

Middle School



Educator's Guide
STICKS TO BRICKS

Major Sponsor:



The **Field**
Museum

Background

Take a moment to consider what life was like before there were cities. For the majority of human history people lived off the land in every possible way. They did not grow crops or keep animals for food. They hunted wild animals and gathered wild fruits, grains roots and mushrooms.

Every person alive today are descendents of expert hunter-gatherers. Before 10,000 BCE humans lived as hunter gatherers. Early humans did not have a sedentary or settled lifestyle. They moved around based on the time of year and the distribution of their foods (animals or fruits, grains). Hunter-gatherers lived a nomadic life, moving across the landscape and taking those things they could use. This foraging lifestyle did not allow humans to have many possessions or to reside in a permanent home. Humans across the world began to domesticate wild plants and animals in the period beginning around 10,000 BCE. Domestication refers to humans selecting specific traits of plants and animals that are most desirable to humans and breeding for the proliferation of these traits. This domestication allowed humans to move from a nomadic hunter-gatherer life to one of herding and farming. Early humans only began to settle in one area for an extended period of time when they were able to harvest crops. The domestication of animals (keeping herds of animals) also allowed early humans to settle. With an increase in predictable food supply the population of humans was able to increase allowing permanent homes to be built, and material objects such as pottery and furniture to be made. With the establishment of permanent settlements cities, states and civilizations began to develop.

The transition from hunter-gatherer society to an agricultural society is one of the most significant events in the history of humans, it is known as the Neolithic Revolution.

How do we know how ancient peoples lived and when this great change in lifestyle from hunter-gatherer to farmer took place? Archaeology is the study of the past by digging up and excavating places where ancient peoples used to live and examining the objects found there. Archaeologists study human societies through material, cultural and environmental data that is left behind. Archaeologists and anthropologists often work closely together to discover the past. Anthropologists study contemporary societies that continue to live much like hunter-gatherers of the past.

In the Sticks to Bricks broadcast you will meet Bill Parkinson, Associate Curator of Eurasian Anthropology at The Field Museum. Dr. Parkinson's research focuses on the origins and development of early village societies, specifically in southeastern Europe. He is particularly interested in how some human societies became more economically and politically complex over time.

Background (cont.)

He is also currently is the American Director of the Körös Regional Archaeological Project in Hungary; an international, multi-disciplinary research project aimed at understanding the social changes that occurred on the Great Hungarian Plain throughout the Holocene. His research team has excavated two Copper Age villages in southeastern Hungary. These villages, which date to 4,500-4,000 BC, are the first of their kind to be systematically excavated in the region and have yielded important information about economic and political organization during this important time period when humans first began to use metals. Currently, the team is exploring why early agricultural villages in the region began to live in large, fortified, villages during the Neolithic period, about 5,300 BC.

There are several hypotheses as to why humans shifted from a hunter-gatherer lifestyle to a more sedentary agricultural lifestyle. One hypothesis focuses on the change in climate. Pre-Holocene the climate was colder and drier, the climate shifted during the Pleistocene to a warmer and wetter - conditions favorable for farming. Humans were able to readily find locations with plenty of water needed for growing crops. The second hypotheses is the increase in population at this time required that humans find other ways of obtaining a more steady supply of food.

Debate exists among scientists as to whether a hunter-gatherer lifestyle or an agricultural lifestyle was of greater benefit to humans. Hunter gatherers had a more varied diet that allowed them to adapt to natural disasters that may affect food supply, such as drought. A settled, sedentary lifestyle allowed humans the time to advance technology and establish individuals with specialized skills. The Sticks to Bricks broadcast will investigate these topics as well as delve into the different implications that occurred as a result of humans moving into a sedentary lifestyle.

