

Archery Level 1 Training Outline

State Workshop Training Outline

SESSION 1 – RANGE (4HR.)

HAVE RANGE SET-UP BEFORE STUDENTS ARRIVE, POST RANGE RULES, HAVE EQUIPMENT READY, BLANK TARGET

I. ARCHERY ESSENTIALS: SAFETY ORIENTATION CLASS

- A. **LIFE SKILL TO BE LEARNED:** Personal Safety
- B. Pair up pupil coach and determine eye dominance outside of range (safety glasses recommended but not required in archery yet. Some states require them.)
- C. Remove jewelry; tie back long hair, etc.
- D. Enter Range: Range Officer (**ORANGE CAP & ORANGE VETS**)
- E. Hand out equipment (except for bows)
 1. Arm Guard, Finger Tab or Glove
 2. Quiver
 3. Measure archers for arrows (3 **ARROWS** in Quiver)
- F. Range Officer explains **RANGE PROCEDURES & WHISTLE COMMANDS** as a group on waiting line
- G. Demonstration (group on waiting line)
 1. Shooting Arrow
 2. Dropping Arrow
 3. Retrieving Arrow
 4. Pulling Arrow
 5. Lost Arrow (Arrow top of target butt)
 6. Carrying Arrows (either in quiver or by tips with fletching behind shoulder)
- H. **SAFETY** Reminders
 1. Keep your arrows in your quiver until you are told to shoot
 2. Always keep your arrows pointed down or towards the target
 3. Only shoot target in front of you
 4. Only release a drawn bow with an arrow nocked on the string
- I. Select Bow
 1. Flight 1 - Select Bows
 - Archers shoot first end of 3 arrows (1st arrow with instructor)
 - Pull arrows (range officer last to walk back)
 - Flight 2 - Select Bows, Shoot, Pull Arrows
 - Etc.
- J. 4-H Lesson Plans pp. 13-15, 20-22, 29-30, 35; 4-H Fact Sheet 3 (pp. 84-87)

II. DEBRIEF: Explain Each Rule or Procedure as the Archer Needs to Know It

III. THE TEN COMMANDMENTS OF ARCHERY SAFETY

- A. 4-H Lesson Plans pp. 11, 17-18; Handout: The Ten Commandments of Archery Safety (p. 5)

IV. ARCHERY RANGE SAFETY: Posted Poster

- A. Range Rules
- B. Range Whistle Commands
- C. Range Procedures
- D. Pulling Arrows
- E. 4-H Lesson Plans pp. 10-11, 17-18; Handout: Archery Range Rules (p. 90)

V. SHOOT

VI. DEBRIEF

VII. RANGE LAYOUT

- A. **LIFE SKILLS TO BE LEARNED:** Personal Safety, Planning/Organizing, Critical Thinking
- B. Outdoor Range
 - 1. Location of Targets
 - 2. Target line
 - 3. Shooting Line
 - 4. Waiting Line
 - 5. Safety Areas
 - 6. Safety Signs
 - 7. Controlled Access/Spectator Area
- C. Indoor Range
 - Location of Targets
 - Safety Curtain
 - Target Line
 - Shooting Line
 - Waiting line
 - Safety Areas
 - Locked Doors
 - Safety Signs
 - Controlled Access/Spectator Area
- D. Field Layout
 - Footpaths
 - Shooting Line
 - Shooting Lane
 - Safety Lanes
 - Safety Signs
 - Controlled Access
- E. Handout: Outdoor & Indoor Range Layout (pp. 91-94)

VIII. STEPS OF SHOOTING

- A. **LIFE SKILLS TO BE LEARNED:** Personal Safety, Self-Discipline, Self-Responsibility, Goal Setting
- B. **Eleven** Steps to 10 Ring
 - 1. Stance & Posture
 - 2. Place one foot on each side of the shooting line.
 - 3. Find a comfortable balanced stance with feet shoulder width apart.
 - 4. Stand straight, keeping ribs and chest down, and bottom tucked under. Keep shoulders down and relaxed.

