



LEVEL 1 COMMUNITY COACH WORKBOOK



Name _____

Organisation _____

Date / /20



TABLE OF CONTENTS

| | |
|--|----|
| 0.1 ARCHERY AUSTRALIA COMMUNITY COACH ACCREDITATION..... | 4 |
| MODULE 1: SAFETY AND ETIQUETTE..... | 5 |
| 1.1 SAFETY..... | 5 |
| 1.2 PERSONAL SAFETY..... | 5 |
| 1.3 RANGE SAFETY..... | 5 |
| 1.4 EQUIPMENT SAFETY..... | 6 |
| 1.5 PERSONAL EQUIPMENT CHECKS..... | 7 |
| 1.6 ETIQUETTE..... | 7 |
| 1.7 RISK MANAGEMENT FAIR PLAY..... | 7 |
| 1.8 RISK MANAGEMENT ABUSE..... | 9 |
| MODULE 2: EQUIPMENT..... | 10 |
| 2.1 EYE DOMINANCE..... | 10 |
| 2.2 EYE DOMINANCE TEST..... | 10 |
| 2.3 RECURVE BOW..... | 11 |
| 2.4 COMPOUND BOW..... | 12 |
| 2.5 BOW SELECTION..... | 12 |
| 2.6 ARROWS..... | 13 |
| 2.6.1 ARROWS-SAFETY..... | 13 |
| 2.7 BOW SET UP..... | 14 |
| 2.7.1 STRINGING A BOW..... | 14 |
| 2.7.2 BOW SET UP BRACE HEIGHT..... | 15 |
| 2.7.3 BOW SET UP: ARROW RESTS..... | 15 |
| 2.7.4 BOW SET UP: NOCKING POINT..... | 16 |
| 2.8 EQUIPMENT REQUIREMENTS..... | 16 |
| MODULE 3: ARCHERY FUNDAMENTALS..... | 17 |
| 3.1. CORE ELEMENTS..... | 17 |
| 3.2 STRUCTURE..... | 17 |
| 3.2.1 STANCE..... | 17 |
| 3.2.2 POSTURE..... | 18 |
| 3.2.3 ALIGNMENT..... | 19 |
| 3.3 SHOT PREPARATION..... | 19 |
| 3.3.1 SHOT PREPARATION LOADING THE BOW..... | 20 |
| 3.3.2 SHOT PREPARATION - BOW HAND..... | 20 |
| 3.3.3 SHOT PREPARATION - DRAWING HAND PLACEMENT..... | 21 |
| 3.3.4 SHOT PREPARATION - PRE-DRAW..... | 21 |
| 3.3.5 SHOT PREPARATION - DRAWING THE BOW..... | 21 |
| 3.3.6 SHOT PREPARATION - ALIGNMENT..... | 22 |
| 3.3.7 SHOT PREPARATION - ANCHOR..... | 22 |

| | |
|--|----|
| 3.4 SHOT EXECUTION | 22 |
| 3.4.1 SHOT EXECUTION - HOLDING | 22 |
| 3.4.2 SHOT EXECUTION - AIMING..... | 23 |
| 3.4.3 SHOT EXECUTION – AIMING -STRING PICTURE | 23 |
| 3.4.4 SHOT EXECUTION - RELEASE | 24 |
| 3.4.5 SHOT EXECUTION - FOLLOW THROUGH..... | 25 |
| MODULE 4: PROBLEM SOLVING..... | 26 |
| 4.1 EARLY LEARNING CORRECTION AND STRATEGIES..... | 26 |
| 4.2 FAULT TYPES | 26 |
| 4.3 PHYSICAL – STRING HITTING ARM | 26 |
| 4.4 PHYSICAL – CROSS DOMINANCE | 27 |
| 4.5 STRUCTURAL – SHOULDER TOO HIGH/LOW OR OUT OF ALIGNMENT | 27 |
| 4.6 STRUCTURAL–LEANING BACK AT FULL DRAW | 27 |
| 4.7 TECHNICAL–PLUCKING THE STRING | 28 |
| 4.8 MOVING–HEAD ON RELEASE | 28 |
| 4.9 GENERAL COACHING POINTS..... | 28 |
| MODULE 5: SESSION PLAN..... | 29 |
| 5.1 PLANNING..... | 29 |
| 5.2 PREPARATION | 29 |
| 5.3 SAFETY BRIEFING | 29 |
| 5.4 GROUP DYNAMICS | 30 |
| 5.4 GROUP DYNAMICS ORGANISATION | 30 |
| 5.5 DEMONSTRATIONS | 30 |
| 5.5.1 DEMONSTRATION INFOGRAPHIC | 31 |
| 5.6 DEMONSTRATIONS AND FIRST SHOTS..... | 32 |
| 5.7 SCORING | 32 |
| 5.8 CONCLUSION OF SESSION..... | 33 |
| 5.9 REFLECTION | 33 |
| 5.10 SESSION PLANNING TEMPLATE | 34 |
| 5.11 IMPACTS ON SESSIONS..... | 35 |
| 5.12 TIPS FOR FIRST TIME COACHES | 36 |
| Glossary of Terms..... | 38 |
| Bibliography | 45 |

0.1 ARCHERY AUSTRALIA COMMUNITY COACH ACCREDITATION

Level 1 Community coaches

- will be accredited for 3 years.
- will have the opportunity to develop participant's skills and ensure a fun, safe and inclusive environment.
- will be able to effectively deliver 'Come N Try' workshops while being able to manage the demands of all levels of participants, parents and spectators.



MODULE 1: SAFETY AND ETIQUETTE

This section of your workbook will take you through several archery fundamentals including components of basic archery equipment, how to select the correct equipment for your participants, set up and maintenance of equipment.

1.1 SAFETY

Safety is the number one priority for all archery participants. There are three components of safety for consideration:

Personal Safety: ensures all archery participants remain safe throughout their activities as well as being fully aware of their responsibilities to maintain a safe environment.

Range Safety: ensures a safe field of play for all archery participants, bystanders, observers and members.

Equipment Safety: ensures all equipment is well maintained, safe and not damaged before and after archery activities.

1.2 PERSONAL SAFETY

Identify the main aspects to be covered in your safety briefing in relation to personal safety:

1.3 RANGE SAFETY

Using the following headings as a guide, identify the main safety aspects to be considered when setting up the field for 'Come N Try' session or to be discussed in the safety briefing:

Range Layout:

Target Butt Placement:

Shooting Controls:

Removal of arrows from target butt:

All participants need to be coached in the correct procedure and technique for removing arrows from the target butt. These processes will reduce and prevent potential injury to the participants as well as damage to arrows, target butt or face. Using body weight and levers of archers on removal of arrows will importantly reduce fatigue and ensure a more enjoyable experience for participants.

Why do we need to ensure the removal of arrows is completed correctly?

Safety Considerations:

- Always _____ to the target.
- Ensure all participants approach the target from the _____ to ensure no one inadvertently walks into an arrow nock.
- Prior to removing arrows from the target butt, ensure no one is immediately in _____ of the target.
- Always draw arrows from the _____ working towards the _____ of the target butt.
- Always check the _____ for missed arrows and ensure they are drawn out of the ground the _____ way they went in.
- Check all arrows for _____ prior to being re used.

Further reading on the removal of arrows from target butt can be found in your pre-learning module.

1.4 EQUIPMENT SAFETY

Coaches are responsible to ensure all equipment is in working order and in no way a danger to participants accessing and using the equipment.

Identify the main potential faults for each of these pieces of equipment:

Arrows:

Nocks:

Fletches:

Shafts:

Points:

Bows:

Strings:



1.5 PERSONAL EQUIPMENT CHECKS

Coaches are also responsible, prior to distributing equipment to participants, to ensure all personal equipment is safe and in good working order.

Identify the main potential faults for each of these pieces of personal equipment:

Arm and Chest Guards:

Finger Tabs:

Coaches should always ensure there is a range of sizes of left and right handed equipment available for participants, to ensure coaches are not leaving participants unattended to retrieve more equipment.

1.6 ETIQUETTE

To ensure all participants enjoy archery as a leisure activity or as a competitive sport, detail three etiquette practices that should be applied.

1.

2.

3.

1.7 RISK MANAGEMENT FAIR PLAY

Fair Play applies to everyone involved in sport, players, officials, coaches, team managers, parents, and spectators

Coaches should lead a fair play culture – one that embraces diversity, transparency, sporting spirit, integrity, and respect.

Please give an example for each of the following headings

Diversity

Transparency

Sporting spirit

Integrity

Respect

1.8 RISK MANAGEMENT ABUSE

It is important for coaches to be aware of guidelines to protect them from risk and to ensure children are safe while participating in archery activities. The Play by the Rules – Child Protection course is a free, interactive online training course suitable for coaches. This course details:

- what child abuse is
- your rights and responsibilities under child protection laws
- how the laws apply to sporting organisations, clubs, their employees and volunteers
- when, where and how to report incidents
- how to establish a welcoming and inclusive environment at your club or organisation.

