

Kenosha County 4-H
Archery Project

PROJECT HANDBOOK

Archery Range Rules

1. Know and obey all range commands
2. Keep your arrows in your quiver until you are told to shoot.
3. Always wear your arm guard and finger tab.
4. Only use the arrows the instructor gave you. Remember what they look like.
5. Always keep your arrows pointed down or towards the target. Shoot only at the target.
6. If you drop an arrow, leave it on the ground until you are told to get your arrows.
7. Always walk at the archery range.

Archery Range Whistle Commands

Two Blasts -- "Archers to the shooting line."

One Blast -- "Begin shooting."

Three Blasts -- "Walk forward and get your arrows."

Four or More Blasts (series of blasts) -- "STOP SHOOTING immediately and put your arrows in your quiver."

Archery Range Procedures

Stand behind the waiting line until you hear 2 whistles or "Archers to the shooting line." Pick up your bow and straddle the shooting line.

Keep your arrows in your quiver until you hear 1 whistle or "Begin shooting."

After you have shot all of your arrows, step back from the shooting line, set your bow on the rack, and wait behind the waiting line.

After everyone is done shooting and behind the waiting line, the instructor will blow the whistle 3 times. "Walk forward to get your arrows ... Stop at the target line."

Pulling Your Arrows

Two archers at a time, from each target, may go forward from the target line to pull their arrows.

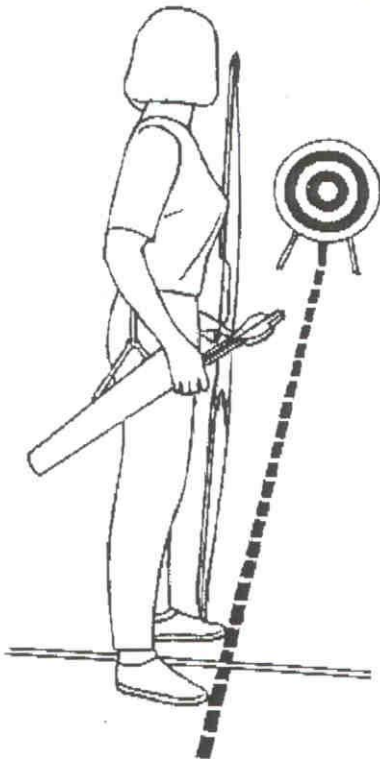
Stand to the side of the target and make sure that no one is standing behind your arrows.

Pull your arrows out one at a time, and put them in your quiver.

After you have pulled all of your arrows, return to the waiting line.

Steps of Shooting

"9 STEPS TO THE 10-RING"



1. STANCE

Place one foot on each side of the shooting line. Find a comfortable balanced stance with your feet shoulder width apart.

Stand straight and tall, with your head up and your shoulders down and relaxed.

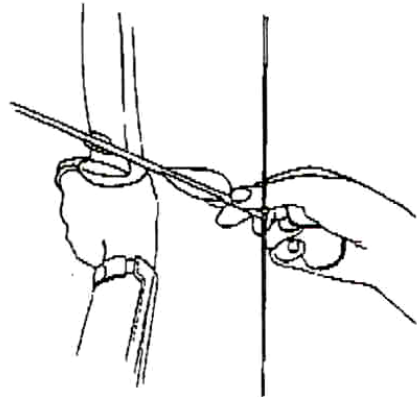
Archers shooting in a wheelchair should place one wheel on each side of the line.

2. Nock

Place the arrow on the arrow rest, holding the arrow close to the nock.

Keep the index fletching pointing away from the bow.

Snap the nock of the arrow onto the bowstring under the nock locator.

