

# Hair Evidence Lab

Name \_\_\_\_\_

**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.

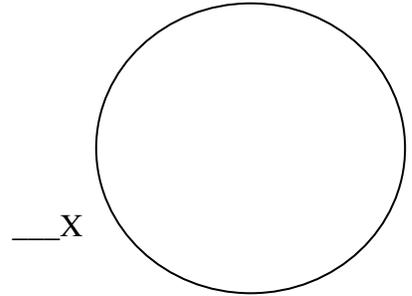
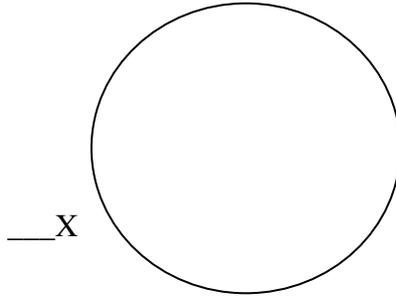
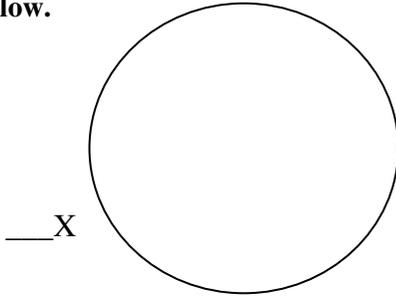
Teardrop      Narrow      Rounded      Pointed      Other: \_\_\_\_\_

What does the tip look like? Choose one.

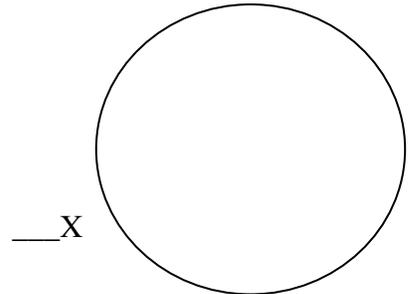
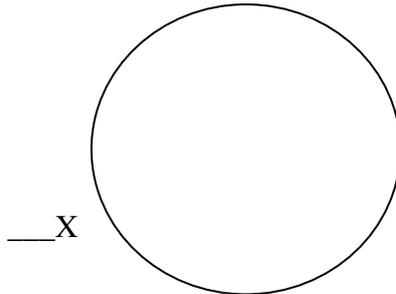
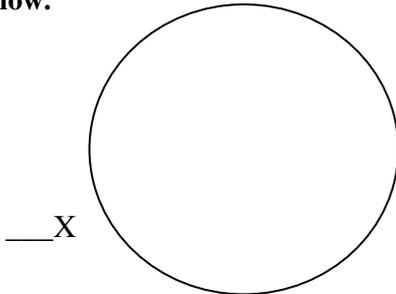
Frayed      Smooth      Bent      Split      Other: \_\_\_\_\_

What color is it? \_\_\_\_\_ Is the color the same everywhere along the shaft? \_\_\_\_\_

**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

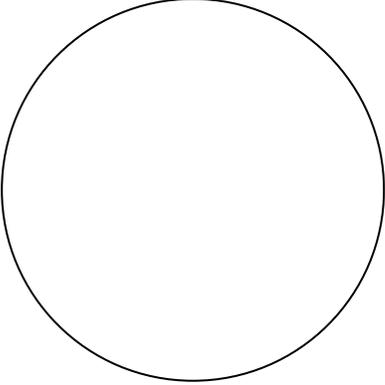
Medulla Thickness       Thick       Thin

Medulla Transparency       Transparent       Semi-transparent       Opaque

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

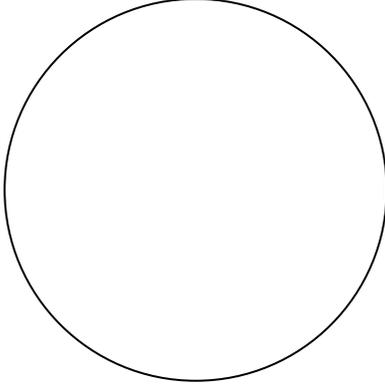
**F. Examine at least four animal hairs provided by your teacher. Draw a sketch of the hair at 100X magnification and write down any unique characteristics you observe that help you tell the hairs apart.**

**Type of Animal** \_\_\_\_\_



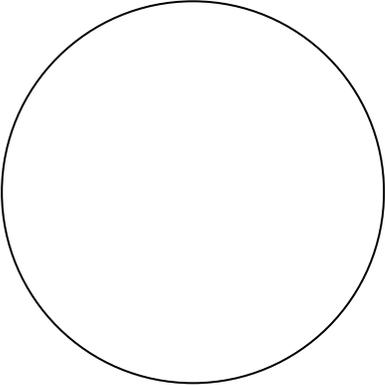
**Unique Characteristics:**

**Type of Animal** \_\_\_\_\_



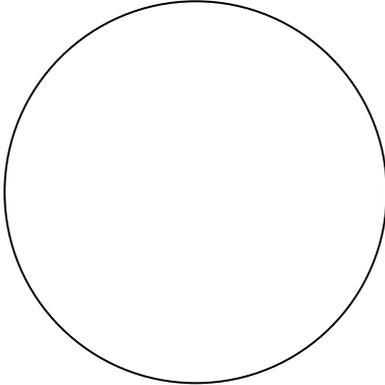
**Unique Characteristics:**

**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?**

## **Teacher Notes**

I collected various animals hairs brought in by students and other teachers to create examination slides. I used clear plastic packing tape to secure the hairs on the slides. You could also use clear nail polish.

## **Challenge Labs**

For the first challenge, I selected five hairs (human, cat, dog, rabbit, and goat) and challenged the students to identify each one. For the second challenge, I selected four human hair samples and gave the students time to compare the unknown samples to known samples. The second challenge proved to be more difficult for the students, but most groups were able to identify all the samples.