Coaches can access this course through the attached link - www.playbytherules.net.au/got-an-issue/childprotection/child-protection-online-course

Physical contact between coaches and participants can be controversial and complex and can be complicated further by cultural, religious, gender and prior experiences. Archery can require physical contact with participants at times when providing skill/posture corrections.

It is important to remember that each participant is different, and no one knows better than the participant what makes them feel comfortable or uncomfortable. It's always good policy to ask someone before you touch them. "Is it okay if I put my hand on your back to demonstrate the correct position?" "Do you mind if I place my hand there to support your knee?" Think of it as a common courtesy.

Refer to the online pre-learning module for further information, scenarios and fact sheets on these topics.

List three ways a coach can maintain appropriate boundaries with participants:

1.

2.

3.

List three ways a coach can avoid being alone with a child or young person:

1.

2.

3.

MODULE 2: EQUIPMENT

2.1 EYE DOMINANCE

It is essential for coaches to determine from each intended archery participant, which is their dominant eye. When shooting a bow, it is important for sighting accuracy that the arrow is drawn under the dominant eye allowing for consistent string alignment.

The dominant eye will determine which hand the bow will be held as the drawing hand must anchor under the dominant eye. There are several methods used to check for the dominant eye and this should be completed before any equipment is distributed. Coaches need to supervise each participant when determining the dominant eye as errors can occur with eye alignment and hand movement.

2.2 EYE DOMINANCE TEST

This method will allow the coach to identify the dominant eye instead of the participant. This is also a good method to confirm or check results of previous methods actioned by the participant.

Occasionally you will come across a participant who is not comfortable using their dominant eye. If this is the case, simply identify if they are left or right-handed and issue them the appropriate equipment. Ensure the participant closes or covers their dominant eye whilst shooting.

Remember, it is important to still complete the eye dominance test for these participants to assist you with making coaching corrections. Eye dominance is one of the first correction tools a coach will consider when a participant is having difficulty shooting.

For a 'Come N Try' format, recurve bows should range from a 10lb up to 25lbs. Recommended bow weights are as follows:

| | |
|------------------|------------------------------|
| Youth – Under 13 | _____ pounds to _____ pounds |
| Youth – 13 to 18 | _____ pounds to _____ pounds |
| Adult Women | _____ pounds to _____ pounds |
| Adult Man | _____ pounds to _____ pounds |

3. Bow Length

Most recurve bows used to instruct are either 66” or 68” in length and will suit most participants. Children will require shorter bows usually at 62” or 64” in length, and at times you may find it necessary to have even smaller bows than these.

As a guide, the following draw lengths can be used.

- 23”- 25” Draw length 64” Bow
- 25”- 27” Draw length 66” Bow
- 27”- 29” Draw length 68” Bow
- 29”- 31” Draw length 70” Bow

It should be noted a short draw length participant can use a longer bow. For safety, under no circumstances should a participant with a draw length of 28” plus use a bow length less than 66”.

This information is a guide to assist the coach with initial bow selection but can be adapted to suit the specific requirements and abilities of the 'Come N Try' participants.

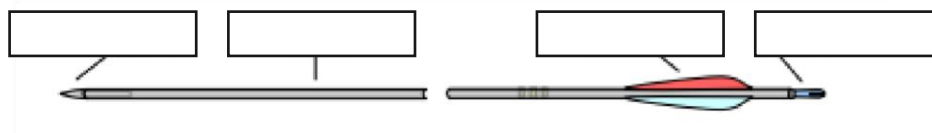
4. Compound

When using a 'Beginner Compound Bow' it is important to ensure that the peak weight is low enough to enable the participant to draw the bow comfortably without excessive body and shoulder movement.

2.6 ARROWS

It is important to have a range of arrows available for new participants, and if necessary, these arrows can be longer than required. Arrows should be stiffer than the normal recommendations for a bow weight and should be matched length and size with the same colour nocks and fletches. It is also suggested coaches provide participants with three arrows to begin with and as they become more proficient this can be increased to six.

Identify the components of an arrow:



2.6.1 ARROWS-SAFTEY

For participant's safety, it is critical arrows are the correct arrow length or longer. To determine arrow length, place the arrow nock above the upper part of the sternum or breastbone. While holding the point end of the arrow between outstretched hand and arms, raise arms until the length of the arrow is parallel to the ground. Select an arrow length that extends 5cm past the tip of the fingers. List safety issues relating to selecting an arrow that is too short for the participant

- _____
- _____

2.7.2 BOW SET UP BRACE HEIGHT

Bow manufacturers recommend a brace height for each model and length of bow, but as a guide most bows have the following tolerances in brace height.

- 62" Bow:

- 64" Bow:

- 66" Bow:

- 68" Bow:

- 70" Bow:

How can you determine the approximate brace height if the specifications are not available?

List three methods of adjusting the brace height

1.

2.

3.

2.7.3 BOW SET UP: ARROW RESTS

Arrow rests should be fitted to the bow window so the contact point of the arrow on the rest is directly above the " _____ " of the bow.

Some bows will not have an obvious place to fit the rest. In these cases, fit the rest so the arm is approximately _____ above the shelf

2.7.4 BOW SET UP: NOCKING POINT

Always install the arrow rest before installing the nocking points.

It is highly recommended to use two nocking points, a top and bottom nocking point.

There are two common types of nocking points used in archery. A commercially available metal clamp on nocking point and a tie on of a bowstring serving material. The metal clamp nocking point is easy to use and is ideal for setting up bows quickly.

To obtain consistent arrow flight, a point on the bowstring must be found where the force of the string will act directly along the shaft of the arrow.

To determine the starting point for the nocking point, the bottom of the nock should be positioned about 1/8" – 3/8" above square.

If the nocking point is positioned too low, the arrow will be on release forced downwards on the arrow rest. This will cause the passage past the bow to be further complicated as well as causing unnecessary wear on the arrow rest. Therefore, it is desirable to have a nocking point slightly higher than the arrow rest to avoid interference.

Once the bow is strung place a Bow Square onto the string and arrow rest. Use a marking pen, place a mark on the serving about 1/8" to 3/8" above square. This mark will represent the bottom of the arrow nock.

Attach the bottom nocking point and place an arrow on the string against the bottom nocking point and then attach the top nocking point so it sits snugly against the arrow nock.

When setting up a bow, it is important the arrow fits correctly onto the string. The nock should fit in a way it snaps onto the string.

The arrow nock fit should be loose enough for the string to still be rotated within the groove of the arrow nock. The fit should not be too loose to cause the arrow to fall off the string.

Where necessary, the serving can be built up to facilitate loose fitting arrow nocks by using dental floss or cotton thread. This should only be used as a temporary measure as the material will quickly wear causing the nock to be ill fitting again.

2.8 EQUIPMENT REQUIREMENTS

To conduct your coaching session safely, a range of suitable equipment is required to be on hand to avoid leaving participants unattended. It is recommended the following be included in your session:

- Recurve Bows – lightweight (10lb to 25lb)
- Compound Bows – under 20lb
- All bows strung and checked
- All bows should be fitted with arrow rests and nocking points
- All strings and servings in good order
- Ratio of Right-Hand Bows to Left Hand Bows – minimum 4:1
- Variety of arrow shafts for varying draw lengths
- Arm Guards, Finger Tabs (left and right) finger slings
- Resistance bands
- Chest Guards – should be made available
- Ground Quivers – should be made available
- Bow Stands
- Secured Target Butts

MODULE 3: ARCHERY FUNDAMENTALS

3.1. CORE ELEMENTS

The core elements of the archery technique can be considered under the following three key components:

- Structure
- Shot Preparation
- Execution

These three components become the fundamental building blocks of archery skill acquisition and must be understood by the coach and delivered to beginner archers in the same manner.

Whilst teaching these fundamentals, coaches can utilise training aids to assist in correct technique correction and progression. Allowing participants, the opportunity to familiarise themselves with the shooting technique without physically shooting a bow, creates opportunities for coaches to safely correct technique whilst also building confidence in their archery ability.

3.2 STRUCTURE

The structure of the participant is the basis of the shooting position and is fundamental to their ongoing development in Archery.

From a coaching perspective, structure can be defined into three areas:

- Stance
- Posture
- Alignment

3.2.1 STANCE

Stance:

- The position that you take relative to the target
 - Body weight distribution
1. Both feet should be shoulder-width apart, with one foot on either side of the shooting line.
 2. Feet to be aligned square to the target.
 3. Body should be upright, with leg and knee muscles relaxed and not locked.
 4. Weight should be evenly distributed on both feet. This weight balance should be maintained when the participant fully draws the bow with an expectation that 60% to 70% of the body weight will be towards the balls of the feet.

