

2012



INTRODUCTION TO ARCHERY

During the course the Instructor will review, archery safety, shooting form, and types of equipment.

Introduction to Archery

In the United States, Archery is one of the fastest-growing sports. Every year men, women, children are trying archery for the first time. They are surprised how easy it is to participate, how gratifying the sport is and just how much it will challenge you. Archery is enjoyed by the young and old it doesn't whether an individual sport where you can shoot alone to achieve your Zen state or experience the fun with your entire family or friends being outdoors, shooting, and laughing together. However you choose to enjoy archery, you can never beat the pleasure of a sport that has been around for ten thousand of years!

Getting started in archery is not difficult. Visit one of the local clubs in your area and participate in a Basic Archery course. Don't worry about equipment, the club supply what is needed.

During the course the Instructor will review a little archery history, archery safety, shooting form, and types of equipment that will be used during the course. Learning how to shoot is easy. We teach beginners "Instinctive" shooting. Instinctive shooting basically means you learn how to shoot without the aid of an aiming device. It is the simplest method to learn and it teaches you how to handle a bow and develop good shooting form and consistency. It is challenging and a whole lot of fun! The archery equipment used are during the class are lightweight Rolan recurve bows and Genesis compound bows; you will have the opportunity to try them both. Don't worry about not being strong enough to draw the bow. These bows vary from 10-20 pounds in draw weight. The targets are 5-15 meters away and are 48 inches across. As a result of teaching with these bows there is little advantage to strength, gender or age.

Please come prepared. Because of the equipment, no loose fitting shirts should be worn. Footwear wear should be closed toe and flat soled to provide good balance. We advise you to consider your comfort needs as well, bring items like sunscreen, bug spray, a hat or anything else that will provide for your needs. Don't forget drinks to remain hydrated; you will need to keep hydrated in our Texas heat.

To learn more about Archery Academy of Texas, and how we can help you get started in archery, or see our many other programs visit our website at www.texasarcheryacademy.org.

Introduction to Archery Program Details

Who: Any person with little prior archery experience from the age 9 and up. Or if it has been a long time since you shot bow and arrow and you're looking for a refresher class. (If you have a large group or maybe the whole family that wants to attend the same session, we may be able to accommodate you. Email us with details to find out).

Dates: Held at Texas Archery Academy Indoor and at the Elm Fork Archery Ranges.

Times: As posted on the Website.

Duration: 1 ½ hours.

Syllabus: Safety practices and Range configuration
Types of equipment
Basic shooting skills
Plenty of Practice Shooting

Location: Texas Archery Academy facility.
600B Accent Dr. Plano, TX 75075

Elm Fork Shooting Range
10751 Luna Rd, Dallas, TX 75220-7009

Fee: \$10.00 per person – includes the use of archery equipment.
Checks should be made payable to Texas Archery Academy.

Materials: None required.

Contacts: For more information or to register for a session please email us at

info@texasarcheryacademy.org

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Course Material

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Introduction

Welcome to Archery! Through the ages, this primitive weapon has fed families, conquered civilizations, and provided a wonderful source of recreation. As a martial art, archery helps build self-confidence and control. As a sport, it ranks with golf as a challenge to building individual skill.

There are many models and manufacturers of archery equipment. There are also many styles, or forms of archery developed around two basic methods of shooting - using sights, and not using sights. Mechanical sights rely on the fine adjustment of equipment paired to the archer and the appropriate distance from the target to be shot. Archery without sights is an instinctive style, using a point-of-aim view at the target. This is similar to the difference between using a rifle with a telescopic scope, and a shotgun, just looking down the barrel to aim.

Instinctive is our preferred method for beginners. It is the simplest method for handling the equipment and developing good shooting form and consistency. It lays a practical foundation for the pursuit of archery in any discipline.

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Archery Safety

The sport of Archery takes pride in its safety record. Archery has the lowest incidence of injury of all shooting sports and is the fourth safest of all sports. The reason for this outstanding safety record is that the rules and procedures developed for archery are adhered to by the participants which ensure each person's safety.

Control of all shooting activities is under the direction of the Instructor, sometimes called the Range Officer. Archers must obey their instructions at all times.

Before you begin ensure that all clothing is held tightly to the body to prevent fouling by bowstrings. Long hair should be tied back for the same reason.

