MSI Summer Work

Humanities
All students enrolling in MSI English II will complete the following assignments:

1. Read *The Immortal Life of Henrietta Lacks*
2. Fill out a dialectical journal digitally or in a composition notebook (see the attached example and refer to stems for help on how to write)

For this nonfiction text, you will need to create a journal that tracks your thinking over the course of the work by completing at least two entries per chapter (you can mix and match from the list below). A digital journal using one of the templates provided on the Google Classroom (class code: **b57arcs**) is preferable, but it can be neatly handwritten as well. Your entries should reflect upon

1. Follow the SOAPSTone model you will find in Google Classroom.
2. Track your confusion:
   a. What is confusing at the beginning of the book? Does the confusion remain or does it clear up?
   b. What passages/sentences/words do you find confusing? Show evidence that you are wrestling with the meaning.

See below for a list of sentence stems to help get your entries started (if needed):

| I noticed/think...                       | The point of view is important because... |
| I wonder...                              | The effect of this figurative language is... |
| I’m surprised that...                    | The central issue(s) is (are)... |
| The author used this device/figurative language because... | One consequence of ___ could be... |
| I realized...                            | If __, then... |
| The descriptions of ___ show ___        | I’m not sure why... |
| The point of view shifts here because... | Although it seems... |
| This scene happens now because...        | This passage makes me think that... |

Due Date: Your assignment will be due the first week of class.
Please note: You will receive additional support through Google Classroom. You may also communicate with me at anytime through the classroom or through email.
AP World History Summer Coursework  
2018-2019  
LaNier

1) Please review the course and exam description as well as the syllabus.
   • Please sign and return the last sheet of the syllabus on the first day of school.

2) Please find and complete the enclosed viewing guides for the first 4 Crash Course World History videos.
   • These videos are available on YouTube and can be found by searching for the title of each viewing guide.
   • Please read the key concepts and instructions for each video before you begin.
   • Please fill out the viewing guides as detailed as possible and return them on the first day of school.
   • Expect a quiz during the first week of school

3) Please find and read the selection from the book *A History of the World in 6 Glasses* by Tom Standage
   • This book provides an excellent and thought provoking look at world history through the beverage of beer. As we will see in this reading and throughout this class, everything from what we drink to the clothes we wear, from the technology we use, to the religion we practice...everything has an interrelated history.
   • Read the first two chapters (attached). Write a one page summary of the author’s main points. Explain when, where, why, and how beer became important and what effect it had on world history. Give specific examples of how beer affected history.
   • Complete the 6 Glasses reading questions on notebook paper and have them ready to turn in on the first day of class.

Please sign up for Remind (you can use the app, or sign up online for texts—or both!)--Our code is @mhslanier  
You can also text @mhslanier to 81010
Summer Assignment Checklist for AP World History

☐ Read Course and Exam Description

☐ Read Syllabus

☐ Complete Crash Course Guides
  ☐ Crash Course #1 The Agricultural Revolution
  ☐ Crash Course #2 The Indus Valley Civilization
  ☐ Crash Course #3 Mesopotamia
  ☐ Crash Course #4 Ancient Egypt

☐ A History of the World in 6 Glasses
  ☐ Read the 2 attached chapters
  ☐ Complete a summary of the 2 chapters
  ☐ Answer the Reading Questions
AP World History Course and Exam Information

Course Outline

<table>
<thead>
<tr>
<th>Period</th>
<th>Time Period</th>
<th>Weight on Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Technological and Environmental Transformations</td>
<td>c. 8000BCE to 600 BCE</td>
<td>5%</td>
</tr>
<tr>
<td>2 Organization and Reorganization of Human Societies</td>
<td>c. 600 BCE to 600 CE</td>
<td>15%</td>
</tr>
<tr>
<td>3 Regional and Interregional Interactions</td>
<td>c. 600 CE to 1450</td>
<td>20%</td>
</tr>
<tr>
<td>4 Global Interactions</td>
<td>c. 1450 to 1750</td>
<td>20%</td>
</tr>
<tr>
<td>5 Industrialization and Global Integration</td>
<td>c. 1750 to 1900</td>
<td>20%</td>
</tr>
<tr>
<td>6 Accelerating Global Change and Realignments</td>
<td>c. 1900 to Present</td>
<td>20%</td>
</tr>
</tbody>
</table>

Course Themes

- Interaction between humans and the environment
  - Demography and disease
  - Migration
  - Patterns of settlement
  - Technology

- Development and interaction of cultures
  - Religions
  - Belief systems, philosophies, and ideologies
  - Science and technology
  - The arts and architecture

- State-building, expansion, and conflict
  - Political structures and forms of governance
  - Empires
  - Nations and nationalism
  - Revolts and revolutions
  - Regional, trans-regional, and global structures and organizations

- Creation, expansion, and interaction of economic systems
  - Agricultural and pastoral production
  - Trade and commerce
  - Labor systems
  - Industrialization
  - Capitalism and socialism

- Development and transformation of social structures
  - Gender roles and relations
  - Family and kinship
  - Racial and ethnic constructions
  - Social and economic classes

Format of Assessment

Section I

Part A—Multiple Choice: 55 Questions | 55 Minutes | 40% of Exam Score
- Questions appear in sets of 2 to 5.
- Students analyze historical texts, interpretations, and evidence.
- Primary and secondary sources, images, graphs, and maps are included.

Part B—Short Answer (SAQs): 3 Short-answer questions with multiple parts | 40 Minutes | 20% of Exam Score
Students will choose between two options for the final required short-answer question, each one focusing on a different time period.
- Question 1 (required): periods 3-6
- Question 2 (required): periods 3-6
- Students choose between Question 3, periods 1-3, and Question 4, periods 4-6

Section II

Part A—Document Based Question (DBQ) — 1 Question | 60 Minutes | 25% of Exam Score
- Assess written, quantitative, or visual materials as historical evidence.
- Develop an argument supported by an analysis of historical evidence.
- Focus on Periods 3-6

Part B—Long Essay (LEQ) — 1 Question | 40 Minutes | 15% of Exam Score
- Explain and analyze significant issues in world history.
- Develop an argument supported by an analysis of historical evidence.
- Updates for 2017-18: The question choices will continue to focus on the same theme and skill but will now allow students to select among three options...
  - Option 1: periods 1-2
  - Option 2: periods 3-4
  - Option 3: periods 5-6
ADVANCED PLACEMENT WORLD HISTORY COURSE SYLLABUS
LaNier 2018-2019
ARLaNier@mabankisd.net

WHAT IS AP WORLD HISTORY?

Advanced Placement World History is the College Board college-level survey course that introduces students to world civilizations and cultures. A student’s performance on the AP World History exam (offered in May) determines a student’s eligibility to earn up to six hours of college credit. Course curriculum, materials, and expectations are designed to prepare students for the rigorous three-hour exam.

COURSE PHILOSOPHY: WHY TAKE THIS COURSE

AP World History is a superior preparation for college. While our goal is that you will all receive acceptable scores of threes or higher on the May exam for credit, additional goals include preparing students for eleventh grade AP US History and AP English Language and Composition and the SAT and ACT college placement exams.

My wishes are that you learn to think critically and write as a good historian would. An additional desire is to open your eyes to the world. You will be successful in this course provided you understand that we will read extensively and write frequently. I will provide assistance and tutorials if help is needed.

