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# ANCIENT HISTORY ACTIVATORS



Brief, Engaging Historical Experiences



# Ancient History Activators

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# Welcome to *Ancient History Activators!*

Through these interactive one or two period simulations, students will face the problems ancient people confronted in establishing civilization and experience the solution to those problems. These include how hunter-gatherer tribes progressed to the development of farming, how ancient people learned to control rivers, the development of writing, law systems, architecture, and Cultural Diffusion.

The activators provide opportunities for hands-on activity, critical thinking, and problem solving, and include writing prompts for extending the lessons. By the authors of *Empires*, these activators can stand alone or serve as an introduction to the Interact Simulation *Empires*.





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## Purpose and Overview

### Purpose

The Activators contained in this book are intended to supplement World History classes by allowing students to experience and understand some of the most daunting challenges faced in the creation of civilization. The six Activators are presented as problems that ancient peoples had to overcome to be able to create civilization. These problems can be briefly summarized as:

1. The need for a stable source of food that can generate a surplus.
2. The need for cooperation to control the flooding of rivers.
3. The need to be able to accurately record food supplied to the civilization.
4. The need for non-verbal communication in civilization.
5. The need to make the people of a civilization feel an attachment to it.
6. The need to be able to introduce new ways of thinking and doing things into the civilization.

The “problems” approach to dealing with the emergence of civilization forms a coherent and strong unifying theme that connects all six activators together. These six activators, actually 1-2 day simulations, tell one tale, the story of what obstacles needed to be overcome for civilization to take root. Each Activator deals with one of the problems listed above and places the students in a situation to experience their solution. These simulations are inter-related and provide a strong foundation for the further study of World History.

A good simulation does two things. First, it allows students to experience concepts that the teacher wants them to learn. Upon completing an activity, the student should be able to explain the concept based on that experience. Second, the simulation should be so engaging that it makes a lasting impression on the students.



### **What are Activators?**

These Activators are one or two day simulations that allow students to actively experience central concepts leading to the formation of civilization. Upon completing the activities, students should be able to explain these concepts based on what they have just experienced. These Activators so engage the students that the concepts that emerge from the lessons enters into their long-term memory.

The Activators require very little background information. They serve to provide an experiential background that gives your students a foundation to understand the information and concepts necessary to learn about the birth of civilization.

The Activators were designed to totally immerse students in the activity. Regardless of whether they are of advanced, average, low ability or limited English fluency, all students will be able to participate and gain from their use.

### ***Learning Styles***

Activators allow your students to participate in each lesson using a wide variety of learning styles. The students will have ample opportunity to deal with visual-spatial, kinesthetic, interpersonal, interpersonal, linguistic, auditory and logical modes of learning throughout these six Activators. Multiple learning modes are required for each lesson. Incorporating various learning styles is a powerful way to motivate students and account for individual differences within the classroom. Given the right circumstances and environment, all children can learn. These Activators are intended to help make that possible. Students bring diverse capabilities and strengths to the classroom that often are not allowed to shine in traditional classroom settings. One of the true joys of teaching is seeing a student surprise his/her fellow students with his/her hidden talents; and even greater joy is when you see them surprise themselves. The Activators give them a chance to do that.

### ***Grouping Students***

The six Activators provide an immersion experience for your students. As a result, traditional cooperative group roles are not necessary. Whether they are hunting and gathering, building levees and channels or constructing temples, the lesson and the time frame will structure their activities. Part of the intention of these Activators is for the students to work out for themselves how they will complete the task. This is part of the theme of problem solving. While this is not the usual model for cooperative group activities, the highly engaging and participatory nature of the Activators make it the preferred method.

**Set-Up**

The Activators are meant to be highly engaging for the students. Most require a high degree of mobility and some will require that you will have to rearrange your classroom to accommodate this. Some will also require that you provide some materials such as marbles (Activator 2), butcher or poster paper (Activator 4) and materials such as tape and paper-clips (Activators 2 & 5). Activators 1-5 are all done in one class period while Activator 6 requires two periods. Some of the Activators will require handouts for the students (Activators 1, 3, and 6) while some will not (Activators 2, 4, and 5). Some will require your direct participation throughout the lesson (Activators 3 and 4) while others will allow the teacher to turn the students loose after directions while then monitoring their activities (Activators 1, 2, 5, & 6).