Additional Resources:

Explorer's Journal by Bill Parkinson

https://drive.google.com/open?id=0B_RRAL81VyHTdTVNT1VMU3pncHB0ZFZBdlR3a2VrUENXWDQw

Expeditions at the Field Museum: Neolithic Archaeology - Bill Parkinson's research:

<http://expeditions.fieldmuseum.org/neolithic-archaeology>

<http://expeditions.fieldmuseum.org/neolithic-archaeology/media/virtual-neolithic-village-tour>

TED Ed Urbanization and the Evolution of Cities across 10,000 years

<http://ed.ted.com/lessons/urbanization-and-the-future-of-cities-vance-kite>

TED Ed: How farming planted seeds for the Internet - Patricia Russac

<http://ed.ted.com/lessons/how-farming-planted-seeds-for-the-internet-patricia-russac#watch>

TO FORGE OR FARM: EXPLORING HUNTER-GATHERER AND AGRICULTURAL SOCIETIES

Pre-Broadcast Activity

After this lesson your students will be able to:

- Compare and contrast hunter-gatherer and agricultural communities.
- Identify the key characteristics of each way of life
- Explain there were advantages and disadvantages to each



PREREQUISITE KNOWLEDGE

- Basic understanding of prehistoric eras (ex. Neolithic vs. Paleolithic)
- Familiarity with the definitions of hunter-gatherer and agricultural societies
- Identification of basic human needs that all communities must fill



MATERIALS AND PREP

- Hunter-Gatherer/Settler Comparison Chart (pg. E6)
- “Join the Neolithic Revolution” comic (pg. E8)
- Venn diagram - one copy for each student (pg. S1)

Resources

Standards: C3 Framework

D2.His.16.6-8: Organize applicable evidence into a coherent argument about the past

Common Core State Standards

CCSS.ELA-LITERACY.W.6.1

Write arguments to support claims with clear reasons and relevant evidence.

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.6.4

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.



DIRECTIONS

Warm Up

- 1.** Begin class by projecting the following question: “If you lived in 5000 BC, would you prefer to be a hunter-gatherer or live in an agricultural settlement? Why?”
 - a.** Record students’ answers on a piece of chart paper
- 2.** Ask students to brainstorm some advantages and disadvantages of a hunting-gathering lifestyle.
 - a.** Records these answers on a piece of chart paper.
- 3.** Ask students to brainstorm some advantages and disadvantages of an agricultural lifestyle
 - a.** Records students’ answers on a piece of chart paper
- 4.** Hand out copies of the “Join the Neolithic Revolution” comic. Walk through the comic with students.
 - a.** Ask students: “What time period does the cartoon depict?” “What was going on at the time?” “Why do you think the comic has the title - Join the Neolithic Revolution?”
 - b.** Have students look at the first two characters in the cartoon and ask the following questions:
 - i. Who are the first two characters in the cartoon?
 - ii. Ask students if they can define migration.
 - iii. Ask: What do we call people who migrate?
 - iv. How do nomads know where to go for food?
 - c.** Direct students to the first photo.
 - i. Ask: The characters seem tired, why might they be feeling this way?
 - ii. What happens to these characters?
 - iii. What does the Neolithic man tell them?
 - iv. What does the Neolithic man tell them is the key to the Neolithic way of life? Discuss domestication with your students.
 - d.** Have students examine the bottom section that says “Your KEYS to a BETTER LIFE”
 - i. What do these keys tell you about domestication and the Neolithic Way?
 - ii. What do you call people who live and produce their food in one place?
 - iii. According to the cartoon, how does domestication work?
 1. How did early agriculturalists modify the environment?
 2. Can we think of similar ways agriculture exploits the environment today?
 - e.** Ask students to read the disclaimer at the bottom of the cartoon.
 - i. What might the disclaimer mean?
 - ii. What does it tell you about the attitude of the cartoon.

DIRECTIONS (CONT.)

- 5.** Break students into two groups Hunter-Gatherers and Farmers
 - a.** In their groups they are to discuss the things they feel are important to their community and what their work and worries would be every day, students will present their ideas to the rest of the class
 - b.** May want to assign roles for each group, leader, recorder, presenter
 - c.** Have students complete the Hunter-Gatherer/Settler Comparison chart as they have discussions in their group.
- 6.** After students have presented the characteristics of each community - hand out the Characteristics of Hunter Gatherers vs. Agricultural Society Venn diagram to students and have them fill it out
 - a.** Review the Venn diagram as a class - the Venn diagram will serve a students' notes for the day

Closing

- 7.** Students will write a few sentences as to whether they still prefer the choice they made at the beginning of class and why.