The participants shooting stance or standing position on the shooting line is the foundation to their shot. Participants over time, with the assistance of a coach should develop a consistent comfortable position

Basic Square Stance

List the benefits of this stance in early learning of archery fundamentals

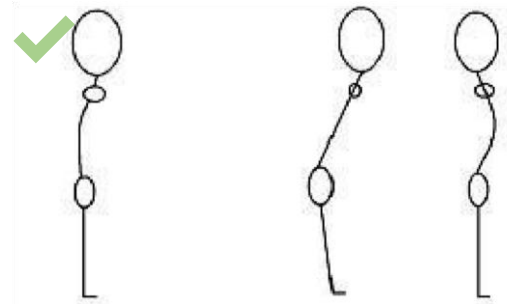


3.2.2 POSTURE

Posture:

The natural position of the body when standing upright

Good posture will stabilise the body, ensuring loads applied are not concentrated in the lower back, and will assist in maintaining good shoulder position.

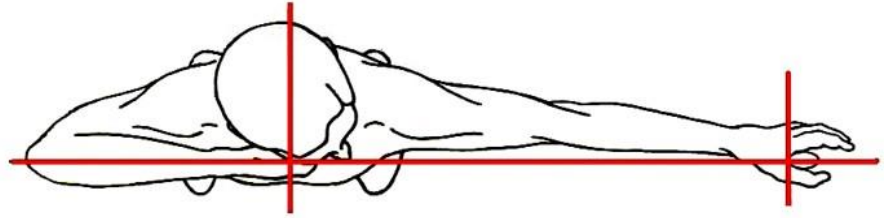


List the benefits of this posture in early learning of archery fundamentals:

3.2.3 ALIGNMENT

Alignment ensures the correct biomechanical positioning of the drawing arm, bow arm and shoulders during the shot process.

Participants should develop a biomechanically correct shooting technique, with the skeleton as the foundation and relaxed muscles to support this technique.



List the benefits of this alignment in early learning of archery fundamentals:

3.3 SHOT PREPARATION

The shot preparation phase covers the steps required prior to releasing the arrow. This phase will cover the following:

- Loading the bow
- Bow hand placement
- Drawing hand placement
- Pre draw
- Drawing the bow
- Alignment
- Anchor

To best prepare your participant to shoot, follow the logical steps outlined below:

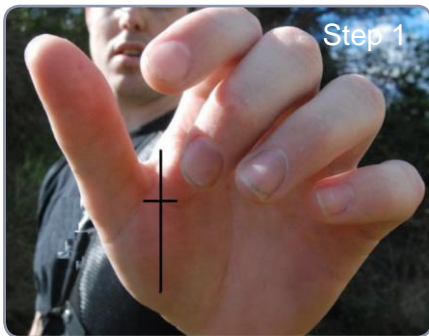
3.3.1 SHOT PREPARATION LOADING THE BOW

1. Hold bow across body, canted at a slight angle, slightly touching leg for stability.
2. Draw the arrow from the quiver, holding the arrow by your thumb and index finger between the nock and fletch.
3. Place the arrow onto the arrow rest.
4. Place the arrow on the string at the Nocking Point, ensuring the arrow is rotated until the index fletch is pointing away from the riser and square to the bow string.
5. Carefully draw the arrow back against the string until the nock engages the bowstring.



3.3.2 SHOT PREPARATION - BOW HAND

1. The bow hand should be positioned directly behind the centerline of the bow.
2. Place hand on bow grip, with the pressure point as high as possible into the pivot point of the bow, with knuckles slanted at an approximate 45-degree. (as shown in step 3)
3. Fingers should be relaxed and slightly curled over in a natural position. Ensure fingers are not tucked in and curled tight around the bow.



Name the benefits of the described bow hand placement in early learning of the fundamentals:

3.3.3 SHOT PREPARATION - DRAWING HAND PLACEMENT

Drawing Hand:

1. Place the first three fingers of the drawing hand on the string, hook fingers around the string below the arrow nock.
2. Take a deep hook with the string position in or behind the first joints of the fingers, with finger tips pointing backwards toward the wrist.
3. Keep hand relaxed, and importantly keep back of the hand, wrist and knuckles flat but not necessarily vertical.



3.3.4 SHOT PREPARATION - PRE-DRAW

1. Raise the bow arm and drawing arm together up to the level of the target. Ensure the bow arm shoulder sits down in its natural position.
2. The drawing arm elbow should be kept above the line of the arrow, and as near as possible behind the bow and string hand.
3. The drawing hand should be relaxed with the back of hand flat in behind the string.
4. The bow arm elbow is kept firm, turned down and out to ensure good string clearance.



3.3.5 SHOT PREPARATION - DRAWING THE BOW

1. Roll the drawing arm shoulder down and back.
2. Bring the elbow around and in line with the bow.
3. As the drawing arm moves back, the bow arm is extended firmly with the bow shoulder down, pushing the bow towards the target.
4. Holding the head as still as possible, allow the string to be drawn firmly towards the head whilst keeping the chin higher than the shoulder. Be mindful the head does not move towards the string at this point.
5. At full draw, when viewed from behind, the elbow of the drawing arm should be in line with the shaft of the arrow with the back of the drawing hand flat with three fingers in contact with the string. The bow arm should be straight with the elbow rotated away from the bow string.



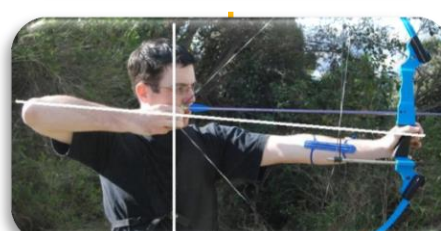
Step 1 and Step 2



Step 3



Step 4



Step 5

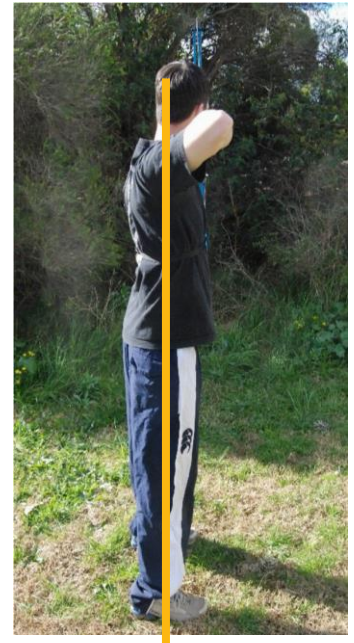
3.3.6 SHOT PREPARATION - ALIGNMENT

Check to make sure your participant is standing upright and in a natural position.

Participants should not be leaning back or forward, instead weight should be evenly distributed on both feet with body weight (centre of gravity) directed over the instep (60% to 70% body weight distributed forward on balls of feet and 40% to 30% on heels).

Coaching Point:

It is common for participants to naturally lean back in the drawing action, which will place excessive body weight on to their back foot. This will cause participants biomechanical alignment to shift and impact the shot, as the bow shoulder will move up and back towards their neck.



3.3.7 SHOT PREPARATION - ANCHOR

The anchor is the term used when the drawing hand connects with the face.

The initial anchor point is where the index finger of the drawing hand contacts with the corner of the mouth.

A consistent anchor point is vital to achieving technical accuracy and should be considered as a rear sight.



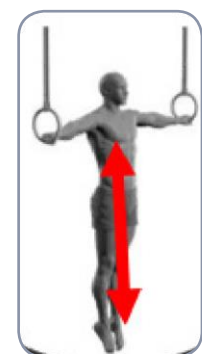
3.4 SHOT EXECUTION

The shot execution phase covers the final steps in completing Archery Fundamentals for a 'Come N Try' participant. The shot execution includes:

- Holding
- Aiming
- Release
- Follow Through

3.4.1 SHOT EXECUTION - HOLDING

Participants are required to maintain a constant and stable position at full draw to allow for the final stages of the shot execution. To do this the muscles used for drawing the bow are held in an "isometric" contraction where the joint angle and muscle length do not change whilst under load. It is also the time when the initial aiming process is commenced



3.4.2 SHOT EXECUTION - AIMING

For 'Come N Try' participants, shooting is initially carried out without a sight mounted to the bow.

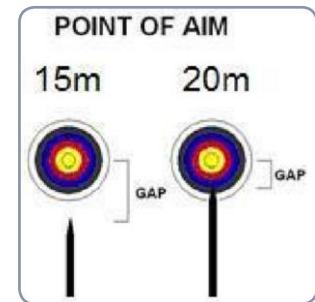
The aiming method used for 'Come N Try' is known as 'Point of Aim' or 'Gap Shooting', which uses the arrow point instead of a bow sight to aim.

Coaches should note, the most improvement will come from consistent execution of the shot process and ensuring the dominant eye remains open.