COURSE PURPOSE

The purpose of the course, however, extends beyond the possibility of earning college credit by providing students with the opportunity to develop skills and knowledge that will form a useful foundation for college studies. A recent study of this “AP Effect” reported the following results:

- Better prepared academically for college
- More likely to specialize in majors with tougher grading standards
- More likely to complete more college course work
- More likely to take subjects in their AP subject area
- Likely to perform significantly better over four years of college course work
- More likely to be superior in terms of leadership
- More likely to make significant accomplishments in college
- Twice as likely to do graduate level studies

COURSE DESCRIPTION

In this course, traditional historical points of reference in world history are identified as students analyze important events and issues in western civilization as well as in civilizations in Southwest, East, and South Asia, Africa, and the Americas. Students evaluate traditions and institutions, which form the basis of the world’s major civilizations and cultures. Students examine the impact of geographic factors on major historic events and identify the historic origins of contemporary economic systems. Students analyze the process by which democratic-republican governments evolved as well as the ideas from historic documents that influenced that process. Students trace the historical development of important legal and
political concepts. Students examine the history and impact of major religious and philosophical traditions. Students analyze the connections between major developments in science and technology and the growth of economies, and they use the process of historical inquiry to research, interpret, and use multiple sources of evidence.

**THE SEVEN HABITS OF THE MIND**

1. Constructing and evaluating arguments; using evidence to make plausible arguments;
2. Using documents and other primary data; developing the skills necessary to analyze point of view, context, and bias and to understand and interpret information;
3. Developing the ability to assess issues of change and continuity over time;
4. Enhancing the capacity to handle diversity of interpretations through analysis of context, bias, and frame of reference.
5. Seeing global patterns over time and space while also acquiring the ability to connect local developments to global ones and to move through levels of generalizations from the global to the particular;
6. Developing the ability to compare within and among societies, including comparing societies reactions to global processes;
7. Developing the ability to assess claims of universal standards yet remaining aware of human commonalities and differences; putting culturally diverse ideas and values in historical context, not suspending judgment but developing understanding.

Every part of the AP World History course assesses habits of mind as well as content. Students will take multiple-choice tests and write essays which will include studying maps, using graphs, analyzing art works, and interpreting quotations. Other aspects include assessing primary data, evaluating arguments, handling diverse interpretations, making comparisons, and understanding historical context.

**THE FIVE THEMES**

1. Interaction between Humans and the Environment
2. Development and Interaction of Cultures
3. State-Building, Expansion, and Conflict
4. Creation, Expansion, and Interaction of Economic Systems
5. Development and Transformation of Social Structures

**CLASS STRUCTURE AND EVALUATION**

Students who take this course should realize that *AP courses are taught and graded at the college level; this includes all pre-AP tests and essays.* Consequently, the courses exceed the demands and expectations for typical high school courses. But the class is truly manageable and I am aware that you have seven other classes and extracurricular activities.

A. Class structure

   Our classes will meet day for 47 minutes. A typical day will include a warm-up exercise (Focus Questions, SOAPPS-Tone/APPARTS, OPTIC, TWEDYADWTS, or Quiz), followed by two different
activities. One will usually involve a lecture for around 25 minutes and the third time block will be an exercise to check your understanding of the content. There will be no time to do homework in class so make sure you come with your assignments completed. All work assigned is due at the beginning of class.

B. Nine-Weeks Grades and Exercises (indicates amount each nine weeks and their weights)

1. 70% Grade
   a. All timed (30-40 minutes) in-class essays
   b. Traditional Exams (which may include multiple choice as well as essay)

2. 30% Grade
   a. Daily Writing Exercises
   b. Mastery Checks and Quizzes
   c. HIPPO Exercises
   d. Individual assignments

C. Notebooks

Students will keep both (1) a class notebook which is critical for test preparation and the May AP exam. Your notebook should be a 1 1/2” 3 Ring Binder with 8 dividers.

1 Comp Book or single subject Spiral (either one is totally fine with me)

**EXAM FORMAT AND GRADING**

All exams will conform to the standard AP format multiple choice questions and may also include short answers and/or essays. Quizzes will be in a similar format. All essays will be graded with the official College Board AP World History rubrics. Short writing assignments will use a rubric modeled on the official rubrics.

**SUMMER WORK**

I have provided summer assignments in the form of 4 Crash Course World History Videos along with viewing guides that you are to complete before the beginning of school. You will also read 2 chapters of a book, write chapter summaries and answer questions regarding that reading. In addition, I have provided exam format information that I need you to look over and be familiar with before school begins. Half the battle with the test is knowing how you will be assessed.

**THE MAY NATIONAL EXAM**

The AP National exam is in May. The test is cumulative and comprehensive covering material from the entire year. Students should maintain a notebook, participate in after-school reviews, form student study groups, and work your review books. Final responsibility for preparing and passing the exam is of course the student’s.
SUGGESTIONS FOR STUDENTS

The single most important contributor to student success is whether he/she completes each reading assignment and its accompanying work. There is no substitute. Do the reading faithfully. Reading is assigned for each class period. At first it may seem time consuming and difficult, but practice makes perfect! And use a dictionary every time you do not understand a word.

Although we are in high school, this is a college course. We will discuss topics that may be new and different. Please keep an open mind. You do not have to agree with what you read and hear, but you will need to think historically and critically.

Keep an organized notebook for both semesters and use it to review. Proper prior planning prevents poor performance. This is especially true of college courses.

Work at mastering writing styles. In that one-half of the AP grade is writing, you must be able to write if you want to pass. Come to tutorials if you need help.

Do not worry about your grade unless it is failing. This is a college course and universities know the difference on transcripts between regulars and Advanced Placement classes. University Admissions will tell you they would rather see a “C” in an AP than an “A” in a regulars’ class. AP classes earn higher grade points. Consequently an 87 in an AP class is worth a 97 in a regulars class.

Form and join an informal study Group with students in the same class. These are very successful. The group is not a substitute for reading or the work, but two heads are often better than one. This also allows you to get missing notes. And exchange phone numbers so you can call each other if need be.

If you have a question or concern, call, email me, or come by. I will help you all as much as is possible, but you have to see me outside of class. Please do not have parents call me until you yourself have tried to resolve a concern. My conference and tutorial times are posted. And I am usually at school before classes start and after school.

FINAL THOUGHTS

I love teaching students and I have a great enthusiasm for world history. But I also know there will be much “wailing and gnashing of the teeth.” Please bear with it. It will become easier by the second month after you have acclimated. And traditionally, I have a very low failure rate. This does not mean you will not have to work to get those “A’s, B’s, and C’s.” My class will never be a “blow-off” but it will be what you need to succeed. And it will be funny and good-natured. If you have any concerns, please contact me. Could you please read, sign, and return the form below by the first day of school? And remember, you can do this work! I have faith in you!
To Ms. LaNier,

I have read the course description for Advanced Placement World History. I understand my responsibilities in this course, the requirements to be successful, and that there will be more work than in a typical class. I will do my best to abide by class expectations.

______________________________  ________________
Student                          Date

I/we have read the course syllabus for Advanced Placement World History. I/we understand the long-term benefits of the intellectual development offered by this course, and support my/our student's enrollment in this course. I/we have also read the class rules and will do my/our best to have our student abide by class expectations.

______________________________  ________________
Parent/Guardian                  Date

______________________________  ________________
Parent/Guardian                  Date

Comments:
Reading Questions for A History of the World in 6 Glasses

Please complete on your own notebook paper

Use complete sentences

1. How is the discovery of beer linked to the growth of the first civilizations?
2. What does this history of beer in the ancient world tell us about early civilizations?
3. What sources does the author use to gather his information on the use of beer?
4. What were some of the uses of beer by ancient cultures? Nourishment? Ritual? Religious?
5. How did beer “civilize” man, according to Standage?
6. What is the relationship between beer and writing, commerce, and health?

