

# ARCHERY



*“This is not just another day, this is yet another chance to make your dreams come true.”*

Unknown

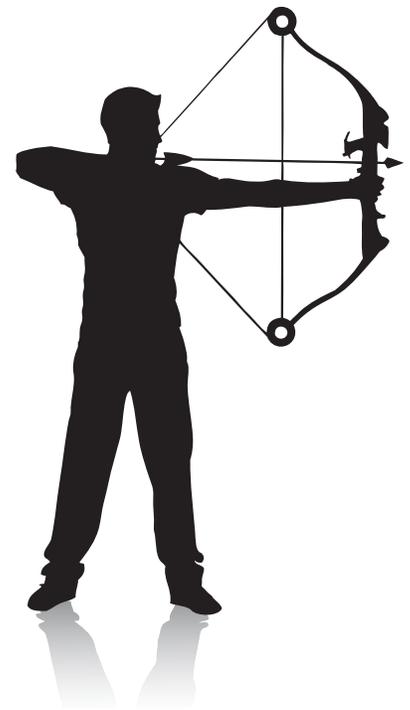
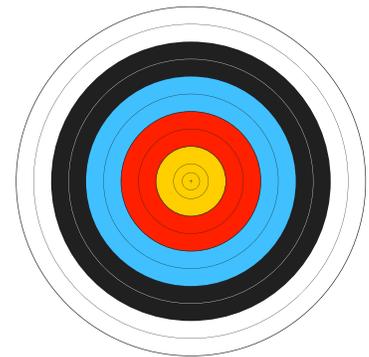
## INTRODUCTION

With the possible exception of spear or javelin throwing, archery (using a bow to shoot an arrow) is probably the oldest sport in existence. It can be traced back to prehistoric times. Archery also played a major role in military history for thousands of years.

Today people participate in archery for the sheer enjoyment of target shooting and bowhunting. It is also a relatively inexpensive sport which can be practiced both indoors and outdoors.

Bowhunting for deer, peccary (wild pig) and other small game is gaining in popularity in the United States. Bow hunters often participate in competitions with full-sized three-dimensional targets made to resemble actual game.

For example, the annual “Mountain Man Classic” bowhunting competition in North Georgia involves running against the clock up and down 1-1/2 to 2 miles of steep wilderness terrain, spotting and shooting at deer and turkey targets that have been placed in obscure locations. This type of archery competition is



extremely strenuous and requires months of endurance conditioning in addition to skills with a bow.

## **HISTORY OF ARCHERY**

In prehistoric times, people used bows and arrows to hunt for food and for self-defense. During the Greek and Roman civilizations, armies used the skill of trained bowmen to win many battles.

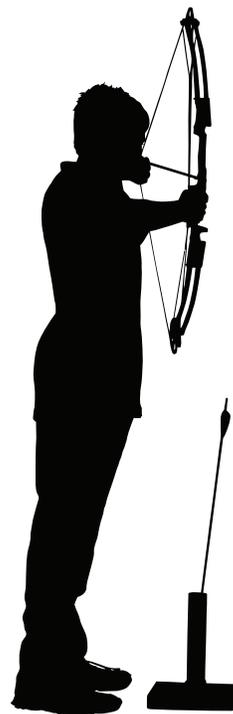
Archery achieved new status as an American sport in 1828 when an association called “The United Bowmen of Philadelphia” was formed. This group is still in existence today.

The National Archery Association (NAA) was founded in 1879. It still sponsors annual national archery competitions.

## **HOW ARCHERY IS DONE**

The purpose of archery as a sport is to hit a target with an arrow. There are ten evenly spaced concentric rings on the target. The highest score is made when a target designed with progressively smaller rings is hit in the center. This is the familiar “bullseye” target.

Lesser scores are made as the arrow hits rings farther away from the center. Competition involves several archers, each trying to make the highest score possible in a specified number of tries.