Aiming is achieved by placing the point of the arrow on a predetermined position for a given distance as seen in this image. The position will vary for different distances and will occur by aiming above or below or at the centre of the target face.

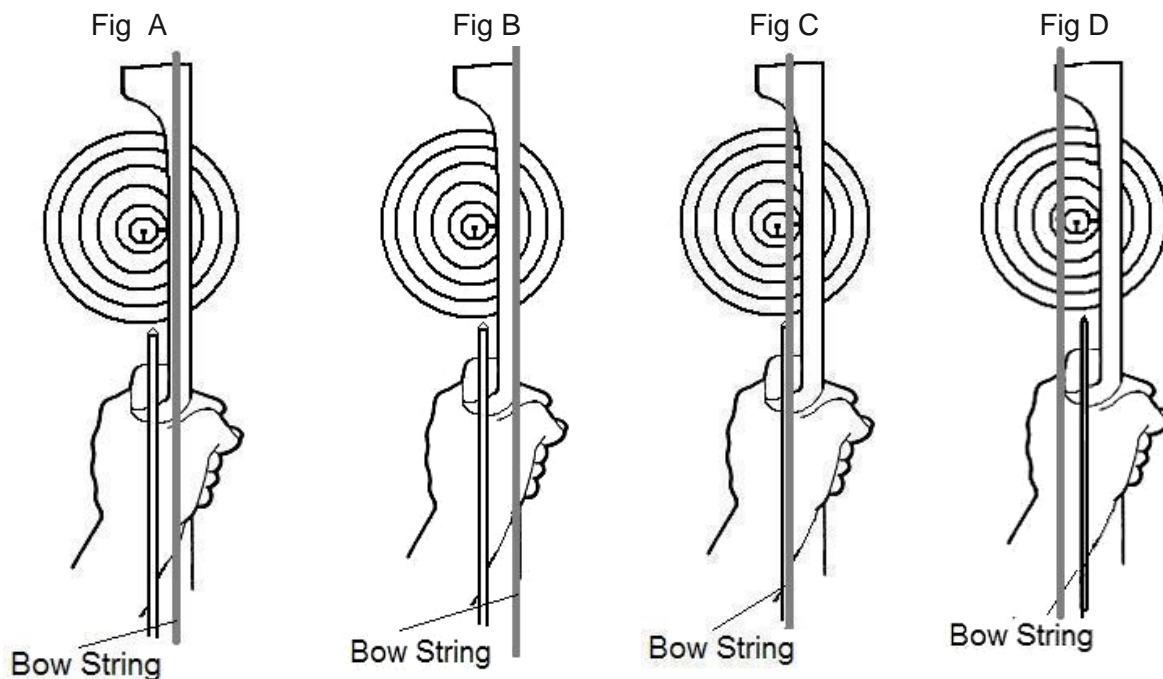
It takes practice for participants to determine where the point of the arrow needs to be placed for a given distance. Note this point of aiming is different for everyone.

Eventually bow mounted sights can be used. If this is the case, coaches will initially set the sight so a 'Come N Try' participant can hit the target. As the session progresses you can discuss the principles of moving the sight to achieve better results (follow the arrow).



Aiming is the process of focusing on the aiming mark (target) throughout the holding, expansion, release and follow through phases of the shot

3.4.3 SHOT EXECUTION – AIMING -STRING PICTURE



String picture/string alignment is the archers' rear sight

String alignment is the relationship between the blurred image of the bowstring and the bow or sight pin.

You can align the string with the bow handle, Fig A and B or sight pin Fig C and D which ever feels comfortable as long as it is replicated each shot.

It is preferable however to align the string with the sight, thereby allowing the archer to be aware of its alignment during the final shot execution phases

Any variation in string alignment will show as a change in left/right arrow placement.

Explain the importance of string picture in the aiming process:

3.4.4 SHOT EXECUTION - RELEASE

Executing the release by relaxing the muscles in the drawing forearm and drawing fingers, allows the weight of the bow to pull the string from the fingers. It is important participants maintain drawing tension throughout the execution of the shot.

Coaching Point:

List a method to assist a participant in understanding the difference between 'letting go' and 'not holding on'.

Safety:

Coaches should advise 'Come N Try' participants of the process of letting down from full draw without releasing the arrow.

Whilst at full draw, the bow arm is lowered, so the arrow is pointing at the ground. The participant gradually lets the string go forward, while still maintaining the drawing hand position on the string.

This activity should be practiced with the group prior to any shooting.

Dry firing a bow is the act of release, whilst drawing or having reached full draw without having loaded an arrow.

List possible negative outcomes of participants dry firing their bow:

3.4.5 SHOT EXECUTION - FOLLOW THROUGH

The follow through should be a natural reaction, as a result of the loads placed on the body being released. The drawing hand should move in a backward action, whilst the bow arm and bow will move slightly forward for a right-handed participant.



Coaching Point:

Ensure the participant maintains focus, by continuing to look at the target, while keeping their head still until the arrow strikes the target. After the arrow, has hit the target, lower the bow arm and drawing hand to the side of the body.

MODULE 4: PROBLEM SOLVING

4.1 EARLY LEARNING CORRECTION AND STRATEGIES

As a community coach, it is your role to be able to teach basic archery skills while allowing participant's individual style to develop. Fault correction is an important part of this process. The challenge for coaches is to correct faults as early as possible, to avoid long term habits being formed, while ensuring the enjoyment and success of the participant. A combination of both positive and constructive feedback is essential.

Coaches need to become familiar with the most common occurring faults in beginner participants. Not only do coaches need to be familiar with these faults, they also must be confident in solutions and options to correct them.

4.2 FAULT TYPES

Fault correction in archery can be broken down into three key areas:

- Physical
- Structural
- Technical

4.3 PHYSICAL – STRING HITTING ARM

'Come N Try' participants can alter the positioning of their bow arm to try and avoid contact with the string on release.

It should be noted this fault does not always occur due to a technical aspect. Loose and bulky clothing can contribute to this occurring for participants.



What corrections can be made for string hitting bow arm, elbow or forearm?

Coaching Point:

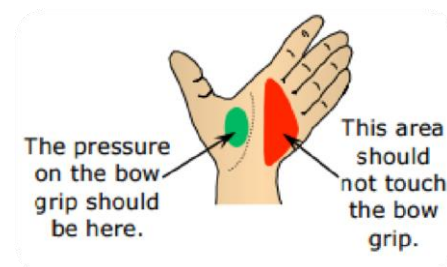
Ensure the bow arm elbow joint is vertical at full draw

To assist in understanding the correct position of the bow arm elbow use the following process

- Without a bow, have the participant extend the bow arm towards the target.
- Bend the arm so that the flat of the hand touches the chest.
- Extend the bow arm back towards the target whilst focusing on maintaining elbow position.
- Check bow does not have a low brace height.

Ensure

- The correct placement of the hand on the bow.
- The participant is not gripping the bow too tightly.
- The hand and fingers are relaxed with knuckles facing away from the bow.
- The heel of the hand is not touching the bow.
- Bow shoulder is not rolling inwards towards the bow. Shoulder joint should be held in its natural position.



4.4 PHYSICAL – CROSS DOMINANCE

In most cases, participants will have the same sided dominant hand and eye. At times you may encounter participants who has a dominant hand on the opposite side of their dominant eye. For instance, your participant may be right eye dominant but will draw the bow with their left hand. This is known as cross dominance.

When this occurs, cross dominant participants will have difficulty perfecting technique and/or hitting targets due to the dominant hand and eye being on opposite sides of the body. As a result of cross dominance, participants may be unable to close their dominant eye independent of their non-dominant eye.

What corrections can be made for a participant who is cross dominant?



4.5 STRUCTURAL – SHOULDER TOO HIGH/LOW OR OUT OF ALIGNMENT

Some participants are not able to maintain their shoulder stability during the drawing process. When the bow shoulder rises up and backwards towards the neck, it can cause participants to lean backwards. If participants, do not correct this fault it can result in discomfort in the neck, as well as developing inconsistent draw length which impacts on results and enjoyment



4.6 STRUCTURAL – LEANING BACK AT FULL DRAW

At full draw participants may tend to transfer body weight on to their back foot causing their head to move backwards in the process. This can occur from over drawing during the drawing process, or if participants are not aware of or have an inconsistent anchor. This may also occur if bow mass is too heavy for a participant

What corrections can be made for a participant who leans back too much at full draw?



4.7 TECHNICAL PLUCKING THE STRING

What corrections can be made for a participant who plucks the string on release



4.8 MOVING-HEAD ON RELEASE

What corrections can be made for a participant who moves their head?



4.9 GENERAL COACHING POINTS

As you continue with your coaching journey and your coaching philosophy evolves, you will begin to identify coaching traits which will become your coaching identity. Coaches should always remember the basic recommendations when working with new participants. These recommendations have been outlined for you to take a moment and recheck your processes, from time to time, to ensure you are giving the best opportunities for participants to enjoy the sport of Archery.