**Debriefing**

It is important that each Activator be debriefed at its conclusion. If this cannot be done at the end of the period then it should occur during the next class period. During the debriefings it is important to have the students describe their own experiences of what occurred during the Activator. Prior to this, you may want to have students write a brief summary of what happened during the Activator. From these experiences the teacher will explain how it relates to a problem that had to be solved to make civilization possible. The emphasis should be on the problem and its solution. Since the students experienced both, allow them to address the solution. Each Activator contains a series of questions that may be helpful during the debriefing.

**Evaluation**

One way to evaluate the students is to have the students write an essay describing the experience they had while participating in the Activator. In this essay they will identify the central problem within the Activator and its solution. Writing prompts are provided at the end of each Activator.

**A Problem Approach Theme to the Activators**

For over two million years human beings lived a nomadic life in which very little progress was made to alleviate the meagerness and insecurity of their existence. Human energy was entirely consumed in the daily effort to survive, especially in the hunting and gathering of food. Then, about 5,000 years ago, all of that suddenly changed. Cities were started on the banks of great rivers and civilization emerged. Within 5000 years the human energies released by civilization led to mankind landing on the moon. This rapid transformation of the conditions and outcome of human life is truly astounding!

These Activators help to tell the story about how this transformation was made possible. They do so by presenting problems that had to have solutions before civilization could take root as the revolutionary and dominant form of human organization.

**Activator 1, Hunting and Gathering versus Farming: The Agricultural Revolution**, identifies the contrast of methods of securing food between nomadic hunter-gatherers and farmers. Students learn that farming was a vastly more productive way of securing food and was able to generate food surpluses needed to support civilization.

**Activator 2, Controlling the Flooding of Rivers: The Birth of Government**, takes students to the banks of the great river valleys where farming began. Here they will learn that rivers created the soil that made farming possible. But they will also discover that the destructive force of rivers could threaten that farming. Students will learn that the problem of controlling the flooding of great rivers and diverting its potentially destructive force to productive ends was one that early farmers had to confront. They will understand that this problem was solved through extensive organization and cooperation that gave rise to the first organized governments in history.

In **Activator 3, Counting the Grain Harvest: The Birth of Writing**, the lessons of Activators 1 and 2 will be reinforced as students learn the first cities were dependent on surpluses of food created by farming. They will see that one of the primary jobs of organized governments was to collect and store food to feed the inhabitants of the city. This task was essential to the survival of the city and relied on a need for extremely accurate record keeping. Students will observe that the problem facing the city was record keeping by mere memory was not precise enough and a tool needed to be developed that would allow for an accurate count. They will learn that writing was that tool.