Credits:

Comic by David Steinlicht [Mysteries of Çatalhöyük](#) ©2003 [Science Museum of Minnesota](#)

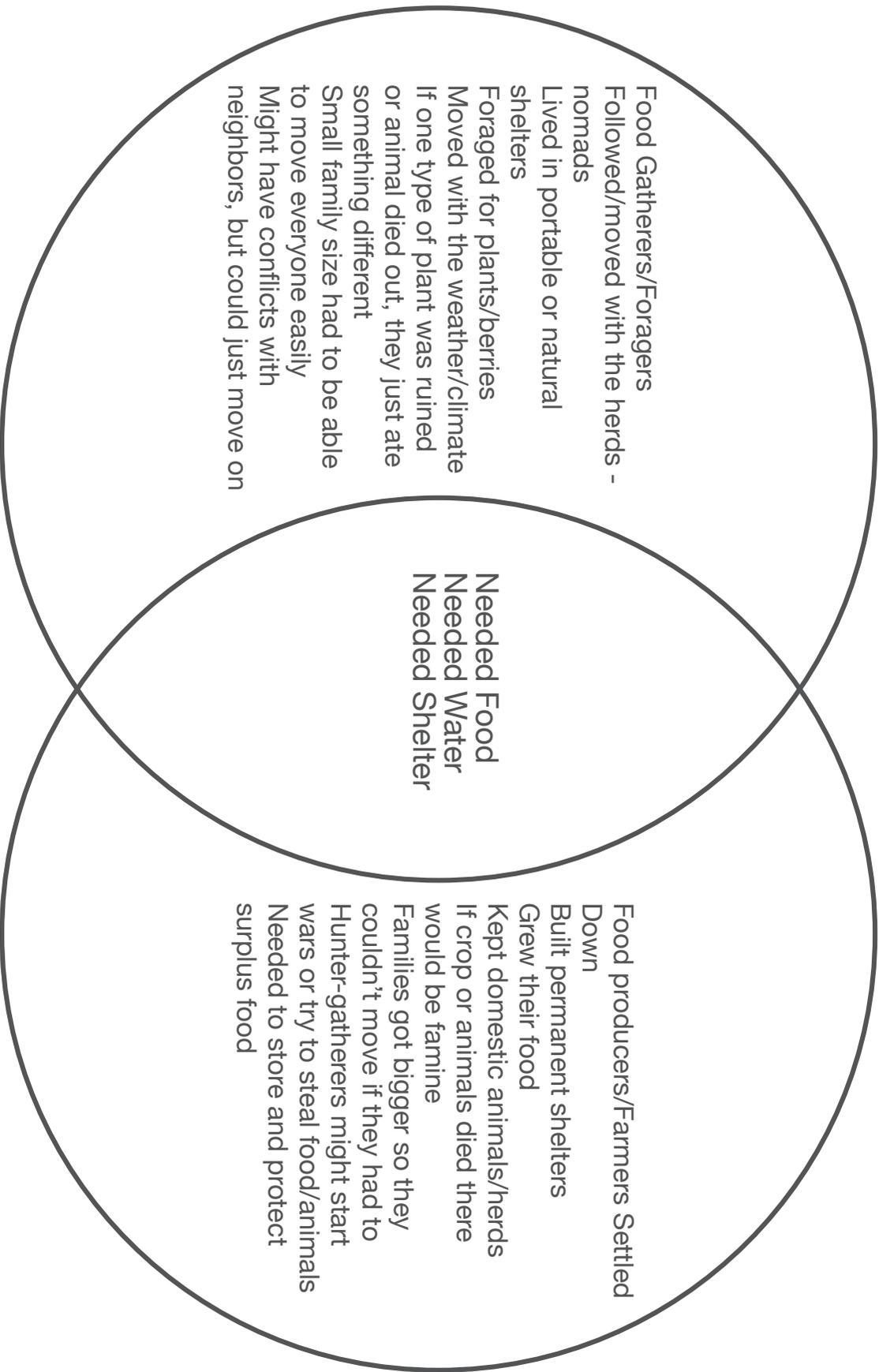
Teacher Background Information

Resource: "[What Happens When Mobile Hunter-gatherers settle down?](#)"

