

Types of Evidence

OBJECTIVE: S.HS.FS.2 Distinguish between types of evidence: testimonial, physical: individual and class: quantitative, qualitative.

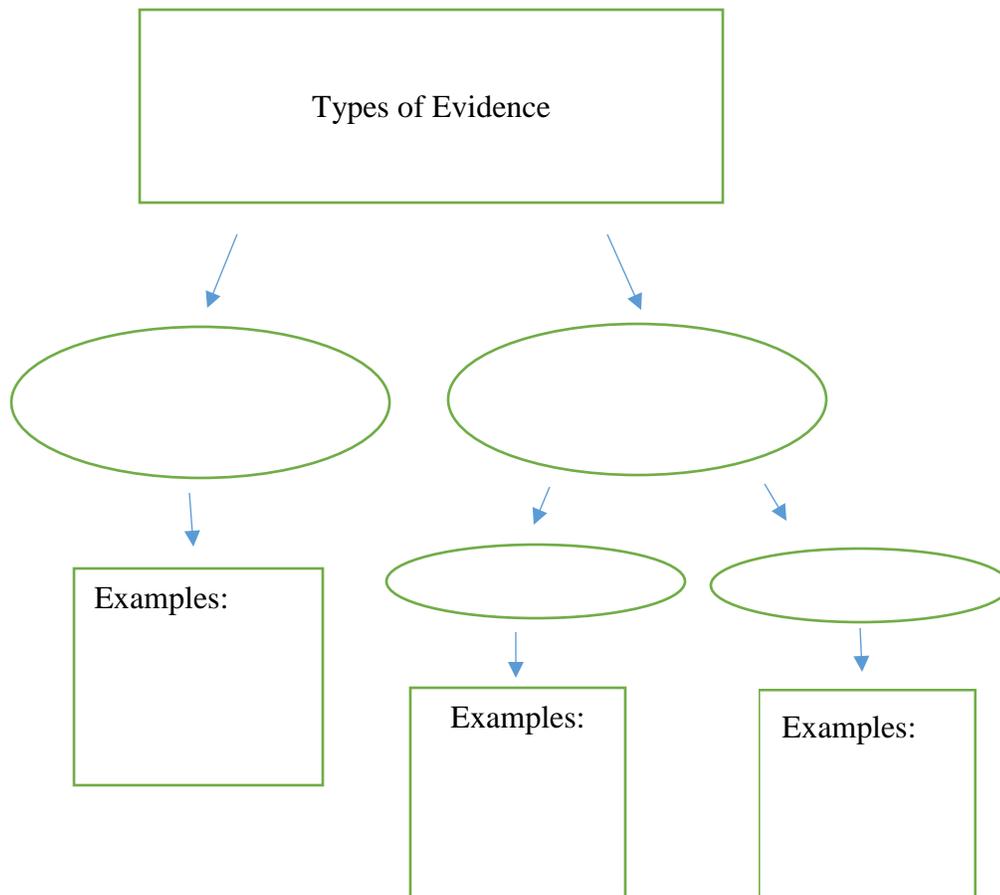
Two basic types of evidence exist: testimonial and physical (class or individual).

- **Testimonial Evidence** is a statement made under oath; also known as direct evidence or *prima facie* evidence. This evidence includes witness testimony and, when gathered by law enforcement or crime scene investigators, can be used to build a timeline of events or confirm as suspect's whereabouts.

- **Physical Evidence** is any object or item that establishes that a crime has been committed or establishes a link between a crime and its perpetrator or crime and its victim. Examples of physical evidence include a document, a hair, fibers, fingerprints, soil, and blood.

Class Characteristics are properties of physical evidence that can be associated only with a group and never with a single source. If evidence is determined to possess class characteristics it may serve as a mechanism to reduce the number of suspects, but it cannot be directly connected to one person or source. Examples of class evidence include blood type, fibers, and paint.

Individual Characteristics are properties of physical evidence that can be attributed to a common source with a high degree of certainty. Examples of individual evidence include anything that contains nuclear DNA, toolmarks, and fingerprints.



Name _____ Date _____

Physical Evidence	Description	Examples
Class		
Individual		

Which type of evidence is more reliable: testimonial or physical? Explain why and provide an example.

Classify each piece of evidence as testimonial or physical:

Evidence	Classification	Evidence	Classification
Expert testimony by a Chemist in a drug case		A ripped blanket found in the victim's garage	
DNA collected from the crime scene		Fiber evidence collected from a trunk	
A description of a car by an onlooker		Written description of perpetration by victim	
A knife found in a suspect's vehicle		A gum wrapper found in a wooded area	

Classify each piece of physical evidence as class or individual and provide an explanation.

Evidence	Classification	Explanation
A piece from a paper cut into four equal pieces.		
A piece of from a paper ripped jaggedly in to four pieces.		
A broken piece of glass from a window found a suspect's car		
A footprint left by a brand new pair of Converse All Stars.		
A ransom note ripped from a notebook.		
Nuclear DNA		
A match taken from a box of matches.		
The fingerprint of a kidnapper left at the scene of the crime.		

Which is more valuable in court: class or individual evidence? Explain why and provide an example.

Name _____ Date _____

Locard's Exchange Principle I

OBJECTIVE: S.HS.FS.3 Analyze modes of transfer and factors affecting persistence of evidence (Locard's Exchange Principle): indirect, direct

Every Contact Leaves A Trace

- **Edmond Locard (1877-1966)** Locard was the founder of the Institute of Criminalistics at the University of Lyon in Lyon, France. The Institute of Criminalistics is considered to be the flagship university in the field of forensic science. He is most prominently remembered for his cross-transfer principle known as **Locard's Exchange Principle**, which states that whenever two pieces of evidence come into contact with each other, there is always an exchange of materials.
- **Trace Evidence** is evidence from a transfer of material, a very small piece of evidence left at a crime scene that may be used to identify or link a suspect to a crime. The value of trace evidence was first recognized by Edmond Locard. Examples of trace evidence include paint, explosive debris, glass, dust and dirt, gunshot residue, blood, and other bodily fluids.

Looking at Locard's Exchange Principle in Action

Imagine you have 2 children and a cat. You run out to take care of some errands that include stopping at a furniture store, the laundromat, and the house of a friend who has one child and a dog.

What kinds of things might you leave behind?

What kinds of things might you pick up from **each** place?

If someone robbed your friend's house that evening while your friend was away, they could place you at the scene of the crime. How could you defend yourself to the police?

Name _____ Date _____

Give examples of trace evidence and describe how the evidence could be left at a crime scene.

Example	How could it be left at a crime scene?

Snow Day Lab: Locard's Exchange Principle and Trace Evidence

Instructions: You will need to select a new shirt or one that has been worn little and just washed and dried. Inspect the shirt carefully before putting it on for 'trace evidence' and remove what you can. Wear the shirt for at least four hours and keep track of your activities during this time. After you take the shirt off, inspect it under a bright light. List anything you find on your shirt below (hairs, fibers, etc.) and how you think those pieces of 'evidence' got on there.

'Evidence' found on shirt	How did the evidence get on the shirt?

Explain how the snow day lab demonstrates Locard's Exchange Principle and the value of trace evidence.
