Forage

*Lesson Plan for Grade 6, English Language Arts*

*Prepared by National Ag in the Classroom*

*Modified by Mississippi State University, School of Human Sciences*

*for Mississippi Farm Bureau Federation - AITC*

# OVERVIEW & PURPOSE

Students will participate in a foraging activity, gaining perspective on how scarcity of resources can affect well-being and how agriculture provides the benefit of a steady, reliable food supply. Then they will read about hunter-gatherers and early agriculture and use maps to explore how geography affected the development of early civilizations.

# EDUCATIONAL STANDARDS

**Mississippi College-and-Career Readiness Standards:**

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.

SL.6.4 Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation.

**NALOs:**

T1.6-8.f Explain and discuss why people migrate and change environments to meet their basic needs

# OBJECTIVES

* Students will discuss food, water, and space needs of common livestock animals
* Students will understand factors important to ancient civilizations.
* Students will describe how land use and food consumption can be sustainable

# MATERIALS NEEDED

* Peanuts (4 for each student)
* Wrapped Candy (4 for each student)
* [Making a Water Cup activity sheet](https://drive.google.com/file/d/1DzFQmRl92XesGXKf1gdnU1ECyUai7rHL/view?usp=share_link) (1 for each student)
* [Hunter-Gatherer Experience activity sheet](https://drive.google.com/file/d/1WrPi-4x2T4nPMFvwmx6ixyLWu7Lx0pxN/view?usp=share_link) (1 for each student)
* [Stone Age Hunter-Gatherer activity sheet](https://drive.google.com/file/d/11qV6OjHJgbDzouNXMFnEI65AigKkblM5/view?usp=share_link) (1 for each student)
* [Hunter-Gatherer Think Sheet](https://drive.google.com/file/d/1RBd5i6guGLfYNO4DtpOu6GG6HltrSglj/view?usp=share_link) (1 for each student)
* [How Farming Planted Seeds of the Internet](https://www.youtube.com/watch?v=3Evl0tQAdXI) video

# Lesson Set Up:

1. Read through the teacher's background information provided.
2. Print copies of “[Making a Water Cup](https://drive.google.com/file/d/1DzFQmRl92XesGXKf1gdnU1ECyUai7rHL/view?usp=share_link)” sheet (1 per student).
3. Print copies of the “[Hunter-Gatherer Experience](https://drive.google.com/file/d/1WrPi-4x2T4nPMFvwmx6ixyLWu7Lx0pxN/view?usp=share_link)” activity sheet (1 per student)
4. Print copies of the “[Stone Age Hunter-Gatherer](https://drive.google.com/file/d/11qV6OjHJgbDzouNXMFnEI65AigKkblM5/view?usp=share_link)” activity sheet (1 per student)
5. Print copies of the “[Hunter-Gatherer Think](https://drive.google.com/file/d/1RBd5i6guGLfYNO4DtpOu6GG6HltrSglj/view?usp=share_link)” activity sheet (1 per student)
6. Pull up [How Farming Planted Seeds for the Internet](https://www.youtube.com/watch?v=3Evl0tQAdXI) video

# VOCABULARY

**agriculture:** the science, art, or practice of cultivating the soil, producing crops, and raising livestock and in varying degrees the preparation and marketing of the resulting products

**ancient:** of or relating to a time long past, particularly the time from the earliest known civilizations to the fall of the Roman Empire in 476 AD

**civilization:** the way of life of a people that is advanced in social developments like art, science, and government

**domesticate:** to breed a population of animals or plants to serve the purposes of human beings and to need and accept human care

**hunter-gatherer:** a member of a culture in which food is obtained by hunting, fishing, and gathering plants to eat rather than by growing crops and raising animals

**technology:** the application of scientific knowledge for practical purposes

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# Ag Facts:

* Fifteen crops provide about 80 percent of the world's food supply, and most of them were domesticated in ancient times.
* With the development of agriculture, the human population nearly doubled, growing from less than 3 million people in 10,000 BC to 5.3 million in 8000 BC.
* The world's oldest known recipes were written on clay tablets in ancient Babylon around 1700 BC.

Background information for teachers:

**Technology** can be broadly defined as the use of knowledge and invention to make life better. There are countless forms of technology that we use every day, but perhaps the most essential technology for human civilization is the practice of agriculture. It may seem strange to think of agriculture as a form of technology because it is such an integral part of our lives, but there was a time before agriculture when people had to get their food by hunting and gathering.

All people share the same basic needs for water, food, and protection from the elements. Humans who lived more than 10,000 years ago worked daily to ensure that they could cover their basic needs. These people were called hunter-gatherers because they obtained their food by hunting animals and searching for edible plants. They lived in small family groups and moved from place to place in order to collect food from different sources as they became available. Hunter-gatherers took advantage of all food sources, even scavenging alongside vultures and hyenas, and they lived in nearly every different climate zone. They used fire to cook meat, preserved fish by salting and smoking, and even preserved meat from larger animals by storing it under water where it would stay cool. Even long ago, people were constantly developing new technologies to help them survive and to make life easier.

