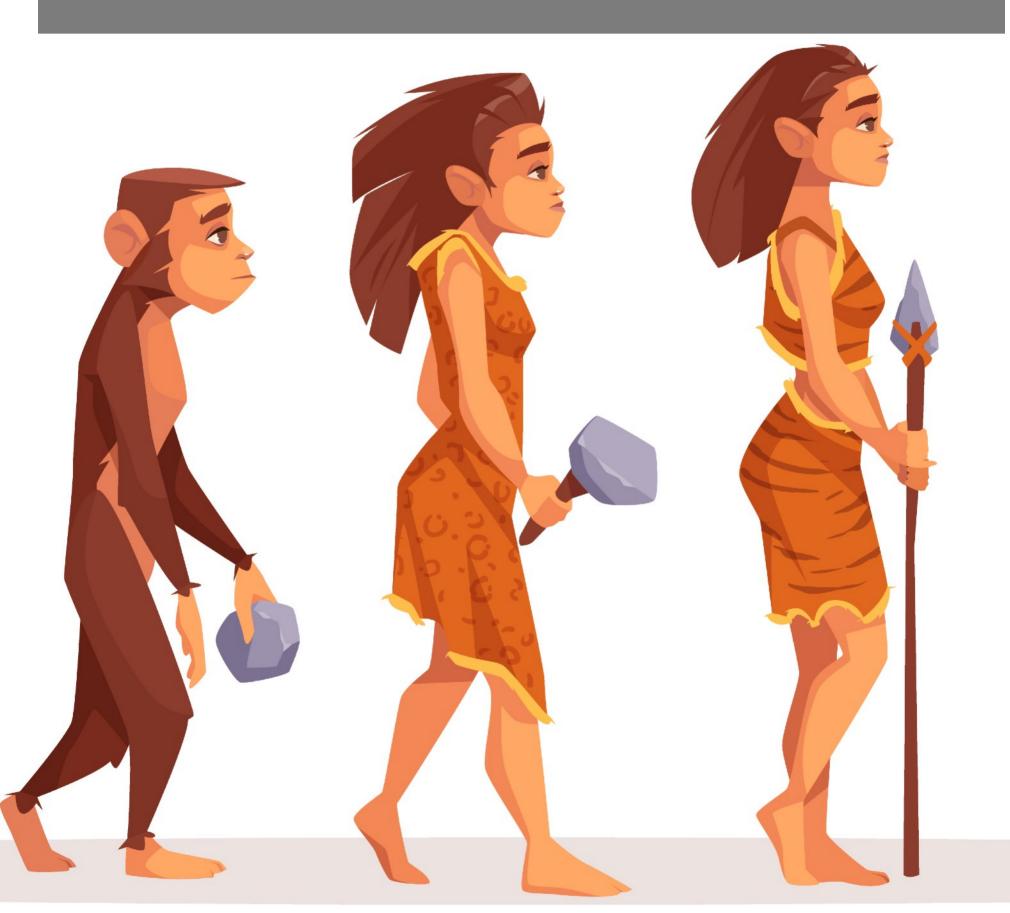
INTELLIGENCE ACTIVITIES



Intelligence activities	3
Introduction	3
How to	3
Required Intelligence activity #1 (RI)	4
Information compiled by: April M. Higgins	
Introduction	4
Palaeolithic Age	5
Neolithic Age	6
Required Intelligence activity #2 (RI)understanding the agricultural revolution	
Watch the crash course video here	8
Required Intelligence activity #3 (RI)why was agriculture so important?	
Watch the Big history project video here	
Optional Intelligence activity #1 (OI)	
Optional Intelligence activity #2 (OI)	
Palaeolithic menu design	11
Optional Intelligence activity #3 (OI)	12
What killed off the neanderthal?	12
Questions	13
 Find the BEST evidence to support the idea that the study offers scientific community? 	
Which section of the article highlights the idea that further study extinction may help scientists understand the history of modern h	
3. How are Neanderthals and modern humans compared and conthe article?	•
4. Based on evidence presented in the article, which of the following the extinction of Neanderthals?	•



INTELLIGENCE ACTIVITIES

INTRODUCTION

The activities within have been created to help you, the student, grow your knowledge and understanding of both the hunter-gatherer way of life and the farming way of life up to and after the Agricultural Revolution. Each team is required to complete three intelligence activities in this notebook they can be identified with an IR at the top of page. There will be additional optional intelligence activities included from which you gain a)gain more knowledge b)earn additional intelligence activities for your team.

