

# Flinn Forensic Files — Finding Evidence in Fibers Worksheet

## Observations

### Part A. Burn Analysis

Fabric Type	Observations When Heated	Observations When Ignited
Wool		
Acrylic		
Polyester		
Nylon		
Cotton		
Acetate		

### Part B. Microscopy Analysis

Wool	Acrylic	Polyester
Nylon	Cotton	Acetate

### Part C. Evidence Analysis

Sample Description	Observations When Heated	Observations When Ignited	Microscopy Analysis
Fabric from Crime Scene			
Fabric from Gas Station			

### Post-Lab Questions *(Answer on a separate sheet of paper)*

1. Wool and cotton are considered natural fibers. Acrylic, polyester, nylon, and acetate are considered synthetic fibers. Based on your results from part A, what generalizations can be made to differentiate the two groups?
2. Based on the observations of the six known fabric types in Parts A & B as well as the results obtained from the fabric from the Crime Scene (first half of Part C) what type of fiber was attached to Christine's coat?
3. Based on the observations of the six known fabric types in Parts A & B as well as the test results obtained from the fabric from the gas station (second half of Part C) what type of fiber was found at the gas station? Was this fiber a match to the fiber found at the crime scene?
4. Based on your testing, identify a possible suspect in this robbery. Is this conclusive evidence? Explain.