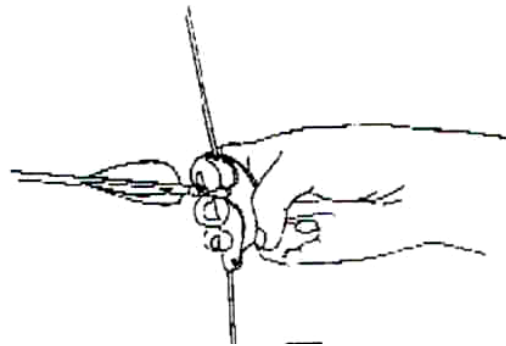
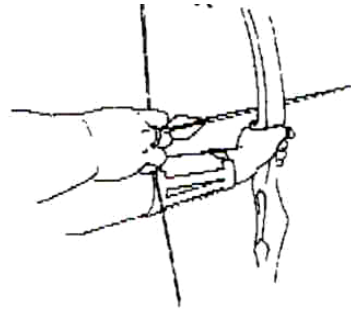


3. SET

Set your bow hand on the grip using only the web and the meaty part of your thumb.

Your bow hand should stay relaxed throughout the entire shot.

Set the first groove of your first 3 fingers around the bowstring creating a hook. Keep the back of your drawing hand relaxed.



4. PRE-DRAW

Raise your bow arm towards the target, while keeping your shoulder down.

Look at the target through the sight ring, and line up the bow string with the center of the bow.

Rotate your bow arm elbow under.

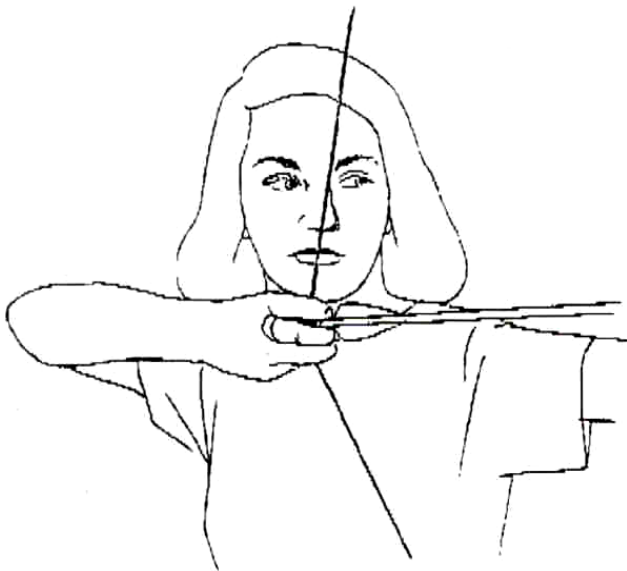
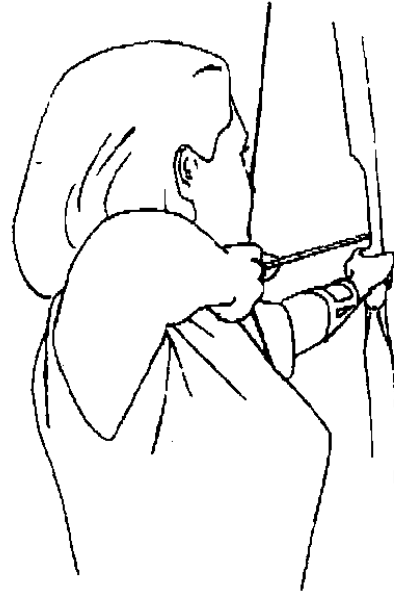
The elbow of your drawing arm should be near the level of your nose.

5. DRAW

Draw the bow back by rotating your draw arm shoulder around until your elbow is directly behind the arrow.

Continue looking at the target through the sight ring, and keep the string lined up with the center of the bow as you draw.

Maintain a continuous drawing motion throughout the shot.



6. ANCHOR

Draw the string to the front of your chin, placing the knuckle of your index finger directly under the side of your jaw.

The string and string hand should be felt firmly against your jaw bone.

