# **Forensics investigation**

Can a regular person solve a murder case?

A forensics agent is arguably the most useful thing in the criminal justice system, without them there would be no easy way to decipher what has happened in a crime scene. They can easily collect fingerprints and tell the difference between blood splats and sprays. Now let's see if we can do it ourselves!

## Blood splats and sprays

A well trained agent should be able to easily tell what has happened at a crime scene just by looking at the blood patterns. A blood stain can reveal how much blood came out, what direction it came from and even how it was caused. You can even tell if it was from a person or an object covered in blood there is a category just for that called object cast offs. Speaking of different categories let's get right into it



Elongated blood spatter Just like pass blood spats but have been casted with medium velocity and at an angle



Small blood spots Casted a high velocity by a strong force (exp. Shotgun spray)



Straight elongated lines of splatter showing that blood was thrown off of a moving object



A stain on the surface of an item caused by contact with blood



An area of blood missing because an object was moved or used

#### **Finger prints**

You may not realize but you are a dirty animal constantly covered in sweat, grease and oil all from your own body but why is that important for us investigators? Your fingerprints! Everybody's fingerprints are slightly different even if you had a twin sibling with the same DNA your fingerprints would still be different. Now why is the dirt important? Touching just about anything leaves a trail of grease behind making our job of finding you a lot easier. We have tools such as magnetic powder and brushes (real high tech stuff here). When the powder is gently brushed over top, the powder clings onto that grease and oil.



There are three main types of fingerprints



60% of the world has loops,35% has whorls and 5% has arches

### **DNA Evidence**

Every single person has a specific DNA profile just like a fingerprint it is different to everybody else. It is the molecule that holds all genetic information



about you. DNA is a double helix molecule that is made up of Adenine,guanine,thymine and cytosine. It is the "code" that tells the organisms inside your body what to do. It can often be found in all sorts of things but most common are blood,skin,urine,hair and semen and any bodily fluid. These are often referred to as biological

evidence. Once biological evidence is found it can be collected with a sterilized cotton swab. It then can be taken to a lab where it'll be specifically tested based on what kind of biological evidence it is

#### The Murder of Loren Sinder

The next pages show photographs of a horrific crime scene. Loren Sinder was on his way home from a long day at high school. When he stepped out of his car He didn't notice someone waiting for him with a knife and a terrible plan. The victim was thrown to the asphalt then slashed with a knife.





Plent off cast off and even some impact spatter



There was a car crash reported nearby, we should

check it out and see if there's any relations here.

There is no body to be Seen other then these Footprints here, might be smart to investigate more



A murder weapon has been found! This is perfect evidence We can dust for fingerprints and get the blood tested to see if its our victims the weapon also matches the blood spatter

Steering wheel and shifter can also be dusted for prints

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#### Citations

DNA Analysis, latent prints . The forensics library. (n.d.). Retrieved November 14, 2021, from <u>http://aboutforensics.co.uk</u>

Fitton, J. (n.d.). *Crime scenes and forensics*. Mr. Fitton's Website. Retrieved November 14, 2021, from https://mrfitton.weebly.com/crime-scenes-and-forensics.html

Knowledge i gained from Mr Fittons law class