HOW TO

Required Intelligence activities will be assigned to you and you will be given a due date for each. To gain points for your team and ensure you do not lose any points, be sure to complete these in a timely manner.

Optional Intelligence activities can be completed at any time by anyone in your group. Once complete please submit to your classroom teacher for assessment and to receive awarded points. Full points will only be awarded for what the teacher will determine is a complete and full effort on the assignment.

REQUIRED INTELLIGENCE ACTIVITY #1 (RI)

PALAEOLITHIC VS. NEOLITHIC: THE RISE OF CIVILIZATION

INFORMATION COMPILED BY: APRIL M. HIGGINS

The students will understand that

- Civilizations developed in different parts of the world at different times.
- Humans make modifications to the natural environment to sustain life.
- Societies develop and change over time.

INTRODUCTION

Food is emotional and exciting, energizing and inspiring. Humans spend numerous hours each week acquiring, preparing, and eating their food. Eating is social and the basis of the human experience. Eating is common to all cultures across the globe. Food acquisition has shaped the world as we know it today. The role of food can be traced throughout history and it forms the basis of the Neolithic Revolution; food production has had the largest impact on societies, more than any other variable.

Approximately 10,000 years ago humans began to develop skills in farming and animal domestication. The movement toward agriculture allowed these early people to develop larger populations and sedentary lifestyles that eventually led to civilizations. Regions with greater resource endowments and favorable climatic conditions made the transition to raising crops and domesticating animals much earlier than regions with fewer resources and unfavorable climatic conditions. Agriculture provided the economic benefits for societies to develop into large civilizations. Unfortunately, farming was not easy; many times farming required longer and more strenuous labor hours than hunter gathering.6

The large scale change in human lifestyle is referred to as the Neolithic Revolution and is marked by human settlements, advances in technology, and increased population. Early Neolithic villages were motivated by shared kinship of the community. Communities were dependent on the climate, natural resources, crops, and animals. The abundance of usable and nutrient rich resources determined the amount of time that a small village can thrive in one locality. The span of time that a society thrives in one locality determines if they may eventually develop into a civilization. With the use of technology such as plows, sickles, irrigation systems and the wheel, crop harvests became more plentiful and allowed greater numbers of people to exist together. Larger populations led to specialization and thus economic advancement.

Early human societies are categorized by the tools they developed and used: The Stone Age, Bronze Age, and Iron Age. The Stone Age is broken into several periods, the Lower Paleolithic, Middle Paleolithic, Upper Paleolithic, and Neolithic. The Stone Age lasted from 2,000,000 to 12,000 B.C., where the Lower Paleolithic was from 2,000,000 to 70,000 B.C., Middle Paleolithic was from 70,000 to 35,000 B.C., the Upper Paleolithic was from 35,000 to 12,000 B.C., and the Neolithic Age was from 10,000 to 5,000 B.C. The Bronze Age was from about 8,000 to 800 B.C. and the Iron Age lasted from 12,000 to 550 B.C. The actual date for each period is dependent on the area and date by which they acquired the technology necessary to meet the specifications of each age.

Before You Read On:

What do you think? Revisit after reading to see if your understandings have changed.

Re	ad each statement. Write an "+" if you agree and if "X" you disagree.	Before Reading	After Reading
1	The movement toward agriculture allowed early people to live in larger populations.		
2	The adoption of agriculture meant that early people had a much easier life than living as hunter-gatherers.		
3	Communities were dependent on the climate, natural resources, crops, and animals.		
4	With the use of technology such as plows, irrigation systems, and the wheel, crop harvests became more plentiful.		

PALAEOLITHIC AGE

Read and answer the questions below

Early humans during the Palaeolithic Age were hunter-gatherers; they had not developed the biogeographic knowledge necessary for successful agriculture. They depended on foraging the land for animals and plants to feed their small nomadic bands. These early humans are credited with creating and effectively using stone tools, controlling and producing fire, developing a simple language. These tools were constructed using stone, bone, and ivory and included hammers, knives, clubs, spears, and axes.

