Section 1: Firearms

Chapter 2: Rifles

Student Performance Objectives

In this section, the student should learn:

1. The four primary rules of gun safety
2. How to correctly match proper ammunition to a rifle
3. The five types of rifle actions
4. Four types of rifle sights
5. Three basic parts of a rifle
6. The components of a cartridge
7. The importance of rifling in the rifle barrel

Parts of a Bolt Action Rifle

Safety First

Again, during this session, remember the four basic rules of firearm safety.

1. **Keep the muzzle pointed in a safe direction.**
2. **Treat every gun as if it is loaded.**
3. **Always be sure of your target and beyond.**
4. **Keep your finger off of the trigger until you are ready to fire.**

Rifles

While the **bore**, *or the inside of the barrel*, of a shotgun is usually smooth, a rifle always has a rifled bore. **Rifling** *is grooves cut on the inside of the barrel in a spiral pattern*. Rifling causes the bullet to spin in order to stabilize it in flight. Since a rifle shoots a single projectile (bullet), this firearm is aimed and the trigger is squeezed.

Parts of a Rifle

Rifles, like shotguns, are composed of three basic parts: the barrel, action, and stock.

Barrels

A rifle uses a rifled bore to help make the bullet more accurate. A **rifled bore/barrel** *has spiral grooves cut on the inside of the barrel that cause the bullet to spin.* Rifles are identified by **caliber**, *or the diameter of the bore*. For example, a 22 caliber is .22 inches, and a 270 is .270 inches. The rifle caliber is stamped on the barrel. Only carry the correct ammunition for the rifle you are using. If you use the wrong ammunition, you may damage the gun and may injure yourself and/or bystanders.

Rifled Barrel

Rifle Key Terms

rifled barrel	centerfire
stock	rifling
action	sights
bore	safety
caliber	magazine
cartridge	projectile
rimfire	

Hinge Action

Closed **Open**


Pump Action

Closed **Open**


Bolt Action

Closed **Open**


Lever Action

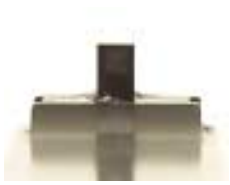
Closed **Open**


Semi-automatic Action

Closed **Open**


Open Sight

Front **Rear**




Correct Open Sight Alignment

Actions

In rifles there are five basic types of **actions**- *the part that loads, fires, and unloads firearms*:

1. **Hinge action** - This action opens and closes like a hinge on a door.
2. **Pump action** -You must pull and push the forearm to operate a pump action.
3. **Bolt action** - This type of action has a bolt handle on the side which must be lifted, pulled to the rear, returned to the front, and locked down to operate the action.
4. **Lever action** - This firearm has a large lever that swings out from the bottom of the gun to operate the action.
5. **Semi-Automatic** - A semi-automatic rifle fires once and reloads with each pull and release of the trigger.

***It is not legal to hunt with a fully automatic firearm**

Stocks

The barrel and action are attached to the **stock,** *or the part you hold to aim the firearm.* Stocks are made from a variety of materials, including wood and plastics. The buttstock is placed firmly against the shoulder and the shooter holds the firearm with both hands while resting his/her cheek on the stock to aim.

Telescopic Sight

Other Parts of a Rifle:

1. **Sights**- *Sights are devices that help the shooter aim.* Shooting a single projectile (bullet) from a rifle requires more precise sights than the simple bead sight on a shotgun. One type of rifle sight is the **open sight**, which has a post in the front and a simple notch at the rear. Another type of sight is the **peep sight**. This sight has a post or a circle at the front of the barrel, but the rear sight has a round hole that you look through to center the post on the target. A third type is the **telescopic sight**. This sight magnifies the target and uses a cross hair, a dot, a post, or a combination of these, to aim. A final type of sight is the **electronic sight**. This type of sight looks and functions very similar to a telescopic sight. However, with an electronic sight there is little or no magnification and generally there is only an electronically imposed dot as an aiming device.

Peep Sight

Front **Rear**


Electronic Sight

2. **Safety** - *The "safety" is a mechanical device that locks the trigger on the firearm to prevent pulling the trigger.* **The firearm may still fire if it is dropped or otherwise jarred. Always keep the muzzle pointed in a safe direction.** Again, you must remember that the safety is a mechanical device and it may fail. Always remember and practice the four primary rules of gun safety, even when your safety is on. The safety on a rifle can be mounted in many different places. Read your gun's instruction manual or ask a knowledgeable person where the safety is located and how to operate it. Always keep the safety on until you are ready to fire.

3. **Magazine** - *This is the part that holds the ammunition in a repeating firearm until it is needed.* It can look like a tube, a box that is built into the gun, or a box that can be removed from the gun.