Don’t forget—write a summary of the two chapters on separate paper as well!
A Stone-Age Brew

Fermentation and civilization are inseparable.
—John Ciardi, American poet (1916-86)

A Pint of Prehistory

The HUMANS WHO migrated out of Africa starting around 50,000 years ago traveled in small nomadic bands, perhaps thirty strong, and lived in caves, huts, or skin tents. They hunted game, caught fish and shellfish, and gathered edible plants, moving from one temporary camp to another to exploit seasonal food supplies. Their tools included bows and arrows, fishhooks, and needles. But then, starting around 12,000 years ago, a remarkable shift occurred. Humans in the Near East abandoned the old hunter-gatherer lifestyle of the Paleolithic period (old stone age) and began to take up farming instead, settling down in villages which eventually grew to become the world’s first cities. They also developed many new technologies, including pottery, wheeled vehicles, and writing.

Ever since the emergence of "anatomically modern" humans, or Homo sapiens sapiens, in Africa around 150,000 years ago, water had been humankind’s basic drink. A fluid of primordial importance, it makes up two-thirds of the human body, and no life on Earth can exist without it. But with the switch from the hunter-gatherer lifestyle to a more settled way of life, humans came to rely on a new beverage derived from barley and wheat, the cereal grains that were the first plants to be deliberately cultivated. This drink became central to social, religious, and economic life and was the staple beverage of the earliest civilizations. It was the drink that first helped humanity along the path to the modern world: beer.

Exactly when the first beer was brewed is not known. There was almost certainly no beer before 10,000 BCE, but it was widespread in the Near East by 4000 BCE, when it appears in a pictogram from Mesopotamia, a region that corresponds to modern-day Iraq, depicting two figures drinking beer through reed straws from a large pottery jar. (Ancient beer had grains, chaff, and other debris floating on its surface, so a straw was necessary to avoid swallowing them.)

Since the first examples of writing date from around 3400 BCE, the earliest written documents can shed no direct light on beer’s origins. What is clear, however, is that the rise of beer was closely associated with the domestication of the cereal grains from which it is made and the adoption of farming. It came into existence during a turbulent period in human history that witnessed the switch from a nomadic to a settled lifestyle, followed by a sudden increase in social complexity manifested most strikingly in the emergence of cities. Beer is a liquid relic from human prehistory, and its origins are closely intertwined with the origins of civilization itself.

A pictogram from a seal found at Tepe Gawra in Mesopotamia dating from around 4000 BCE. It shows two figures drinking beer through straws from a large pottery jar.

The Discovery of Beer

Beer was not invented but discovered. Its discovery was inevitable once the gathering of wild grains became widespread after the end of the last ice age, around 10,000 BCE, in a region known as the Fertile Crescent. This area stretches from modern-day Egypt, up the Mediterranean coast to the southeast...
corner of Turkey, and then down again to the border between Iraq and Iran. It is
so named because of a happy accident of geography.
When the ice age ended, the uplands of the region provided an ideal
environment for wild sheep, goats, cattle, and pigs—and, in some areas, for
dense stands of wild wheat and barley. This meant the Fertile Crescent provided
unusually rich pickings for roving bands of human hunter-gatherers. They not
only hunted animals and gathered edible plants but collected the abundant cereal
grains growing wild in the region.

The Fertile Crescent, a region of the Near East where humans first took up
farming and established large-scale settlements (shown here as black dots)
Such grains provided an unexciting but reliable source of food. Although
unsuitable for consumption when raw, they can be made edible by roughly
pounding or crushing them and then soaking them in water. Initially, they were
probably just mixed into soup. A variety of ingredients such as fish, nuts, and
berries would have been mixed with water in a plastered or bitumen-lined
basket. Stones, heated in a fire, were then dropped in, using a forked stick.
Grains contain tiny granules of starch, and when placed in hot water they absorb
moisture and then burst, releasing the starch into the soup and thickening it
considerably.
Cereal grains, it was soon discovered, had another unusual property: Unlike
other foodstuffs, they could be stored for consumption months or even years
later, if kept dry and safe. When no other foodstuffs were available to make

...
diastase enzymes, which convert starch within the grain into maltose sugar, or malt. (This process occurs in all cereal grains, but barley produces by far the most diastase enzymes and hence the most maltose sugar.) At a time when few other sources of sugar were available, the sweetness of this "malted" grain would have been highly valued, prompting the development of deliberate malting techniques, in which the grain was first soaked and then dried.

The second discovery was even more momentous. Gruel that was left sitting around for a couple of days underwent a mysterious transformation, particularly if it had been made with malted grain. It became slightly fizzy and pleasantly intoxicating, as the action of wild yeasts from the air fermented the sugar in the gruel into alcohol. The gruel, in short, turned into beer. Even so, beer was not necessarily the first form of alcohol to pass human lips. At the time of beer's discovery, alcohol from the accidental fermentation of fruit juice (to make wine) or water and honey (to make mead) would have occurred naturally in small quantities as people tried to store fruit or honey. But fruit is seasonal and perishes easily, wild honey was only available in limited quantities, and neither wine nor mead could be stored for very long without pottery, which did not emerge until around 6000 BCE. Beer, on the other hand, could be made from cereal crops, which were abundant and could be easily stored, allowing beer to be made reliably, and in quantity, when needed. Long before pottery was available, it could have been brewed in pitch-lined baskets, leather bags or animal stomachs, hollowed-out trees, large shells, or stone vessels. Shells were used for cooking as recently as the nineteenth century in the Amazon basin, and Sahti, a traditional beer made in Finland, is still brewed in hollowed-out trees today.

Once the crucial discovery of beer had been made, its quality was improved through trial and error. The more malted grain there is in the original gruel, for example, and the longer it is left to ferment, the stronger the beer. More malt means more sugar, and a longer fermentation means more of the sugar is turned into alcohol. Thoroughly cooking the gruel also contributes to the beer's strength. The malting process converts only around 15 percent of the starch found in barley grains into sugar, but when malted barley is mixed with water and brought to the boil, other starch-converting enzymes, which become active at higher temperatures, turn more of the starch into sugar, so there is more sugar for the yeast to transform into alcohol.

Ancient brewers also noticed that using the same container repeatedly for brewing produced more reliable results. Later historical records from Egypt and Mesopotamia show that brewers always carried their own "mash tubs" around with them, and one Mesopotamian myth refers to "containers which make the beer good." Repeated use of the same mash tub promoted successful fermentation because yeast cultures took up residence in the container's cracks and crevices, so that there was no need to rely on the more capricious wild yeast. Finally, adding berries, honey, spices, herbs, and other flavorings to the gruel altered the taste of the resulting beer in various ways. Over the next few thousand years, people discovered how to make a variety of beers of different strengths and flavors for different occasions.

Later Egyptian records mention at least seventeen kinds of beer, some of them referred to in poetic terms that sound, to modern ears, almost like advertising slogans: Different beers were known as "the beautiful and good," "the heavenly," "the joy-bringer," "the addition to the meal," "the plentiful," "the fermented." Beers used in religious ceremonies also had special names. Similarly, early written references to beer from Mesopotamia, in the third millennium BCE, list over twenty different kinds, including fresh beer, dark beer, fresh-dark beer, strong beer, red-brown beer, light beer, and pressed beer. Red-brown beer was a dark beer made using extra malt, while pressed beer was a weaker, more watery brew that contained less grain. Mesopotamian brewers could also control the taste and color of their beer by adding different amounts of baqqir, or beer-bread. To make baqqir, sprouted barley was shaped into lumps, like small loaves, which were baked twice to produce a dark-brown, crunchy, unleavened bread that could be stored for years before being crumbled into the brewer's vat. Records indicate that baqqir was kept in government storehouses and was only eaten during food shortages; it was not so much a foodstuff as a convenient way to store the raw material for making beer.