## **SHOOTING TECHNIQUES**

There is only one basic shooting technique in archery. An analysis of this technique helps us to identify ten basic steps as listed below. If all ten steps are done correctly, the shooting will appear to be graceful and almost effortless:

1. **Assuming the stance.** The archer should feel firmly placed but not stiff

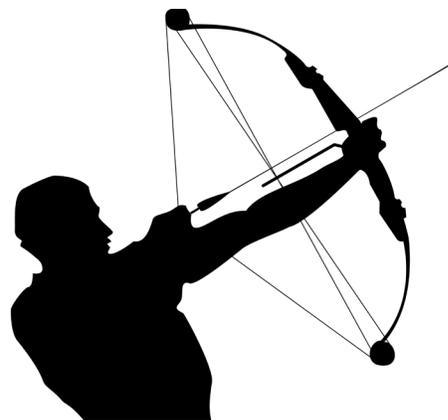
or tense. He or she should stand at right angles to the target with the eyes looking directly at the target.

2. **Positioning the bow arm and grip.** The bow is not really “gripped,” but is supported at arm’s length from the body. The index finger or second finger is wrapped around the part of the bow that is facing the target, while the thumb is wrapped around the part of the bow that faces the archer. The shoulders are not “hunched,” but are kept down and pulled to the back. The arm holding the bow is held as steady as possible without the muscles being tensed.



3. **Nocking.** The fletched or vaned end of the arrow has a small notch that fits over the bowstring. Slipping this notch over the bowstring is called “nocking.”
4. **Drawing.** Drawing or pulling back on the bow string utilizes both arms and the upper body muscles. The bow arm is raised toward the target as the string arm pulls backwards. The upper arm, shoulder and upper back muscles should not be too tense, or the draw will be executed improperly. During this step, many archers find that it helps to take a deep breath and hold it.

5. **Anchoring.** It is critical that the string be pulled back to a proper anchor point. This is the point at which the bowstring arm has reached full flexion or bending at the elbow. The position varies according to the particular individual’s skeletal and muscular lever system. As little as 1/8 inch in anchoring can affect shooting accuracy.



6. **Relaxing.** Archers need to take time to assure that only the muscles involved in supporting the bow and drawing the bowstring are tense. Overall performance improves when archers pay attention to this point.
7. **Aiming.** The sight-shooting method is a popular way of shooting at targets. A mechanical device is attached to the bow and can be both horizontally and vertically adjusted. The “sight” is fastened to the back of the bow slightly above the arrow rest. The archer should close the left eye or right eye (depending on whether the archer is right- or left-handed) and look at the “sight” pin. Then he/she should align it with the center (gold circle) of the target, also allowing for distance and wind (if any).
8. **Concentrating.** As with all sports, the ability to concentrate in archery often makes the difference between excellence and average performance. The archer should put everything else out of his/her mind and concentrate on the target.
9. **Releasing.** Smoothly release the string, holding the string fingers steady and relaxed without any snap or jerk to the hand. The arrow is now sent on its way.
10. **Follow-through.** Hold your stance for a few seconds after release.

## **EQUIPMENT AND CLOTHING**

A first and major step in learning archery is identifying and understanding the equipment. A potential bowman will choose either a straight bow or a recurved bow (a bow in which the tips curve back to form an arc). The length of the bow depends on the individual needs of the purchaser, including his/her age, weight and height. Some hunting bows have complex compound curves, with equally complex systems of pulleys and bowstrings.



Bows range in length from 48 to 70 inches. Longer bows are used for target shooting and shorter bows for hunting. Most hunting bows weigh more than target bows, which usually range in weight from 10 to 50 pounds. It is always best to buy a bow that is light enough to be handled comfortably. The “weight” of the bow does not refer to how much it would weigh if put on a set of scales. Instead, “weight” in archery refers to the amount of weight in pounds you would have to attach to the bowstring to bend a stationary bow a specific amount. This is often called the “draw weight.” Thus a 70-pound bow does not weigh 70 pounds. Instead, it requires 70 pounds of pulling force to bend the bow a certain amount.



Bowstrings are made of synthetic materials such as Nylon or Dacron. Archers often wax their bowstrings as protection against the elements.

Arrows are carried in an arrow holder called a “quiver,” or, in the case of hunting bows, are often attached to a rack on the bow itself. The arrow is composed as follows:

A point or “pile,” which varies from a simple sharp point to broadhead, quintuple-sectioned steeple-shaped heads.