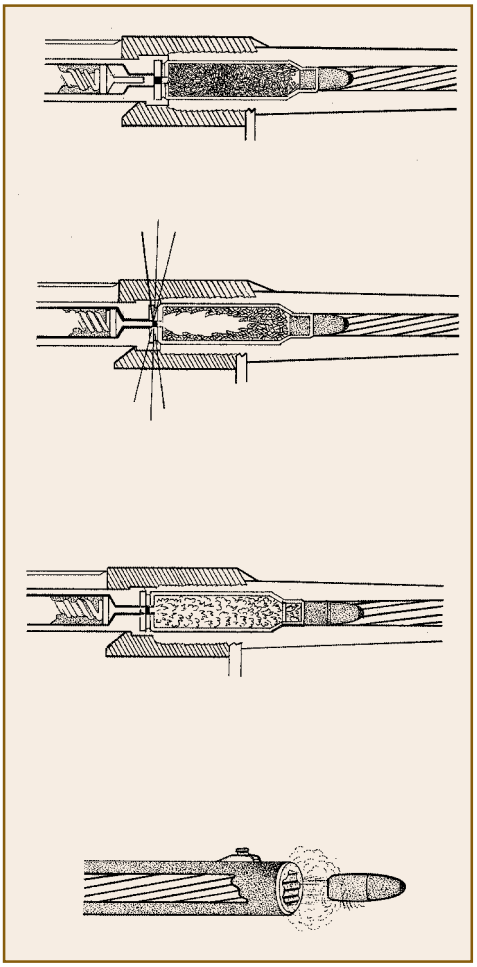
Rifle Ammunition

Ammunition for a rifle is called a **cartridge** and can be either rimfire or centerfire. **Rimfire** means that *the primer that ignites the powder is located in the* ***rim*** *of the case.* The most common rimfire is the .22 caliber. All high-powered rifle ammunition is centerfire. **Centerfire** gets its name from the fact that *the primer is in the* ***center*** *of the rear of the case*. Ammunition for a rifle is composed of the following four parts:

1. **Case**-The case is the metal tube that holds the primer, powder, and projectile. The case can have either a straight or tapered wall.
2. **Primer**- The primer explodes and ignites the powder when hit by the firing pin of the gun. The primer can be centerfire or rimfire. Rimfire means it is in the rim of the case.
3. **Powder**- Powder is the fuel that burns to create the pressure that propels the bullet.
4. **Projectile**-*A projectile is the bullet that comes out of the muzzle.* Bullets are made in many different types, depending on their purpose.

Parts of a Rifle Cartridge

Firing Sequence



To make sure that you have the proper ammunition for your rifle, find the caliber stamped on the barrel of the firearm. The caliber of the ammunition is stamped on the back of the case for centerfire ammunition. Rimfire ammunition does not have the caliber stamped on the case. Instead, you must look on the box that held the ammunition.

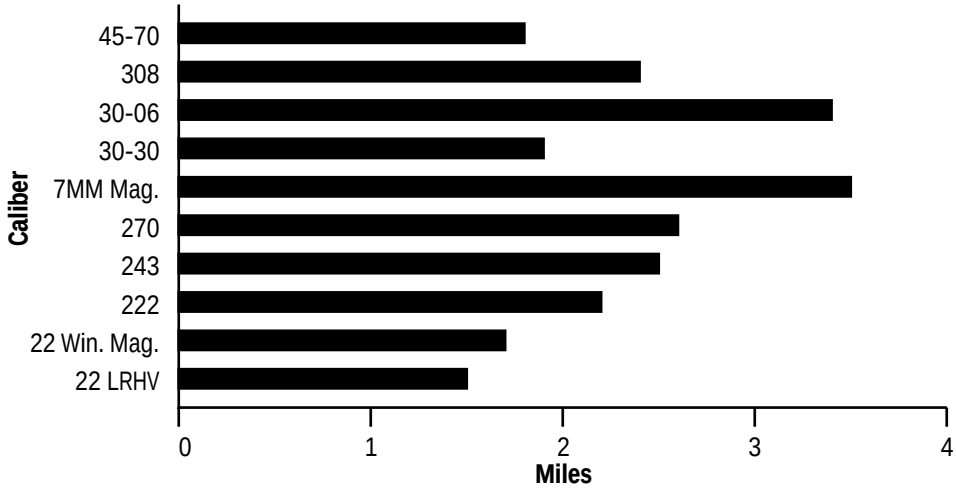
The ammunition box is your best source of information for all ammunition. The ammunition box will show the caliber, type, and weight of the bullet. It is very important to match the type of bullet to your use, whether it is competitive shooting, hunting, or recreational shooting.

.22 Long Rifle Caliber

.243 Winchester Caliber

30-30 Winchester Caliber

How Far Will a Rifle Shoot?



CAUTION:

WHEN TARGET SHOOTING OR HUNTING WITH A RIFLE YOU MUST ALWAYS PLAN ON WHERE THE BULLET WILL GO IF YOU MISS OR IT PASSES THROUGH YOUR INTENDED TARGET!