***Chapter 1 Notes***

***Forensic science is the application of science to the law***

Brainstorm #1 –

*Name some TV shows or movies about crime*

*List the names of some specialists you see on these shows (i.e. pathologist or FBI agent)*

*List things police officers should do when they arrive at a crime scene*

*List ways police can record a crime scene so they can bring info to trial at a later date*

**Functions of a Forensic scientist** – can work in certain units within a laboratory (see packet about crime scene units)

1. To supply accurate and objective information that reflects the events that have occurred at a crime
2. Provide court testimony. They can act as **Expert witnesses** because they have a particular skill or knowledge about science or another trade. If there is doubt as to whether or not someone should be allowed to testify as an expert, a preliminary examination through questioning can be done to determine the competency of the witness. To **Voir Dire** the witness means to question them. The judge decides if the witness can testify as an expert.

*Mini Brainstorm – Not all witnesses at a trial are “expert” witnesses. What are some other types of witnesses?*

1. Train law enforcement personal in the recognition, collection, and preservation of physical evidence

**Processing the Crime scene**

Authorized personnel need to preserve and protect the crime scene. All unauthorized persons should be removed from the scene immediately because every untrained person is a potential destroyer of evidence (on purpose or by accident).

**Locard’s Principle of Exchange** – states that when things come in contact with each other there is transference between the objects. This can help solve crime (i.e. a suspect leaves blood or DNA at the crime scene) OR it can cause problems (i.e. untrained persons leave hair at the scene or accidently pick up evidence from the scene)

**Recording the Scene** – required for presentation at trial. The 3 most common methods are:

1. Photographs/video – must take pictures of the items BEFORE they are moved. You may need to put rulers or other markers in the picture with some items so you have some idea as to their size
2. Police notes – must take notes throughout the processing of the scene
3. Sketches – Must include:

Outline of room with north at the top

Artist’s name, date, and case number

Location of doors and windows

All recovered items of physical evidence

Legend (key) of the evidence

Dimensions of evidence/objects

Location of evidence/objects from two FIXED points

 The sketch must also be drawn to scale!

 \*Remember Brainstorm #1 – there are more than 3 ways to record evidence!

**Conducting a systematic search for physical evidence**

The search must be systematic and thorough or evidence may be overlooked. Failure to do a thorough job can also lead to accusations of negligence and “cover ups”.

4 main search methods: Spiral, Grid, Line, and Quadrant or zone (see separate sheet with a picture of each search method)

**Collecting and packaging physical evidence (Bag N’ Tag)**

Brainstorm #2-

*List evidence commonly collected at a crime scene*

*List tools and equipment used to bag n’ tag the evidence*

*Match the evidence listed for question 1 with the tools and equipment you would use to bag it*

*List things commonly collected by the pathologist in the morgue*

All evidence must be handled in a way that prevents change from the scene to the lab. Evidence must not be contaminated during this process.

Mini Brainstorm – How can police and forensic specialists reduce the chance of contamination?

A **Chain of Custody** (a list of who had custody of an item of evidence) must be started when the item is collected and maintained throughout the investigation. If evidence is to be presented in court, a chain of custody must be established for that item.

Mini Brainstorm – Why would police and specialists need to keep a list of who has/had the evidence?

**Control Evidence**

Once police have suspects and physical evidence from the scene, it is time to obtain control evidence. Control = evidence whose origin is known i.e. blood, shoes, car etc taken from the suspects. Control evidence is compared with physical evidence. Do you need to send it to the laboratory? Is it a match?

\*In order to search for and seize control evidence from suspects, police usually need a warrant that is signed by a judge. Unreasonable search and seizure can lead to evidence getting tossed out.

**Allowances made to justify a warrantless search**

1. Emergency situations
2. Consent of suspect/parties involved
3. To prevent the immediate loss or destruction of evidence
4. Probable cause – search of a person and property within the immediate control of the person provided it is made incident to a lawful arrest