- C. Nock Arrow
 1. Place arrow on arrow rest, holding arrow close to nock.
 2. Keep index fletching pointing away from bow.
 3. Snap nock of arrow onto bowstring under nock locator
- D. Set Hook
 1. Set first groove of first three fingers around the bowstring under the arrow nock creating a hook.
 2. Keep back of drawing hand flat and relaxed.
 3. The thumb and pinkie should be tucked away
- E. Set Bow-Hand Grip
 1. Position the bow-hand on the bow grip by making a **Y** with the fingers and thumb.
 2. The knuckles of the fingers should be positioned at a 45-degree angle and the thumb pointed towards the target.
- F. Raise & Extend Bow
 1. Raise bow arm and string hand together towards the target, while keeping shoulder down and aligning chest perpendicular to target.
 2. Drawing arm should be near level of nose.
 3. Bow arm should be rotated so it is straight up and down.
- G. Draw
 1. Draw the string back in a straight line from raising and extending bow (step 5) to the side of the face anchor point.
 2. Set drawing arm shoulder back and down until elbow is directly behind or a bit higher than arrow.
- H. Anchor
 1. Draw string to side of face placing tip of first finger on corner of mouth.
 2. Keep hand snug against face folding thumb down and little finger towards palm.
- I. Aim
 1. Look at target or through sight, keeping focus on form.
 2. Focus on the point of aim if not using sight.
 3. If using sight, then focus on the point you want to hit.
 4. Keep string lined up with center of bow.
- J. Release
 1. Release all tension in fingers and drawing hand, all at once, while continuing to draw bowstring back without stopping.
 2. Continue bow arm towards target.
- K. Continue focusing on target. Follow Through
 1. The drawing hand should continue back beside neck with fingers relaxed and ending up behind the ear.
 2. Keep bow arm up
 3. Maintain follow through until arrow hits target.
- L. Relax & Evaluate
 1. Relax after each shot.
 2. Evaluate the feeling of each shot to determine if you accomplished the goal you were trying to achieve.
 3. If not, you should refocus your efforts on the feeling of the proper shot and try again.
 - 4-H Lesson Plans pp. 2-3, 24-29, 31-35

IX. CALLING OUT STEPS & SHOOTING

- A. Mimetics without Tackle
- B. Mimetics with Tackle
- C. Shoot

X. DEBRIEF

XI. HISTORY OF ARCHERY

- A. **LIFE SKILL TO BE LEARNED:** Responsible Citizenship
- B. Hunters and warriors since prehistoric times
- C. Projectile points have been found from 5-6 thousand years ago
- D. The Egyptians developed the bow from plant fibers
- E. The Turks developed the laminated recurve bow
- F. The NAA was founded in 1879 by Maurice Thompson; Will Thompson won the first sponsored tournament that year
- G. Dr. Saxton Pope and Art Young were great bowhunters
- H. 1931- The Federation Internationals de Tir a l'Arc (FITA) was formed
- I. 1939 - National Field Archery Association formed
- J. 1957- Pope and Young Club formed
- K. 1961 -Professional Archers' Association formed
- L. 1966- H. W. Allen invented the compound bow
- M. 1984- International Bowhunting Organization formed
- N. 4-H Lesson Plans pp. 10, 16

XII. SHOOT

XIII. DEBRIEF

XIV. BOW & ARROW PARTS

- A. **LIFE SKILL TO BE LEARNED:** Personal Safety
- B. Bow
 - 1. Tip
 - 2. String Notch
 - 3. Upper Limb
 - 4. Face
 - 5. Back
 - 6. Window
 - 7. Shelf
 - 8. Arrow Rest
 - 9. String Height (Brace Height)
 - 10. Grip (Pivot Point)
 - 11. Lower Limb
 - 12. Recurve
 - 13. String
 - 14. Nock Locator
 - 15. Serving
 - 16. Cable
 - 17. Wheel or Cam

- C. Arrow
 - 1. Point
 - 2. Shaft
 - 3. Crest
 - 4. Fletch or Vane
 - 5. Index Fletch or Vane
 - 6. Nock
- D. 4-H Lesson Plans pp. 11-13, 18-19, 95-97

XV. ARCHERY ACCESSORIES

- A. **LIFE SKILLS TO BE LEARNED:** Personal Safety
- B. Arm Guard
- C. Finger Protection
 - 1. Tab
 - 2. Glove
 - 3. Rubber Finger Guard
- D. Quiver
 - 1. Side Quiver
 - 2. Ground Quiver
- E. Miscellaneous
 - 1. Silencers
 - 2. Sights
 - 3. Stabilizer
 - 4. Clicker
 - 5. Kisser Button
 - 6. Mechanical Release
 - 7. Torque Compensator
 - 8. Spirit Level
 - 9. Peep Site Eliminator
- F. 4-H Lesson Plans pp. 13, 19

XVI. SHOOT: INSTINCTIVE SHOOTING (High Anchor & Point of Aim)

- A. **LIFE SKILLS TO BE LEARNED:** Self Discipline, Self-Responsibility, Self-Motivation, Leadership, Communication, Goal Setting, Healthy Lifestyle Choices b.) Shoot at FITA Target Face
- B. Shoot at Balloons
- C. 4-H Lesson Plans pp. 37-42

XVII. DEBRIEF

- A. Have students leave range on a **HIGH**
 - 1. Example: Give all participants a **BLUE** ribbon for being **FIRST CLASS** students in the session

SESSION 2 – RANGE (4HRS.)