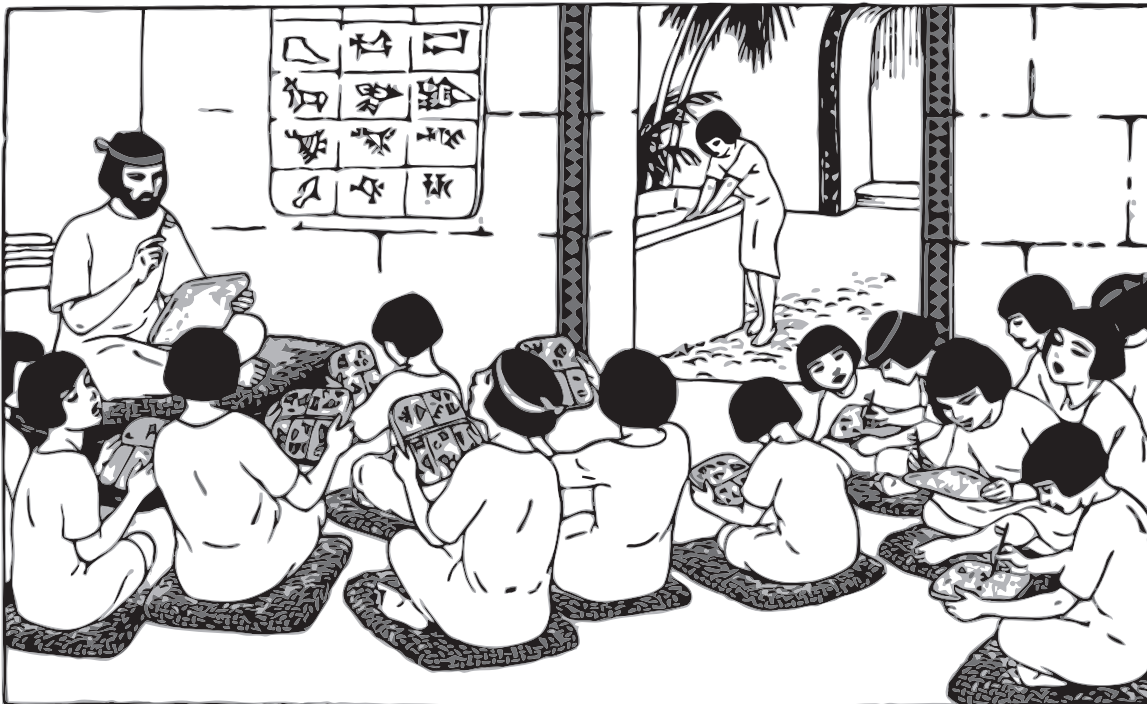
**Activator 4, City of Strangers: The Need for Written Laws**, reinforces and extends the lessons of Activator 3. In this Activator, students will learn that life in the city created a new problem that was not experienced by nomadic and farming communities. Cities, the heart of civilization, had populations in the many thousands. For the first time in human history people living in the same society personally knew or had contact with only a small percentage of people in that society. Virtually all the inhabitants of the new city had no contact with the cities' rulers at all. This led to a communication problem. The much smaller nomadic and farming communities could rely exclusively on verbal communication and unwritten customs to regulate their lives. This would not be enough in the changed circumstances of the city. In this Activator the students will learn that indirect communication was needed and that it was used to turn verbal custom into written law.

**Activator 5, Making an Impression: The Power of Ancient Architecture**, extends the lessons of Activator 4 in demonstrating the changed circumstances that people were experiencing living in cities. The close personal ties that created a strong attachment for the individual to his society disappeared in the new cities. Life in cities was much more impersonal than any previous form of human organization. Yet all societies need their

members to form strong bonds of attachments to it. The problem for the new cities was to find new ways to establish these new forms of attachment. After experiencing the Activator, the students will see that the majestic and imposing architecture of temples and palaces within the city walls was one of the ways in which ancient cities sought to forge those new attachments.

In **Activator 6, The Need to Introduce the New: Cultural Diffusion**, the students will learn that cities and civilization must be open to new information and ways of doing things to survive and grow. But ancient civilizations were extremely authoritarian and little inclined to think about or do new things. For civilizations to grow and prosper there had to be a way to let new ideas and ways of doing things filter into the city. While experiencing this Activator the students will learn that it was through the process of interaction with other civilizations that this problem was mainly solved through the process of “cultural diffusion.”

By presenting each of these Activators as problems to students, a coherent and powerful theme will be established that will continue to reinforce the lessons of the previous Activators. Although divided into six different Activators, they in fact tell one story. That story, the solutions to problems that led to the emergence of civilization, is a fascinating one that is well worth telling.



## ● Activator 1 ●

### *Hunting and Gathering versus Farming: The Agricultural Revolution*

#### **Overview**

Each of the Activators is intended to pose problems that ancient peoples had to overcome in their efforts to establish civilization. By participating in the Activator the students will realize what the solutions to those problems were. Each overview will present the problem and the solution that the Activator is designed to solve.