The development of **agriculture**, or the intentional production of plants and animals for human use, allowed people to settle in one place and form villages and cities. Approximately 10,000 years ago, the **domestication** of plants and animals for human use began to develop rapidly. As hunter-gatherers became farmers, they learned to select and save seeds from plants that produced the best crops and to breed the animals that were best suited to people’s needs. The first steps of domestication probably happened by accident, but soon farmers deliberately practiced selective breeding to develop crops and livestock more suited to their needs. The development and cultivation of grains and legumes that are calorie-dense, small, and easy to store allowed people to put away food for winter, for hard times or for use in trade and barter.

Having a reliable food source made people less vulnerable to starvation, and over time, life expectancy increased. However, the advent of agriculture may not have immediately improved nutrition and health. In times of abundance, hunter-gatherers had very nutritious diets, eating mostly vegetables and meat and very little sugar or salt. In contrast, early farmers showed more signs of malnutrition and disease, which likely came from depending on a few starchy crops (wheat, rice, corn) for most of their calories and living in crowded cities where disease spread easily. Over time, these challenges diminished as people learned more about health and nutrition and agricultural practices improved.

As agriculture became more productive and efficient, people were able to produce a surplus of food, and villages developed into **civilizations**. People began to specialize in different tasks, writing systems arose, and art and science flourished. Around the world, **ancient** civilizations arose in areas favorable for seasonal farming, animal domestication, and hunting. The best locations for farming provided fertile soil, a long growing season, regular rainfall, and access to fresh water.

LEARNING PROCEDURES

Interest Approach:

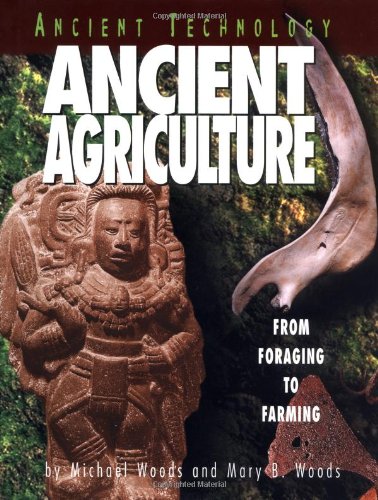
1. Show students the video [How Farming Planted Seeds for the Internet](https://www.youtube.com/watch?v=3Evl0tQAdXI).
2. Discuss the video using the following questions:
   1. Why would some argue that farming is the most important technology?
   2. What did people do before the invention of farming?
3. Explain to students that our species, *Homo sapiens,* has been on the Earth for approximately 200,000 years, but we have only been farming for a little more than 10,000 years. For the vast majority of human history, people got their food by hunting and gathering.
4. Tell students that in the following lesson, they will get to explore what life was like for hunter-gatherers and how life changed with the beginning of agriculture.

Activity 1 Procedures:

1. Prior to class, identify an area for this activity; outdoors is preferable, but a large room indoors will work. Hide the peanuts and wrapped candy (four of each per student) around the area. Some of the peanuts and candies should be difficult to find.
2. Review with students what the basic human needs are—food, water, and protection from the elements (food/clothing). Tell them that today they will not have to worry about their shelter, but they will be working like hunter-gatherers to obtain their food (represented by peanuts) and water (represented by wrapped candies).
3. Pass out the [Making a Water Cup activity](https://drive.google.com/file/d/1DzFQmRl92XesGXKf1gdnU1ECyUai7rHL/view?usp=share_link) sheet and have each student make their own water cup by following the directions.
4. Take students to the area where the candies and peanuts are hidden. Show them the boundaries of the search area and the place they should gather when finished searching.
5. Explain to the students that they will have **12 minutes** to find enough food and water to survive. Because people can survive longer without food than they can without water, students must find enough water to survive (2 pieces of wrapped candy) before they start collecting food. They should place the candy in their cups and then search for as much food (peanuts) as they can find in the remaining time. When they are asked to stop, they must immediately stop searching and come back to the designated area.
6. After the search is finished, pass out the [Hunter-Gatherer Experience](https://drive.google.com/file/d/1WrPi-4x2T4nPMFvwmx6ixyLWu7Lx0pxN/view?usp=share_link) activity sheet and have students record the sum of what they were able to find under “Experience #1.”
7. Use the following questions to discuss what the students observed during this first experience:
   * Did all of the students start to work at the same time? Why or why not?
   * Did everyone obtain the same amount of water and food?
   * What else were students doing during this time?
   * What happened when they did not get started on time?
   * What happened if they helped someone else?
8. Explain to the students that in order for them to survive, they need to have filled their water cup with two pieces of wrapped candy and have at least two peanuts for food. Take a poll and record the following statistics:
   * How many survived (i.e., have at least two candies and two peanuts)?
   * How many survived but went hungry (i.e., collected two candies but less than two peanuts)?
   * How many died (i.e. did not collect enough water)?
   * How many had excess food (more than two peanuts)?
9. Repeat the activity, but this time give the students only **9 minutes** to search. Note: This time you will notice that there is not enough food to go around, so some students will not get enough food to survive. Some students may steal from others, and some students may get mad and stop playing the game. Allow these interactions to take place; it will help the students to better understand the purpose of the activity.
10. Bring students back to the classroom and have them fill out “Experience #2” on the *Hunter-Gatherer Experience* activity sheet.
11. Repeat the questions from steps six and seven. Discuss the changes between the first experience and the second experience. Ask students to explain why things changed.