I. STRINGING A BOW

- A. **LIFE SKILLS TO BE LEARNED:** Personal Safety, Concern for Others
- B. Cord Stringer
- C. Wall Stringer
- D. Box Stringer
- E. Do Not Use Push-Pull Method and Step -Through Method
- F. Practice stringing recurve bow using cord stringer
- G. 4-H Lesson Plans pp. 14, 20; 4-H Fact Sheet 8 (p. 98)

II. SHOOT USING SIGHTS

- A. **LIFE SKILLS TO BE LEARNED:** Decision Making, Learning to Learn, Self-Discipline, Self-Responsibility, Self-Motivation, Leadership, Communication, Goal Setting
- B. Make a Pin Sight
 - 1. Put duct tape and/or weather stripping foam on back of bow at the sight window
 - 2. Use dressmaker's enamel head pins (white, yellow, orange, or red) for sight
 - 3. Stick pin under tape or in foam, leaving enamel pin in the sight window
 - Place pin about the same distance above the arrow rest as the eye is above the anchor point
 - The head of the pin should stick out the sight window about as far as the edge of the arrow is from the dominant eye (about 3/4 inches)
- C. Shooting with Sights
 - 1. Use low anchor point below the chin. This raises the rear sight (the eye), giving the shooter more room in the sight window to adjust the front sight
 - 2. Shoot 3 arrows to establish point of impact or grouping
 - Use consistent aiming point to anchor
 - Chase group center with pin
 - Low arrow: lower pin
 - High arrow: raise pin
 - Left arrow: move pin left
 - Right arrow: move pin right
 - Repeat trial and error method until arrows hit where aimed d.) 4-H Lesson Plans pp. 43-48

III. DEBRIEF

IV. SHOOT USING COMPOUND BOWS

- A. **LIFE SKILLS TO BE LEARNED:** Wise Use of Resources, Goal Setting, Self-Motivation, Self-Discipline, Self-Responsibility, Leadership, Communication
- B. Definition: Any bow that uses pulleys or cams is deemed a compound
- C. Basic Parts
 - 1. Riser or Handle
 - 2. Limbs
 - 3. Wheels or Cams
 - 4. Cables
 - 5. String

D. Advantages

1. Mechanical
 - Relaxation at full draw
 - Ease of holding anchor
 - Redistributing draw force
2. Increased Energy Transfer
 - Greater energy recovery
 - Higher arrow speed
 - Reduced arrow stress

E. Disadvantages

1. More moving parts
 - Noise
 - Complex tuning
 - Possible damage

F. Types

1. Wheels
2. Single Cam
3. Dual Cam
4. Universal Draw-Length

G. Shoot Compound Bow

H. 4-H Lesson Plans pp. 49-54, 95

V. DEBRIEF

VI. TEACHING TECHNIQUES

A. **LIFE SKILLS TO BE LEARNED:** Leadership, Communication, Cooperation, Nurturing Relationships, Self Esteem, Social Skills

B. Flexible Gumby Technique

1. Ask for archer's permission, then mold archer into the proper form as you would a flexible "Gumby"
2. Use hands-on to get the body into the proper "T" position
3. Never take a bow out of a child's hand to show them how it is done

C. **NON-THREATENING** Hands-On Instruction

1. Use an assistant or child you know to demonstrate how you will handle them
2. Tell archer what you are going to do
3. Ask permission before touching
4. When touching them use:
 - Heel of your hand: hold your hands flat and firm with your fingers straight out and your thumbs on the side
 - Have them move their feet to touch your feet in proper position
 - Back of hand with hand relaxed

D. **OREO** Technique: **PUPIL COACH** Relationship

1. **COOKIE:** Find something the archer is doing right and compliment. This reinforces correct behavior and opens them up to your ideas for improvement. "Your release looks real smooth."
2. **CREAM:** Give the archer positive instruction on how to perform a skill correctly without telling them they are doing something wrong. "Keep your bow arm up until the arrow hits the target."
3. **COOKIE:** Follow-up with a compliment specific to the skill you have just taught them. "Your bow arm looks much more solid now. Good Shot."