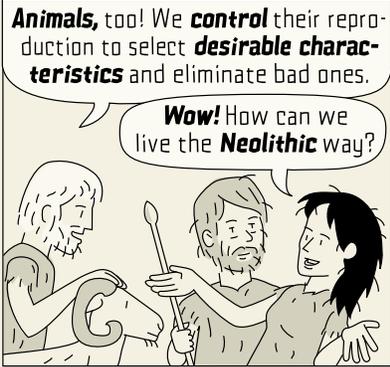
Hunter-Gatherer		Agricultural Society	
Advantages	Disadvantages	Advantages	Disadvantages
Groups kept small —> stability		stable food supplies	more work to build permanent homes
balanced diet: seasonal fruits, vegetables, nuts in their immediate surrounding area		bigger families	herding animals caused disease (for both animals and people)
not dependent on one crop or species of animal —> less likely to have famine		division of labor	dependent on good weather for successful crop —> greater likelihood of famine
			increased labor to cultivate food than to gather it
			issues of how to store and guard surplus food in case of future famines
			territorial issues arise
			government must be put into place to manage resources and resolve conflicts —> government may be oppressive

Hunter-Gatherers

Agricultural Settlements



WHY HUNT? WHY GATHER? JOIN THE **NEOLITHIC** REVOLUTION!



Special offer!
Free booklets!
The Pleasures of Porridge
Earn Your Animals' Respect
How to Tell a Weed

Your KEYS to a BETTER LIFE!

- Harness Plant Power!**
- Learn how the seeds you drop can become next fall's crop!
 - Use seed selection to make future plants more productive and easier to harvest!
 - Preserve and store surpluses for hard times!
 - Invent new ways of preparing and cooking plant foods!

- Put Animals To Work For You!**
- Learn which species are slow and submissive!
 - Use food and fences to keep them around!
 - Influence their choice of mates!
 - Breed the best and eat the rest!

Disclaimer: Plant and animal domestication can lead to overpopulation, deforestation, erosion, flooding, desertification, materialism, diminished nutrition, cavities, and television. Caution advised.
YOUR RESULTS MAY VARY

Broadcast Activity

Main Ideas

Bill Parkinson is the Associate Curator of Eurasian Anthropology at The Field Museum. His research focuses on the origins and development of early village societies, specifically in southeastern Europe. He is particularly interested in how some human societies became more economically and politically complex over time. Currently, his research team is exploring why early agricultural villages in the region of southeastern Hungary began to live in large, fortified, villages during the Neolithic period, about 5,300 BC.

After this lesson your students will be able to:

- What it is like for an archaeologist to do field work.
- How artifacts from the past provide clues to how societies lived in the past.
- How scientists determine the ages of fossils using information from the rock layers



PREREQUISITE KNOWLEDGE

- Familiarity with different pre-historic time periods.



MATERIALS AND PREP

It is recommended that you do the following prior to this lesson:

- Explore the different resources available with your class featured on <http://expeditions.fieldmuseum.org/neolithic-archaeology> as an introduction to the scientist and what he does.
- Read the Virtual Visits Technical Guide
- Check with your IT specialist to make sure you will have available bandwidth on the day of your Visit

You will need the following materials:

- Computer with Ethernet connected Internet
- Projector
- Optional: Scrap paper or note cards