**Problem:** For 2.5 million years, humans lived nomadic lives of hunters and gatherers. This era of human existence was one of continual scarcity. All human energy had to be devoted to daily securing the food necessary to survival. All members of the hunting and gathering community had to be involved in this all-consuming task. Under these conditions, human civilization could not emerge. Before civilization could be created, human beings had to discover a way to secure food in a way that would not require all of their energy. Only on this foundation could civilization be started.

**Solution:** Farming solved the food problem for human beings and created the conditions necessary for the birth of civilization. The Agricultural Revolution changed the face of humanity. Because farming was vastly superior to hunting and gathering as a way to acquire food, humans could establish roots for the first time. The surplus created by farming allowed the population to grow and made it possible for some people to follow pursuits other than producing food. This excess population that could specialize in non-food producing activities gathered in a new form of human organization known as the city. It was in these cities that civilization emerged.

**Summary:** In this simulation you want your students to understand how farming revolutionized human life and created the conditions for the emergence of civilization.

You will explain to the students that for most of human existence, people engaged in a desperate struggle each day to secure enough food to survive. To do this, they had to hunt for food and vegetation that would provide for a meal for that day. They had to be constantly on the move, following the animals they hunted and new areas to find edible vegetation and fruits. As a result of their nomadic life, they could only have the barest of material possessions.

Hunter and gather tribes had to be very small (usually bands of 20–30) people. Their way of life could not support an excess population. Because of their constant need to secure food, hunters and gatherers could not devote any energy in any other pursuit. They lived a life of scarcity and want. This

way of life continued virtually unchanged for over two million years. Then, in fertile river valleys, human beings learned how to sow seed and tame animals. They learned how to farm. Farming changed every aspect of human life. It was vastly superior to hunting and gathering as a means for securing food. Farming was so successful that humans were able to produce a surplus of food. For the first time in human history people produced enough food to take care of not only today but tomorrow also. Because so much more food could now be secured, the population exploded. Farming's success made it possible for some of those people to direct their energies to things other than securing food. Some could become artisans, creating the possessions that people could now enjoy because they had given up their nomadic lives and stayed in one place. Some of the population could be priests or scribes. Others could learn how to build great architectural structures or serve in a military meant to protect the people of the civilization. The success of farming meant that there would be enough food to support this new specialization in jobs. For the first time, human energy could release itself to activities beyond securing food. This energy was focused in a new type of human organization known as a city. In the cities, people followed the pursuits that created civilization. This was made possible by the incredible productivity of farming. For over 2 million years, human life experienced minimal progress. Within 10,000 years from the creation of the first farms the energy released by solving the food problem led to humans landing on the moon.

In this activator your students will powerfully experience the vast superiority of farming to hunting and gathering and how it created the conditions which allowed the creation of civilization.



## Setup Directions

### 1. Duplications

Duplicate the following in the quantities indicated in *Italics*:

- Background Essay—*one for each student*
- Card Sheet—*cut-out the 80 cards*
- Hunting and Gathering Sheet—*one for each student who is in one of the Hunting and Gathering groups*
- Hunting and Gathering Question and Answer Sheet #1–5—*one for each of the Hunting and Gathering Tribes (groups)*
- Hunting and Gathering Question and Answer Sheet #6–10—*one for each of the Hunting and Gathering Tribes (groups)*
- Hunting and Gathering Question and Answer Sheet #11–15—*one for each of the Hunting and Gathering Tribes (groups)*
- Hunting and Gathering Question and Answer Sheet #16–20—*one for each of the Hunting and Gathering Tribes (groups)*
- Farming Group Question Sheet—*one copy for the one Farming group in the class. Cut along dotted lines (after every five questions) to create 12 sheets (of five questions)*

### 2. Procedures

- A. Cut out cards from the Card Sheet.** Make one copy of each of the sheets for the **Card Sheet**. Cut these sheets along the lines to create individual cards. When completed, 80 cards will be created. Each of the 80 cards has a number (1–20) on it and a letter (A, B, C, or D). Four cards together that share the same number make up a question. Each question is numbered and has an A, B, C, or D card. The first card (A) contains the first part of the question. The second card (B) contains the second part of the question; the third card (C) contains the final part of the question. The fourth card (D) gives the paragraph number on the **Background Essay** where the answer to the question can be found. Using number #1 from the **Card Sheet** as an example, the first three cards (1A, 1B, and 1C) together form the question “How did members of different civilizations come into contact with one another?” Card D directs the students attention to which paragraph from the **Background Essay** contains the information which will allow them to answer the question. See example below:

