

Iron(III) chloride solution is used to test for	A positive result for aspirin, using iron(III) chloride solution, is a colour	Benedict's solution is used to test for	A positive result for sugar, using Benedict's solution, is a colour
aspirin	purple	sugar	green / orange / red precipitate
The four main blood groups are —	Will the blood clump? A blood and anti A	Will the blood clump? B blood and anti A	Will the blood clump? B blood and anti B
A, B, AB and O	yes	no	yes
Will the blood clump?	Will the blood clump?	Will the blood clump?	Will the blood clump?
A blood and anti B	O blood and anti B	O blood and anti A	AB blood and anti B
no	no	no	yes
A person with blood group AB can receive blood from someone with blood types	A person with blood group O can receive blood from someone with blood type	A person with blood group O can give blood to someone with blood types	Will the blood clump? AB blood and anti A
A, B, AB or O	O only	A, B, AB or O	yes

List the 4 blood types from most to least common.	M, I and C are important in forensic science - what are they?	M, I or C? How fast the car was travelling	M, I or C? The length of the skid mark on the road
O, A, B, AB	measurement, identification. comparison	M-measurement	M-measurement
M, I or C? The <u>brand</u> of shoe by studying the footprint left in mud	M, I or C? The blood type left on the knife	M, I or C? Analysis of hand writing on a ransom note and a suspects writing	M, I or C? Chromatography of a suspects pen and the ink on a cheque
I-identification	I-identification	C-comparison	C-comparison
name of technique	which match?	What is deoxyribose nucleic acid better known as?	which match?
DNA analysis / fingerprinting	1 st and 2 nd sample	DNA	2 nd and 3 rd sample
identify this	identify this	natural or synthetic fibre?	natural or synthetic fibre?
pollen grain under microscope	hair with root under microscope	natural (silk) *silk is very smooth	natural (cotton) *twisted fibres

natural or synthetic fibre?	natural or synthetic fibre?	natural or synthetic fibre?	natural or synthetic fibre?
synthetic (nylon) *fibres smooth and even	synthetic (rayon) *fibres are ridged	natural (wool) *fibres have scales	natural (linen) *fibres like "bamboo"
White powder that swells when mixed with water and sets rapidly; used in making casts and moulds	What can rigor mortis be used to help work out?	The most common type of finger points is	What are L, A and W types of?
plaster of Paris	time of death	Іоор	the 3 types of finger print
Restricting access and wearing protective clothing minimises	What type of search is most effective in large open areas, such as fields and parks?	What can the person's height, gait and the direction they entered and exited the crime scene be worked out from?	What is carried out to find out how and why a person died?
contamination of evidence	line and grid search	footprint	an autopsy
What is the term used to describe the stiffening of the body after death	Forensic odontologists specialize in the examination of	The intentional and unlawful burning of a building or other property	What are 2 ways to record a footprint or a tyre track?
rigor mortis	teeth	arson	make a cast & take a photograph

What are 2 ways blood might be analysed?	What are 2 ways fibres might be analysed?	What are 2 ways fingerprints might be used?	Differences?
for blood type & DNA profile	for fibre type & for the dyes in them	compared with suspects & checked against a data base	shoe size / make / tread patterns
What 2 ways could you collect fibres from a crime scene?	What are these?	How might you collect a glass sample found at the scene of a crime?	What's happening?
tweezers / brush (sticky tape is a poor method)	Scene of crime "shoe-covers"	carefully brush it into an evidence bag, using a brush (NEVER by hand)	dusting for fingerprints with white powder
2nd signature is forged or not? Why/why not? Heren Grey. Heren Grey	Where/how might information on a criminal be stored?	Fingerprints are left at 30% of all crime scenes. Why are the victims of crime also fingerprinted?	How might you collect a hair sample found at the scene of a crime?
Yes - different "e", extra pen stroke inserted, curves turned into corners	in a (computer) database	to eliminate them from the enquiries	carefully brush it into an evidence bag, using a brush (NEVER by hand)
If a soil sample fizzes when acid is added, the soil contains	DNA is unique to the individual unless you have	What method would you use to matching a fibre found at the crime scene with a fibre from a suspect's clothing?	What method would you use to prove that a man is the father of a child?
calcium carbonate / limestone	an identical twin	microscope	DNA profiling

restricting access & wearing protective clothing are necessary to stop what from occurring at a crime scene? contamination of evidence	marks and impressions left at the scene of a crime may be recorded using	what can be used to measure the pH of a solution?	what is the technique called when different colours in a mixture are carried different distances by the solvent?
contamination of evidence	plaster of Paris, plasticine or by taking a photograph	Universal Indicator paper or solution	chromatography
what TWO things can blood typing tell you?	what can be extracted from samples of blood, semen and saliva for use in forensic investigations?	what are TWO methods used to record a witness description?	how should a dried blood stain be collected?
is the blood stain human? What blood group is it?	DNA	artist impression and an identikit picture	scrape stain onto a clean piece of paper, fold paper and place in an envelope
dip metal loop in acid Heat it in the flame until clean & dip it in the acid again Dip it in the sample Hold the sample in flame Observe flame colour	some common flame test colours yellow-orange green lilac	why is UI solution (or paper) more useful than litmus paper?	how should a sample of pollen be removed from hair / a garment & viewed?
how to do a flame test	sodium copper potassium	UI tells you how acidic/alkaline; litmus just tells you acid, neutral or basic	wash off & view under a microscope
what is pollen rain?	what are these?	how many different types of pollen?	what are called palynologists?
the way in which pollen is dispersed	different types of pollen (grains)	six	experts in forensic pollen analysis

what are these?	what type of microscope?	what might a comparison microscope be used to compare?	M=mother, C = child. Which F is the father and why?
different types of pollen (grains)	comparison microscope	two different bullets, threads, hairs, soils etc <u>side by side</u>	F1 – he and child, C. have some bands in common
what can the pattern of "spines" around a blood stain tell you?	shake soil with distilled water - filter or allow to settle - test liquid with UI paper/solution is the test for	add a few drops of dilute HCl acid to a soil sample & see if there is fizzing is the test for	give 3 ways this glass could be matched to another sample
direction and angle of impact	soil pH	calcium carbonate / limestone / chalk	shape of the fragment, refractive index, colour / chemical composition
what does a forensic entomologist study?	what are the stages in the blowfly life cycle?		
insect evidence (flys, maggots, beetles etc)	eggs - 3 larval stages (maggots) - pupa - adult		