The Mesopotamian use of bread in brewing has led to much debate among archaeologists, some of whom have suggested that bread must therefore be an offshoot of beer making, while others have argued that bread came first and was subsequently used as an ingredient in beer. It seems most likely, however, that both bread and beer were derived from gruel. A thick gruel could be baked in the sun or on a hot stone to make flatbread; a thin gruel could be left to ferment into beer. The two were different sides of the same coin: Bread was solid beer, and beer was liquid bread.
Under the Influence of Beer?

Since writing had not been invented at the time, there are no written records to attest to the social and ritual importance of beer in the Fertile Crescent during the new stone age, or Neolithic period, between 9000 BCE and 4000 BCE. But much can be inferred from later records of the way beer was used by the first literate civilizations, the Sumerians of Mesopotamia and the ancient Egyptians. Indeed, so enduring are the cultural traditions associated with beer that some of them survive to this day.

From the start, it seems that beer had an important function as a social drink. Sumerian depictions of beer from the third millennium BCE generally show two people drinking through straws from a shared vessel. By the Sumerian period, however, it was possible to filter the grains, chaff, and other debris from beer, and the advent of pottery meant it could just as easily have been served in individual cups. That beer drinkers are, nonetheless, so widely depicted using straws suggests that it was a ritual that persisted even when straws were no longer necessary.

The most likely explanation for this preference is that, unlike food, beverages can genuinely be shared. When several people drink beer from the same vessel, they are all consuming the same liquid; when cutting up a piece of meat, in contrast, some parts are usually deemed to be more desirable than others. As a result, sharing a drink with someone is a universal symbol of hospitality and friendship. It signals that the person offering the drink can be trusted, by demonstrating that it is not poisoned or otherwise unsuitable for consumption.

The earliest beer, brewed in a primitive vessel in an era that predated the use of individual cups, would have to have been shared. Although it is no longer customary to offer visitors a straw through which to drink from a communal vat of beer, today tea or coffee may be offered from a shared pot, or a glass of wine or spirits from a shared bottle. And when drinking alcohol in a social setting, the clinking of glasses symbolically reunits the glasses into a single vessel of shared liquid. These are traditions with very ancient origins.

Just as ancient is the notion that drinks, and alcoholic drinks in particular, have supernatural properties. To Neolithic drinkers, beer’s ability to intoxicate and induce a state of altered consciousness seemed magical. So, too, did the mysterious process of fermentation, which transformed ordinary gruel into beer. The obvious conclusion was that beer was a gift from the gods; accordingly, many cultures have myths that explain how the gods invented beer and then showed humankind how to make it. The Egyptians, for example, believed that beer was accidentally discovered by Osiris, the god of agriculture and king of the afterlife. One day he prepared a mixture of water and sprouted grain, but forgot about it and left it in the sun. He later returned to find the gruel had fermented, decided to drink it, and was so pleased with the result that he passed his knowledge on to humankind. (This tale seems to tally closely with the way beer was probably discovered in the stone age.) Other beer-drinking cultures tell similar stories.

Since beer was a gift from the gods, it was also the logical thing to present as a religious offering. Beer was certainly used in religious ceremonies, agricultural fertility rites, and funerals by the Sumerians and the Egyptians, so it seems likely that its religious use goes back farther still. Indeed, the religious significance of beer seems to be common to every beer-drinking culture, whether in the Americas, Africa, or Eurasia. The Incas offered their beer, called chicha, to the rising sun in a golden cup, and poured it on the ground or spat out their first mouthful as an offering to the gods of the Earth; the Aztecs offered their beer, called pulque, to Mayahuel, the goddess of fertility. In China, beers made from millet and rice were used in funerals and other ceremonies. The practice of raising a glass to wish someone good health, a happy marriage, or a safe passage into the afterlife, or to celebrate the successful completion of a project, is the modern echo of the ancient idea that alcohol has the power to invoke supernatural forces.

Beer and Farming, the Seeds of Modernity

Some anthropologists have even suggested that beer might have played a central role in the adoption of agriculture, one of the turning points of human history. Farming paved the way for the emergence of civilization by creating food surpluses, freeing some members of society from the need to produce food and enabling them to specialize in particular activities and crafts, and so setting humanity on the path to the modern world. This happened first in the Fertile Crescent, starting around 9000 BCE, as people began cultivating barley and wheat deliberately, rather than simply gathering wild grains for consumption and storage.

Of course, the switch from hunting and gathering to farming was a gradual
transition over a few thousand years, as deliberately cultivated crops played an increasingly significant dietary role. Yet, in the grand scheme of human history, it happened in an eyelash. Humans had been hunter-gatherers ever since humankind diverged from the apes, around seven million years earlier; then they suddenly took up farming. Exactly why the switch to farming occurred, and occurred when it did, is still hotly debated, and there are dozens of theories. Perhaps the amount of food available to hunter-gatherers in the Fertile Crescent diminished, for example, either because of climatic changes, or because some species died out or were hunted to extinction. Another possibility is that a more sedentary (but still hunter-gatherer) lifestyle increased human fertility, allowing the population to grow and creating demand for new sources of food. Or perhaps once beer had been discovered, and its consumption had become socially and ritually important, there was a greater desire to ensure the availability of grain by deliberate farming, rather than relying on wild grains. Farming was, according to this view, adopted partly in order to maintain the supply of beer.

Tempting though it is to attribute the adoption of agriculture entirely to beer, it seems most likely that beer drinking was just one of many factors that helped to tip the balance away from hunting and gathering and toward farming and a sedentary lifestyle based on small settlements. Once this transition had begun, a ratchet effect took hold: The more farming was relied on as a means of food production by a particular community, and the more its population grew, the harder it was to go back to the old nomadic lifestyle based on hunting and gathering.

Beer drinking would also have assisted the transition to farming in a more subtle way. Because long-term storage of beer was difficult, and complete fermentation takes up to a week, most beer would have been drunk much sooner, while still fermenting. Such a beer would have had a relatively low alcohol content by modern standards but would have been rich in suspended yeast, which dramatically improved its protein and vitamin content. The high level of vitamin B, in particular, would have compensated for the decline in the consumption of meat, the usual source of that vitamin, as hunting gave way to farming.

Furthermore, since it was made using boiled water, beer was safer to drink than water, which quickly becomes contaminated with human waste in even the smallest settlements. Although the link between contaminated water and ill health was not understood until modern times, humans quickly learned to be wary of unfamiliar water supplies, and to drink where possible from clear-running streams away from human settlements. (Hunter-gatherers did not have to worry about contaminated water supplies, since they lived in small, mobile bands and left their human waste behind when they moved on.) In other words, beer helped to make up for the decline in food quality as people took up farming, provided a safe form of liquid nourishment, and gave groups of beer-drinking farmers a comparative nutritional advantage over non-beer drinkers.

Farming spread throughout the Fertile Crescent between 7000 BCE and 5000 BCE, as an increasing number of plants and animals (starting with sheep and goats) were domesticated, and new irrigation techniques made farming possible on the hot, dry lowlands of Mesopotamia and in the Nile Valley of Egypt. A typical farming village of the period consisted of huts built from clay and reed mats, and perhaps some rather grander houses built of sun-dried mud bricks. Beyond the village would have been fields where cereals, dates, and other crops were cultivated, with a few sheep and oxen tethered or penned nearby. Wild fowl, fish, and game, when available, supplemented the villagers' diet. It was a very different lifestyle from the hunting and gathering of just a few thousand years earlier. And the transition toward an even more complex society had begun. Settlements from this period often had a storehouse where valuable items were kept, including sacred objects and stores of surplus food. These storehouses were definitely communal, since they were far larger than would have been needed by any single family.

