acetates
5. Polyester
6. Cellulose-based synthetic fiber
7. The most common natural fiber
8. Wrinkle-resistant synthetic fiber
9. Industrially used cannabis fiber
10. Wool-like synthetic fiber

**Multiple Choice**

1. Which one of the following analytical methods is used to determine the chemical composition of a fiber?
   1. Polarized light microscopy
   2. Fourier Transform Infrared Spectrophotometry
   3. UV-Visible Microspectrophotometry
   4. Stereomicroscopy
2. What is birefringence?
   1. The difference between two refractive indices
   2. The angle between two fibers
   3. The angle between two refraction
   4. Yarn with two layers of fibers
3. All of the following characteristics are examined in fiber comparisons EXCEPT
   1. Color
   2. Cross-section
   3. Diameter
   4. Follicular tag

**Short Answer**

9) Name the two types of aramid fiber and describe the typical end use of each.

10) What is the main difference between natural and synthetic fibers in their microscopic appearance?

11) Name the four most common textile weave patterns.

12) Name two people who have been convicted of murder(s) based on fiber evidence.