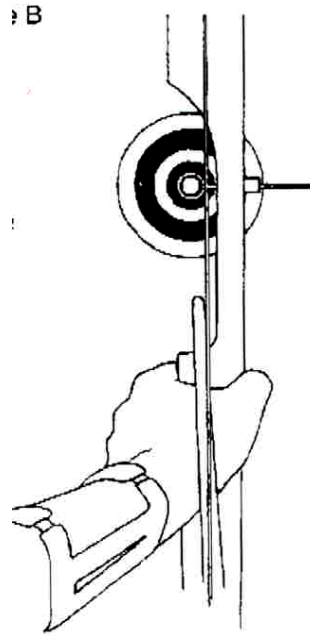
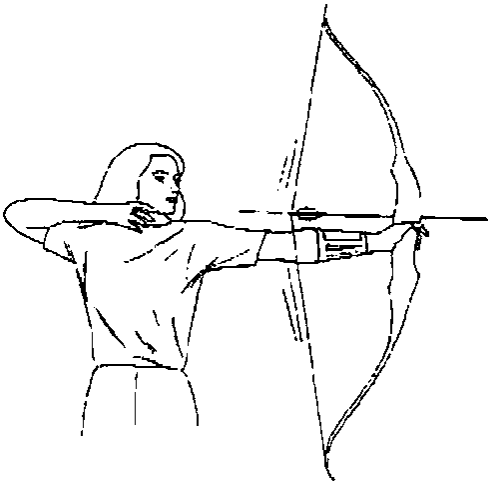
Continue to draw the bow smoothly, without stopping.

7. AIM

Focus your eyes and your concentration on the center of the target, looking through the sight ring.

Keep the string lined up with the center of the bow.

Continue your smooth gradual draw.



8. RELEASE

Simply release all of the tension in your fingers and drawing hand, all at once, while you continue the drawing motion without stopping.

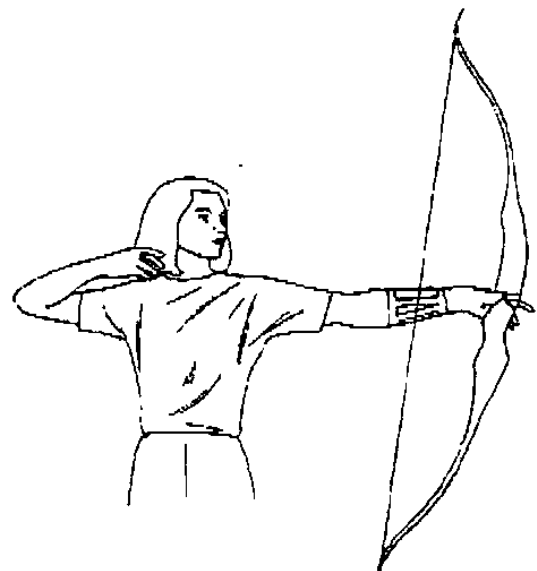
9. FOLLOW-THROUGH

Drawing hand continues back inside neck with fingers relaxed, ending up near shoulder.

Bow arm continues extension towards the target for a recurve, and maintains its position for a compound shooter.