Safety Rules – Archery is a lot of fun, but the fun can quickly turn into a tragedy unless every archer observes the shooting rules. Learn the safety rules and follow them every time you hold a bow or retrieve your arrows. Remember, most accidents are the result of carelessness and thoughtlessness.

1. **Follow the instructions of the Range Officer.** Give attention and listen to the commands given. Ask questions if you do not understand what is said.
2. **Always use proper safety equipment,** including an arm guard, finger tab or glove. The Instructor will ask the youth to reposition their safety equipment to prevent injury if the equipment is incorrectly positioned. If still incorrect, the Instructor will ask the youth if the leader can reposition the equipment.
3. **Always inspect your equipment before shooting.** damaged equipment should be repaired or replaced to avoid injuries. Replace the bowstring whenever it becomes worn.
4. **Always use arrows of the proper length for you.** Arrows that are too short can cause injuries.
5. **Wear snug fitting clothes, tie back long hair, remove large earrings, and clear off any pins or remove anything from chest pockets.** Wear a chest protector as need.
6. **Never "DRYFIRE" your bow.** Always have an arrow on the string when shooting. "DRYFIRING", or shooting a bow without an arrow, can seriously damage a bow.
7. **POINT, DRAW, and AIM your arrow only in the direction of your target.** The arrow must always be pointed down range.
8. **Always aim and shoot only at targets on the range:** Always be sure you know what your target is and that it is safe to shoot. If you're not sure take a closer look, if you're still not sure, do not shoot. Be sure the area around and behind your target is clear before you shoot. Never shoot if there is a chance your arrow may ricochet from the target or another object and hit someone.
9. **Place your bow in the bow rack once you have finished the end and stand behind the waiting line:** This helps the other archers know your finished shooting your arrows. Bows in a rack cannot accidentally be fired.
10. **Always walk; never run, on the archery range.** If you run, you might accidentally cross in front of another archer, step on arrows lying on the ground, or trip and fall into the target and be injured by arrows sticking out of it.

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Range Shooting Commands

Range Shooting Rules – **Follow the commands given by the Range Officer.** If you are not familiar with the commands ask the Range Officer to give both verbal commands and whistle blasts until you are familiar with them.

WHISTLE: TWO BLASTS

VERBAL: "Archers to the shooting line."

VISUAL: Red light is on

Meaning: Pick up the bow and move into position on the shooting line. Do not nock an arrows.

WHISTLE: ONE BLAST

VERBAL: "Begin Shooting"

VISUAL: Green light is on

Meaning: Archers may take the arrows out of the quivers and begin shooting.

WHISTLE: THREE BLASTS

VERBAL: "Clear, walk forward and get your arrows,"

VISUAL: Red light is on

Meaning: Archers have completed shooting. All archers have set their bows down and are standing behind the waiting line. They may now go forward to the target line and pull their arrows.

WHISTLE: FOUR OR MORE BLASTS (series of blasts)

VERBAL: "STOP, STOP, STOP, STOP" or "CEASE FIRE"

VISUAL: Red light is on

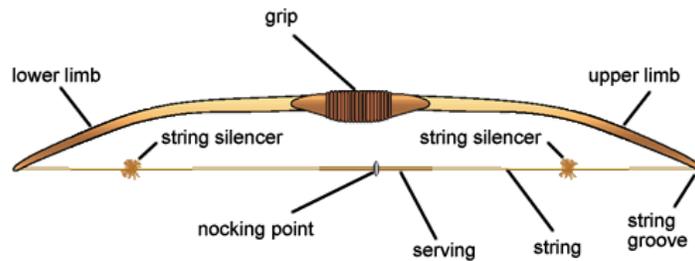
Meaning: There is an emergency on the range. Immediately let down and put arrows back in the quiver, and step tack behind the waiting line.

