

Name: _____ Period: ____ Date: _____



Hair Evidence Lab*

Purpose: To observe and draw human hair and non-human animal hair.

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. If your hair is too short, have a friend cut three strands.

- What does the root look like? Choose one. (Teardrop, Narrow, Rounded, Pointed, or other)

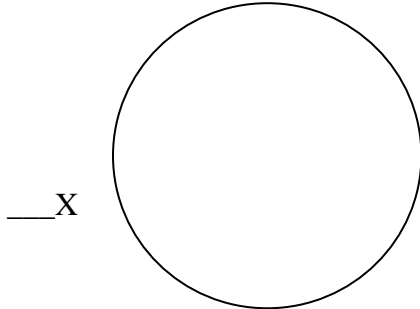
- What does the tip look like? Choose one. (Frayed, Smooth, Bent, Split, or Other)

- What color is it? _____ Is the color the same everywhere along the shaft? _____

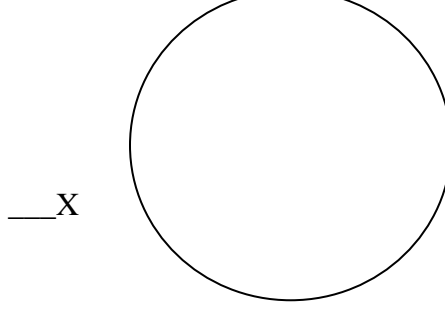
B. Place your hair on a slide, add a drop of clear nail polish to secure, and anchor with a cover slip. If nail polish is not available, obtain clear tape to secure hair onto the slide. View the shaft. Draw a sketch in the boxes below.

- Sometimes playing with the amount of transmitted light will make the hair more distinctive. Save your hair samples by taping it in your microscope slide. You will need this in the next activity.

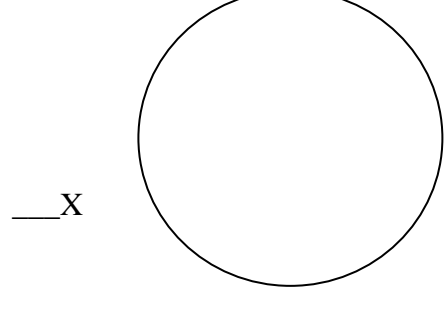
Cuticle:



Cortex:



Medulla:

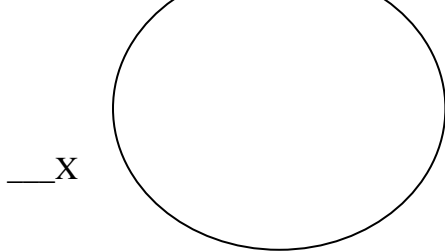


Description: _____

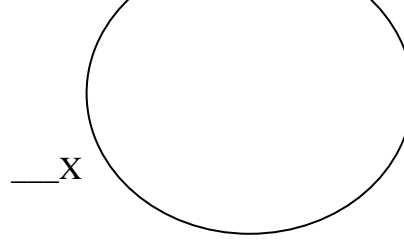
Description: _____

Description: _____

Root :



Tip:



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 Color: _ Same color throughout _ Different colors – Explain: _____

Medulla Style: _ Broken _ Continuous _ Other: _____

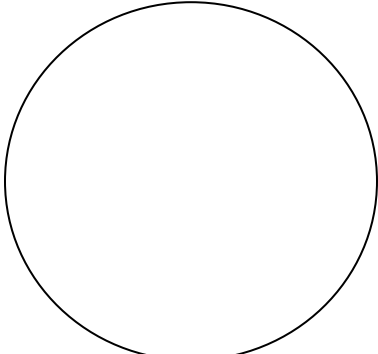
Medulla Thickness: _ Thick _ Thin

Medulla Transparency: _ Transparent _ Semi-transparent _ Opaque

E. Compare your hair sample to one from a classmate. How is it similar? How is it different? Draw you classmates hair to compare/contrast.

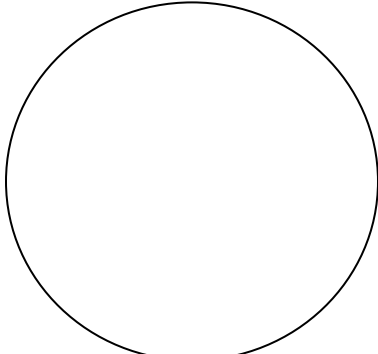
F. Examine at least four animal hairs provided by your teacher. Draw a sketch of the hair at 100X magnification and write down any unique characteristics you observe that help you tell the hairs apart.

Type of Animal _____



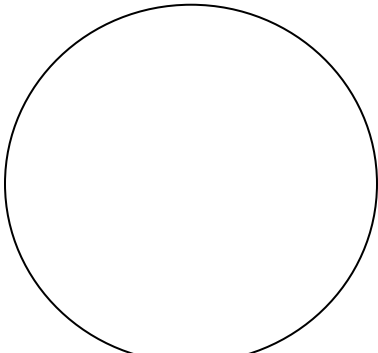
Unique Characteristics:

Type of Animal _____



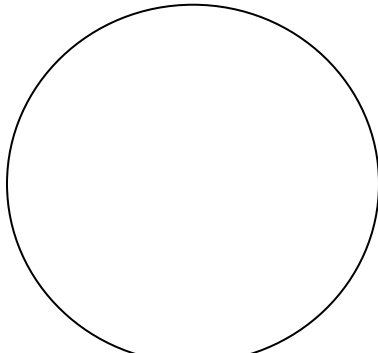
Unique Characteristics:

Type of Animal _____



Unique Characteristics:

Type of Animal _____



Unique Characteristics:

G. Write a paragraph that compares the human and animal hair samples you examined. What differences did you notice? What characteristics could you use to identify the hair samples?