**Hand-out 4**

DNA profiling is also called **DNA fingerprinting**,

**DNA** testing, or **DNA** typing….

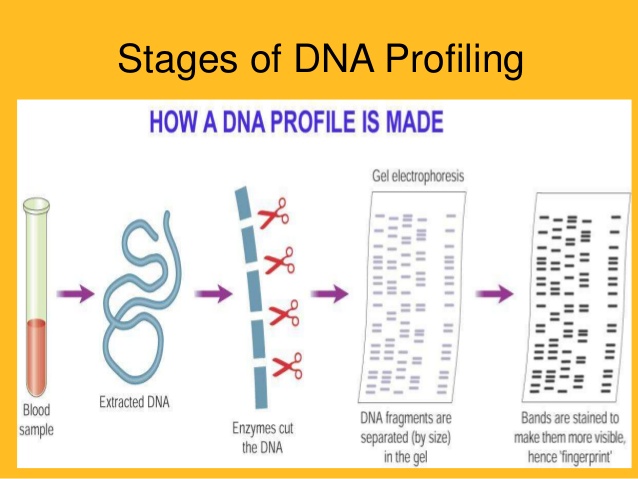
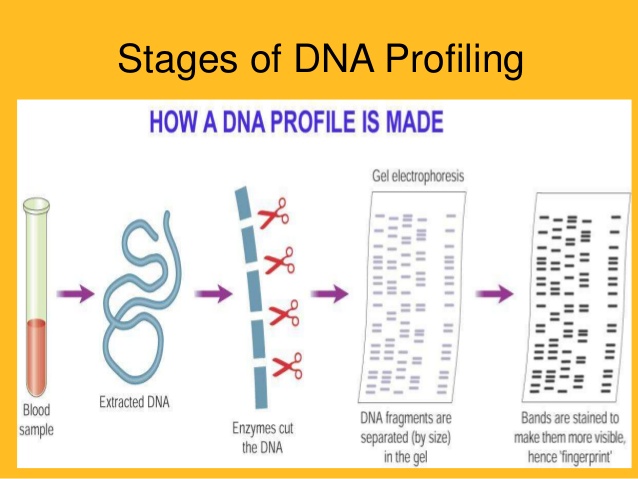
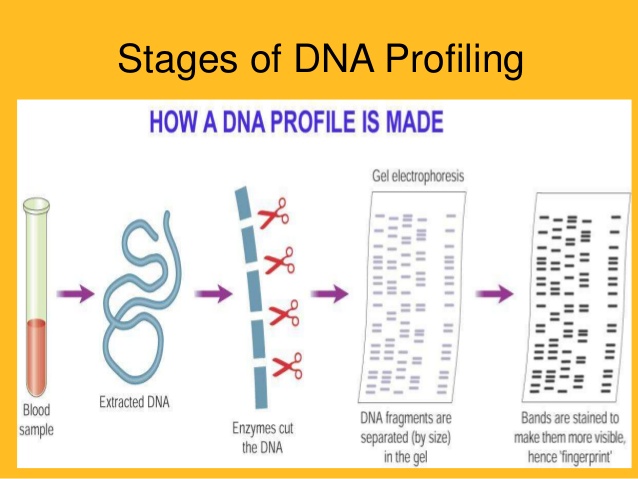
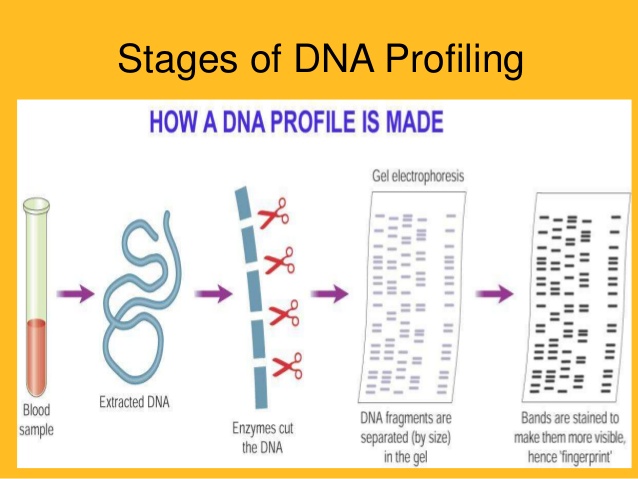
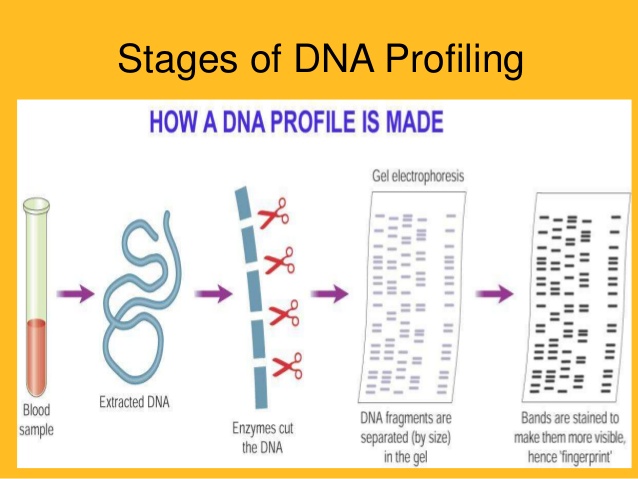
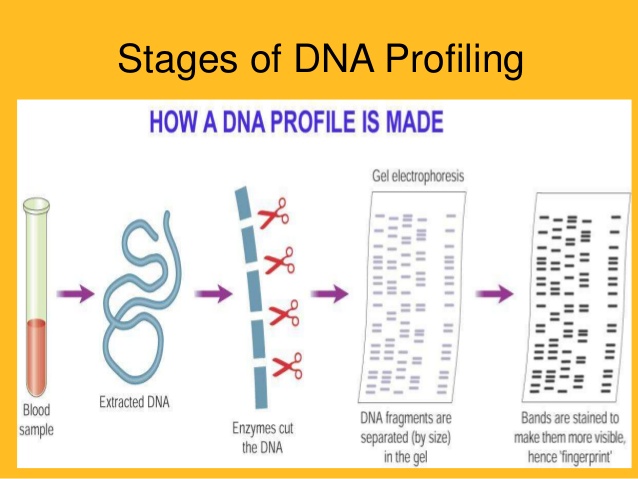
**Applications of PCR**

**DNA profiling and Repetitive DNA sequences**

* Although humans share 99.9% of their DNA, the remaining 0.1% is unique to individuals.
* DNA profiling is a way of identifying an individual’s DNA from their DNA \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Throughout the human genome there are many short, **non-coding regions** composed of a number of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_. These regions occur **randomly** and each sequence is **unique to the individual** who possess it - they are \_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ from one person to another.
* It is these \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that are looked for in **DNA profiling**, allowing DNA samples to be individually matched.

**DNA profiling process in brief…**

*Label the diagram using the jumbled up statements:*



**Medical and forensic applications of amplified DNA**

* Complete brief notes on the medical and forensic applications of amplified DNA.

|  |
| --- |
| **Medical applications** |
| **Forensic applications** |