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Archery Equipment

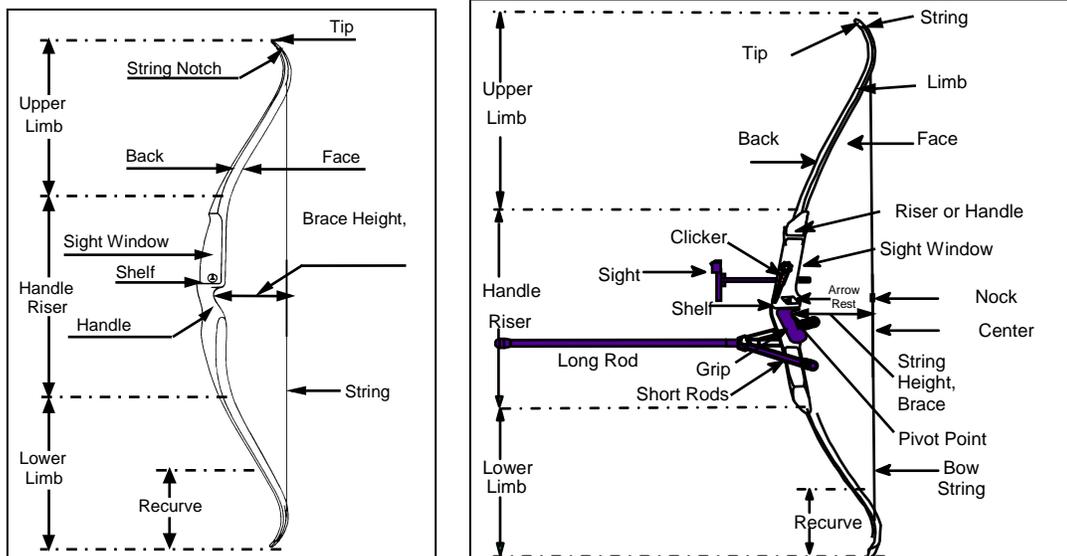
Long Bow

The most traditional type of bow is the longbow. These are the bows that most have seen in the old Errol Flynn-Robin Hood movies. They were made from a single piece of wood. Modern long bows are laminated strips of wood, with a leather-wrapped grip and a string. This type of bow remains very popular among archers that prefer a more traditional experience. A long bow offers many exciting challenges to an archer by keeping the equipment and experience as basic as possible.



Traditional Recurve and Olympic Recurve Bows

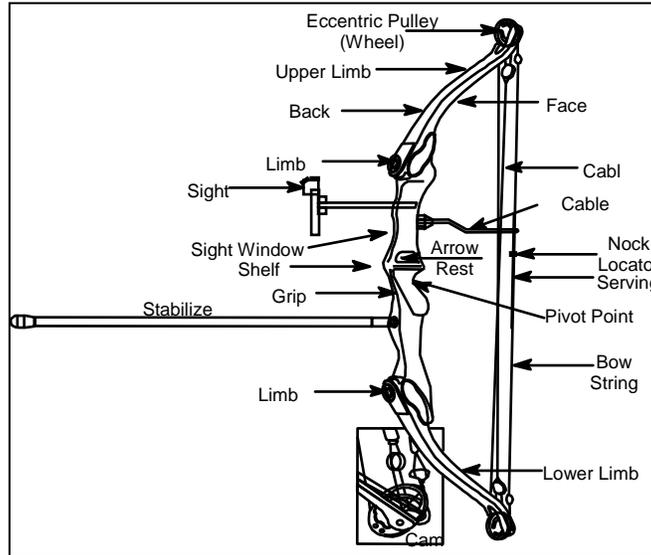
The first evolution of the bow is the recurve bow. The recurve is constructed with limbs that have a curve built into them. This special curve stores more energy in a shorter length limb. The result is increased arrow speed. A recurve can be fashioned from wood or from machined aluminum and also provides a shelf for the arrow to rest on that is centered to provide truer arrow flight. The recurve is the bow of choice for those competing on the international level.



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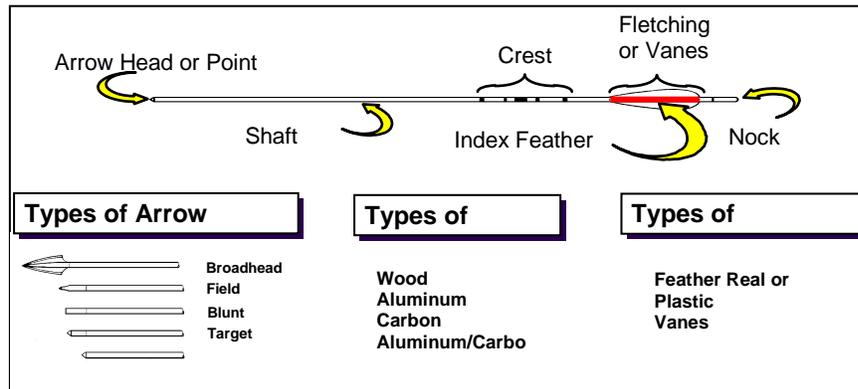
Compound Bows