Keeping surplus food in the storehouse was one way to ward off future food shortages; ritual and religious activity, in which the gods were called upon to ensure a good harvest, was another. As these two activities became intertwined, deposits of surplus food came to be seen as offerings to the gods, and the storehouses became temples. To ensure all villagers were pulling their weight, contributions to the common storehouse were recorded using small clay tokens, found throughout the Fertile Crescent from as early as 8000 BCE. Such contributions were justified as religious offerings by administrator-priests who lived off the surplus food and directed communal activities, such as the construction of buildings and the maintenance of irrigation systems. Thus were sown the seeds of accountancy, writing, and bureaucracy.

The idea that beer provided some of the impetus for this dramatic shift in the nature of human activity, after millions of years of hunting and gathering, remains controversial. But the best evidence for the importance of beer in prehistoric
times is its extraordinary significance to the people of the first great civilizations. For although the origins of this ancient drink inevitably remain shrouded in mystery and conjecture, there is no question that the daily lives of Egyptians and Mesopotamians, young and old, rich and poor, were steeped in beer.

2
Civilized Beer

Pleasure—it is beer. Discomfort—it is an expedition.
—Mesopotamian proverb, c. 2000 BCE

The mouth of a perfectly contented man is filled with beer.
—Egyptian proverb, c. 2200 BCE

The Urban Revolution

The World's first cities arose in Mesopotamia, "the land between the streams," the name given to the area between the Tigris and Euphrates rivers that roughly corresponds to modern Iraq. Most of the inhabitants of these cities were farmers, who lived within the city walls and walked out to tend their fields each morning. Administrators and craftsmen who did not work in the fields were the earliest humans to live entirely urban lives. Wheeled vehicles trundled through the matrix of city streets; people bought and sold goods in bustling marketplaces. Religious ceremonies and public holidays passed by in a reassuringly regular cycle. Even the proverbs of the time have a familiar world-weariness, as this example shows: "He who possesses much silver may be happy, he who possesses much barley may be happy, but he who has nothing at all can sleep."

Exactly why people chose to live in large cities rather than small villages remains unclear. It was probably the result of several overlapping factors: People may have wanted to be near important religious or trading centers, for example, and in the case of Mesopotamia, security may have been a significant motivation. The lack of natural boundaries—Mesopotamia is essentially a large open plain—meant the area was subject to repeated invasions and attacks. From around 4300 BCE villages began to band together, forming ever-larger towns and eventually cities, each of which sat at the center of its own system of fields and irrigation channels. By 3000 BCE the city of Uruk, the largest of its day, had a population of around fifty thousand and was surrounded by a circle of fields ten miles in radius. By 2000 BCE almost the entire population in southern
Mesopotamia was living in a few dozen large city-states, including Uruk, Ur, Lagash, Eridu, and Nippur. Thereafter Egypt took the lead, and its cities, such as Memphis and Thebes, grew to become the ancient world’s largest.

These two earliest examples of civilization—a word that simply means "living in cities"—were different in many ways. Political unification enabled Egyptian culture to endure almost unchanged for nearly three thousand years, for example, while Mesopotamia was the scene of constant political and military upheaval. But in one vital respect they were similar: Both cultures were made possible by an agricultural surplus, in particular an excess of grain. This surplus not only freed a small elite of administrators and craftsmen from the need to produce their own food but also funded vast public works such as canals, temples, and pyramids. As well as being the logical medium of exchange, grain was the basis of the national diet in both Egypt and Mesopotamia. It was a sort of edible money, and it was consumed in both solid and liquid forms, as bread and beer.

The Drink of the Civilized Man
The recorded history of beer, and indeed of everything else, begins in Sumer, a region in southern Mesopotamia where writing first began to emerge around 3400 BCE. That beer drinking was seen as a hallmark of civilization by the Mesopotamians is particularly apparent in a passage from the Epic of Gilgamesh, the world’s first great literary work. Gilgamesh was a Sumerian king who ruled around 2700 BCE, and whose life story was subsequently embroidered into an elaborate myth by the Sumerians and their regional successors, the Akkadians and Babylonians. The story tells of Gilgamesh’s adventures with his friend Enkidu, who starts off as a wild man running naked in the wilderness but is introduced to the ways of civilization by a young woman. She takes Enkidu to a shepherds’ village, the first rung on the ladder toward the high culture of the city, where

They placed food in front of him,  
they placed beer in front of him;  
Enkidu knew nothing about eating bread for food,  
and of drinking beer he had not been taught.  
The young woman spoke to Enkidu, saying:  
"Eat the food, Enkidu, it is the way one lives."

Drink the beer, as is the custom of the land."  
Enkidu ate the food until he was sated,  
He drank the beer—seven jugs!—and became expansive and sang with joy.  
He was elated and his face glowed.  
He splashed his shaggy body with water,  
and rubbed himself with oil, and turned into a human.

Enkidu’s primitive nature is demonstrated by his lack of familiarity with bread and beer; but once he has consumed them, and then washed himself, he too becomes a human and is then ready to go to Uruk, the city ruled by Gilgamesh. The Mesopotamians regarded the consumption of bread and beer as one of the things that distinguished them from savages and made them fully human. Interestingly, this belief seems to echo beer’s association with a settled, orderly lifestyle, rather than the haphazard existence of hunter-gatherers in prehistoric times.

The possibility of drunkenness seems to have done nothing to undermine the equation of beer drinking with civilization. Most references to drunkenness in Mesopotamian literature are playful and humorous: Enkidu’s initiation as a human, indeed, involved getting drunk and singing. Similarly, Sumerian myths depict the gods as very fallible, human characters who enjoy eating and drinking, and often drink too much. Their capricious behavior was blamed for the precarious and unpredictable nature of Sumerian life, in which harvests could fail and marauding armies could appear on the horizon at any moment. Sumerian religious ceremonies involved laying out a meal on a table in the temple before a divine image, followed by a banquet at which the consumption of food and drink by the priests and worshipers invoked the presence of the gods and the spirits of the dead.

Beer was just as important in ancient Egyptian culture, where references to it go back almost as far. It is mentioned in documents from the third dynasty, which began in 2650 BCE, and several varieties of beer are mentioned in "Pyramid Texts," the funerary texts found inscribed in pyramids from the end of the fifth dynasty, around 2350 BCE. (The Egyptians developed their own form of writing shortly after the Sumerians, to record both mundane transactions and kingly exploits, but whether it was an independent development or inspired by Sumerian writing remains unclear.) One survey of Egyptian literature found that beer, the Egyptian word for which was hekt, was mentioned more times than
any other foodstuff. As in Mesopotamia, beer was thought to have ancient and mythological origins, and it appears in prayers, myths, and legends.

One Egyptian tale even credits beer with saving humankind from destruction. Ra, the sun god, learned that humankind was plotting against him, and dispatched the goddess Hathor to exact punishment. But such was her ferocity that Ra feared there would soon be nobody left to worship him, and he took pity on humankind. He prepared a vast amount of beer—seven thousand jars of it, in some versions of the story—dyed it red to resemble blood, and spread it over the fields, where it shone like a vast mirage. Hathor paused to admire her reflection and then stooped to drink some of the mixture. She became intoxicated, fell asleep, and forgot about her bloody mission. Humankind was saved, and Hathor became the goddess of beer and brewing. Versions of this story have been found inscribed in the tombs of Egyptian kings, including Tutankhamen, Seti I, and Ramses the Great.