E. **COACHING STYLES**

1. **COMMAND** - Coach makes all the decisions. Athlete's role is to listen, absorb, and comply.
2. **SUBMISSIVE**- Coach makes as few decisions as possible. Allowing archer to make most decisions. For example, throw out the balls and tell the athletes to have a good time.
3. **COOPERATIVE**- Coach shares decision making with athlete. They recognize their responsibility to provide leadership and guide your people toward achieving their goals. Spend most time with this style.

F. **COACHING POSITIONS**

1. **FRONT** - Look for:
 - Proper stance: feet shoulder width apart, hips aligned with feet
 - Straight body alignment
 - Shoulders level and relaxed
 - Relaxed bow hand
 - String hand flat and relaxed.
 - Drawing arm and elbow even or slightly elevated
2. **BACK**- Look for:
 - Correct arrow length for archer
 - Shoulders even and level across
 - Head straight over body
3. **Elbow**- Look for:
 - Posture- bottom tucked under, ribs and chest down
 - Bow straight up and down
 - Head straight
 - Body stable
 - Proper release motion
4. **Far back**- look for
 - Whole archer
 - Complete shot sequence

G. 4-H Fact Sheet4 (p. 89)

VII. SHOOT

- A. Shooters pair up and practice Oreo Technique and Coaching Positions
- B. Developing Archery Skills: What are shooters doing wrong? Form Faults/Effect on Shot or Arrow/Correction

VIII. DEBRIEF

IX. ARCHERY GAMES

- A. **LIFE SKILLS TO BE LEARNED:** Healthy Lifestyle Choices, Stress Management, Self-Motivation, Teamwork, Social Skills, Contributing to Group Effort, Sharing, Cooperation
- B. Relay: 2 teams using equipment and FITA Target
- C. Balloons
- D. Other
 - 1. Skeet
 - 2. Clout
 - 3. Flight
 - 4. Tick Tack Toe
 - 5. Scavenger Hunt
 - 6. Wand

X. 4-H LESSON PLANS PP. 76-81, 143-148

XI. DEBRIEF

XII. DEMONSTRATION: WHAT IS WRONG WITH SHOOTING THIS?

- A. Dollar bill where you only see the President's face
- B. Firing squad where people shoot center of target
- C. Animal target

XIII. DEBRIEF

SESSION 3 – CLASSROOM (4HRS.)

I. PROPER SUPERVISION

- A. **LIFE SKILLS TO BE LEARNED:** Concern for Others, Personal Safety, Managing Feelings, Nurturing Relationships
- B. Instructor immediately accessible and able to oversee the entire program
- C. Instructor alert to dangerous conditions and takes preventative action
- D. Qualified supervision is required while archers are retrieving arrows as well as while shooting
- E. Number of archers an instructor can manage depends on the experience of the instructor, the age and maturity of the archers, and the abilities or disabilities of the archers
- F. Developmentally disabled children may need one instructor per archer
- G. **Number and age of children per instructor: (not including range officer)**
 - 1. 6-7 years old: 2 or 3 children per instructor
 - 2. 8-9 years old: 4 to 6 children per instructor
 - 3. 10-11 years old: 6 to 10 children per instructor
 - 4. 12-15 years old: up to 10 children per instructor
 - 5. 15 years and older: up to 10 children per instructor

II. TEACHING CHILDREN WITH SPECIAL NEEDS

- A. **LIFE SKILLS TO BE LEARNED:** Accepting Differences, Concern for Others, Managing Feelings, Personal Safety
- B. Identify children's abilities and disabilities and plan to accommodate
 - 1. May require additional class time or need space for wheelchair, or need an interpreter who knows sign language
 - 2. Plan for needs
- C. **TIPS**
 - 1. Identify the children's abilities (moving their arms, gripping and holding a bow, pulling a string back) rather than their disabilities
 - 2. Find out what they can do and assist them where they need help
 - 3. Use adaptive aids
 - 4. Talk to children, parents, or caregivers to understand the children's abilities and what they might need
 - 5. Patience plus persistence equals progress for all children
 - 6. Be creative, modify equipment and procedures to allow children to reach their highest level of performance
 - 7. Encourage children to do things independently using as little adaptive equipment as possible
 - 8. Provide positive feedback whenever something goes right, regardless of the level of success
 - 9. Specific archery guidelines
 - a) Wheelchair wheels straddle the line
 - b) Keep arrows in some form of quiver
 - c) The archer may have someone else retrieve and score arrows
 - d) Select bows short enough and light weight enough to draw back
 - e) Keep comments positive to reinforce the experience
 - f) Reference: *Teaching Shooting Sports to Persons with Disabilities* by Robin Taylor, Dennis Carpenter, at www.amazon.com