The most technologically advanced form of the bow is the compound bow. A compound bow has an eccentric pulley or cam mounted at the end of each limb tip. Most compound bows will have a let-off percentage at a point in the draw from where the weight is reduced, or "let off". This helps the archer remain at full draw.



Arrows

Selecting arrows is not difficult; it depends on the type of bow and what you are shooting at. There are four types of arrow to choose from. Most traditionalists who use longbows prefer shooting cedar arrows. Recurve and compound shooters may choose from aluminum, carbon, Aluminum/Carbon composite, and fiberglass, depending on your needs.

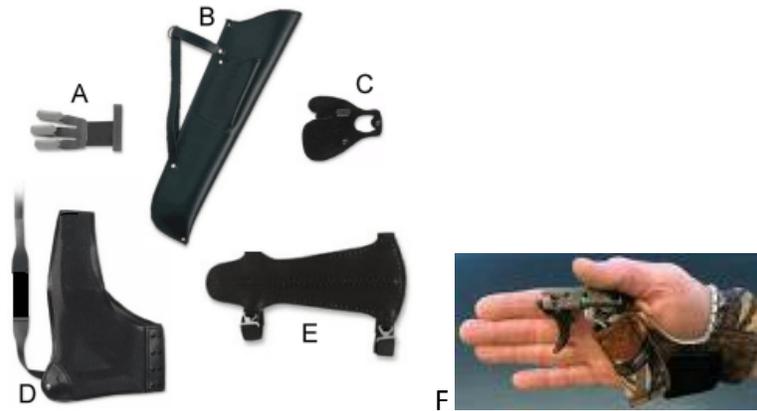


Archery Accessories

There are a few accessories that can be used to help make things a little easier on you. A finger-tab or glove ("C and A") helps protect your finger tips from being chaffed as you draw the string back. An arm

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guard ("E ") is worn on the arm you hold the bow with. It is used to protect your forearm from being struck by the string when you release. A quiver ("B") hangs from your belt and is used to hold your arrows. A chest protector ("D") covers a portion of the chest to protect the skin and hold back clothing. For compound shooters, a ("F") mechanical release is an option. This device clips to the string and is used instead of your fingers. Once the bow is at full draw, you press a trigger that releases the string.



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GETTING STARTED

Instinctive shooting employs the use of your anchor (rear sight), your dominant eye, and the point of the arrow (front sight) to develop a point-of-aim view.

Without bow and arrow, just raise your arm and point your index finger at the target. Focus on the bullseye, with both eyes open, then take turns winking. You will notice your index finger pointing at the bullseye is lined up with one of your eyes, this is your dominant eye and it controls your aim. It is preferable that your dominant eye and hand be the same. If not the same, you can switch hands or close an eye so you are in alignment. Next, you will be replacing your outstretched arm with the arrow, and your pointing index fingertip with the arrow point.



Hold an arrow up now. Touch the nock to the corner of your mouth (anchor) - this is centered under your dominant eye. The arrow shaft rests in your bow hand. See the point on the target. Start by centering the point just below the bullseye. Try to keep both eyes open for your depth perception, but focus only on the target spot you want to hit. You will notice the arrow shaft in your peripheral vision; it is drawing a straight line to your target. When you see the alignment and feel certain you are centered on the target, move closer to the target, until there is no doubt you will hit the bullseye. Remember these mental images. When you load the bow with an arrow and pull back the nock to your mouth, you want to see the same picture.



Now let's go get the bow...

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Handling the Bow

These are the steps you take in executing a shot:

Stance

Point your bow hand at the target, with your feet spread about shoulders width apart in a balanced ready position.