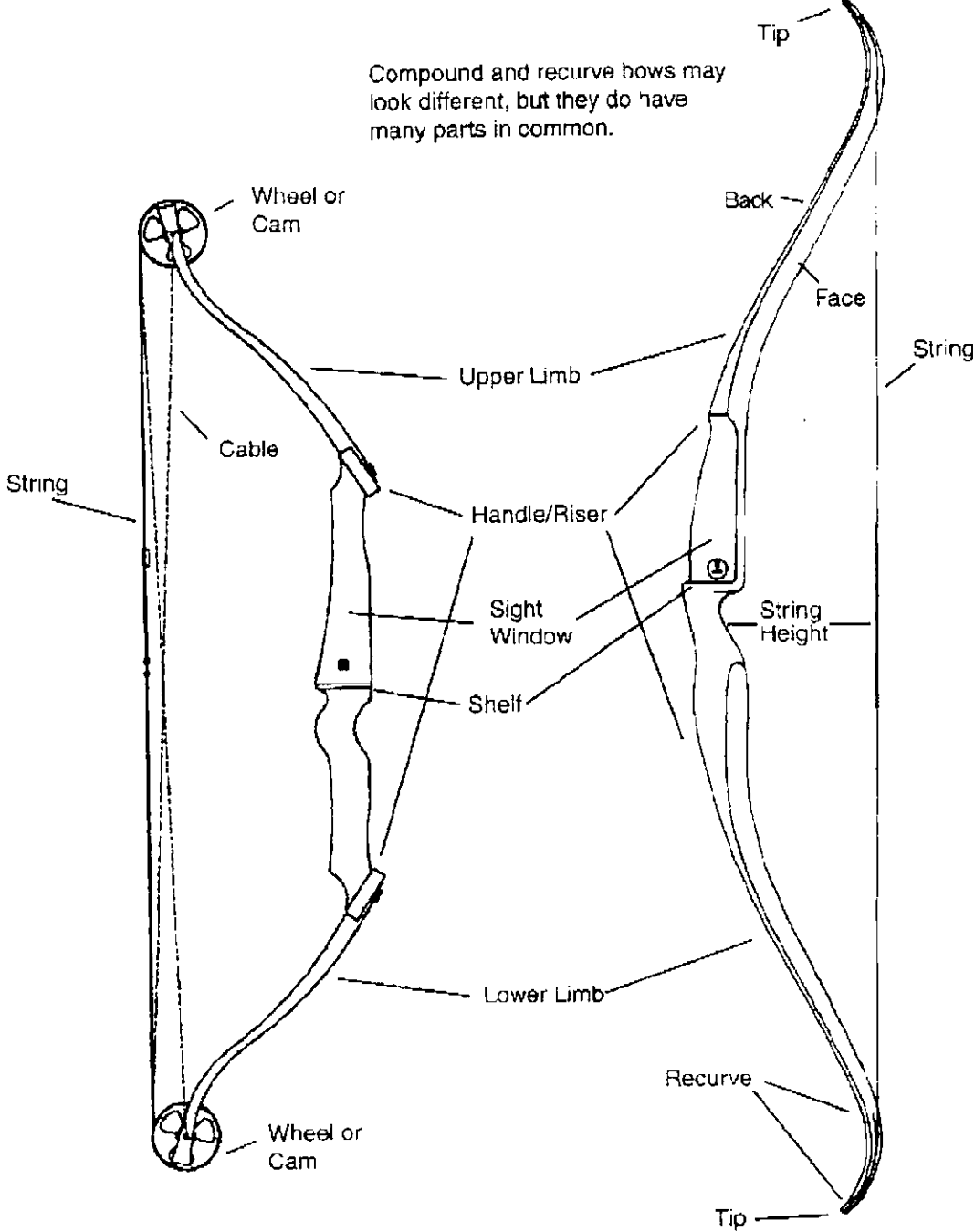
Continue focusing on the target.

Maintain your follow-through until the arrow hits the target, or until your fingers touch your back shoulder for a compound shooter.



Equipment

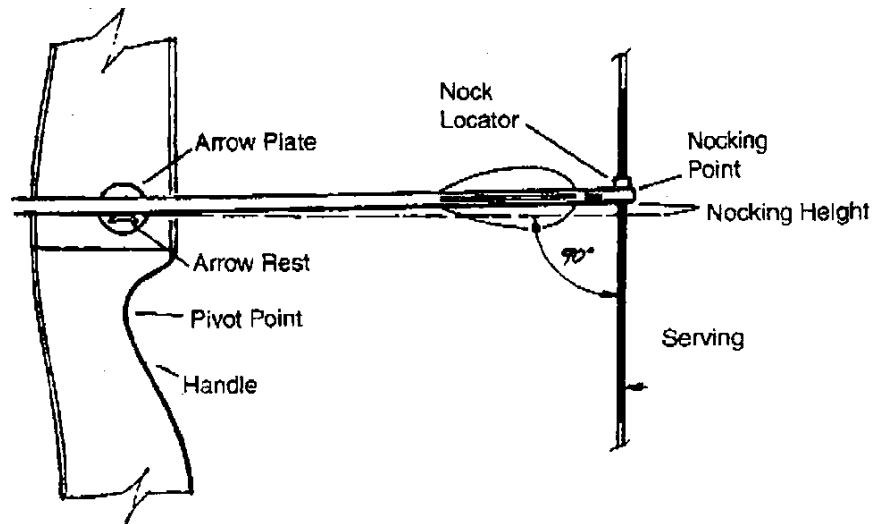
Compound and recurve bows may look different, but they do have many parts in common.



