Name: _____ 3/2/2016 Per: _____

Forensic Firearm Identification

Wham! Bam! Thank you Ming!

- The invention of _____ led to the development of firearms.
- Gunpowder first appeared in use in _____ over a thousand years ago, but was used primarily in firecrackers and only sparingly in weapons for military use (canons and such)
- The knowledge of gunpowder manufacture spread to Europe in the 14th century did _____ at first lead to military usage.
- Once they realized how much damage a _____ can do to a knight's armor or a fortification, the use of firearms proliferated rapidly.

Slide 2

The 1st handheld guns were essentially mini-_____; you loaded some gunpowder & a steel ball & lit a fuse.

Slide 3

- W_____ typically resulted in the need for improved weapons technology.
- In the late 1800's, the _____ quickly became popular due to its size & _____ loading.
  - It only had to be reloaded every _____ shots instead of after each shot.

Slide 4

- H_____ reigned supreme for the past 200 years & to this day, remain the most ___ _____ & readily available firearm.

Firearms

- Forensic analysis is vital to solve a crime that uses a _____.
- In 2004, there were _____ homicides in the United States.

Types of Firearms

- H_____
- S_____

- R_____
- M_____ guns

Different Types of Firearms

- ***Semiautomatic Pistol***
  - A _____ firearm requiring a _____ pull of the trigger for each shot fired, and which uses the energy of discharge to perform a portion of the operating or firing cycle*
- ***Revolver***
- A firearm with a cylinder having _____ chambers so arranged as to rotate around an axis and be discharged successively by the same firing mechanism.*
  - **Double Action -** A mechanism in which a _____ pull of the trigger cocks and release the _____.*

Different Types of Firearms

- ***Revolver***
  - **Single Action** - An action requiring the _____ cocking of the hammer before sufficient pressure on the trigger releases the firing mechanism.*
- ***Bolt Action Rifle***
  - A firearm that is manually loaded by the reciprocation and engagement of a _____

Different Types of Firearms

- ***Lever Action***
  - A design wherein the breech mechanism is cycled by an external lever generally _____ _____ the receiver.*
- ***Slide Action***
  - An action which features a movable forearm which is _____ actuated in motion parallel to the barrel by the shooter. Also known as _____ ACTION.*

Manual, Semi-Automatic, Automatic

- In manual guns, the user must _____ a round into the _____, either manually or through the action of the weapon between shots.
- In semi-automatics, a _____ pull is needed per round fired.
- In contrast, a fully automatic firearm, can _____ to _____ as long as the trigger is held _____ or until it runs _____ of ammunition.

Centerfire Ammunition

- C_____ (unfired)
- B_____
- Gun P_____
- Cartridge Case
- P_____

Figure 18-8 *The caliber of a bullet is its diameter.*

Caliber

Caliber: the _____ of the gun barrel

- Caliber is recorded in
  - hundredths of an _____ (.22 & .38)
  - m_____ (9mm)

Ammunition

- Headstamp -_____, _____ and _____ (or combination thereof) stamped into the head of a cartridge case or shotshell to identify:
  - the _____,
  - caliber, gauge or
  - give additional information.*

Shotgun Ammunition

- ***Shotshell*** - A cartridge containing projectile(s) designed to be fired in a _____. The cartridge body may be metal, plastic or paper.*

- ***Shot*** – Typically _____ or _____

- ***Wadding*** – Plastic _____ which holds the shot

Rifle Ammunition

- ***Bottleneck Cartridge*** - A cartridge case having a main diameter and a distinct angular shoulder stepping down to a smaller diameter at the neck position of the case.* *Typically associated with rifle ammunition.*

Hollow-Point Bullets

- Contain a _____ in the _____

- Hollow-tip bullets are designed to "_____" upon impact - to cause more tissue damage – used for _____.

- They can be partially jacketed (_____-point) or fully jacketed

- If they are partially jacket, they are called soft-point hollow nose bullets

Types of Bullets

- ***Full Metal Jacket***

  - A projectile in which the bullet _____ encloses the entire _____, with the usual exception of the base.*

Types of Bullets

- ***Jacketed Soft Point***

  - A bullet designed with the soft _____ core exposed at the _____.

  - **Cannelure** - A circumferential groove generally of a _____ or _____ appearance in a bullet or cartridge case.* Typically found on revolver and rifle bullets

Types of Bullets

- ***Jacketed Hollow Point***

  - A bullet designed with a _____, typically _____, surrounding the lower portion. The nose of the bullet has a _____ point.

Types of Bullets

- ***Lead Round Nose***
  - An _____ projectile made of a _____ alloy with a _____ nose.

Types of Bullets

- ***Semi-wadcutter***
  - A bullet designed with a _____ nose and sharp shoulder

Types of Bullets

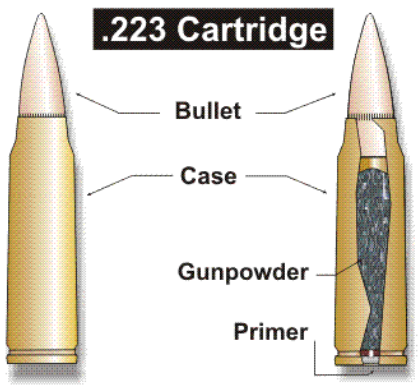
- ***Wadcutter***
  - A _____ bullet design having a sharp shouldered nose intended to _____ target paper cleanly to facilitate easy and _____ scoring.*

Types of Bullets

- ***Boat Tail***
  - A specific design of bullet having a _____ or a truncated_____ base.*

Bullets

- Bullets come in different _____, _____, and _____.
- When bullets hit objects they can break apart or become _____



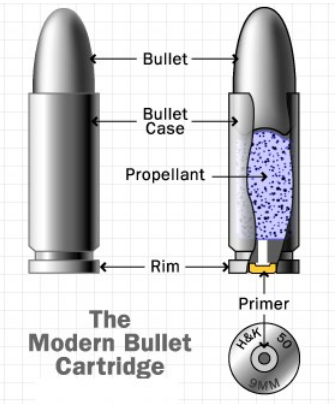


Figure 18-7 *The sequence of events in the firing of a bullet.*