<b>1A</b> How did members	<b>1B</b> of different civilizations come into	<b>1C</b> contact with one another?	<b>1D</b> paragraph 20
------------------------------	---	---	---------------------------

**Teacher Option**—You may prefer to use your text to provide the information rather than the **Background Essay**. If this is the case, you will create the 20 questions and the 80 cards made from those questions yourself. The D card would then list a page number instead of a paragraph number.

- B. Place the cards throughout the room.** Take 80 cards that have been cutout from the **Card Sheet** and tape each card individually throughout the classroom. This is to be done prior to the students entering class. Place the cards all over the room (on walls, bookshelves, desks, the ceiling, etc.). The purpose of the cards is for the students to “hunt” and “gather” the clues found throughout the room.
- C. Create Hunting and Gathering Tribes.** The students will be placed in groups of four or five. These will be called “tribes.”
- D. D. Explain the Hunting and Gathering Cards taped throughout the room.** Pass out **Background Essay** to the groups so that each student has one. Do not have the students read the **Background Essay** prior to the activity. They will use it to help them answer questions during the activity.

After putting the students into their tribes, point out the 80 cards that are taped throughout the room (students will probably point them out beforehand). Inform the students that the 80 cards are 20 questions created from the **Background Essay** (or page numbers in text if you prefer to create your own cards.) Explain to the students that there are 80 cards and that they form 20 questions. Tell them that each question is divided into four parts. Instruct them that each part is found on a separate card. Explain to the students that each card that is part of the same question will share the same number (#1–20). Explain that the **A Card** is the first part of the question, the **B Card** is the second part of the question, and that the **C Card** is the third part of the question. Then explain to them that the **D Card** indicates the paragraph where they will find the information to answer the question.

- E. Pass out and explain the Hunting and Gathering Sheets.** Pass out the **Hunting and Gathering Sheet** to the tribes so that each student gets one. Instruct the students that they will copy the clues that they find on the cards throughout the room onto their **Hunting and Gathering Sheet**. Go over the **Hunting and Gathering Sheet** with the students. Point out to them that the sheet has four columns, labeled A, B, C, and D. The **Hunting and Gathering Sheet** also has

**Teaching tip**

Make sure that each card is in plain view. Tell the students that they may have to change positions to see a card but that they do not have to touch or move anything! You do not want the students to get into drawers or move materials.

## Setup Directions

### Activator 1

20 rows numbered #1-20. Remind them that each number and its A, B, C, and D cards create a question. Instruct the students that they will travel around the room and "hunt and gather" clues that they will copy onto their **Hunting and Gathering Sheet**. Give the example of a student finding the Card 1 Clue C. Show the students how they would write the clue down on their sheet on the row for Card 1 under the column for C. See example below:

**Hunting and Gathering Sheet**  
*Activator 1*Master

### Hunting and Gathering Sheet

Card Number	A Clue	B Clue	C Clue	D Clue
1.			<i>contact with one another?</i>	
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				

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As they begin to gather more clues from the cards, their individual **Hunting and Gathering Sheets** will begin to look like the following:

**Hunting and Gathering Sheet**  
*Activator 1*
Master

### Hunting and Gathering Sheet

Card Number	A Clue	B Clue	C Clue	D Clue
1.			contact with one another?	
2.	This word means			
3.				Paragraph 7
4.				
5.	How did leaders of ancient		Obedience of the city's population?	
6.				
7.		went into the construction of magnificent		
8.			in jobs in cities?	Paragraph 12
9.				
10.				
11.	Why did the governments	of cities tax the		Paragraph 17
12.				Paragraph 10
13.				
14.		learn how to plant		
15.		tribe size of	Paleolithic people?	
16.				
17.	What is the transition			Paragraph 9
18.				
19.			different people through contact called?	
20.				