- Ensure participants are at ease by being positive in your coaching approach
- Participants learn by doing, so don't talk too much
- Focus on one point at a time
- Avoid overwhelming participants with too much information
- Ensure participants are not at full draw when adjusting technique
- Mistakes are to be considered as positive and are easily corrected
- Emphasis on having a go and a fun experience

Archery Specific:

- Check overall posture
 - Upright body position
 - Shoulders in natural (low) position
 - Correct drawing action
- Check draw/arrow length – change equipment if required
- Use 'resistance band' to assist skill development
- Check string clearance



MODULE 5: SESSION PLAN

5.1 PLANNING

The main objective of a Community Archery Coach is to teach participants to shoot an arrow towards a target within a short amount of time. Safety is the main priority, with the developing of a proper shooting technique a secondary consideration. Your sessions will still require a progressive set of steps to the shooting action, although the emphasis will be more on recreational fun and safety.

Most of your 'Come N Try' sessions will be two hours in duration with participants registering in advance for the session. When preparing the range layout and equipment for your session, expect and plan for additional participants to turn up on the day. Always prepare additional bows and arrows as well as an assortment of left- and right-handed equipment.

Components that should be included in preparation of a 'Come N Try' course can be considered in two phases:

- Actions that need to be undertaken in preparing to conduct a session
- Components that are required to conduct a successful session

5.2 PREPARATION

Three key elements to be considered in the initial preparation of conducting a 'Come N Try' session include the following:

- **Administration**

How do participants register, communication regarding venue, session timing, clothing requirements, and any other specific requirements that apply to your club

- **Venue**

Ensure that the venue is available to conduct a session, setting up of the venue, including meeting any safety requirements, target butts etc.

- **Equipment**

Ensure that adequate and suitable archery equipment is available in good working order to safely conduct the course

5.3 SAFETY BRIEFING

List the main elements to be included in a 'Come N Try' safety briefing:

List the main considerations when determining and distributing equipment in a 'Come N Try' session:

5.4 GROUP DYNAMICS

Group dynamics will determine how well your group works together, influences others and how quickly they will progress through your 'Come N Try' session.

Coaches will find the need to manage groups within the larger group, as well as need for some participants to be task orientated in comparison to those who are social orientated. Task orientated participants will have a goal to learn to shoot effectively within the session, while social orientated participants are looking for social interaction, enjoyment and not really worried about results.

Participants can range in:

5.4 GROUP DYNAMICS ORGANISATION

It is important to ensure your group is organised and clear about the safety and participation requirements whilst you are coaching.

Effective organisation includes:


5.5 DEMONSTRATIONS

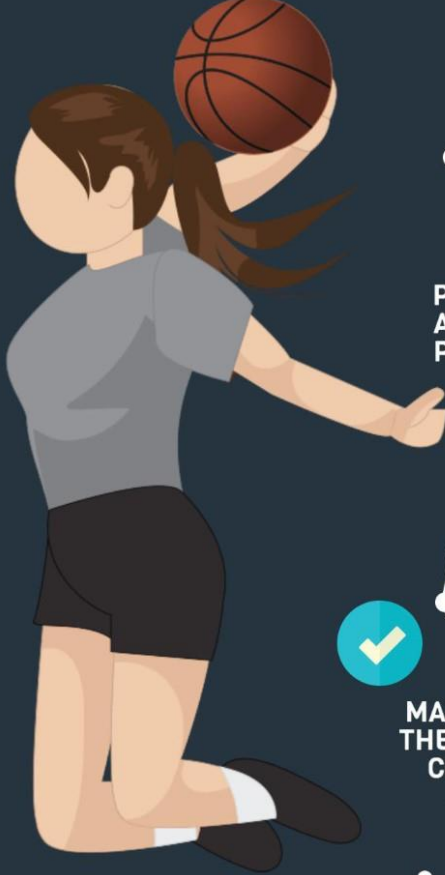
As you continue to coach sessions you will become quicker at identifying participants and their needs, altering skill acquisition for the level of participant and using visuals effectively. Dependent on the skill being demonstrated, participants or the demonstration may need to reposition to view a different angle of a skill.


Always ensure participants have plenty of opportunity to practice the skill being demonstrated.

To ensure maximum benefit is received from demonstrations, coaches should:


10 TIPS FOR DEMONSTRATING A SKILL WHEN COACHING

 @BELIEVEPHQ




- 


#1

BREAK THE SKILL DOWN FOR YOUR PLAYERS
- 


#2

MAKE SURE THAT EVERYONE IS FOCUSED AND PAYING ATTENTION
- 


#3

TRY NOT TO OVER LOAD YOUR PLAYERS WITH TOO MUCH INFORMATION
- 


#4

GIVE YOUR PLAYERS TIME AND SPACE TO PRACTICE THE SKILL
- 


#5

MAKE SURE THAT THE TECHNIQUE IS CORRECT AND ACCURATE
- 


#6

MAKE SURE THAT YOU ARE ENGAGING YOUR PLAYERS. USE A VARIETY OF TECHNIQUES
- 


#7

TAKE IT SLOW. DON'T RUSH THE DEMONSTRATION
- 

#8

IF PLAYERS ARE STRUGGLING TO PERFORM THE SKILL YOU CAN REPEAT THE DEMONSTRATION
- 

#9

FOCUS ON THE MAIN POINTS
- 

10

USE PLAYERS ON THE TEAM TO DEMONSTRATE A SKILL

5.6 DEMONSTRATIONS AND FIRST SHOTS

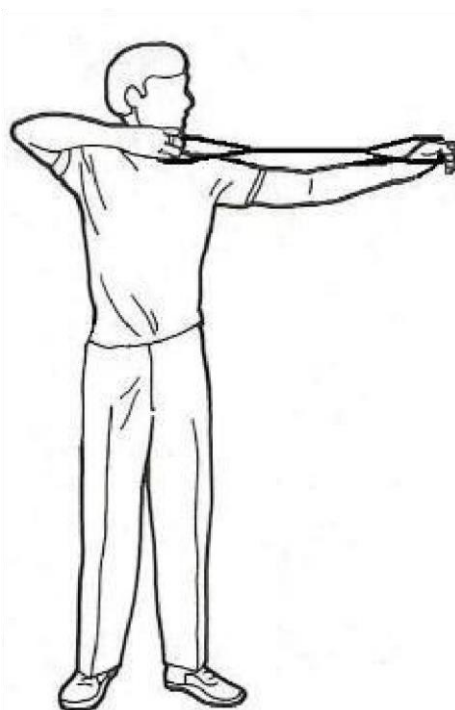
Coaches can utilise training aids such as 'resistance bands' to allow participants to familiarise themselves with the shooting technique without physically shooting a bow. This method also allows you as a coach to correct technique in a safe manner while also building confidence in your participant's archery ability.

Once the participant is comfortable shooting with the training aid, they are ready to progress to using bow and arrows. It is recommended coaches provide a demonstration to the group on correct shooting technique when commencing with bow and arrows.

Shooting instruction should then be delivered individually on a 'one on one' basis to your participants. Allow participants to shoot three arrows at a time to ensure appropriate feedback is given.

The release action of the shot is usually the hardest part of the shooting technique for participants to acquire. An easy method to teach is to get the participant to link hands together and rest their chin on their hands. Look towards the target and on the count of three push/pull and separate fingers. The fingers holding the string should continue going backwards.

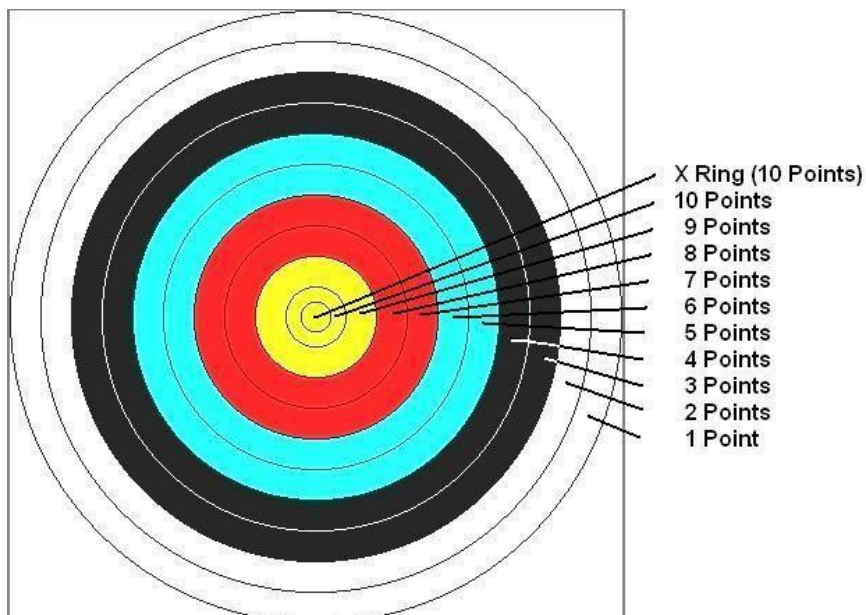
When all participants are confident with their shooting action, the group can commence shooting together on your shooting signal.



