







INSTRUCTOR GUIDE

LESSON 19: INTRODUCTION TO ARCHERY

V. 2/2017

Objectives: D, E, & F

<u>Instructor Notes</u> 	<p>This lesson introduces the students to the knowledge needed to use archery equipment safely. This lesson corresponds with Chapter 7 (pages 103-106) in the student manual. Teach this lesson as part of a round robin.</p> <p>Teaching Methods Used In This Lesson</p> <ul style="list-style-type: none">• Lecture• Demonstration
<u>Time Suggested</u> 	20 Minutes
<u>Materials Required</u> 	<ul style="list-style-type: none">• Arrows – two types with different fletching (wood, fiberglass, aluminum, carbon, flu-flu)• Arrow tips – two types if possible (field tip, blunt tip, practice fixed-blade broadhead, mechanical broadhead)• Bow accessories (e.g. arm guard; release aid; quiver)• Compound bow
<u>Station Set-up</u>  5 minutes	<ol style="list-style-type: none">1. Lay out all items on a table.

Vocabulary
Builder



Note: Do not read the vocabulary to the students. These are terms commonly used during this lesson, and the definitions are for instructor reference only.

Armguard – A wrap around an archers bow arm that prevents the bowstring from slapping the archer’s arm.

Blunt tip – A tip of an arrow with a flat end used for shooting small game.

Bolt – A crossbow arrow consisting of a head, shaft, fletch, and nock.

Bowstring – The string of the bow which is pulled to engage the limbs and released to propel the arrow.

Bow stringer – A string used to flex the limbs of a longbow or recurve bow so that the bowstring can be put on the bow.

Broadhead – A tip on an arrow that provides multiple cutting surfaces.

Cables – The strings of a compound bow which link the cams.

Cam – The mechanical wheel at the end of a compound bow’s limb.

Compound bow – A bow with one or two cams mounted on the end of the limbs that allow faster speeds, greater energy, and let-off.

Crossbow – A bow where the limbs are mounted horizontally on a shouldered stock and is fired like a firearm.

Draw length – The measurement at full draw from the nock point to the throat of the grip plus 1 $\frac{3}{4}$ ".

Draw-weight – The peak amount of weight an archer will pull while drawing the bow.

Dry-fire – Pulling a bowstring back and releasing it without having an arrow in the bow.

Field tip – A tip of an arrow used for shooting practice targets.

Finger tab (finger glove) – A piece of fabric used to shield the archer's fingers from the bowstring to allow a smooth release of the bowstring.

Fletching – Feathers or plastic vanes around the nock end of the arrow shaft that helps stabilize the flight of the arrow.

Flu-flu – An arrow with large fletchings to produce increased drag to limit the distance the arrow will fly. Generally used for aerial shooting.

Let-off – A percentage that the draw-weight is reduced upon reaching full draw.

Limb – The part of the bow that provides the energy and forward motion of the string.

Longbow – A bow resembling a stick and string.

Nock – A slot in the end of an arrow that fits on the string; the spot on a bowstring where the arrow is connected.

Peep sight – A small piece of plastic or metal that is inserted into the bowstring above the nock to serving as a rear sight

window.

Quiver – A container that may or may not be attached to the bow that stores the arrows and can cover broadheads securely.




Recurve bow – A bow resembling a stick and string with the limbs curved away from the archer.

Release aid – A trigger device an archer uses instead of their fingers to draw and release the bowstring.



Riser – The stiff frame of a bow that the limbs extend off of.

Serving – A small diameter string that is wound tightly around the bow string, typically where the arrow is nocked.

LESSON PLAN

<p><u>PART A:</u></p> <p><u>Focus Activity</u></p>  <p>1 minute</p>	<p>The purpose of the focus activity is to get everyone focused on the lesson. Ask: “Have any of you ever shot a bow before?” Follow-up this question with: “Do you know what type of bow it was?”</p>
<p><u>PART B:</u></p> <p><u>Objectives</u></p>  <p>1 minute</p>	<p>State the learning objectives to the students. “At the end of this lesson, you will be able to:</p> <ul style="list-style-type: none"> • identify and explain the parts of a compound bow; • explain basic safe archery practices; • and explain how a broadhead tipped arrow kills.”
<p><u>PART C:</u></p> <p><u>Teaching Method</u></p>  <p>15 minutes</p>	<p>Say: “Let’s take a look at the equipment and knowledge necessary to shoot a bow safely.”</p> <ol style="list-style-type: none"> 1. Identify and explain the purpose of the following parts of a bow: <ul style="list-style-type: none"> • grip • limb • bowstring • sight • quiver • release aid 2. Identify and explain the parts of an arrow: <ul style="list-style-type: none"> • shaft <ul style="list-style-type: none"> ○ wood, fiberglass, aluminum, carbon • nock • fletching <ul style="list-style-type: none"> ○ feathers, vanes, flu-flu

	<ul style="list-style-type: none"> • tip <ul style="list-style-type: none"> ◦ field tips, blunt tips, broadheads <p>3. Explain how a broadhead tipped arrow kills:</p> <ul style="list-style-type: none"> • cutting through the vitals • rapid, uncontrolled blood loss <p>4. Explain safety concerns dealing with arrows:</p> <ul style="list-style-type: none"> • explain why the arrow has to match the bow based off of draw length and draw weight • not shooting wooden arrows from a modern compound bow • testing carbon arrows to make sure the shaft hasn't been compromised • ensuring weight of field points matches weight of broadheads • designate one broadhead for practice <p>5. Identify important safety accessories and safe archery practices:</p> <ul style="list-style-type: none"> • arm guard • bowstring wax • safe backstop • never "dry-fire" a bow <p>Students are not being tested at this stage; they are gaining new knowledge. Your role as the instructor is that of a facilitator/coach to help the students learn the material. Ensure they understand the terminology.</p>
<p><u>PART D:</u></p> <p><u>Student Summary</u></p>	<p>Ask students to recall the important topics that were covered in the lesson. It is important for students to be able to verbalize these points. Use questioning strategies to flesh out answers.</p>

 3 minutes	<ul style="list-style-type: none"> • What are the 4 components of an arrow? • What piece of equipment do bow hunters use to prevent themselves from being cut by a broadhead? <p>END OF LESSON</p>
<p><u>Addendum</u> <u>A</u></p> 	<p>FREQUENTLY ASKED QUESTIONS</p> <ol style="list-style-type: none"> 1. Does anyone still use recurve bows or longbows? <i>Yes, these styles of bows have grown in popularity in recent years. Both styles can be very effective, but both require an immense amount of practice.</i> 2. Why aren't crossbows legal? <i>By Massachusetts statute (MGL 131 s69), crossbows are not a legal means of archery equipment for hunting unless the hunter is permanently disabled to the point that they can't draw a conventional bow. To change this law requires an act of legislature. Each year bills are presented to the state House and Senate to change this law, but each year so far it has failed to pass. If students wish to have this law changed, they need to contact their state representatives.</i>