

# THE EXCITING SPORT OF YOUTH ARCHERY

### 6th-8th Grade Discussion Guide

Developed by: Dan Bertalan

#### Educational Partners:



#### SCIENCE CATEGORIES

**Outdoor Recreation & Adventure** 

TIMEFRAME 3-5 lessons

MATERIALS Access to internet for research, devices for recording videos

KEYWORDS Archery, Trap Shooting, Long Bow, Recurve Bow, Compound Bow, Crossbow, Nock, Fletching, Shaft



# **LEARNING OBJECTIVES**

Students will be able to:

- Explain how youth can learn about the sport of archery and practice it safely
- Define archery specific vocabulary
- Write an informational text and adapt it to film

### **ACTIVITY SUMMARY**

In this lesson students will consider what knowledge and skills youth need to participate in the sport of archery. Students will first reflect on the original clip using a triangle-square-circle protocol during which time their "circling" questions will be captured.

Next, in partners, students will engage in collaborative mini-research to define key vocabulary and create a crossword to demonstrate their understanding. Then, in small groups, students will research in greater detail the safety and knowledge necessary to participate in the sport of archery. They will collaboratively choose one point of safety or knowledge upon which to further expand into an informational video that could be used in an introductory archery class.

Finally, students will return to the questions they generated during the opening activity and share their new collective knowledge to answer these questions as able.





### **BACKGROUND INFORMATION**

Shooting sports is something that can be considered by all ages and skill levels. Some examples of different kinds of shoot sports to consider include: archery, scholastic shooting, firearms, trap shooting and hunting.

This episode explores one place, Spring Valley Range in Ohio, where youth can explore their interest in shooting sports. This center offers a static and walkthrough archery range as well as a static pistol and rifle range and trap shooting. Aside from the ranges, the facility offers a state-of-the-art educational center where many youths can learn to practice safe shooting sports.

For example, in the basics of bowhunting class, students will learn that there are four types of bows: longbow, recurve, compound and crossbow. They will also learn about bow terminology, including the parts of an arrow: nock, fletching, shaft and arrow tip.

Safety is also an important part of participating in shooting sports. A few tips for safety are to only point the bow and arrow down range in a safe direction. Only nock your arrow (or place it on the string) when it is safe to shoot. Be aware of both your target as well as what is in front, behind and beyond it.

### VOCABULARY

**ARCHERY**: the sport or skill of shooting with a bow and arrows, especially at a target.

**TRAP SHOOTING**: shooting at clay pigeons sprung from a trap into the air away from the shooter.

LONG BOW: a powerful wooden bow drawn by hand; usually 5-6 feet long.

**RECURVE BOW**: This type of bow features limbs that curve away from the archer at each end when it is unstrung. Compared to bows with straight limbs, recurve bows are able to provide a higher level of energy and speed to an arrow.

**COMPOUND BOW**: a modern type of bow that uses cables and pulleys when pulling the limbs back. Using a compound bow requires less energy thanks to its levering system, especially since there is less resistance when the bow is drawn.

**CROSSBOW**: resembling something between a rifle and a bow, uses a fast string to launch projectiles—just as a bow does—but also has a stock and trigger like a rifle.

**NOCK**: serves as the attachment point to place an arrow on a bowstring. Snap-on nocks lightly snap onto or grasp the bowstring

**FLETCHING**: describe any fin-like attachment used for stabilizing an arrow. These devices add spin to the arrow as it travels, creating a straight path through the air.

SHAFT: the shaft is the body of the arrow





# **LEARNING PROCEDURE**

#### **INTRODUCTION:**

Instructor states, "Shooting sports are great for all ages and skill levels. Shooting sports programs help kids learn about archery."

Ask students to engage in dialogue using the triangle, square, circle protocol. Provide the following set up, "Regarding the clip we just watched, engage in the following:"

1. Triangle

After a lesson, have students draw a triangle and next to it write down three important points from the presentation or reading they just saw or completed.

2. Square

Then, have students draw a square and next to it write down anything that "squares" with their thinking or anything they agree with.

3. Circle

Finally, have the students draw a circle and next to it write down anything that is still "circling" in their head or questions that they have.

Provide students with some individual think and write time and then ask for and call on volunteers to share their important points, things they agreed with and questions they still had. Capture the questions on a digital document or anchor chart to return to at the end of the lesson cycle.

#### ACTIVITY 1:

Explain to students that they will be working with a partner to develop a crossword puzzle as a means to engage in learning the vocabulary more deeply. Depending on students' understanding around crosswords, the instructor may need to provide some context.

Provide students with the vocabulary offered in the clip as well as a crossword template. There are multiple options online for both a hard copy as well as digital generators. As a starting point, provide students with the vocabulary that was presented in the clip and encourage students, as they research definitions and put them into their own words, to include other archery vocabulary.

#### Vocabulary that should be included:

Archery, Trap Shooting, LongBow, Recurve Bow, Compound Bow, Crossbow, Nock, Fletching, Shaft will happen next in the activity.

Once student partners have completed their crossword puzzles instruct them to switch with another pair to complete the crossword. Partners should also offer feedback on the puzzle when the definitions are vague or potentially mistaken.





#### ACTIVITY 2:

Explain to students that in groups of three they will research the safety and execution of archery. As they research, they should collectively agree on one topic related to safety or instruction that they would like to explore more deeply. Once students have chosen their topic, explain that they will be creating a short informational video on their topic that could be used by other youth as they begin to learn about archery. As an example, consider showing one of the clips found on the <u>National Archery in School Programs website</u>.