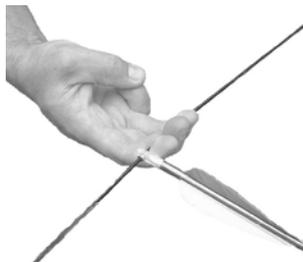
Nock Arrow

If you hold the bow vertically, bring the arrow over the bow to load. Handle the arrow by the nock to load when the bow is hanging at your side. The arrow is snapped on the string under the nock rest with the arrow shaft resting on the bow's shelf. The index fletching (different color than other two) faces up towards you.



Drawing Hand Set

To start, grasp the string using a "scout salute" of three fingers only, just before the first joint of fingers. The thumb and little finger are locked down out of the way. Use either a grip of three fingers under the arrow nock, or a grip of one finger above the arrow nock and two under to pull the string.



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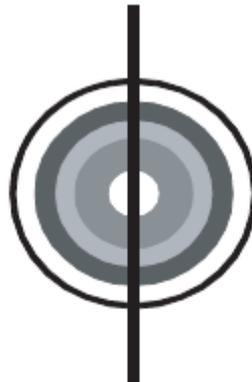
Bow Hand Set

Your hand grips the bow handle along the "life line" to guide placement. The palm is not used, pressure is resisted with the base of your thumb on the handle. As the bow is lifted and pulled, the bow arm will straighten, remember to rotate your elbow out away to avoid the string's path upon release.



Pre-Draw

Imagine a vertical line through the spot you want to hit. All arrows should align with this path. Any adjustments will be for high or low errors, but the arrows will not be sprayed around the target using this technique.



Draw

Start by slowly swinging your arrow point up from the ground into the imagined vertical line on your target. Your bow hand resists and pushes against the bow commencing the draw. As you near the rise, your string hand pulls the string back to your face to anchor. There is a straight horizontal line in your posture from arrow point to the tip of your elbow. Draw is complete as you bring the string to anchor, no further or shorter.

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Anchor

Anchor is your rear sight for aiming. Use the corner of your mouth to start. As you pull the string to your face, touch your index or middle finger to your canine tooth, and hold. This is the foundation for consistent shooting. You must see the same picture down the arrow each time you draw the arrow back.



Aiming

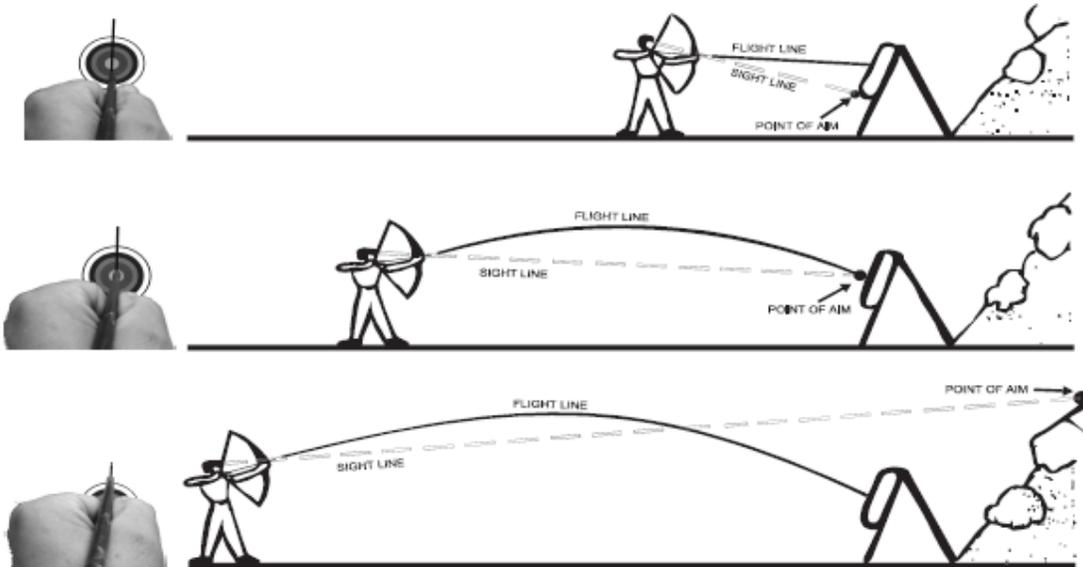
By bringing the arrow to anchor at your mouth, notice the arrow is under your eye. This allows a peripheral view down the arrow's shaft to the target. Again, this is similar to pointing your index finger at the target - you will be replacing your arm with the arrow, and your index finger tip with the arrow point.