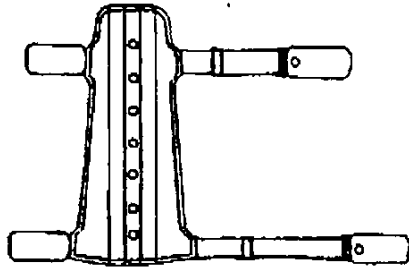
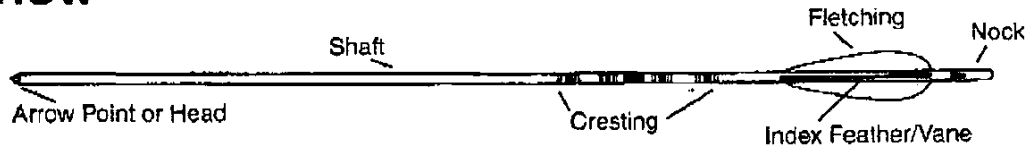
COMPOUND BOW

RECURVE BOW

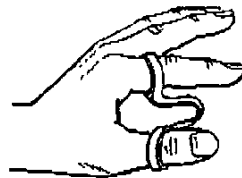
CLOSE UP OF BOW PARTS



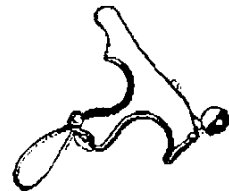
ARROW



Arm Guard



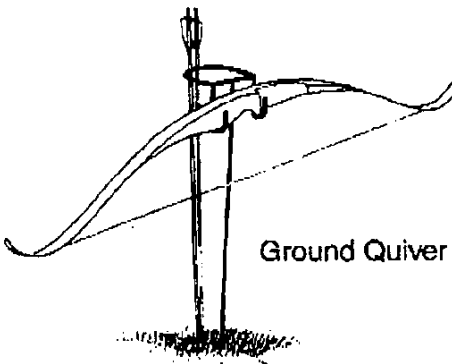
Finger Sling



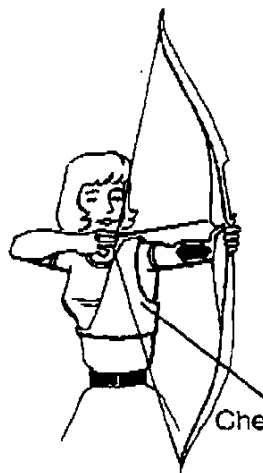
Release Aid



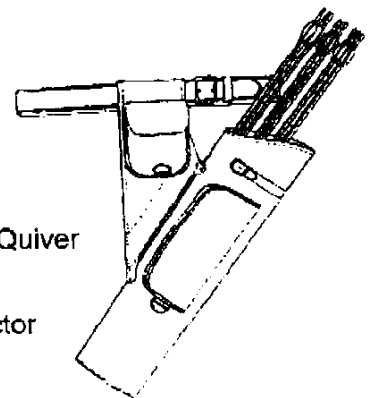
Finger Tab



Ground Quiver



Chest Protector



Side Quiver

ARCHERY TERMS

AIM: Any method used to point the arrow in the direction you want it to go.

ANCHOR: Consistent placement of the drawing hand to a position on the face mouth or jaw.

ARM GUARD: A piece of stiff material, usually leather, used to protect the bow arm from the slap of the bowstring upon release. It is worn on the inside of the forearm of the bow arm.

ARROW REST: The horizontal projection on the bow upon which the arrow lies.

BACK: The side of the bow away from the bow string.

BAREBOW: A style of shooting -- without a bow sight.

BLUNT TIP: An arrow point usually made of rubber and used in some archery activities.

BOW: A device made of a piece of flexible material with a string connecting the two ends, used to propel an arrow.

BOW SIGHT: A mechanical device placed on the bow which the archer uses for aiming at the target.

BOW SQUARE: A T-shaped device used to measure brace height and for placing nock locators.

BOW STRINGER: A device used to string a bow safely.