5.7 SCORING

Scoring is usually only applied to day two of multiple session classes, although it can be used to maintain interest and to teach participants how to keep track of their performances.

Scoring in archery is easily applied by adding the number of points based on where your arrow hits the target. If the arrow misses the target, no score is registered for that arrow. If an arrow touches a divided line it will score the higher value.



5.8 CONCLUSION OF SESSION

Identify elements coaches could include at the conclusion of a session:

5.9 REFLECTION

It is good practice for coaches of all levels to take the time to reflect on your coaching session after the session has been completed. As you become more experienced as a coach you will begin to do this throughout the session and will be able to make adjustments to your sessions as you go.

The infographics below will assist you in identifying ways to improve your coaching and coaching sessions for 'Come N Try' participants.

10 REASONS WHY IT'S IMPORTANT FOR COACHES TO REFLECT

@BELIEVEPHQ



Reflection helps coaches to solve problems effectively



Reflection helps you to identify your strengths



Reflection helps coaches to learn from mistakes





Reflection helps to develop self awareness. It helps coaches to become more aware of their feelings, thoughts and behaviours



Reflection can help coaches to learn more about what works and areas they can improve on



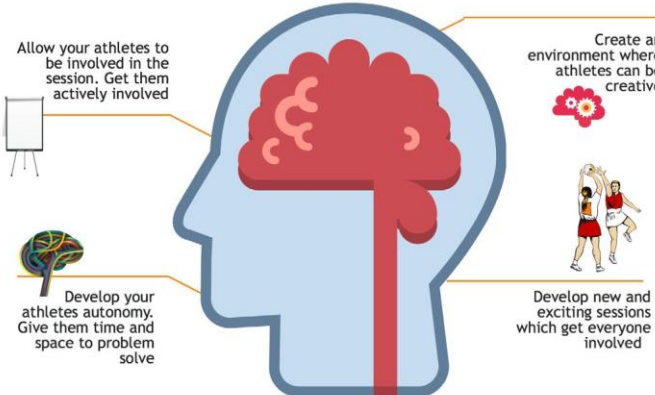
Reflection helps to guide coaches on how they should behave and act in certain situations

Reflection helps coaches to take informed actions


- Reflection helps to develop higher level thinking
- Reflection can help to ground coaches emotionally
- Reflection helps to develop critical thinking skills

10 WAYS TO IMPROVE ATHLETE ENGAGEMENT WHEN COACHING


@BELIEVEPHQ




Allow your athletes to be involved in the session. Get them actively involved




Create an environment where athletes can be creative




Develop your athletes autonomy. Give them time and space to problem solve




Develop new and exciting sessions which get everyone involved







Create an environment where athletes are not afraid to task risks




Ask the right questions. Ignite curiosity among your athletes




Promote teamwork. Develop sessions where athletes must solve problems as a team



Be passionate, enthusiastic and make sure your sessions are fun



Get feedback from your athletes. Ask them what they would like to do in the session



Be patient. Not all athletes will engage in the first session

5.10 SESSION PLANNING TEMPLATE

| COME N TRY SESSION | Time |
|---------------------------|-------------|
| Introduction | |
| Safety Briefing | |
| Demonstration | |
| Shooting & Coaching | |
| Conclusion | |
| Feedback | |

5.11 IMPACTS ON SESSIONS

Without fail coaches can be 100% prepared for 'Come N Try' sessions, and something or someone can impact your session plan or ability to deliver the session.

Coaches need to expect these impacts will occur as all groups will be different, with differing group dynamics or outside influences on the group.

Explain two impacts which could impact your session as a coach, and suggest strategies to manage these impacts:

Impact 1:

Impact 2:

8 TIPS FOR FIRST TIME SPORT COACHES



 @BelievePHQ



GET TO KNOW YOUR PLAYERS

- Make sure as a coach that you meet each of your player's individual needs

PLAN YOUR SESSIONS



- Make sure you take time to plan your sessions. Be organised and know what you want to achieve



NEVER STOP LEARNING

- Don't stop learning. Keep learning to become a better more effective coach

OBSERVE OTHER COACHES



- Meet new coaches and watch their sessions. Learn from them



KEEP IT SIMPLE

- Try not to over complicate sessions. Be clear with what you want to do

BE AWARE OF LEARNING STYLES

- Each player will learn differently. Don't make the mistake of thinking that each player learns the same way



MAKE IT FUN

- Be that coach who motivates, inspires and makes sport fun

BE YOURSELF



- Don't try and copy what other coaches do. Be unique, be different and find your own way of coaching



HOW TO DEVELOP COACHING EXPERTISE IN SPORT

@BelievePHQ



Never Stop Learning



Lifelong learning is an important skill for becoming an effective coach. It is important for a coach to constantly develop and improve their own skills

Learn how to reflect

Reflection plays an important role within coaching. Coaches must take time to evaluate, review and learn from a number of experiences



#1

Develop a good knowledge base of technical, tactical, social and psychological skills



#2

Become aware of individual differences when coaching



#3

Help athletes to achieve their goals



#4

Improve your interpersonal and intrapersonal skills



#5

Build a good coaching network



#6

Ask for help when needed



#7

Understand how to motivate, engage, inspire and connect with athletes



#8

Listen carefully to what people have to say

Glossary of Terms

| | |
|----------------------------|--|
| Actual draw length | The personal draw length of the archer measured at full draw, from the bottom of the slot in the arrow nock to the pivot point of the bow plus 13/4 inch (45mm), (on most bows this is the back edge (far side of the bow)). |
| Actual arrow length | The personal arrow length of the archer, measured from the bottom slot of the arrow nock to the cut end of the shaft. |
| Actual draw weight | The energy required to draw the bow to the archer's draw length (commonly measured in pounds). |
| Anchor point | A location on the archer's face to where the string hand comes to rest at full draw to give consistency |
| Archer | A person who shoots a bow and arrow. |
| Archer's paradox | The initial stages of flight in which the arrow flexes to clear the bow. |
| Arm guard | A protective shield, usually of leather or plastic, worn on the inner side of the forearm of the bow arm. It protects the arm from being hit by the bow string. Many different designs and types of arm guard can be found. |
| Arrow | A projectile shot from a bow. |
| Arrow rest | A device on the bow to provide a contact point; also, a resting point, or shelf to support the arrow. |
| Arrow shelf | A horizontal projection from the bottom of the bow window. |
| Back (of bow) | The side of the bow facing away from the archer, when holding up the bow. |
| Bare shaft | An arrow shaft without fletching. |
| Bare-bow | A class of shooting where no sighting marks, protruding stabilizers or other accessories are permitted. |
| Basic technique | The fundamental technique of shooting a bow and arrow. Usually the style taught during the introduction to archery, forming the basis for consistent shooting. |
| Belly (of bow) | The surface of the bow facing the archer during shooting. Also, known as the "face" of the bow. |
| Bouncer | Bouncer: An arrow that hits and bounces away from the target instead of remaining in the target butt. Also, known as a "bounce-out" or "rebound". |
| Bow arm | The arm that supports the bow. |
| Bow hand | The hand that supports the bow. |
| Bow sight | A device, which can be of several different designs, attached to the bow and which assists the archer in aiming. |
| Bow sling | A strap attached to the bow through which the archer slips the bow hand, thereby preventing the bow from being dropped upon release. |