In contrast to the Mesopotamians' relaxed attitude toward intoxication, however, a strong disapproval of drunkenness was expressed in the practice texts copied out by apprentice scribes in Egypt, many of which have survived in large quantities in rubbish mounds. One passage admonishes young scribes: "Beer, it scareth men from thee, it sendeth thy soul to perdition. Thou art like a broken steering-oar in a ship, that is obedient on neither side." Another example, from a collection of advice called "The Wisdom of Ani," gives a similar warning: "Take not upon thyself to drink a jug of beer. Thou speakest, and an unintelligible utterance issueth from thy mouth." Such scribal training texts, however, are unrepresentative of Egyptian values in general. They disapprove of almost everything except endlessstudying in order to pursue a career as a scribe. Other texts have titles such as "Do Not Be a Soldier, Priest or Baker," "Do Not Be a Husbandman," and "Do Not Be a Charioteer."

Mesopotamians and Egyptians alike saw beer as an ancient, god-given drink that underpinned their existence, formed part of their cultural and religious identity, and had great social importance. "To make a beer hall" and "to sit in the beer hall" were popular Egyptian expressions that meant "to have a good time" or "to carouse," while the Sumerian expression a "pouring of beer" referred to a banquet or celebratory feast, and formal visits by the king to high officials' homes to receive tribute were recorded as "when the king drank beer at the house of so-and-so." In both cultures, beer was a staple foodstuff without which no meal was complete. It was consumed by everyone, rich and poor, men and women, adults and children, from the top of the social pyramid to the bottom. It was truly the defining drink of these first great civilizations.

The Origins of Writing

The earliest written documents are Sumerian wage lists and tax receipts, in which the symbol for beer, a clay vessel with diagonal linear markings drawn inside it, is one of the most common words, along with the symbols for grain, textiles, and livestock. That is because writing was originally invented to record the collection and distribution of grain, beer, bread, and other goods. It arose as a natural extension of the Neolithic custom of using tokens to account for contributions to a communal storehouse. Indeed, Sumerian society was a logical continuation of Neolithic social structures but on a far larger scale, the culmination of thousands of years of increasing economic and cultural complexity. Just as the chieftain of a Neolithic village collected surplus food, the priests of the Sumerian cities collected surplus barley, wheat, sheep, and textiles. Officially, these goods were offerings to the gods, but in practice they were compulsory taxes that were consumed by the temple bureaucracy or traded for other goods and services. The priests could, for example, pay for the maintenance of irrigation systems and the construction of public buildings by handing out rations of bread and beer.

This elaborate system gave the temple direct control over much of the economy. Whether this resulted in a redistributive nirvana—a form of ancient socialism in which the state provided for everyone—or an exploitative regime of near-slavery is difficult to say. But it seems to have arisen in response to the unpredictable nature of the Mesopotamian environment. There was little rain, and the flooding of the Tigris and Euphrates was erratic. So agriculture depended on the use of carefully maintained communal irrigation systems and, the Sumerians believed, on making the appropriate offerings to the local gods. Both these tasks were handled by the priesthood, and as villages grew into towns and then cities, more and more power was concentrated into their hands. The simple storehouses of the Neolithic period became elaborate temples, or ziggurats, built on raised, stepped platforms. Numerous rival city-states arose, each with its own resident god, and each ruled by an elite priesthood who maintained the agricultural economy and lived off the surplus it produced. Carvings depict them wearing beards, long kilts, and round headdresses, and drinking beer from large pots through long straws.

For all this to work, the priests and their subjects needed to be able to record
what they had taken in and paid out. Tax receipts were initially kept in the form of tokens within clay "envelopes"—hollow shells of clay, called bullae, with several tokens rattling around inside. Tokens of different shapes were used to represent standard amounts of grain, textiles, or individual cattle. When goods were presented at the temple, the corresponding tokens were placed in a clay envelope, and the tax collector and taxpayer would both press the envelope's wet clay with their personal signature seals to signify that the envelope's contents accurately reflected the tax paid. The envelope was then stored in the temple archive.

It soon became clear, however, that an easier way to achieve the same result was to use a tablet of wet clay, and to press the tokens into it to make different-shaped impressions signifying barley, cattle, and so on. The signature seals could then be applied to this tablet, which was baked in the sun to make the impressions permanent. Tokens were no longer needed; their impressions would do instead. Gradually, tokens were abandoned altogether in favor of pictograms scratched into the clay, derived from the shapes of the tokens or of the objects they represented. Some pictograms thus came to stand as direct representations of physical goods, while other combinations of indentations stood for abstract concepts such as numbers.

The oldest written documents, dating from around 3400 BCE from the city of Uruk, are small, flat tablets of clay that fit comfortably into the palm of one hand. They are commonly divided into columns and then subdivided into rectangles by straight lines. Each compartment contains a group of symbols, some made by pressing tokens into the clay, and others scratched using a stylus. Although these symbols are read from left to right and top to bottom, in all other respects this early script is utterly unlike modern writing and can only be read by specialists. But look closely, and the pictogram for beer—a jar on its side, with diagonal linear markings inside it—is easy to spot. It appears in wage lists, in administrative documents, and in word lists written by scribes in training, which include dozens of brewing terms. Many tablets consist of lists of names, next to each of which is the indication "beer and bread for one day"—a standard wage issued by the temple.

A modern analysis of Mesopotamian ration texts found that the standard issue of bread, beer, dates, and onions, sometimes supplemented with meat or fish and with additional vegetables such as chickpeas, lentils, turnips, and beans, provided a nutritious and balanced diet. Dates provided vitamin A, beer provided vitamin B, onions provided vitamin C, and the ration as a whole provided 3,500 to 4,000 calories, in line with modern recommendations for adult consumption. This suggests that state rations were not just occasional handouts, but were the primary source of food for many people.

An early cuneiform tablet, dating from around 3200 BCE, recording the allocation of beer.

Having started out as a means of recording tax receipts and ration payments, writing soon evolved into a more flexible, expressive, and abstract medium. By around 3000 BCE some symbols had come to stand for particular sounds. At the same time, pictograms made up of deep, wedge-shaped impressions took over from those composed of shallow scratches. This made writing faster but reduced the pictographic quality of the symbols, so that writing began to look more abstract. The end result was the first general-purpose form of writing, based on wedge-shaped, or "cuneiform," indentations made in clay tablets using reeds. It is the ancestor of modern Western alphabets, which are descended from it via the Ugaritic and Phoenician alphabets devised during the second
millennium BCE.

Compared with early pictograms, the cuneiform symbol for beer is barely recognizable as a jar shape. But it can be seen, for example, on tablets that tell the story of Enki, the cunning and wily god of agriculture, as he prepares a feast for his father, Enlil. The description of the brewing process is, admittedly, somewhat cryptic. But the steps are recognizable, which means that the world's oldest written recipe is for beer.

3200 BCE  2700 BCE  2250 BCE  1750 BCE  1000 BCE

The evolution of the written symbol for beer in cuneiform. Over the years the depiction of the beer jar gradually became more abstract.

Liquid Wealth and Health

In Egypt, as in Mesopotamia, taxes in the form of grain and other goods were presented at the temple and were then redistributed to fund public works. This meant that in both civilizations barley and wheat, and their processed solid and liquid forms, bread and beer, became more than just staple foodstuffs; they were convenient and widespread forms of payment and currency. In Mesopotamia, cuneiform records indicate that the lowest-ranking members of the Sumerian temple workforce were issued a *sila* of beer a day—roughly equivalent to a liter, or two American pints—as part of their ration. Junior officials were given two *sila*, higher officials and ladies of the court three *sila*, and the highest officials five *sila*. Large numbers of identically sized bevel-rimmed bowls found at Sumerian sites seem to have been used as standard units of measurement. Senior officials were given more beer not because they drank more; having drunk their fill, they had some left over to tip messengers and scribes and pay other workers. Liquids, being easily divisible, make ideal currencies.