BRACE HEIGHT: The distance from the pivot point to the string when a bow is strung. (Also called string height and once called the fistmele.)

BROADHEAD: A sharp, razor bladed arrow point used for hunting.

BUTT: Any backstop to which a target face is attached.

CANT: To tilt the bow left or right while at full draw.

CAST: The ability of a bow to propel an arrow a given distance.

CENTER SERVING: The material in the center of the bow string where the arrow is nocked. Protects the string from wear.

COMPOSITE BOW: A bow made of several materials.

COMPOUND BOW: A hand-held, hand-drawn bow that uses a pair of cables and wheels to store more energy.

CREST: The colored bands around the shaft of the arrow which aid in its identification.

DRAW: To pull the bow string back. Also the distance the bow string is pulled back.

DRAW WEIGHT: The weight, measured in pounds, used to bring the bow to full draw. Also the weight on a bow, using 28 inches to front of bow as the standard draw length.

END: A set number of arrows that are shot before going to the target to score and retrieve them.

FINGER TAB: A flat piece of smooth materials which protects the fingers of the branding hand.

FINGER SLING: A small strap that attaches to the thumb and index finger of the bow hand.

FLETCHING-SLETCH: The feathers, plastic vanes or other devices attached to the arrow shaft which stabilizes the flight of the arrow.

FLU-FLU: An arrow with large untrimmed feathers which restrict the distance it will travel; used for shooting aerial targets.

FOLLOW-THROUGH: Maintaining the motion of the upper body muscles after releasing the string.

FULL DRAW: The position of the archer when the bowstring has been drawn to the anchor point.

GROUP: To shoot arrows in a pattern. Or the pattern of the arrows in the target.

LAMINATED BOW: A bow made of several layers of material glued together, usually two layers of fiberglass and a hardwood core.

LET DOWN: Returning from full draw to the undrawn position with control and not releasing the string.

LIMB: Upper or lower part of the bow that bends when the string is drawn back. The part of the bow where the energy is stored.

NOCK: To place the arrow on the string. Also the attachment to the rear end of an arrow which is placed on the bow string and holds the arrow on the string.

NOCK LOCATOR: The mark or device that indicates where the arrow is to be placed on the string.

RECURVE BOW: A bow with limbs that bend away from the archer when the bow is held in the shooting position.

SERVING: The wrapping of material around the loops and center of the bow string to protect it from wear.

SPINE: The stiffness or amount an arrow bends, determined by hanging a 2-lb weight from the center of the arrow and measuring the bend.

STABILIZER: A rod attached to the handle riser. Usually has a weight on the end of the rod. Absorbs the vibrations of the bow when the string is released.

TOXOPHILITE: A lover of the bow; an archer.

TUNE: To adjust the variables in the bow and arrow system to achieve the best arrow flight and arrow groups.

VANE: Any fletching made of a material other than feathers, usually plastic.

WINDAGE: The left-right adjustment of the bow sight.

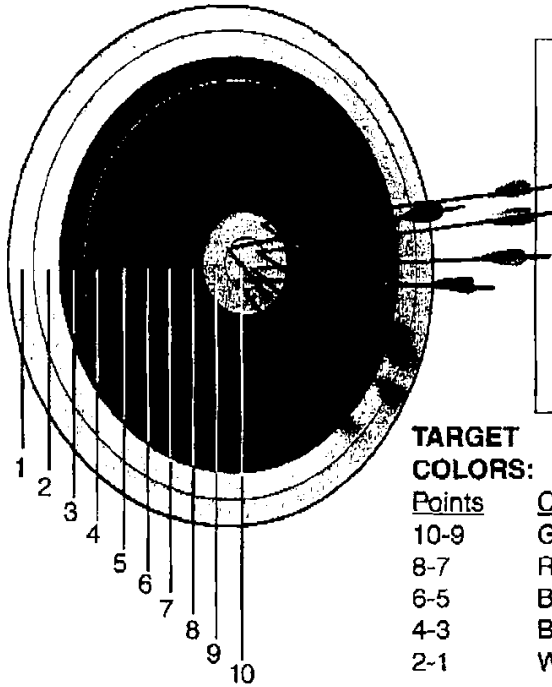
SCORING A TARGET

There is a wide number of variations in targets depending upon the particular tournament or game being played. However, the fundamentals of scoring are the same.

