

Hair & Fiber Challenge Teacher Information

For this challenge, students will need to be familiar with various hairs and fibers through the completion of the Hair & Fiber ID Lab. I used a microscope camera to capture images of the samples they had to use for the lab. The images were taken at 100X and 400X magnifications.

I printed copies of the hair and fiber samples (pages 1 and 2) as well as enough copies of the answer sheet (page 3) for each group.

Each group was assigned to one microscope station during the activity. They were able to examine the prepared slides I have as well as the worksheet they completed during the ID lab.

The teams must attempt to identify all the samples before they can have their answers checked by me. I mark the incorrect answers and the students return to their station to reexamine the hairs and fibers. Teams continue checking their answers until they have them all correct. In order to reduce the amount of guessing, I only give three “free” guesses and any further guesses will reduce the grade by 5 points. Most groups are able to correctly identify the hairs and fibers in 5 or fewer guesses.

Hair & Fiber Challenge

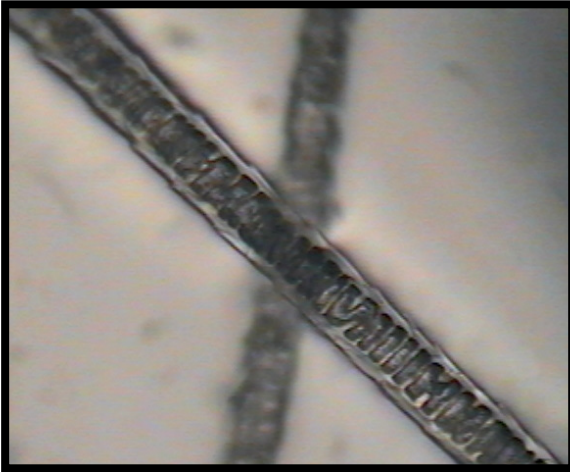
ANSWER KEY

- A – Cat
- B – Dog
- C – Deer
- D – Rabbit
- E – Human
- F – Rat
- G – Acrylic Yarn
- H – Nylon Rope
- I – Wool Yarn
- J – Rayon
- K – Polyester Yarn
- L – Cotton

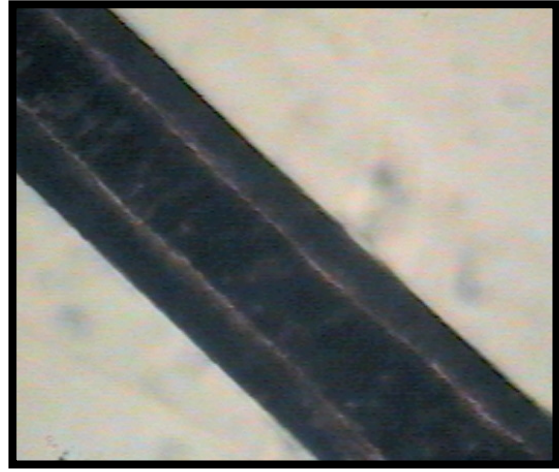
Hair Challenge

Work with a partner to identify the hairs shown below.

