

Fibers as Trace Evidence

Fibers

- Fibers are _____!
- As you interact with others or the environment, fibers become _____ to your body and clothes, _____ into the environment from your clothing, etc.

What principle is this demonstrating? _____

What is a fiber???

Fiber = the smallest unit of a textile material that has a _____ many times greater than its _____.

Fibers can be classified as:

- 1- occurring = found in nature (plants and animals) and not greatly altered in production
Examples: _____
- 2- or man-made = originate from natural materials such as cotton or wood and under go much processing (_____ containing)
--Examples: _____ (first man-made fiber), _____
- 3- Synthetic = manufactured from synthesized _____ compounds (non-cellulose containing)
--Examples: _____

Fibers as Evidence

- A fiber can be spun with other fibers to form a _____ that can be woven or knitted to form a fabric.
- The _____ and _____ of fiber used, the type of _____ method, and the type of _____ construction all affect the transfer of fibers and the significance of fiber associations. This becomes very important when there is a possibility of fiber _____ between a suspect and a victim during the commission of a crime.

Fibers are everywhere . . .

- Most textiles are _____ produced . . . thus it is _____ to trace a fiber to a specific source
- Fibers can still be useful to create _____ among victims, suspects, and places.

What type of evidence do we call this???? _____

Interesting Points on Fibers . . .

- _____ fibers are the plant fibers most commonly used in textile materials.
- The animal fiber most frequently used in the production of textile materials is _____, and the most common wool fibers originate from sheep.
- More than _____ of all fibers used in the production of textile materials are _____.

How can forensic scientists examine trace evidence?

- Compare

. . .p_____ . . .

. . .using m_____ . . .

. . .c_____.