DIRECTIONS

Warm Up

1. Follow the Technical Guide provided to set up the Virtual Visits broadcast.
2. While waiting for the broadcast to begin, review information from the Main Ideas section with your class.
3. OPTIONAL: Provide students with a sheet of paper or note card to record questions that they come up with during the broadcast.
4. During the broadcast the scientists will interact with classrooms by asking students a question. Please type student responses into the chat box in the broadcast window or use the polling feature.
5. Follow-up the broadcast with a class discussion on what was learned and what students would like to investigate further.
 - a. Ask students how they felt about the experience. What was it like to meet a real scientist? What was their favorite part? Least favorite?
 - b. Ask students to recall the experience. What is the scientist's job at the Museum? What does he study? How do scientists collect specimens? What types of projects does the scientist work on? What did he show us?
 - i. If students have conflicting viewpoints, encourage them to discuss it using evidence from what the scientist said or did.
 - c. Ask students to explain what they learned. What is something you learned about science or social sciences careers from the broadcast? What is something you learned about science from the broadcast?
 - d. Have students make connections from the broadcast to their life. Has anyone gone to a museum and seen artifacts from prehistoric peoples?
 - e. Ask students to consider how they can apply this new knowledge in the future.

TIP: Before the discussion, project these questions on to the board and have students write down their ideas to increase discussion participation.

GEOGRAPHY'S INFLUENCE ON EARLY SOCIETIES

Post-Broadcast Activity

After this lesson your students will be able to:

- Explain the importance of the natural environment in the development of agricultural settlements
- Identify the variety of environments the first human communities adapted to
- Distinguish the factors of the natural environment and why they were necessary for these communities to succeed



PREREQUISITE KNOWLEDGE

- Identification of basic human needs that all communities must fill
- Basic understanding of prehistoric eras



MATERIALS AND PREP

- Computers or other devices with access to the Internet for each group
- Poster board
- Markers
- Group description cards
- Pre-prepared research information for students

Resources

Standards:

C3 Framework: Human-Environment Interaction: Place, Regions and Culture

Common Core State Standards

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.6.1

Write arguments to support claims with clear reasons and relevant evidence.

CCSS.ELA-LITERACY.W.6.7

Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.

CCSS.ELA-LITERACY.W.6.8

Gather relevant information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources.

CCSS.ELA-LITERACY.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.



DIRECTIONS

Warm Up

1. Begin class by projecting the following question: “How do you think early communities ended up either foraging or farming? What factors in the environment may have influenced them?”
 - a. Record students’ answers on a piece of chart paper

Instruction

2. Divide students into 3 groups.
 - a. Tell students they are going to be different communities from around 5000 BC, as communities, they must decide if they are going to be nomads and gather their food, or if they will settle down and grow food.
 - b. Each group will be given an environment that they are located near
 - i. Students will research their location and decide based on their location what lifestyle is best for the survival of their group
 - ii. Students should focus their research on the food and shelter that are available in their location
 - iii. They will present their decision and findings to the whole class by creating a poster
 - c. Provide students with the following terms and ideas to kick-off their research:
 - i. Beidha
 - ii. Çatal Hüyük
 - iii. Szeghalom-Kovácsshalom
 - iv. Hunter-gatherer lifestyles

Closing

- d. After each group has presented their research discuss with students what factors had the biggest influence on early communities.

Student’s posters must include

- Group’s decision to be a forager or a farmer
- What environmental features led them to their choice
- How these environmental features affected their choice

Group 1: Students in this group live near a border of cold, barren land, but a couple days walk opens to mild grassland with a narrow river.

Group 2: Students in this group live near a desert with a few water holes and few desert animals.

Group 3: Students in this group live near a grassland with a wide river running through it that floods and then subsides.

Credits: This lesson has been adapted from “From Hunter-Gatherers to The Agricultural Revolution 10 Day Unit for 6th Grade Social Studies” by Mrs. Brenner

Resources

[The Field Museum Neolithic Archaeology Expeditions site](#)

Big History Project Unit 6 and Unit 7 videos

The Agricultural Revolution: Crash Course World History #1 YouTube video

Group 1:

Students in this group live near a border of cold, barren land, but a couple days walk opens to mild grassland with a narrow river.

Group 2:

Students in this group live near a desert with a few water holes and few desert animals.

Group 3:

Students in this group live near a grassland with a wide river running through it that floods and then subsides.

