

LAB EXPERIENCE 4.26*

IDENTIFY ANIMAL, VEGETABLE, and MANMADE FIBERS — SMELL TEST

* TEACHER DEMONSTRATION

Purpose: To identify animal, vegetable, and manmade fibers by direct burning and by testing vapors released in decomposition.

Materials:

Bunsen burner	10 3-inch Petri dishes	
Forceps or tweezers	Filter paper	
Matches	Solution of lead acetate	
10-ml Test tubes	Red and blue litmus paper	
Test tube holders	Marked swatches of	
Test tube racks	the following washed fabrics:	
Safety glasses	Cotton	Acetate**
Plexiglass shield	Linen	Viscose rayon**
Scissors	Wool	Dacron polyester**
	Silk	Nylon**
		Orlon**

SAFETY CAUTIONS:

1. ~~Place plexiglass shield between you and the experiment.~~
2. Wear safety glasses.
3. Hold test tube away from face.
4. Avoid breathing the fumes.
5. Remove all unnecessary flammable material from work area.
6. Wear lab coat to protect clothing.

Procedure:Part A: Burning in Direct Flame

1. Cut fabrics in pieces measuring 2.5 cm square and label them. Cut sufficient fabric for Parts A and B.
2. Using forceps or tweezers, hold a piece of fabric in contact with the flame of the ~~Bunsen~~ ^{Alcohol} burner until it ignites.
3. Once it is burning well, place the burning fabric in a ~~petri dish~~ ^{beaker of H₂O} and let it burn out.

IDENTIFY ANI

4. In the chart below
 - a. the way the f
 - b. how fast or s
 - c. the amount a
 - d. any obvious
 - e. keep the disl samples.

5. Repeat Steps 2

Part B: Destructive

1. Using fabric cu
2. Cut filter paper
3. Turn the mouth burner flame ur
4. With forceps or
5. Hold this satur Note any color
6. In turn, hold a j the fumes. Onc below.
7. Note the appear
8. Repeat Steps 1