Later documents from the reign of Sargon, one of a series of kings from the neighboring region of Akkad who united and ruled Sumer's rival city-states from around 2350 BCE, refer to beer as part of the "bride price" (a wedding payment made by the groom's family to the bride's family). Other records indicate that beer was given as payment to women and children for doing a few days' work at the temple: Women received two *sila* and children one *sila*. Similarly, documents show that refugee women and children, who may have been slaves or prisoners of war, were issued monthly beer rations of twenty *sila* for women and ten *sila* for children. Soldiers, policemen, and scribes also received special payments of beer on particular occasions, as did messengers as a form of bonus payment. One document from 2035 BCE is a list of provisions paid out to official messengers in the city of Umma. Various amounts of "excellent" beer, "ordinary" beer, garlic, cooking oil, and spices were issued to messengers whose names included Shu-Dumu-zi, Nur-Ishtar, Esur-ili, Ur-Ningirsu, and Bazatu. By this time, the Sumerian state employed three hundred thousand people, all of whom received monthly rations of barley and annual rations of wool, or the equivalent amount of other goods: bread or beer instead of barley, and fabric or garments instead of wool. And every transaction was noted down methodically on indestructible cuneiform tablets by Mesopotamian accountants.

The impression of a cylinder seal depicting a banquet scene, including seated figures drinking beer from a large jar through straws.

What is without doubt the most spectacular example of the use of beer as a form of payment can be seen on Egypt's Giza plateau. The workers who built the pyramids were paid in beer; according to records found at a nearby town where the construction workers ate and slept. The records indicate that at the time of the pyramids' construction, around 2500 BCE, the standard ration for a laborer...
was three or four loaves of bread and two jugs containing about four liters (eight American pints) of beer. Managers and officials received larger quantities of both. No wonder that, according to some ancient graffiti, one team of workers on the third Giza pyramid, built for King Menkaure, styled themselves the "Drunkards of Menkaure." Written records of payments to the construction workers show that the pyramids were built by state employees, rather than by an army of slaves, as was once thought. One theory is that the pyramids were built by farmers during the flood season, when their fields were under water. The state collected grain as tribute and then redistributed it as payment; the building work instilled a sense of national unity, demonstrated the wealth and power of the state, and provided a justification for taxation.

The use of bread and beer as wages or currency meant that they became synonymous with prosperity and well-being. The ancient Egyptians identified them so closely with the necessities of life that the phrase "bread and beer" meant sustenance in general; their combined hieroglyphs formed the symbol for food. The phrase "bread and beer" was also used as an everyday greeting, much like wishing someone good luck or good health. One Egyptian inscription urges women to supply their schoolboy sons with two jugs of beer and three small loaves of bread daily to ensure their healthy development. Similarly, "bread and beer" was used by Mesopotamians to mean "food and drink," and one Sumerian word for banquet literally means "the place of beer and bread."

Beer also had a more direct link to health, for both the Mesopotamians and Egyptians used it medicinally. A cuneiform tablet from the Sumerian city of Nippur, dated to around 2100 BCE, contains a pharmacopoeia, or list of medical recipes, based on beer. It is the oldest surviving record of the use of alcohol in medicine. In Egypt, beer's use as a mild sedative was recognized, and it was also the basis for several medicinal concoctions of herbs and spices. Beer was, of course, less likely to be contaminated than water, being made with boiled water, and also had the advantage that some ingredients dissolve more easily in it. "The Ebers Papyrus," an Egyptian medical text that dates from around 1550 BCE but is evidently based on far older documents, contains hundreds of recipes for herbal remedies, many of which involve beer. Half an onion mixed with frothy beer was said to cure constipation, for example, while powdered olives mixed with beer cured indigestion; a mixture of saffron and beer massaged into a woman's abdomen was prescribed for labor pains.

The Egyptians also believed that their well-being in the afterlife depended on having an adequate supply of bread and beer. The standard funerary offering consisted of bread, beer, oxen, geese, cloth, and satron, a purification agent. In some Egyptian funerary texts the deceased is promised "beer that would not turn sour"—signaling both a desire to be able to pursue beer drinking eternally and the difficulty of storing beer. Scenes and models of brewing and baking have been found in Egyptian tombs, along with jars of beer (long since evaporated) and beer-making equipment. Special sieves for beer making were found in the tomb of Tutankhamun, who died around 1335 BCE. Ordinary citizens who were laid to rest in simple shallow graves were also buried with small jars of beer.

A Drink from the Dawn of Civilization

Beer permeated the lives of Egyptians and Mesopotamians from the cradle to the grave. Their enthusiasm for it was almost inevitable because of the emergence of complex societies, the need to keep written records, and the popularity of beer all followed from the surplus of grain. Since the Fertile Crescent had the best climatic conditions for grain cultivation, that was where farming began, where the earliest civilizations arose, where writing first emerged, and where beer was most abundant.

Although neither Mesopotamian nor Egyptian beer contained hops, which only became a standard ingredient in medieval times, both the beverage and some of its related customs would still be recognizable to beer drinkers today, thousands of years later. While beer is no longer used as a form of payment, and people no longer greet each other with the expression "bread and beer," in much of the world it is still considered the staple drink of the working man. Toasting someone's health before drinking beer is a remnant of the ancient belief in beer's magical properties. And beer's association with friendly, unpretentious social interaction remains unchanged; it is a beverage that is meant to be shared. Whether in stone-age villages, Mesopotamian banqueting halls, or modern pubs and bars, beer has brought people together since the dawn of civilization.
Key Concept 1.2. The Neolithic Revolution and Early Agricultural Societies

I. Beginning about 10,000 years ago, the Neolithic Revolution led to the development of new and more complex economic and social systems.
A. Possibly as a response to climatic change, permanent agricultural villages emerged first in the lands of the eastern Mediterranean. Agriculture emerged at different times in Mesopotamia, the Nile River Valley and Sub-Saharan Africa, the Indus River Valley, the Yellow River or Huang He Valley, Papua New Guinea, Mesoamerica, and the Andes.
B. Pastoralism developed at various sites in the grasslands of Afro-Eurasia.
C. Different crops or animals were domesticated in the various core regions, depending on available local flora and fauna.
D. Agricultural communities had to work cooperatively to clear land and create the water control systems needed for crop production.
E. These agricultural practices drastically impacted environmental diversity. Pastoralists also affected the environment by grazing large numbers of animals on fragile grasslands, leading to erosion when overgrazed.

II. Agriculture and pastoralism began to transform human societies.
A. Pastoralism and agriculture led to more reliable and abundant food supplies, which increased the population.
B. Surpluses of food and other goods led to specialization of labor, including new classes of artisans and warriors, and the development of elites.
C. Technological innovations led to improvements in agricultural production, trade, and transportation.
D. In both pastoralist and agrarian societies, elite groups accumulated wealth, creating more hierarchical social structures and promoting patriarchal forms of social organization.

Directions:
1. Read Key Concepts that will be discussed in today's video.
2. Preview the video viewing questions.
3. Watch "Crash Course in World History: Agricultural Revolution" without taking any notes.
4. Watch "Crash Course in World History: Agricultural Revolution" a second time. Pause the video as needed so that you can answer the questions.
Crash Course World History: Agricultural Revolution #1

1. How do we have evidence of Hunter-Gatherers (H-G) and their lifeways? (New word that means "ways of life", do not use "lifestyle").