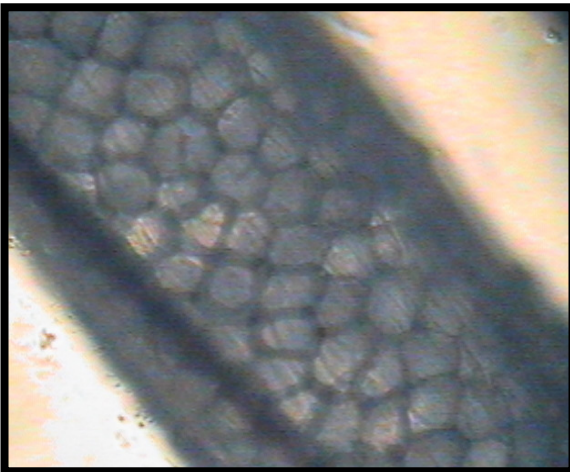
A



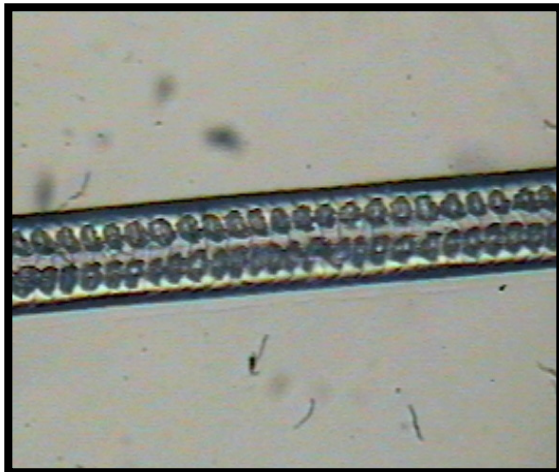
B



C



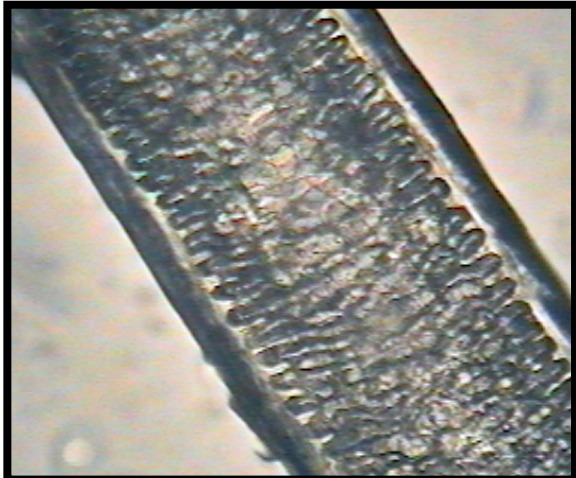
D



E



F



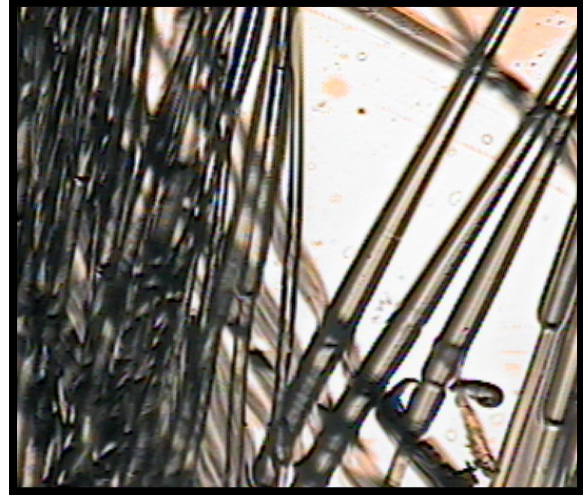
Fiber Challenge

Work with a partner to identify the fibers shown below.

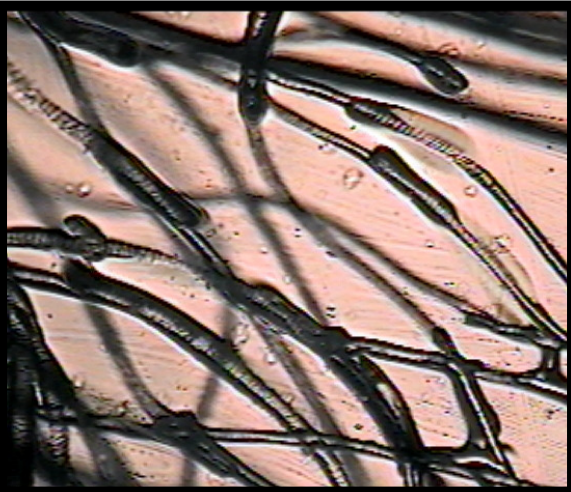
G



H



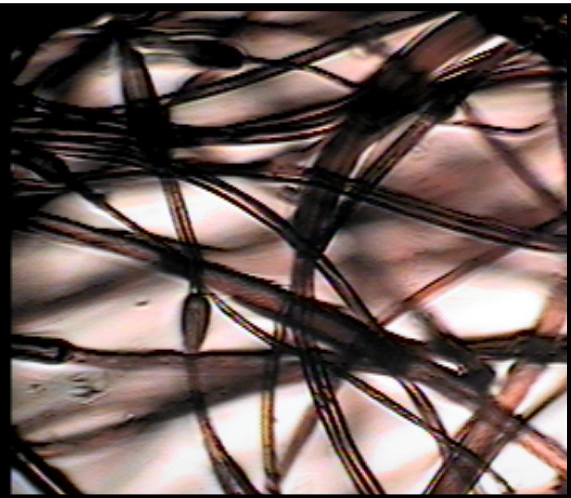
I



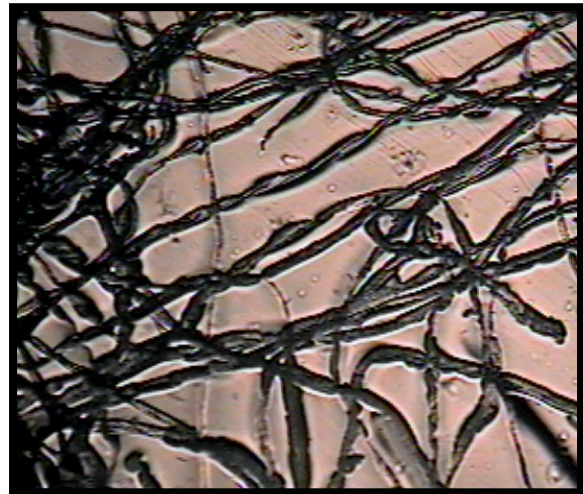
J



K



L



Student Answer Sheets

Hair & Fiber Challenge

Names _____

A - _____	Guesses
B - _____	Free
C - _____	Free
D - _____	Free
E - _____	95
F - _____	90
G - _____	85
H - _____	80
I - _____	75
J - _____	70
K - _____	65
L - _____	60

Hair & Fiber Challenge

Names _____

A - _____	Guesses
B - _____	Free
C - _____	Free
D - _____	Free
E - _____	95
F - _____	90
G - _____	85
H - _____	80
I - _____	75
J - _____	70
K - _____	65
L - _____	60

Hair & Fiber Challenge

Names _____

A - _____	Guesses
B - _____	Free
C - _____	Free
D - _____	Free
E - _____	95
F - _____	90
G - _____	85
H - _____	80
I - _____	75
J - _____	70
K - _____	65
L - _____	60

Hair & Fiber Challenge

Names _____

A - _____	Guesses
B - _____	Free
C - _____	Free
D - _____	Free
E - _____	95
F - _____	90
G - _____	85
H - _____	80
I - _____	75
J - _____	70
K - _____	65
L - _____	60