

Fabric Lab Data Table: General Characteristics

	% Water Retention	Weave Pattern (SKETCH)	Knitted (YES or NO)	Filament Number (SKETCH)	Flame Test (Burn, melt, or smolder)
Cotton: Natural or Synthetic	53.8%		NO		BURN
Nylon: Natural or Synthetic	28.6%		YES		MELTING
Wool: Natural or Synthetic	62.5%		NO		SMOLDER - string small
Polyester Acetate: Natural or Synthetic	0%		YES		MELT
Polyester: Natural or Synthetic	33.3%		YES		MELT
Rayon: Natural or Synthetic					

Fabric Lab Data Table: General Characteristics

	% Water Retention	Weave Pattern (SKETCH)	Knitted (YES or NO)	Filament Number (SKETCH)	Flame Test (Burn, melt, or smolder)
Cotton: Natural or Synthetic	53.8%		NO		BURN
Nylon: Natural or Synthetic	28.6%		YES		MELTING
Wool: Natural or Synthetic	62.5%		NO		SMOLDER - string small
Polyester Acetate: Natural or Synthetic	0%		YES		MELT
Polyester: Natural or Synthetic	33.3%		YES		MELT
Rayon: Natural or Synthetic					

Name: Emma King

Blood Stains Worksheet

Part 1. Blood Typing Tests

	Blood Type A	Blood Type B	Blood Type AB	Blood Type O
Antibody A	no agglutination	agglutination	agglutination	no agglutination
Antibody B	agglutination	no agglutination	agglutination	no agglutination

1. What do the results for blood type AB indicate about the types of proteins on the red blood cells?

they lack an equal amount of both A and B proteins

and blood cells easily clump

2. What proteins are indicated on the red blood cells in the type O results?

there is neither A or B blood cells in O results

- does NOT clump

3. Which type would be considered the "universal recipient" (a person who can receive all blood types)? Explain why the person can receive all blood types.

- type AB is considered the universal recipient

- it lacks an A or B protein making it possible to receive any blood type without clumping occurring

Part 2. Crime Scene Blood Testing Results

Hair Evidence Lab

Name Emma King

A. Pull out a strand of your hair and examine it with a hand lens. You may need to put it on a piece of white or black paper to make it easier to see.

What does the root look like? Choose one.

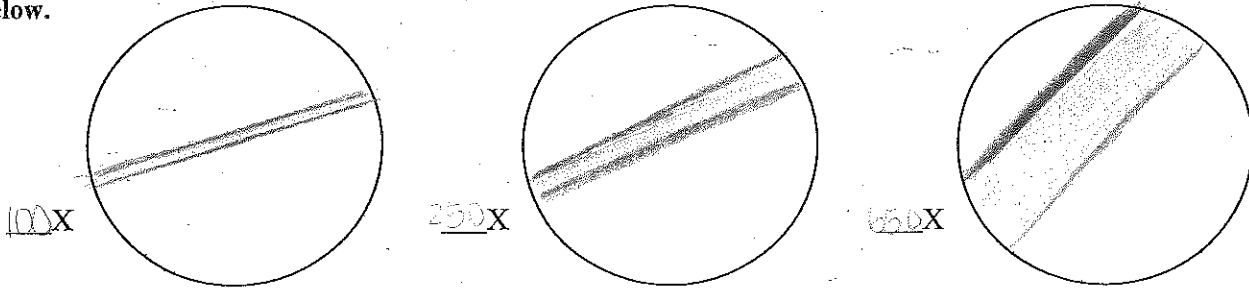
Teardrop Narrow Rounded Pointed Other: _____

What does the tip look like? Choose one.

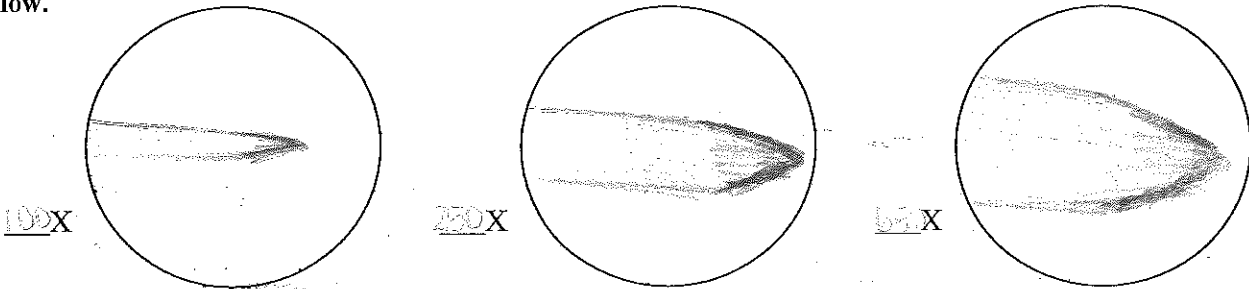
Frayed Smooth Bent Split Other: _____

What color is it? light brown Is the color the same everywhere along the shaft? yes

B. Place your hair on a slide and view the shaft at low, medium, and high power. Draw a sketch in the boxes below.



C. Place your hair on a slide and view the root at low, medium, and high power. Draw a sketch in the boxes below.



D. Locate the three primary structures of your hair and choose the best description for each feature.

- Cuticle Scales Flat and smooth Protruding or spiky Other: _____
- Cortex Thickness Thick Thin
- Cortex Color Same color throughout Different colors – Explain: _____
- Medulla Style Broken Continuous
- Medulla Thickness Thick Thin
- Medulla Transparency Transparent Semi-transparent Opaque

E. Compare your hair sample to one from a classmate. How is it similar? How is it different?

The thickness varies & the cortex is slightly different. It is similar in the root & that it is the same color throughout the strand.