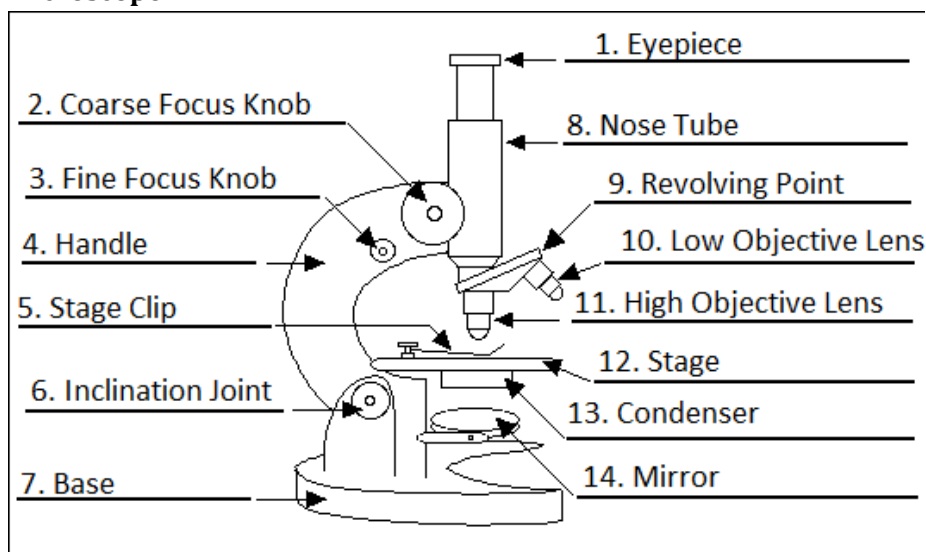


Investigations – Forensic Studies

Microscope




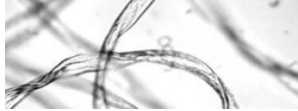
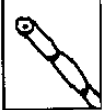


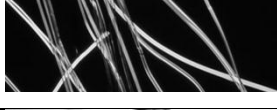


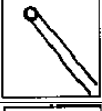

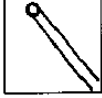

No.	Part	What it does
1	Eyepiece	Where eye is placed to look at sample
2	Coarse Focus Knob	Knob that makes large adjustments to focus – an initial picture of sample
3	Fine Focus Knob	Knob that makes small adjustments to focus – a detailed picture of sample
4	Handle	To carry the microscope
5	Stage Clip	Holds the sample on stage
6	Inclination Joint	Adjustable joint to tilt handle
7	Base	Supports the microscope
8	Nose Tube	Connects the eyepiece and objective lens
9	Revolving Point	Allows lens to revolve
10	Low Objective Lens	Low magnification
11	High Objective Lens	High magnification
12	Stage	Place sample on stage
13	Condenser	Filters light
14	Mirror	Reflects light source into condenser

- As magnification of the microscope increases, the diameter of the field of view decreases.

Chromatography

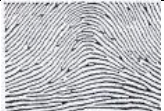


- Used to separate mixtures.
- We dissolve the **analyte** (substance to be separated, e.g. ink) into a **stationary phase** (the liquid that doesn't move). The different molecules are **isolated**.
- Chromatography can be **preparative** (separate components for further use) or **analytical** (measures the proportions of analytes on a mixture).

Fabrics, Fibres and Hairs

Simple Image	Name of Fibre	Properties	Microscope Image
	Cotton (Natural)	appear as flat ribbons under the microscope that are slightly twisted	
	Linen (Natural)	looks like a miniature bamboo	
	Silk (Natural)	double strands, smooth, and shiny	
	Wool (Natural)	Under the microscope it looks like scaly corkscrews.	
	Nylon (Synthetic)	The fibres under the microscope are smooth and clear rods.	
	Polyester (Synthetic)	Under the microscope the rod shaped fibre looks like nylon but is not clear.	

- Synthetic fibres are usually straighter, as it is created with a machine.

Fingerprints

Fingerprint Pattern	Image
Arch	
Whorl	
Loop	

Fingerprint Feature	Definition
Dark Ridges	Thicker lines of the fingerprint
Ridge Ending	Where a ridge line ends
Ridge Branches	Where a ridge line branches into two
Short Ridge	A small isolated ridge
Delta	A small triangular space in between ridges
Lake	A low space inside a ridge

There must be 12 features of a fingerprint identified before being correct.

Other Notes

When drawing field of views – Make a perfect circle, use pencil, label as shown below.

When drawing graphs/table – use pencil, label as shown below.