Middle School



Student Handouts
STICKS TO BRICKS

Major Sponsor:

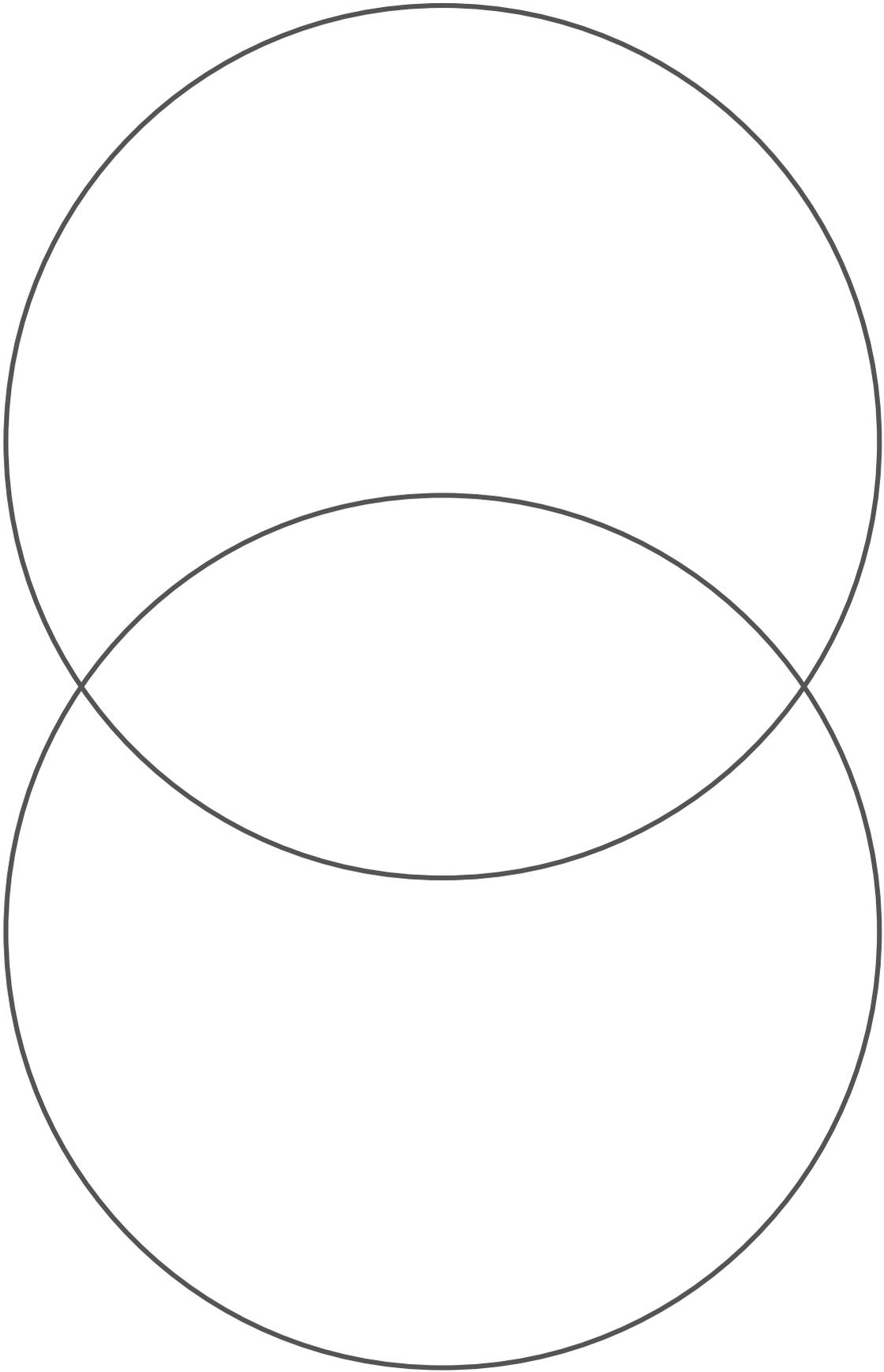


NAME

DATE

Hunter-Gatherers

Agricultural Settlements



NAME

DATE

Hunter-Gatherer and Settler Comparison Chart

Hunter-Gatherer	
What do I eat?	
Where do I live?	
Whom do I live with or who are my neighbors?	
How do I get my food?	
Settler	
What do I eat?	
Where do I live?	
Whom do I live with or who are my neighbors?	
How do I get my food?	