| | |
|------------------------------------|--|
| Bow square | A measuring device that is be used to measure various aspects of the bow/ string relationship including brace height, nocking point, tiller, peep and kisser location, etc. |
| Bow string | The string for a bow usually made of synthetic material with two looped ends. |
| Bow stringer | A device that an archer uses to assist in stringing the bow. |
| Bow window | The cut-out section on the arrow side of the bow to allow the arrow to pass through or near the centre line of the bow. |
| Bow | A long object with a string attached from one end to the other holding the object bent and under tension,which projects an arrow upon drawing and release. |
| Braced bow | A bow that has had a string fitted into position ready for shooting. |
| Brace height | The shortest distance between the string and the pivot point of the handle when the bow is strung. |
| Butt | A device on to which the target face is fixed and which stops the arrow. |
| Cant | To tilt the bow left or right while shooting. |
| Cast | The ability of the bow to propel an arrow and the degree of efficiency with which this is achieved. Denotes the speed of the limbs in discharging the arrow and is used as a term to refer to the parabola made by the arrow in flight. |
| Centre serving | The serving on the central area of the bow string |
| Centre shot | A bow which is designed to allow the arrow to take a position central to, or on the midline, of the limbs. Centre shot is also used to refer to the correct alignment of the arrow |
| Chest guard | A protective device that covers the side of the archer's chest that is nearest to the bow. |
| Clicker (draw length check) | A device attached to the bow that gives an audible indication when the arrow has been drawn to the archers desired draw length. |
| Closed stance | A shooting stance where the foot furthest away from the target is behind the line drawn from the centre of the target to the foot closest to the target. |
| Coach | A tutor or teacher of sporting activities. |
| Cock fletch | The fletch on the arrow that identifies a certain fletching. This fletch is sometimes a different colour from the other two fetches. With different types of bow and different bow set-ups the vane could face upward, downward or at right angles to the string. Also, known as the cock feather or index vane. |
| Composite bow | A bow that consists of different laminated parts or materials. |
| Compound bow | A bow where the string is attached to pulleys, wheels, or cams to increase the kinetic energy when an arrow is released and to decrease the bow weight held at full draw. |
| Creep | Letting the drawing hand edge forward before releasing, thereby reducing the drawing length. |

| | |
|-----------------------------|--|
| Director of shooting | The official in control of the shooting during a tournament. |
| Dominant eye | The eye which is dominant while aiming with both eyes open. |
| Draw | The act of pulling back the bow string thus storing energy in the bow. |
| Draw weight | The force required to draw the bow, measured in pounds to the specified draw length. |
| Drift | Left or right movement of an arrow during flight caused by the wind. |
| Drop away rest | An arrow rest/launcher that drops away, clearing the path for the arrow as the bowstring is released. (Mainly used on compound bows). |
| Dry-fire | Release of the string without the normal discharge of the arrow. |
| End | A specific number of arrows shot before the archers go to the target to score and collect their arrows. Usually three or six arrows per end. |
| Field archery | A type of archery round shot outdoors in an undulating wooded area with targets of varying sizes and distances. |
| Field captain | A person controlling the shooting along all or part of the shooting line, |
| Finger tab | A piece of leather worn on the drawing hand to protect the fingers and give a smoother release to the string. |
| Finger sling | A piece of leather, plastic or rope looped at each end through which the archer slips the thumb and finger after taking hold of the bow, permitting a loose grip on the bow. It also prevents the bow from being dropped upon release. |
| Fishtailing | A horizontal left/right motion of the nock of an arrow during its flight to the target. |
| Fletching jig | A mechanical device that is used for accurate and consistent placement of fletches on an arrow. |
| Fletching | (1) The feathers or plastic vanes fitted to the arrow. (2) The process of attaching fletch to an arrow shaft. |
| Follow through | Continuing all activities produced during the full draw (visual, physical, mental and respiratory) during and after the shot. |
| Foot markers | Small objects placed in the ground to mark the place where the individual places the feet to assist with consistency of stance. |
| Full draw | The position reached when the string has been pulled back to the anchor point (facial reference point) prior to the release. |
| Ground quiver | An arrow holder that sits on or sticks into the ground; may also hold a bow. |
| Group | The pattern of an archer's arrows as they appear on the target. |
| Handle | The centre section of a bow also called the "riser". |
| Hanger | An arrow that does not penetrate the target fully but hangs down the face. |
| Heeling (the bow) | A term used when the archer puts most of the pressure on the lower part of the palm (with the heel of the bow hand) when at full draw. |

| | |
|-------------------------|---|
| Holding | Maintaining a steady bow position at full draw during aiming. |
| Hen fletching | Fletching other than the index or cock fletch. |
| Instinctive | A method of shooting in which no sight or other aiming device is used. The archer looks at the target and shoots. |
| Judge | The person responsible for the application of the rules of shooting during a tournament. |
| Kisser button | A small disc, or similar, which is fitted to the bow string and is drawn to the lips, or other reference point before releasing. |
| Launcher | An arrow rest where the arrow rests on top of a pronged extension just under and in line with the arrow. Can be spring loaded or drop away. |
| Left hand archer | An archer who holds the bow in the right hand, draws with the left hand and aims with the left eye. |
| Left hand bow | A bow with the window cut out on the right-hand side when viewed from the back of the bow. |
| Let down | To return the string to the rest position from draw without releasing the bowstring. |
| Let-off | The weight reduction from the peak weight to the holding weight on a compound bow. |
| Limbs | The parts of a bow that bends when the bow is drawn and give the propelling force to the arrow. |
| Longbow | A traditional bow popular in England in the middle ages, usually 6 feet or more in length and made of Yew wood or similar. |
| Loop | The woven or served eyes at the ends of a bow string that fit into the notches at the tip of the limbs when the bow is strung. |
| Mass weight | The weight of any piece of equipment placed on a weighing scale; usually used in reference to the bow. Not to be confused with the "draw weight". |
| Nock | This is a device fitted to the back of the arrow that has groove in it which fits onto the string. Also refers to the grooves at the extreme ends of the limbs in which the loop ends of the bow string are fitted. |
| Nocking point | The marked position on the bowstring where the arrow nock is placed before drawing and releasing. |
| Open stance | A shooting stance where the foot furthest away from the target is front of the line drawn from the centre of the target to the foot closest to the target. |
| Over-bowed | An archer using a bow that is too strong for them. |
| Over-braced | A bow that has a bracing height greater than the manufacturer's recommendation, or a bow that is fitted with a string too short for optimum and safe performance. |
| Overdrawing | To pull the string further back than optimum at full draw and may cause limb failure. |

| | |
|--------------------------|--|
| Overdrawing | To pull the string further back than optimum causing the arrow to fall off the arrow rest. |
| Pass through | An arrow that hits the target but passes right through. |
| Peak weight | The highest weight achieved during the drawing of a compound bow. |
| Peeking | A shooting flaw wherein the archer moves the head, or the bow out of the way, at release to watch the flight of the arrow. |
| Peep-sight | A plastic or metal device attached to a compound string and has a small hole which the archer looks through to line up the front sight with the target. Also, required to give clarity to a magnifying front sight in compound shooting. |
| Perfect end | An end in which all arrows land in the highest scoring zone. |
| Pile | The metal tip attached to the front of the arrow shaft. Also, known as the arrow point. |
| Pinching | Squeezing the arrow nock with the drawing fingers whilst at full draw. |
| Plucking | A shooting flaw in which the string hand is pulled out and away from the face or anchor point at the moment of release. |
| Point of aim | This is the place or the object at which the archer aims when using the tip of the arrow to aim. This may be above, below or on the target or on the ground, depending on the distance of the target and the cast of the bow. |
| Porpoising | The up and down movement of an arrow in flight, usually caused by a wrongly positioned nocking point. |
| Pressure button | A device that fits to the bow and protrudes just above the arrow rest which can be adjusted to assist in obtaining true arrow flight. Also, known as plunger button. |
| Pressure point | The place on the bow grip where the hand pressure is located when at full draw. |
| Quiver | A holder for arrows that may be worn by the archer or placed on the ground. |
| Range | (1) The distance to be shot. (2) The place where shooting takes place. |
| Recurve bow | A bow with limb tips that are curved forward, away from the archer (in the unstrung position). |
| Release | The act of freeing the bow string from full draw to launch an arrow. |
| Release aid | A mechanical hand-held device mainly used with compound bows, which attaches to the bowstring and is used to draw and release the string, minimizing the string deflection on release. |
| Right hand archer | An archer who holds the bow in the left hand, draws with the right hand and aims with the right eye. |
| Right hand bow | A bow with the window cut out on the left-hand side when viewed from the bow's string side. |
| Riser | The centre section of a bow to which the limbs are attached. |

| | |
|-------------------------|--|
| Round | A complete set of ends shot at designated distances and sizes of targets. |
| Serving tool | A mechanical device to assist in winding serving material onto the bow string. |
| Serving | Thread wrapped around the bowstring at its centre and on the loops. |
| Shaft | The main body of the arrow. |
| Shooting line | A single line marked parallel to the targets from which all archers shoot. |
| Sight bar | The vertical part of the bow sight to which the aperture assembly is attached. |
| Sight block | The moveable portion of the bow sight that holds the sight pin. |
| Sight extension | A bar that allows the bow sight to be extended away from the bow towards the target. |
| Sight pin | The part of the bow sight that is superimposed on the centre of the target during the act of aiming. |
| Sight | Any device mounted on the bow that allows the archer to aim directly at the target. |
| Sighters | Practice arrows shot prior to the commencement of scoring. |
| Snap shooting | Shooting without pausing to aim carefully or shooting before reaching the archers anchor point. |
| Spectator line | A clearly marked line over which spectators must not pass. |
| Spine | A measure of the stiffness of arrows. Some manufacturers use different measurements across the supporting points and different weights to calculate the spine of their own manufactured shafts. Most commonly, however, it is the measured deflection of an arrow shaft established by hanging a specified weight (2 pounds) from its centre whilst being supported at both ends across 28". |
| Stabilizer | A rod and weight assembly mounted on either the face or back of the riser to help eliminate torque of the bow around its axis upon release. |
| Stance | The physical alignment of the body in relation to the target in preparation for shooting. |
| String alignment | The visual relationship between the bowstring and the bow limbs or sight. |
| String fingers | The fingers that hold the bowstring when shooting a bow. |
| String jig | A device on which bowstrings are made. |
| String loop | The part of the string that fits over the nocks at the end of the bow limbs. |
| String walking | A style of shooting where the archer moves the position of the string fingers on the string to adjust the vertical displacement of the arrow. No bow sight is permitted when this method of shooting is being used. |
| String | The cord on a bow to which the arrow is nocked, usually made of synthetic material. |
| Tackle | Archer's equipment. |