A shaft and a “shaftment,” or rear of the arrow.

A “nock” or notch at the end of the arrow that fits over the bowstring.

Feathers, vanes or “fletches” at the nock end of the arrow, which help the arrow to fly in a straight line toward a target.



Some archers use a leather arm guard worn on the inside forearm of the hand that supports the bow. A leather tab or a shooting glove is often worn to protect the fingers that draw back the bowstring.

Archers should always wear comfortable, uncluttered, form-fitting clothes. Jewelry, large buttons, scarves and big pockets will only get in the way of the bow and arrow.

### **SAFETY TIPS**

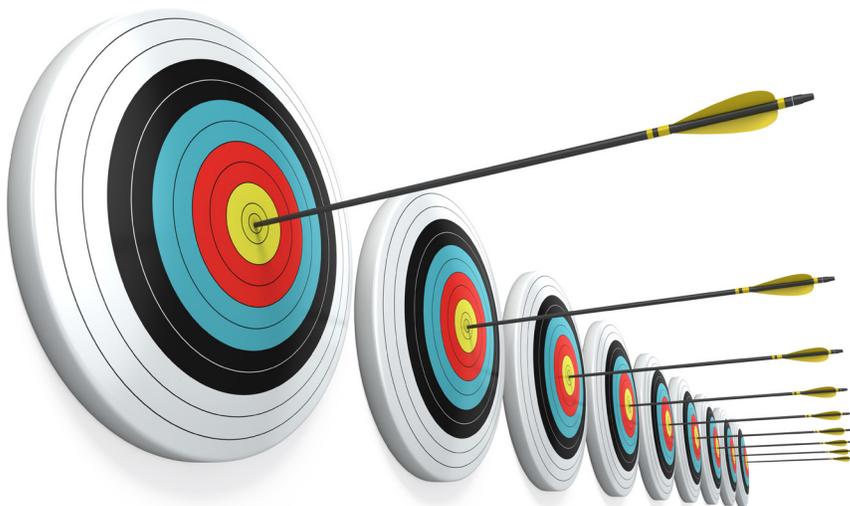
Although it involves the use of one of the oldest types of weapons, archery is not necessarily a dangerous sport. However, as with any physical activity, it is up to the individual to keep the sport as safe as possible by observing certain rules, especially the following four:

Novice (beginning) archers should always be supervised. Don't try to get started in archery without prior instruction or supervision.

An arrow ready to be released should be pointed only at the target, never at persons, animals or objects.

Arrows should not be shot straight up into the air. When that happens, they usually come straight back down. This can be very dangerous!

Never take chances in archery. It's better to be safe than sorry.



## **ARCHERY NOTES**

In addition to being a form of recreation, there are several formats for competitive archery. Competitive archery involves shooting arrows at a target for accuracy at a set distance. This is called target archery and is the most popular form of competitive archery worldwide. Para-Archery is an adaptation of archery for athletes with a disability. It is governed by the World Archery Federation and is a sport in the Summer Para-Olympic Games.

Many high Schools offer archery as a physical education activity but not all sponsor teams or individual competition. Archery is not a sanctioned sport by the National Collegiate Athletic Association (NCAA).

However, archery is an Olympic sport. Olympic archery competition has strict equipment rules. For example, Olympic bows are re-curved, and can propel arrows up to 150 miles per hour. The draw weight averages 50 pounds for men and 34 pounds for women. Most arrows are made of either aluminum or carbon-graphite.

World Archery Championships (World Cups) are held regularly and is organized by the World Archery Federation (formerly known as FITA). This federation is the world governing body for the sport of archery. They have staged World Championships since 1931. Top winners can receive up to \$20,000.

The National Field Archery Association is a non-profit organization dedicated to the sport of archery. It is the largest field archery organization in the world. The NFAA now consists of 49-chartered state associations and 1,0000 affiliated clubs.

Keep current with this exciting sport. Although an ancient sport, archery continues to grow in popularity. Check out the following websites to learn more about this sport:

[www.worldarchery.org](http://www.worldarchery.org)

[www.usarchery.org](http://www.usarchery.org)

[www.nfaausa.com](http://www.nfaausa.com)