

Grade: 4th – Adult
Time: 1-1 1/4 hours
Season: All

Archery

National Science Teaching Standards

- A.** Science as **INQUIRY**
- C.** **LIFE** Science
- E.** Science **TECHNOLOGY**
- F.** Science in **PERSONAL** and **SOCIAL PERSPECTIVE**
- G.** **HISTORY** and **NATURE** of Science

Background Information:

Archery is a sport that has been around a very long time and is rich in history. The first archers were hunters looking for a easier, and safer, way of getting their dinner. A bow allowed them to shoot an arrow much farther and with more accuracy than throwing a spear. Since it's beginnings, archery has been taken up by different people for different reasons. Archery competitions have been around almost as long as the invention of the bow and still are very popular. Hunting with archery equipment, or bow hunting, draws a larger following every year. Most hunters pursue white-tail deer, and the benefits of hunting with a bow are many. Most states have special bow-only seasons before the fire arms seasons start. This gives the bow hunter the advantage of hunting deer before anyone else. Also, the added challenge of bow hunting is something that many hunters enjoy. Equipment has changed greatly, with modern technology helping to develop gear that is safer, more dependable, and easier to use. Even with modern equipment, however, the principle is still the same and the same qualities are that were required hundreds of years ago are still necessary to be a good shot with a bow and arrow. In archery, the shooter needs to able to concentrate and focus on single goal and still be able to relax and control their actions. Like most other sports some participants will find this easy to do while it will be more challenging to others. For every shooter however, the key to success is practice.

Objective:

- The students will participate in the unique shooting sport of archery.
- They will learn about some of the equipment and techniques used, and will learn how technology has changed bow hunting over the years.
- The students will learn the safety needed to participate in archery and the ethics that goes along with any hunting sport.
- It will provide the opportunity to try something new and encourage interest in a sport which can furnish a lifetime of enjoyment.

Pre Activity:

- Research archery in the Olympics.
- Share information with class.
- Discuss the importance of hunting throughout history.

Equipment:

- Compound bows (left and right handed) on bow tree
- Recurve bows
- Bucket of arrows
- 2 targets
- 3-D targets in the shooting trail

Procedure:

1. Discuss the history of the spear and bow.
2. Discuss the safety of this shooting sport:
 - Keep bows and arrows in separate location just like guns.
 - Point the bow and arrow only at the target...never at a person or anything you do not intend to shoot. Emphasize: arrow should be pointed towards the ground until ready to shoot.
 - Set boundaries for safety: all students remain behind the bow tree while classmates are shooting at the targets.
 - Students not shooting need to be quiet while others are shooting...distractions can make a shooter turn toward the group unknowingly. No distractions!
3. Discuss parts of arrow: tip, nock, shaft, fletchings.
4. Discuss the parts of the bow: pulleys making a compound bow (ask if they have studied simple machines in school), the extra curve in the recurve bow (these all increase the power of the force behind the arrow), string, grip, nocking bars, whisker biscuit.
5. Demonstrate proper shooting form:
 - Place feet perpendicular to target.
 - Extend the bow straight out from body towards the target...be sure there is a little crook at elbow so string does not hit the inside of your arm.
 - If shooting right-handed, place left arm straight out from body and draw string back with right arm. Left handers use reverse hands.
 - Grasp string with first joints of middle three fingers. All fingers below the nocking bars.
 - Draw string back to side of face, clear to the cheek bone if possible.
 - Be sure elbow is level...not pointing up or not tucked in next to your body.
 - Try to sight arrow through whisker biscuit or down the shaft of the arrow.
 - Hold string steady and concentrate on center of target.
 - Release smoothly by letting string roll off fingertips.
 - Follow through by holding bow steady until arrow hits target.
6. Demonstrate method for removing arrows from target:
 - Place one hand on target near arrow.
 - Grasp arrow near target and pull straight out.
 - Bracing the target with a leg or knee may help.
 - Students can only retrieve arrows when partner is through shooting.

7. Begin shooting at targets, two students at a time and each gets 3 arrows. All other students need to remain conscious of safety rules. Remind the 2 students they will not retrieve arrows until both students are done! Safety first!

8. After all students have had a chance to shoot 3 arrows, take the students to the 3-D targets in the trail.

- Divide the students in 3-4 groups. Depending on the number of students and adults that feel comfortable taking charge of a group.
- Each student will need to take an arrow to the trail and the adult of each group should take several extra arrows. **Be sure everyone walks and the arrows are pointing down toward the ground.**
- Walk to trail. All stop at the turkey. Explain how this shooting is going to proceed:
 1. Each group will go to a different target.
 2. The shooter will be in the trail with the adult supervising.
 3. All other students and adults will be standing behind the trail...safety!
 4. Each student will take 1 shot in this manor.
 5. When everyone in the group has completed his/her shot, the group leader will raise the bow indicating the group is done.
 6. **No group will proceed to get arrows until all groups are done.**
 7. Pick up arrows.
 8. Rotate to the next 3-D target.
 9. Repeat procedure as time allows.
 10. Collect arrows for last time. Have students take arrows back and put in bucket. Remind them to WALK!

Post Activity:

- Handout HACC, Hunting and Conservation Camp(boys) and Outdoor Journey for Girls (girls) brochures to students. Go over briefly; let students take them home. (Be sure to ask for these brochures before leaving Springbrook.)
- Go on the internet to find local Pheasant Forever Chapters, Isaac Walton League, and other shooting clubs in Iowa for more information about these sports and opportunities in Iowa.
- Research hunting laws in Iowa.

Post Discussion:

- Discuss safety and security as basic needs of all human beings.
- Discuss the purpose of hunter safety education.
- Do you think hunting safety should be taught in schools? Explain.
- Discuss the ethics of hunting an animal.