

Fiber Identification

Look at the fibers with a hand lens.

Try stretching the fiber. Does it stretch? How much?

Hold one end of the fiber just above a flame. What happens to the fiber?

Put a small piece of the fibers into a spot plate. Be sure you mark on a piece of paper what material you put into which well.

Add a drop of HCl to each fiber. Do you see any difference in the way the fibers react?

Add a drop of I₂ to each of the fibers. Any difference?

Add a drop of H₂O₂ to each of the fibers. Any difference?

Be sure to record your observations.

Add a drop of bleach to each type of fiber. Stir the fiber around in the bleach with a glass-stirring rod. What happens to the fiber?

Fiber	Magnifier Observations	Flame Test	Stretch Test	Bleach Observations	HCl Observations	I ₂ Observations	H ₂ O ₂ Observation
Wool							
Silk							
Cotton							
Linen							
Polyester							
Nylon							
Acrylic							
Acetate							
Spandex							
Unknown 1							
Unknown 2							