III. DEALING WITH PROBLEM ARCHERS, PARENTS AND OTHER ADULTS

- A. **LIFE SKILLS TO BE LEARNED:** Problem Solving, Conflict Resolution, Planning/Organizing, Stress Management
- B. Archer **Not** Following Rules and Procedures
 - 1. Remind the entire group of the rules or procedures. Don't single out individual now.
 - 2. Walk up to the individual and remind them of the rule or procedure they are not following.
 - 3. Put the individual in charge of monitoring themselves and others for the rule they are not following.
 - 4. Tell the archer they will need to follow the rules or they will not be allowed to participate.
 - 5. Take the arrows from the archer's quiver. Tell them to sit down behind the waiting line and watch the rest of the group until they feel they understand and can follow the rules and procedures of the archery range.
 - 6. Talk to archer to determine the reason for their disruptive behavior.
 - 7. Talk to parents about archers' disruptive behavior.

- C. Parents and Adult Participants
 1. Have parents and adults in designated area
 2. Assign parents and adults duties and responsibilities

IV. BOW SET-UP AND TUNING

- A. **LIFE SKILLS TO BE LEARNED:** Personal Safety, Learning to Learn, Resiliency, Critical Thinking, Problem Solving, Sharing
- B. 4-H Lesson Plans pp. 67-75
- C. Reference: Easton Arrow Tuning and Maintenance Guide
<http://www.eastonarchery.com/software>

V. EQUIPMENT SELECTION AND CARE

- A. **LIFE SKILLS TO BE LEARNED:** Personal Safety, Sharing, Wise Use of Resources, Contribution to Group Effort
- B. Selection Depends on the Archery Program
 1. More time archers spend at the range, the better equipment you should provide
 - Laminated wood/fiberglass recurve bows, properly sized compound bows and aluminum or carbon arrows
 2. No matter which equipment you buy, the key to cost savings is in equipment care. Bows will last for years.
 - Hang unstrung bows vertically or horizontally with strings attached on wooden pegs (dowels) or nails wrapped with tape
 - Protect arrows and leather goods from mold
 - Equipment must be stored in a protected location
- C. Bow and Arrow Recommendations
 1. 15-20 lb. Recurve Bows (about the same length as the height of the archer using them, with a range of plus or minus 6 inches)
 2. White limbs recommended; black absorbs heat from the sun
 3. 5 left-hand bows to 10 right-hand bows
 4. Arrows: Aluminum, Carbon
 - Feathers more forgiving (for bows with a side rest)
 - Vanes: durability and use in wet conditions
 - Recommend using full length arrows
 5. Factors When Purchasing a Bow
 - Determine eye dominance
 - Draw weight
 - Draw length
 - What the child wants to do: target, hunting, 3-D.
 - Cost
 - How often is it going to be used
 - Size of the kid
 - Color
 - Weight of bow (physical)
 - Size of bow (bow length)
 - Grip of bow
 - Whether shooting a recurve or compound
 - Using fingers or release
 - If possible, try bow first
 6. Arrows designed to match bow

- Spine weight
- Fletching type and style
- Length

D. 4-H Lesson Plans pp. 11-13, 18-19

E. Handout: Equipment for Beginning Archery Club Program (p. 126)

VI. RECORD BOOKS

A. **LIFE SKILLS TO BE LEARNED:** Keeping Records, Goal Setting, Planning/Organizing

B. Examples of Records Books

C. Time to do records

VII. RECREATIONAL SHOOTING, ACHIEVEMENT, HIGHER ACHIEVEMENT

A. **LIFE SKILLS/Values TO BE LEARNED:** Honesty, Integrity, Sportsmanship, Respect, Confidence, Responsibility, Perseverance, Courtesy, Judgment, Humility, Planning, Goal setting

B. USA Archery, NFAA, IBO, FITA, JOAD, NADA

C. Local, State, National Matches

D. 4-H Lesson Plans pp. 152-158

VIII. SIGN CODE OF ETHICS

IX. WRITTEN TEST

X. COURSE EVALUATION

XI. PRACTICUM PREPARATION

SESSION 4 – RANGE (4HRS.)

I. PRACTICUM PREPARATION

A. Range Set-Up

B. Dry Run

II. PRACTICUM AND DEBRIEFING