Humans during the Palaeolithic Age spent numerous hours of the day acquiring food. The hunting methods varied depending on the hunted animal and resources in the area. Animals would be trapped or hunted using spears. Early humans during this time gathered plants, firewood, and materials for creating tools and shelters. Sometimes the women and older children would spend extensive amounts of energy searching for resources. When food resources became sparse or climatic conditions too harsh, the early humans migrated to more lucrative locations. Changes in climatic conditions caused a change in early hunter-gatherer societies. As resources diminished they increased their flexibility, migrating to a new locality, eating a greater diversity of foods, and reducing the number of births.

As hunter-gatherer populations increased, the Earth's resources became increasingly more difficult to acquire. With growing populations sharing the same regional resources, over-foraging was a problem. Hunter-gatherer bands living in proximity of each other began to fight for the resources. Hunter-gatherer bands with larger populations began to prevail as they had more strength to overtake a competing band of hunter-gatherers.

Questions

- 1. What was life like for hunter-gatherer bands?
- 2. What are the disadvantages to a nomadic lifestyle?
- 3. Why did hunter-gatherers live in small bands instead of creating larger populations?

NEOLITHIC AGE

Read and answers the questions below

As hunter-gathering productivity lessened, more individuals within a society adopted and devoted their time to farming. Over time, this led to societies built around a large farming sector, increasing the agricultural labor force. Hunter-gathering reduced the numbers of large game animals and depleted the food resources of the land. This new age, referred to as the Neolithic Age, marks the shift of some nomadic groups to becoming settled producer-raisers. They domesticated animals such as sheep and goats and had crops such as wheat and barley. A transition from hunter-gathering to producing- raising took thousands of years as methods and technologies were developed. More productive plant strains were developed and animal domestication methods were perfected over long periods.

The movement toward agriculture was a process. Some of the first farmers "discovered" plant domestication by accidentally spilling grains and they in turn sprouted and grew. There is not a distinct line between hunter-gatherer societies and early sedentary producer-raiser communities. Many producer-raiser communities supplemented their diets with plants and animals by foraging nearby lands. Even more contrasting, some sedentary societies did not even develop agriculture; their entire diet was fulfilled through hunter-gathering methods.

The producer-raisers were able to more productively use the land to support a larger and growing population. The costs were high for these early groups as the adoption of successful agriculture required many more daily hours than the previous modality of hunter-gathering. Hunter-gatherers worked approximately less than six hours per day in search of food, whereas upon development of agriculture, approximately nine hours per day were spent on daily food production.

Agriculture did not have the most positive outcomes when it was first adopted. Many early producer-raisers had smaller builds and lacked proper nutrition. The demanding labor of early farming resulted in shorter life spans, even shorter than the individuals living in hunter-gatherer bands. In spite of these negative factors, societies still adopted this way of life, possibly due to pressures onset by sustaining a larger population.

Early farming communities faced quickly growing populations and thus had to increase their food production to meet their population's needs. Some areas supported as many as 20 or more agriculturalists in the same area that had previously supported just one hunter-gatherer. When the tribes adopted and developed agriculture, more children were conceived as the children were beneficial in food production. An older child could help in planting seeds and harvesting crops.

Food production was performed by adults and children, as well as shared resources in the community. A higher population translates to fewer shared resources per family. Children are completely dependent until they are old enough to help the community in food production. The cost of a child on his or her family is the amount of food they produce minus the food the child eats for sustenance. As a child ages they become more profitable to the family.

The widespread practice of agriculture and animal domestication marked the Neolithic Age. Successful agriculture was dependent on plant knowledge. Neolithic crops included wheat, millet, corn, barley, lentil, flax, chickpea, and pea. At first, wild seeds were planted, and then over time, more attention was given to selection of the best seed for the intended outcome.

Early humans during the Neolithic Age learned strategies to cook crops that were difficult to digest in their raw form allowing more diversity in the foods eaten. Animals were domesticated through trial and error; specific animals were not suitable for farm life and early producer-raisers had to determine which animals best satisfy the community's needs.