2. What do most early civilizations have in common?

3. What advantages did H-G have over early agriculturalists?

4. Where did agriculture emerge? Which food crops are associated with which areas?

5. What are the advantages and disadvantages of agriculture?

6. What impact does agriculture have on the environment?

7. What other lifeway emerged besides being a H-G or a farmer (agriculturalist)?

8. What were the advantages and disadvantages to pastoralism (being a herder)?

9. What advantages do you think that Eurasia had with its zoological set of animals compared to the Americas?

10. Evaluate John Green's thesis that "the greatest evolutionary advantage an animal species can have is being useful to humans." Agree/disagree, why?

11. If H-G had a "better and healthier" lifeway, why did people become agriculturalists?

12. What do historians say are the drawbacks to complex civilizations and agriculture?

13. What other impacts do complex civilizations have on the environment?

14. What does John Green say about "revolutions"?
Key Concept 1.2. The Neolithic Revolution and Early Agricultural Societies
I. Beginning about 10,000 years ago, the Neolithic Revolution led to the development of new and more complex economic and social systems.

A. Possibly as a response to climatic change, permanent agricultural villages emerged first in the lands of the eastern Mediterranean. Agriculture emerged at different times in Mesopotamia, the Nile River Valley and Sub-Saharan Africa, the Indus River Valley, the Yellow River or Huang He Valley, Papua New Guinea, Mesoamerica, and the Andes.

Key Concept 1.3. The Development and Interactions of Early Agricultural, Pastoral, and Urban Societies
I. Core and foundational civilizations developed in a variety of geographical and environmental settings where agriculture flourished.

III. Culture played a significant role in unifying states through laws, language, literature, religion, myths, and monumental art.

F. Trade expanded throughout this period from local to regional and transregional, with civilizations exchanging goods, cultural ideas, and technology.

Directions:
1. Read Key Concepts that will be discussed in today’s video.
2. Preview the video viewing questions.
3. Watch “Crash Course in World History: Indus Valley Civilization” without taking any notes.
4. Watch “Crash Course in World History: Indus Valley Civilization” a second time. Pause the video as needed so that you can answer the questions.
1. How is the concept of “civilization” a useful construct? When is it not a useful construct?

2. How does John Green define what constitutes a civilization? How does this compare to other definitions of civilization you have learned?

3. Where did the earliest civilizations emerge? Why there?

4. Why was the Indus Valley a prime location? How did the environment impact the people who lived there?

5. How do we know, what we know, about the Indus Valley Civilization?

6. How did they use technology to interact with the environment to improve their quality of life?

7. What evidence exists of long-distance trade and with whom?

8. What appears to be unique about the Indus Valley Civilization, based on your knowledge of other civilizations?

9. What theories do historians have about the fate of the Indus Valley Civilization? As historians, what evidence might one look for to support or disprove these three theories?
Crash Course World History: Mesopotamia #3

Key Concept 1.2. The Neolithic Revolution and Early Agricultural Societies
I. Beginning about 10,000 years ago, the Neolithic Revolution led to the development of new and more complex economic and social systems.
A. Possibly as a response to climatic change, permanent agricultural villages emerged first in the lands of the eastern Mediterranean. Agriculture emerged at different times in Mesopotamia, the Nile River Valley and Sub-Saharan Africa, the Indus River Valley, the Yellow River or Huang He Valley, Papua New Guinea, Mesoamerica, and the Andes.

Key Concept 1.3. The Development and Interactions of Early Agricultural, Pastoral, and Urban Societies
I. Core and foundational civilizations developed in a variety of geographical and environmental settings where agriculture flourished.
II. The first states emerged within core civilizations.
C. Early regions of state expansion or empire building were Mesopotamia, Babylonia, and the Nile Valley.
III. Culture played a significant role in unifying states through laws, language, literature, religion, myths, and monumental art.
F. Trade expanded throughout this period from local to regional and transregional, with civilizations exchanging goods, cultural ideas, and technology.

Directions:
1. Read Key Concepts that will be discussed in today's video.
2. Preview the video viewing questions.
3. Watch “Crash Course in World History: Mesopotamia” without taking any notes.
4. Watch “Crash Course in World History: Mesopotamia” a second time. Pause the video as needed so that you can answer the questions.

Crash Course World History Questions: Mesopotamia #3

1. John Green begins by discussing one of the most obvious consequences of agriculture...what is it and what are the most immediate consequences for those societies?

2. Why do you think early cities devoted resources to building monumental architecture, like ziggurats?

3. How does Mesopotamia compare with the Indus River Valley? Identify both similarities and differences. Think of why a specific similarity and a specific difference might exist. (This is analysis; one of the more challenging skills you will need to develop.)
4. How might the environment of Mesopotamia influence or shape people's perceptions of their gods?

5. What is the significance of the emergence of palaces? How did kings gain power over priests? How did they keep it?

6. CUNIEFORM: What three points does John Green make about the advent of writing?
   a) 
   b) 
   c) 

7. How did the environment of Mesopotamia shape the economy of the society?

8. What factors led to the downfall of the Mesopotamian city-states and to what effect? (A causes and effects question)

9. What was Hammurabi's most significant contribution?

10. Compare new city-states with the old city-states of Mesopotamia. Identify 3 specific similarities and 3 specific differences. State a reason for at least one similarity and one difference.

11. Who provided the basis for the development of territorial kingdoms? How? Why does this "base" prove to be unsteady?

12. What legacy did the Assyrians leave?

13. What are the challenges of empire what is the usual result? Or to put it in math terms:
    \[ \text{____________} + \text{____________} = \text{____________} \]

14. How did Assyrian kings attempt to legitimize their rule?
Crash Course World History: Ancient Egypt #4

Key Concept 1.3. The Development and Interactions of Early Agricultural, Pastoral, and Urban Societies

I. Core and foundational civilizations developed in a variety of geographical and environmental settings where agriculture flourished.

   Required examples of core and foundational civilizations:
   • Mesopotamia in the Tigris and Euphrates River Valleys
   • Egypt in the Nile River Valley
   • Mohenjo-Daro and Harappa in the Indus River Valley
   • Shang in the Yellow River or Huang He Valley
   • Olmecs in Mesoamerica
   • Chavin in Andean South America

III. Culture played a significant role in unifying states through laws, language, literature, religion, myths, and monumental art.

F. Trade expanded throughout this period from local to regional and transregional, with civilizations exchanging goods, cultural ideas, and technology.

   Required examples of trade expansion from local to regional and transregional:
   • Between Egypt and Nubia
   • Between Mesopotamia and the Indus Valley

Directions:

1. Read Key Concepts that will be discussed in today's video.
2. Preview the video viewing questions.
3. Watch "Crash Course in World History: Ancient Egypt" without taking any notes.
4. Watch "Crash Course in World History: Ancient Egypt" a second time. Pause the video as needed so that you can answer the questions.
Crash Course World History: Ancient Egypt #4

Before watching today's Crash Course, listen to this: https://www.youtube.com/watch?v=1JqlAD7dn

1. What point is John Green making about the different "lenses" we use when we study history?

2. How did the Nile River shape the worldview of the Egyptians? How did this compare to the Mesopotamian worldview?

3. How was Egyptian Civilization different from most other River Valley Civilizations? Why do you think this was?

4. What does the construction of the pyramids represent? (not "what was the purpose of the pyramids?")

5. What was the motivation for building the pyramids? (not "what was the purpose of the pyramids?")

6. What changes took place in the transition from the Old Kingdom to the Middle Kingdom?

7. Amon-Ra or Top Ramen...you decide...

8. What protected Egypt from outside peoples? How were the Egyptians eventually conquered by Semitic peoples of the Middle East?

9. What changes took place in the transition from the Middle Kingdom to the New Kingdom?