| | |
|------------------------|--|
| Take down bow | A bow consisting of a riser and separate limbs that can be assembled for use and disassembled for storage or transport. |
| Target archery | A competitive round shot at fixed distances in an open field. |
| Target face | The cloth or paper or cardboard scoring area mounted on the target butt. |
| Target lane | Accommodation for, at most, three archers to shoot simultaneously from the shooting line at one target butt. |
| Target panic | The inability to hold the sight on the gold long enough to steady the bow sight and aim before release. Also, known as “Gold Shy”. |
| Target stand | A structure which holds the target butt in the designated correct position. |
| Tiller (static) | The difference in measurements between a given point on the top and bottom bow limbs and the bow string. Most bows now have adjustable limb bolts that assist in adjusting the tiller measurements. Usually 4-9mm more at the top limb measurement is preferred. |
| Tip | The extreme end of the narrow part of the limbs. |
| Torque | A rotation of the bow about its axis upon release of the bow string. |
| Toxophilite | One who enjoys the sport of archery. |
| Trajectory | The curved path an arrow follows during its flight to the target. |
| Tuning | Adjustments made to the bow and arrow set-up, to achieve the truest arrow flight possible. |
| Under-bowed | An archer shooting a bow that is too weak for the task being undertaken. |
| Under-draw | An archer who does not draw the bow to its full potential. |
| Under-strung | A bow with a string too long resulting in a low bracing height and reduced efficiency. |
| Valley | The point of the lowest holding weight reached while drawing a compound bow. |
| Vane | A feather or plastic fletching fitted to the arrow. |
| Waiting line | A line parallel to the shooting line which the archers about to go to the shooting line must not cross until given the signal to do so. |
| Wax (string) | Material, traditionally beeswax used to seal the bow-string preventing excessive moisture being absorbed. It also binds the string fibres together and lubricates the loop ends. |
| Windage | Horizontal correction of the bow-sight adjustment to compensate for wind drift. |
| World archery | Previously known as Fédération Internationale de Tir à l’Arc. The international governing body of archery. |
| Wrist sling | A strap, cord or lace that wraps around the archer’s wrist and the bow, thereby preventing the bow falling to the ground during release. |

Bibliography

ARCHERY AUSTRALIA . (2017, January). ARCHERY AUSTRALIA CONSTITUTION AND SHOOTING RULES.

Retrieved from ARCHERY AUSTRALIA : <http://www.archery.org.au/About-Us/Constitution-andShooting-Rules>

ARCHERY AUSTRALIA . (2017). POLICIES AND PROCEDURES.

Retrieved from ARCHERY AUSTRALIA : <http://www.archery.org.au/About-Us/Policies-and-Procedures/Policy-and-Procedures>

ARCHERY AUSTRALIA . (2017). TARGET ARCHERY.

Retrieved from ARCHERY AUSTRALIA : <http://www.archery.org.au/About-Archery/Events-andActivities/Target-Archery>

ARCHERY AUSTRALIA. (2017). Technique: Remove arrows.

Retrieved from ARCHERY AUSTRALIA: <http://www.archery.org.au/FAQs/Equipment/How-to-removearrows>

Australia Government . (n.d.). Athlete Pathways and Development.

Retrieved from Clearinghouse for Sport: www.clearinghouseforsport.gov.au/knowledge_base/high_performance_sport/athlete_pathways_and_development/Athlete_Pathways_and_Development

Australia Government . (n.d.). Risk Management.

Retrieved from Australia Institute of Sport : https://www.ausport.gov.au/supporting/clubs/governance/risk_management

Australian Institute of Sport. (n.d.). Pathways.

Retrieved from Australian Institute of Sport : www.ausport.gov.au/ais/pathways

Brazier, R., & Veroni, K. (n.d.). Coaching philosophy key to success.

Retrieved from HUMAN KINETICS : <http://www.humankinetics.com/excerpts/excerpts/coachingphilosophy-key-to-success>

BrianMac SPORTS COACH . (2017, January 1). Coaching Philosophy.

Retrieved from BrianMac SPORTS COACH : <https://www.brianmac.co.uk/coachphil.htm>

BrianMac SPORTS COACH . (2017, January 8). Information Feedback.

Retrieved from BrianMac SPORTS COACH : <https://www.brianmac.co.uk/infofb.htm>

BrianMac SPORTS COACH. (2017, January 1). Communication Skills.

Retrieved from BrianMac SPORTS COACH: <https://www.brianmac.co.uk/commun.htm>

CARDIO TREK. (2017). Archery Warmup Exercises + Stretches.

Retrieved from CARDIO TREK: <http://www.cardiotrek.ca/2013/04/archery-warmup-exercises-stretches.html>

Clarke, J. (2015). STRIVING TO PERFECTION.

Retrieved from BELIEVE PERFORM : <http://believeperform.com/>

Coaching Journey . (n.d.). Inside-Out Performance and Life Coaching.

Retrieved from Coaching Journey : <http://coaching-journey.com/the-most-important-coachingcompetency-active-listening/>

Coaching Kids Sports . (2014). Nonverbal communication sends powerful messages How often are you using it?

Retrieved from Coaching kids Sports: <http://www.coaching-kids-sports.com/nonverbalcommunication.html>

EducationVictoria. (2007). Examples of learning styles.

Retrieved from EducationVictoria: <http://www.education.vic.gov.au/documents/childhood/professionals/support/egsls.pdf>

Free Management Books . (n.d.). Coaching and Active Listening.

- Retrieved from Free Management Books : <http://www.free-management-ebooks.com/faqch/models-01.htm>
- Gary Heiting. (2017, April). Dominant Eye Test: How To Find Your Dominant Eye.
Retrieved from ALL ABOUT VISION : <http://www.allaboutvision.com/resources/dominant-eye-test.htm>
- Hanson, B. (n.d.). Develop Your Sport Coaching Philosophy.
Retrieved from AthleteAssessments : <http://athleteassessments.com/develop-your-sport-coachingphilosophy/>
- MindTools . (n.d.). The GROW Model: A Simple Process for Coaching and Mentoring. Retrieved from Mind Tools : www.mindtools.com/pages/article/newLDR_89.htm
- PERFORMANCE CONSULTANTS INTERNATIONAL . (n.d.). The GROW Model. Retrieved from PERFORMANCE CONSULTANTS INTERNATIONAL : <http://www.performanceconsultants.com/grow-model>
- PlaybytheRules . (2017). Child Protection Online Course.
Retrieved from Play by the Rules : <https://www.playbytherules.net.au/online-courses/child-protectiononline-course>
- PlaybytheRules . (2017). Let Kids Be Kids.
Retrieved from Play by the Rules : <https://www.playbytherules.net.au/>
- Raedeke, D., & Burton, T. (n.d.). What communication means for a coach.
Retrieved from HUMAN KINETICS: <http://www.humankinetics.com/excerpts/excerpts/whatcommunication-means-for-a-coach>
- Reilly, P. (2015 , July 7). A basic guide to the parts of a bow.
Retrieved from Lancaster ARCHER SUPPLY : <http://www.lancasterarchery.com/blog/a-basic-guide-tothe-parts-of-a-bow/>
- Sharpe, H. (2013, March 14). Different Types of Feedback.
Retrieved from A Level Physical Education : <http://hsharpeashfieldpe.blogspot.com.au/2013/03/different-types-of-feedback.html>
- SKILLSYOU NEED. (n.d.). Active Listening.
Retrieved from SKILLSYOU NEED: www.skillsyouneed.com/ips/active-listening.html
- World Archery's Development department. (2015, March 4). World Archery Coach's Manual: Entry Level.
Retrieved from Issuu: https://issuu.com/worldarchery/docs/manual_coaching_level_1
- Wrisberg, C. (n.d.). Considerations for giving feedback on skill performance.
Retrieved from HUMAN KINETICS: <http://www.humankinetics.com/excerpts/excerpts/considerationsfor-giving-feedback-on-skill-performance>