Neolithic technology included a spinning stick and loom for weaving animal and vegetable fibers, pottery for storing food, and dwellings. Small clusters of shelters were built around the storage facilities to allow for quick access and protection from the elements and outside invasions.

Due to growing populations, once farming was adopted, it could not be reversed. The reliable food source of farming could not be given up to go back to past methods of hunting- gathering. The development of farming facilitated specialization

among communities with a stable food supply. The specialization of individuals led to extensive technological advances, eventually leading to the Industrial Revolution and the standard of living we enjoy today.

Questions

- 1. How did agriculture change the way people lived?
- 2. How can agriculture advance a society?

Think Bigger Questions

Discuss with your tribe and respond to the following two questions

- 1. What are the variables (an element, feature, or factor that is liable to vary or change) that impact the development of a civilization and how do the variables have an impact on a society?
- 2. How have humans altered the natural landscape to develop civilizations?

REQUIRED INTELLIGENCE ACTIVITY #2 (RI) UNDERSTANDING THE AGRICULTURAL REVOLUTION



WATCH THE CRASH COURSE VIDEO HERE

Questions from video:

- 1. What did most populations generally live near in the early stages of civilizations?
- 2. Name two advantages of farming/agriculture. Name two disadvantages of farming/agriculture.
- 3. Why is herding not used by most populations?
- 4. Name three reasons why agriculture may have originated according to the video.
- 5. Complete the statement:

"Revolutions are not so much	, but rather they are	that for tens of thousands of
vears people have been making	that have irrevocably shaped the world t	hat .

REQUIRED INTELLIGENCE ACTIVITY #3 (RI) WHY WAS AGRICULTURE SO IMPORTANT?



WATCH THE BIG HISTORY PROJECT VIDEO HERE

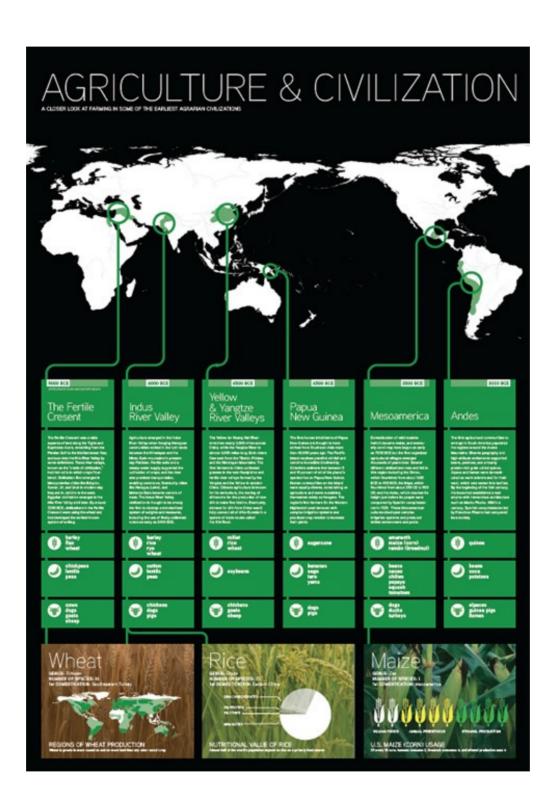
Questions from video:

- 1. How do the plants that humans choose to cultivate benefit from human attention?
- 2. What is symbiosis?
- 3. What does David Christian mean when he says that plants were changed by agriculture but that humans were changed, too?
- 4. Why did agriculture develop in so many places at about the same time?
- 5. Why couldn't humans just migrate to relieve population at the end of the ice age, just as they had always done?
- 6. How did the ways Natufians lived differ from how foragers lived? Why did people like the Natufians feel pressure to begin farming?
- 7. What does David Christian mean when he says that climate change made agriculture possible and overpopulation made it necessary?

OPTIONAL INTELLIGENCE ACTIVITY #1 (OI) COMPARING CROPS

Directions

Working with your group (or on your own), study the Agriculture and Civilization infographic below and answer the questions below.