Each ring of the target is scored according to the official rules of the competition. An arrow that touches the line of a higher-scoring ring is scored at that higher score.

Scores are written down on special score cards in descending value. Misses are also recorded to the competition judge can easily see that all arrows have been accounted for.

Here is a sample of how a target archery score card is filled out. On the next page are some score cards with which you can practise keeping score. Official cards are available through the NAA and NFAA.



TARGET COLORS:

| Points | Color |
|--------|-------|
| 10-9 | Gold |
| 8-7 | Red |
| 6-5 | Blue |
| 4-3 | Black |
| 2-1 | White |

"how do I score for NAA?"

Shoot 3 arrows for each "end" and fill out the score card (write down higher scores first) as you go until you've shot all your ends. Add your End Scores together to make your Running Score.....like this:

| END | ARROW SCORE | | | HITS | END SCORE | RUNNING SCORE |
|-----|-------------|---|---|------|-----------|---------------|
| 1 | 8 | 8 | 6 | 3 | 22 | 22 |
| 2 | 10 | 7 | 4 | 3 | 21 | 43 |
| 3 | 10 | 5 | M | 2 | 15 | 58 |

"MISS" ...and so on until finished!



TARGET COLORS

Black & White:

| Points | Color |
|--------|--------------|
| 5 | Black Center |
| 4 | White |
| 3 | Black |

"how do I score for NFAA?"

Shoot 4 arrows for each of the targets on the course. Fill out the number of hits per target and add their scores togetherlike this:

| HITS | SCORE | HITS | SCORE |
|------|-------|------|-------|
| 1 | 4 20 | 15 | 3 20 |
| 2 | 4 18 | 16 | 4 12 |
| 3 | 4 20 | 17 | 4 20 |
| 4 | 3 15 | 18 | 3 9 |

...and so on until finished!

Name: _____

Division: _____

Address: _____

Age Group: _____

City: _____

State: _____

Zip: _____

Boy: _____

Girl: _____

NAA

| ARROW SCORE | | | HITS | END SCORE | RUNNING SCORE |
|-------------|--|--|------|-----------|---------------|
| | | | | | |
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| ARROW SCORE | | | HITS | END SCORE | RUNNING SCORE |
|-------------|--|--|------|-----------|---------------|
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NFAA

| First 28 F H A I | | | | Second 28 F H A I | | | | Third 28 F H A I | | | |
|------------------|-------|------|-------|-------------------|-------|------|-------|------------------|-------|------|-------|
| HITS | SCORE | HITS | SCORE | HITS | SCORE | HITS | SCORE | HITS | SCORE | HITS | SCORE |
| 1 | | 15 | | 1 | | 15 | | 1 | | 15 | |
| 2 | | 16 | | 2 | | 16 | | 2 | | 16 | |
| 3 | | 17 | | 3 | | 17 | | 3 | | 17 | |
| 4 | | 18 | | 4 | | 18 | | 4 | | 18 | |
| 5 | | 19 | | 5 | | 19 | | 5 | | 19 | |
| 6 | | 20 | | 6 | | 20 | | 6 | | 20 | |
| 7 | | 21 | | 7 | | 21 | | 7 | | 21 | |
| 8 | | 22 | | 8 | | 22 | | 8 | | 22 | |
| 9 | | 23 | | 9 | | 23 | | 9 | | 23 | |
| 10 | | 24 | | 10 | | 24 | | 10 | | 24 | |
| 11 | | 25 | | 11 | | 25 | | 11 | | 25 | |
| 12 | | 26 | | 12 | | 26 | | 12 | | 26 | |
| 13 | | 27 | | 13 | | 27 | | 13 | | 27 | |
| 14 | | 28 | | 14 | | 28 | | 14 | | 28 | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| First 28 Total | | | | Second 28 Total | | | | Third 28 Total | | | |