Both eyes remain open at all times, but the dominant eye aims, or focuses at what you want to hit - thereby guiding your alignment of the arrow with the target. It may help to tilt the bow and your head slightly together so that your dominant eye is lowered towards the arrow. Also maintain a head position leaning towards the target, like you are touching your nose to the back fletching. If you lean your head back away from the arrow, you make it more difficult to see down the arrow. Notice the point of the arrow and its reference to the target.

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At distances of 10 yards or less, the arrow point will be centered underneath your bullseye. This will be your guide for future shot adjustments allowing for the arrow's trajectory. So always start below your intended bullseye, raise the point above the bullseye for longer distances. There will be a distance where the point and bullseye are aligned, this is your "point on" distance.



Shot Set-Up

"Feel" the shot. Envision a successful hit. Focus on the spot you want to hit. Instinctively, it will look right, all is in alignment - that is when you release the string. This "feel" develops through repetitive practice.

Release

"Do nothing", relax the tension in your fingers, let the string smoothly slip out. Your hand is still on your face and bow hand raised as you witness the arrow's flight into the target. Once in the target, relax your position.



Follow Through

Until now, you shot without a thought, only a mental focus on the spot on your target. Now, contemplate the results. Adjust your form for any errors. Your objective is to develop consistency. Anchor and elevation adjustment will correct most errors.

Thanks for your attention. We hope you enjoy the pursuit of Archery, an introduce others to its challenge.

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Cost of Archery Equipment

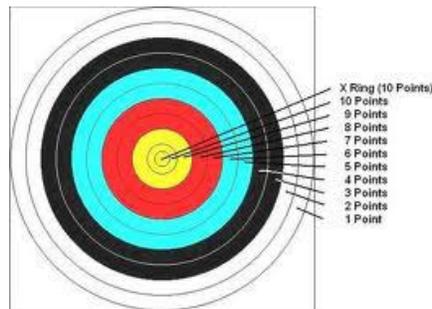
Most archery equipment used by the beginners will cost around \$200.00. For an intermediate archer that would like to compete in local tournaments the price may range from \$700.00 - \$1500.00.

A considerable second hand market for archery equipment exists with prices typically 50%-75% of the original cost. Some retail archery shops also sell second hand and reconditioned equipment, and occasionally offer good deals on year-end models.

Before buying any archery equipment it is worthwhile to work with an archery instructor or Pro Shop in order to work out all of your archery measurements and specifications.

Rules for Scoring

Scoring takes place after each 'end'. Arrows are scored according to the position in the target face. If the shaft of an arrow touches the dividing line between two scoring rings, that arrow always scores the higher value. The scoring value of a 5-color target face is from 10 at the center of the face, to 9, 8, 7, 6, 5, 4, 3, 2, & 1 for each ring.



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Glossary of Terms

Bows:

- Traditional or Long bows - Made by laminating pieces of woods like yew, ash or elm, or, alternatively two pieces of wood with differing characteristics such as elm, yew strengthened with fiberglass. The tips of these bows may be made out of bone or horn.
- Recurve - Typically made in three sections with a handle made from cast or machined aluminum, fitted with flexible limbs on each end made from laminates of carbon, fiberglass, and wood. Space age, non-stretch materials are used for bowstrings.
- Compound - Compound bows are much more technically sophisticated, employing wheels or 'cams' at the tip of the limbs. Acting as lever, these wheels allow an archer to draw and hold a bow with relative ease.

Arrows:

- Point – The tip of the arrow. Shaped like a bullet, it penetrates the target.
- Nock – The attachment on the rear end of an arrow that holds it in place on the bow string (also, to "nock" is to place the arrow on the string).
- Fletching – The feathers (real or synthetic) attached to the arrow which helps stabilize it during flight. The same color pattern must be used throughout an end.
- Shaft – The long, narrow middle of the arrow, connecting the pile to the nock. Any substance (wood, aluminum, carbon) is allowed, but the shaft may not exceed 9.3 mm (about 1/3 of an inch) in diameter. It is marked with the archer's name or initials for identification.