- 1. What are the geographic similarities between the six early agrarian civilizations highlighted on the infographic?
- 2. Why do you think agriculture began in the Fertile Crescent about 3,000 2,500 years before farming in any other location?
- 3. What crops were best suited for long term storage? How do you think this affected the growth of these civilizations?
- 4. How did the indigenous animals in these civilizations both help and hinder them?

^{*}Note: only 1 tribe member has to complete this activity to get +5 Energy Points, +5 Intel Pts, +2 Food Pts., +2 SE Pts.

OPTIONAL INTELLIGENCE ACTIVITY #2 (OI) PALAEOLITHIC MENU DESIGN

Directions

Imagine you owned a restaurant during the Palaeolithic Era. Design a *Creative Menu* (digital or on paper) with meal options that contain food ingredients that would actually be available in the Palaeolithic Era. You can use a website like CANVA or if you have a MAC you can use PAGES. You may also create it by hand if you are feeling artistic!

You may need to conduct some further research to ensure your menu matches the time period. Start with Early hominids ate just about everything and then try, What Did Prehistoric Human Actually Eat?

Modern Menu Example



OPTIONAL INTELLIGENCE ACTIVITY #3 (OI) WHAT KILLED OFF THE NEANDERTHAL?

Read and answer the questions below



Slow flow of human immigration may have doomed Neanderthals

By Associated Press, adapted by Newsela staff on 11.08.17 Word Count **451**



Prehistoric Neanderthal man "N," (left) is visited for the first time by another reconstruction of Homo neanderthalensis called "Wilma" (right) at the Neanderthal museum in Mettmann, Germany, March 20, 2009. Photo from AP

What killed off the Neanderthals? It's a big debate, and now a study says that no matter what the answer, they were doomed anyway.

Neanderthals are our close evolutionary cousins. They enjoyed a long run in Europe and Asia, but they disappeared about 40,000 years ago after modern humans showed up from Africa.

Looking For Answers

The search for an explanation has produced many theories. These include climate change, epidemics or inability to compete with the modern humans, who may have had some mental or cultural advantage.

The new study isn't intended to argue against those factors, but just to show that they're not needed to explain the extinction, says Oren Kolodny of Stanford University.

He and fellow researcher Marcus Feldman present their approach in a paper released Tuesday by the journal Nature Communications.

They based their conclusion on a computer simulation that represented small bands of Neanderthals and modern humans in Europe and Asia. These local populations were randomly chosen to go extinct. Then they were replaced by another randomly chosen population, with no regard for whether it represented the same species.

"A Tiny, Tiny Trickle Of Small Bands"

Neither species was assumed to have any natural advantage, but there was one crucial difference: Unlike the Neanderthals, the modern humans had reinforcements coming in from Africa. It wasn't a huge wave, but rather "a tiny, tiny trickle of small bands," Kolodny said.

Still, that was enough to tip the balance against the Neanderthals. They generally went extinct when the simulation was run more than a million times under a variety of assumptions.

If survival was a game of chance, "it was rigged by the fact that there's recurring migration," Kolodny said. "The game was doomed to end with the Neanderthals losing."

The Mystery Of Why

Kolodny said the evidence that such migrations actually occurred is suggested by the results, but we can't prove it for sure. Such migrations would not be expected to leave much of an archaeological trace, he said.

Experts in human origins said the paper could help scientists pin down the various factors that led the Neanderthals to disappear. It fits in with other recent attempts to explain the extinction without assuming behavioral differences between Neanderthals and our ancestors, said Wil Roebroeks of the University of Leiden in the Netherlands. The notion of such differences has largely been proven false, he said.

Katerina Harvati of the University of Tuebingen in Germany said while the new work could be useful in solving the extinction mystery, it doesn't address the question of why modern humans dispersed from Africa into Europe and Asia. It's important to figure out what was behind that, she said in an email.

QUESTIONS

- 1. Find the BEST evidence to support the idea that the study offers valid results for the scientific community?
- 2. Which section of the article highlights the idea that further study of Neanderthal extinction may help scientists understand the history of modern humans?
- 3. How are Neanderthals and modern humans compared and contrasted throughout the article?
- 4. Based on evidence presented in the article, which of the following MOST influenced the extinction of Neanderthals?