Before filming, tell students that they should write a script for the film as well as consider what props they may need to demonstrate safety and skills (note: students will need to be creative to convey props such as a bow, arrow or target). Groups should exchange scripts for peer feedback before engaging in the filming process. Again, remind students that the audience of the clip is intended to be youth new to archery.

When clips are complete, have a show party. Discuss with students how the class could share their work more broadly. Some options could be to create a website, invite students across the school who are interested to a view party, reach out to a local archery range and share the clips.

### **CONCLUSION**

Example:

The instructor states, "If you like action-packed fun with family and friends, shooting sports might be the perfect sport for you. It's great for all ages and skill levels, from archery, to scholastic shooting, safe and responsible use of firearms, shotgun sports, hunting and more."

Return to the questions "circling" that was captured in the first activity. Read through the questions students had at the start of the lesson. Ask students to contribute to responses to the questions based on their individual learning and research throughout the course of the lesson.

# **EXTENDING THE LESSON**

Example:

- Research to see if there are any youth shooting sports programs in your area. If there are, send them an email or give them a call to see what they can offer in terms of youth education and shooting sports.
- If there were questions from the start of the lesson that the class was unable to answer, consider assigning pairs or groups to further research and answer the questions.
- Tape a term (unit vocabulary) or name on the back of each student. You can also tape it on their forehead. Each student walks around the room, asking "yes or no" questions to the other students in an effort to guess the term. Of course, the term has something to do with your lesson topic.
- Invite students to explore the history of archery. Ask students to share out on one interesting historical fact.
- Pose the question, "How is math involved in archery?" (Youtube video clip resource)



Educational Partners:



**Related Links** 

https://www.naspschools.org

https://partnerwithapayer.org/wp-content/uploads/2022/10/WSFR-Shooting-Ranges-%20Summer\_2022.pdf

#### https://iboarchery.com

### The following National Common Core Standards can be met teaching; THE EXCITING SPORT OF YOUTH ARCHERY

#### **6TH GRADE**

CCSS.ELA-LITERACY.RI.6.1	Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
CCSS.ELA-LITERACY.RI.6.2	Determine a central idea of a text and how it is conveyed through particular details; provide a summary of the text distinct from personal opinions or judgments.
CCSS.ELA-LITERACY.RI.6.7	Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.
CCSS.ELA-LITERACY.W.6.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
CCSS.ELA-LITERACY.W.6.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
CCSS.ELA-LITERACY.SL.6.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.
CCSS.ELA-LITERACY.SL.6.1.A	Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.
CCSS.ELA-LITERACY.SL.6.1.B	Follow rules for collegial discussions, set specific goals and deadlines, and define individual roles as needed.
CCSS.ELA-LITERACY.SL.6.1.C	Pose and respond to specific questions with elaboration and detail by making comments that contribute to the topic, text, or issue under discussion.
CCSS.ELA-LITERACY.SL.6.1.D	Review the key ideas expressed and demonstrate understanding of multiple perspectives through reflection and paraphrasing.
CCSS.ELA-LITERACY.SL.6.2	Interpret information presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how it contributes to a topic, text, or issue under study.
CCSS.ELA-LITERACY.SL.6.5	Include multimedia components (e.g., graphics, images, music, sound) and visual displays in presentations to clarify information.



Educational Partners:



#### **7TH GRADE**

CCSS.ELA-LITERACY.RI.7.1	Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
CCSS.ELA-LITERACY.RI.7.2	Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text.
CCSS.ELA-LITERACY.W.7.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
CCSS.ELA-LITERACY.W.7.4	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
CCSS.ELA-LITERACY.SL.7.1	Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.
CCSS.ELA-LITERACY.SL.7.1.A	Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.
CCSS.ELA-LITERACY.SL.7.1.B	Follow rules for collegial discussions, track progress toward specific goals and deadlines, and define individual roles as needed.
CCSS.ELA-LITERACY.SL.7.1.C	Pose questions that elicit elaboration and respond to others' questions and comments with relevant observations and ideas that bring the discussion back on topic as needed.
CCSS.ELA-LITERACY.SL.7.1.D	Acknowledge new information expressed by others and, when warranted, modify their own views.
CCSS.ELA-LITERACY.SL.7.2	Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.
CCSS.ELA-LITERACY.SL.7.5	Include multimedia components and visual displays in presentations to clarify claims and findings and emphasize salient points.
8TH GRADE	
CCSS.ELA-LITERACY.RI.8.1	Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.
CCSS.ELA-LITERACY.RI.8.2	Determine a central idea of a text and analyze its development over the course of the text, including its relationship to supporting ideas; provide an objective summary of the text.
CCSS.ELA-LITERACY.W.8.2	Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information

CCSS.ELA-LITERACY.W.8.2Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information<br/>through the selection, organization, and analysis of relevant content.

CCSS.ELA-LITERACY.W.8.4Produce clear and coherent writing in which the development, organization, and style are appropriate<br/>to task, purpose, and audience.

CCSS.ELA-LITERACY.SL.8.1Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with<br/>diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their<br/>own clearly.





CCSS.ELA-LITERACY.SL.8.1.A	Come to discussions prepared, having read or researched material under study; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.
CCSS.ELA-LITERACY.SL.8.1.B	Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.
CCSS.ELA-LITERACY.SL.8.1.C	Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas.
CCSS.ELA-LITERACY.SL.8.1.D	Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.
CCSS.ELA-LITERACY.SL.8.2	Analyze the purpose of information presented in diverse media and formats (e.g., visually, quantitatively, orally) and evaluate the motives (e.g., social, commercial, political) behind its presentation.
CCSS.ELA-LITERACY.SL.8.5	Integrate multimedia and visual displays into presentations to clarify information, strengthen claims and evidence, and add interest.