Other Equipment:

- Release aids – Release aids may be used only by compound shooters in the compound 3-D and FITA events. Competence with the equipment must have been demonstrated before the release aid may be used.
- Long rod stabilizer – From 29 to 36 inches long, it balances and stabilizes the bow when raised.
- Side rod stabilizers – From 18 to 12 inches long, these also balance and stabilize the bow when raised.
- Grip – Where you hold the bow.
- Riser – The handle of the bow, and the foundation that supports all other elements. The side facing the target is the back of the bow. The side near the string is the front.
- Limb – The part of the bow from the handle to the tip. A limb can have a draw weight of 15 to 51 pounds.
- Clicker – Helps an archer release at the same spot during the draw process.
- Quiver – A ground quiver, or a quiver worn by the shooter or attached to the bow, must be used to hold arrows.
- Arm guard – used to protect the forearm from getting hit by the string.
- Finger Tab – Protects the tips of the String hand while drawing the bow.

Archery Styles:

- Target Archery – In target archery you shoot at round multi-colored targets. Shooting at distances vary from 18 meters (indoor) to 90 meters (outdoor), with target sizes being 40 or 60 centimeters for indoors and either 80 or 122 centimeters for outdoors. The targets have five colors with each color being divided into 2 to provide 10 scoring zones. The innermost ring is given a value of 10 points, down to the outermost ring with a value of 1 point. Target rounds involve shooting a set number of arrows from one or several distances.
- Field Archery – Field archery is a challenging outdoor discipline in which the archer takes on the terrain as well as the target. It is a course set up in a brush/ land setting taking advantage of hills, slopes, angles and light and shade. Field archery rounds involves walking a course and stopping to shot a set number of arrows over varying distances at large foam targets that resemble familiar shapes or other target butts.
- 3-D Archery – 3-D archery is a subset of Field archery. It utilizes life-sized models of game animals and is popular with hunters. It is a course set up in a brush/ land setting taking advantage of hills, slopes, angles and light and shade. 3-D archery rounds involves walking a course and stopping to shot a set number of arrows over varying distances at foam animal targets.

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- Clout Archery – Clout archery is derived from medieval warfare where archers would lob arrows onto the advancing army. In Clout a target measuring 15 meters in diameter is marked on the ground, with a triangular marker placed at its center. The archer's task is to lob arrows into this ground-target from distances up to 180 meter distances.
- Flight Archery -- In flight archery the aim is to shoot the greatest distance; accuracy or penetrating power are not relevant. Flight archery relies on the finest in performance equipment, optimized for the single purpose of greater range.
- Sky Archery -- An event very similar to the sport of biathlon except a recurve bow is used in place of a gun. The athletes ski around a cross-country track and there are two stances in which the athlete must shoot the targets: kneeling and standing. During competition the skis must not be removed at any time. The athlete may unfasten the ski when shooting in the kneeling position but must keep the foot in contact with the ski. The shooting distance is 18 meters and the targets 16 cm in diameter. In certain events, for every missed target, the athlete must ski one penalty loop. The loop is 150 meters long.

Other Terms:

- ATA/AMO standards – The Archery Trade Association, formerly known as the Archery Manufacturer and Merchant's Organization, (AMO) is a non-profit trade organization for the promotion of archery and bowhunting through sale of equipment, projects in archery education, the standardization of equipment measures, and the sponsorship of events. It includes manufacturers, distributors, retailers, and other companies associated with these industries.
- FITA -- The international governing body of archery is the International Archery Federation (FITA). Founded on the 4th of September, 1931 in Lwow, Poland, by seven countries (France, Czech Republic, Sweden, Poland, the United States, Hungary, and Italy), FITA serves to promote and regulate archery world-wide through its more than 140 Member Associations (National Federations or Associations) and in conformity with the Olympic principles. It aims at framing and interpreting the FITA Rules and arranging for the organization of World Championships and other international competitions.
- ASA -- Since its inception in 1993 the Archery Shooters Association, headquartered in Kennesaw, Georgia, has hosted tens of thousands of amateur and professional archers from across the United States in national ASA Pro/Am and ASA Federation competitions.
- USA Archery – The governing body for Olympic archery in the USA.

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Web Sites:

www.texasarcheryacademy.org

www.lancasterarchery.com Largest archery supplier in USA

www.texasfieldarchery.org

www.usarchery.org