Activity 2 Procedures:

1. Pass out the [Stone Age Hunter-Gatherers activity](https://drive.google.com/file/d/11qV6OjHJgbDzouNXMFnEI65AigKkblM5/view?usp=share_link) sheet. Ask students to fill out the “You” section of the activity sheet.
2. Have students read the first chapter of *Ancient Agriculture: From Farming to Foraging*. Instruct them to take notes, indicating the pages where they find answers to the statements. (Note: There will be more than one place to find an answer for each question). They should also mark on their activity sheets whether the statements are true or false according to the author.
3. Discuss the activity sheet. For each statement, call on a student to tell you on which page they found an answer. Then have the student read the section that answered the statement. When you have finished, ask the students to write a summary statement answering the prompt at the bottom of their activity sheets.
4. Have students complete the [Hunter-Gatherer Think Sheet](https://drive.google.com/file/d/1RBd5i6guGLfYNO4DtpOu6GG6HltrSglj/view?usp=share_link) as a homework assignment.



**Concept Elaboration and Evaluation**

* Use the Prezi[8 Ancient Culture Hearths](https://prezi.com/rd4m-lhrtctb/8-ancient-culture-hearths/) by Mark Leavitt to discuss the concept of *culture hearths,* which are regions where important developments like religion, the use of iron tools, or highly organized social structures developed and then spread from.
* Watch the video clip, [Iowa Nice Guy: The Importance of Ag](https://www.youtube.com/watch?v=1Wh46Ezsxo8&t=39s). Learn what farming has made possible in our lives by freeing up some of the time that our ancestors used to forage for food.

After conducting these activities, review and summarize the following key concepts:

* For most of human history people got their food by hunting and gathering and moved from place to place, following their food sources.
* The practice of agriculture arose slowly about 10,000 years ago as people began to cultivate and domesticate plants and animals.
* With the development of agriculture, people were able to settle in one location and produce and store a surplus of food.
* Ancient civilizations were built around the world in locations that were favorable for agriculture due to climate and the availability of natural resources like fertile soil and access to water.

Additional Learning Procedures

To help students review and elaborate more about forage, try using the [“I used to think.. Now I think…”](https://drive.google.com/file/d/1_S6kBYyjIoIx69Wqy1MEGaOnhDwH6KQj/view?usp=drive_link) method to allow students to think deeper and make new connections.Additional Texts to Include: [Fearless Foraging in the Rocky in the Rocky Mountains -Audiobook](https://www.audible.com/pd/Fearless-Foraging-in-the-Rocky-Mountains-Audiobook/B0BX4SH5MF?source_code=GPAGBSH0508140001&ipRedirectOverride=true&gclid=CjwKCAjwjOunBhB4EiwA94JWsC7ctGAHlEx3BPv_d43diMOYFakf74-KWtgjy6ZkEDezyP98La0J4hoCg2YQAvD_BwE&gclsrc=aw.ds) [Foraging and Feasting](https://mountainroseherbs.com/foraging-feasting?sku=20-00061-27&utm_campaign=&utm_term=&utm_source=adwords&utm_medium=ppc&hsa_ver=3&hsa_acc=5389326775&hsa_mt=&hsa_src=x&hsa_cam=18463803571&hsa_grp=&hsa_tgt=&hsa_kw=&hsa_ad=&hsa_net=adwords&gad=1&gclid=CjwKCAjwjOunBhB4EiwA94JWsPhEbBy6Okw26w51ooHkKyd34-7i1JBUOXu-kh6Giku_-k73VdupnBoC_3YQAvD_BwE)



Source:*Ancient Agriculture From Foraging to Farming* by Michael and Mary B. Woods

*For more information and additional lessons visit https://msfb.org/ag-in-the-classroom/lesson-plans/.*