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Instruct the students that their goal will be to gather as much information from the cards as they can and then transfer the information on the card onto the designated spot on their **Hunting and Gathering Sheet**. Give each tribe a minute to check for understanding among themselves; then ask for any questions they may still have.

### Teaching tip

Stress to the students that it is vitally important for the tribes to be able to feed each member in the time allotted.



**F. Pass out and explain the Hunting and Gathering Tribal Question and Answer Sheets.** Tell the students that the ultimate goal of their tribe is to put together as many questions as they can and to find the answer to those questions in the **Background Essay**. Each completed question with its answer will count as enough food to feed one member of their tribe. Not being able to create enough questions and answers in their tribe will lead to starvation and possible extinction. Encourage the tribes to try to get a surplus (more questions and answers than the number of people in their tribe).

Pass out the **Hunting and Gathering Tribal Question and Answer Sheets** to each tribe. Every **Hunting and Gathering Tribal Question and Answer Sheet** has been cut in half beforehand so there are four sheets total. Each group will receive **Hunting and Gathering Tribal Question and Answer Sheets #1–5, #6–10, #11–15, and #16–20**. Each tribe gets one set of the four sheets.

Tell the students that the four **Hunting and Gathering Tribal Question and Answer Sheets** are to remain in their tribe. Stress that they may not carry them with them as they “hunt” and “gather” throughout the room. These sheets are to remain in the group and will be used to determine how successful the tribe was in its task. Each sheet has five of the 20 question numbers plus spots to write the answer. See example below:

Hunting and Gathering Tribal Question and Answer Sheet #1-5				
Card 1				
Card 2				
Card 3				
Card 4				
Card 5				
Answer Card 1:				
Answer Card 2:				
Answer Card 3:				
Answer Card 4:				
Answer Card 5:				

Instruct the students that after they have gathered two or three clues and placed them on their **Hunting and Gathering Sheets** they are to return to their tribes and transfer the information from their individual sheets to the tribe's **Hunting and Gathering Tribal Question and Answer Sheet**. Explain to them that they are to find the **Hunting and Gathering Tribal Question and Answer Sheet** that has the same card number as the clue on their individual **Hunting and Gathering Sheets**. Tell them that they will then write down the clue in the appropriate A, B, C, or D column. They will then go out and hunt and gather more clues to get for the tribe's sheets. All the members of the tribe will participate in getting clues on their individual sheets and then transferring those clues onto the tribe's sheets.

Their goal is to get as many completed questions on the tribes **Hunting and Gathering Tribal Question and Answer Sheet** as they can. One of the tribes **Hunting and Gathering Tribal Question and Answer Sheet** might look like the following after the members of the tribes have begun to place clues on them:



**Teaching tip**  
Keep reminding the students of this, and tell them to return to their group after finding two or three clues, remind them to both "hunt" and "gather."

### Hunting and Gathering Tribal Question and Answer Sheet #1-5

Card Number	Card A	Card B	Card C	Card D
Card 1	How did members	of different civilizations come into	contact with one another?	Paragraph 20
Card 2	This word means	believing in many		
Card 3				Paragraph 7
Card 4	What was one of		of the ancient world?	
Card 5				
Answer Card 1:				
Answer Card 2:				
Answer Card 3:				
Answer Card 4:				
Answer Card 5:				

In the example above, all the clues for Card 1 have been placed on the tribe's sheet. Someone in the tribe can now go to paragraph 20 in the **Background Essay** and write answer the question in the designated spot. A completed question and answer on the sheet would look like this:

### Hunting and Gathering Tribal Question and Answer Sheet #1-5

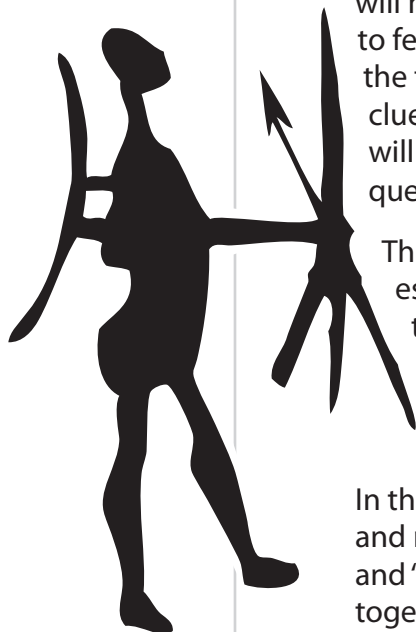
Card Number	Card A	Card B	Card C	Card D
Card 1	How did members	of different civilizations come into	contact with one another?	Paragraph 20
Card 2	This word means	believing in many		
Card 3				Paragraph 7
Card 4	What was one of		of the ancient world?	
Card 5				
Answer Card 1: through trade and warfare				
Answer Card 2:				
Answer Card 3:				
Answer Card 4:				
Answer Card 5:				

The goal of the tribe is to individually gather as many clues as they can and then return to their tribes and place those clues on their **Hunting and Gathering Tribal Question and Answer Sheets**. They will attempt to create complete questions on these sheets. Once this is done, they will attempt to answer the question.

A complete question (the A, B, C, and D clue) along with its answer will produce one unit of food. This is enough food to feed one member of their tribe for one day. If they have five members in their tribe they will need to complete at least five questions with answers to be able to feed everyone in their group for the day. In the example above the tribe gets credit for one unit of food because they got all of the clues for Card 1 and provided the answer to the question. They will continue to “hunt” for the other clues needed to complete the questions for the other cards.

Throughout the activity keep reminding your students how essential it is for every tribe to be able to feed their members. Tell them that if they do not hunt and gather enough food, the tribe members will go hungry. Therefore, it is important for each group to be able to “feed” all of its members and try to generate as much surplus as they can.

In the time allotted, no student in the group will be able to gather and record all of the clues. It is through their joint effort of “hunting” and “gathering” the clues that the group will be able to put questions together and record them along with the answer on the group’s **Hunting and Gathering Tribal Question and Answer Sheet**.



**G. Select one tribe to be the Farming Group.** Give the tribes a minute to discuss their strategy for hunting and gathering the clues. While they are doing this quietly go to one tribe and tell them (*this is not announced to the rest of the class*) that they will not hunt and gather but instead they will “farm.” Give this group the twelve sheets created from the **Farming Group Question Sheet**. Each of the twelve sheets has five complete questions on it. In addition, each sheet has the paragraph number (or text page if you choose to create your own questions) that will direct them to the information to find the answer. The **Farming Group Question Sheet** includes the 20 questions that the tribes are trying to reconstruct and answer as well as 40 additional questions. Quietly take up the individual **Hunting and Gathering Sheets** and the group’s **Hunting and Gathering Tribal Question and Answer Sheets** as the farming group will not be using these. Make sure you do not collect the **Background Essay** sheets as the students in the farming group will need these to answer questions.

Instruct the farming group to put their 12 **Farming Group Question Sheets** in the middle of the group. Each student in the farming group is to draw one of the twelve **Farming Group Question Sheets** and then answer the questions on the sheet. Instruct them to write their answers on the sheet. Tell them that the answers to the questions on the **Farming Group Question Sheets** are found in the **Background Essay**. Remind them to look at the paragraph number after each question and to go to that paragraph in the **Background Essay** for the answer. When a student in the farming group completes a **Farming Group Question Sheet**, they are to set the completed sheet aside and draw another. They continue this process until all twelve sheets have been completed. They may help one another as much as they would like or need to. Their goal is to complete all twelve sheets.

The other students will be so busy and absorbed in hunting and gathering clues that they do not usually pay any attention to this group. Instruct the farming group to avoid interaction (not talk to them about what they are doing if asked) with the tribes and that it is important for them to answer as many questions as possible. You want this group to answer as many questions as possible in the time given so that a large contrast between how much food can be created by farming as opposed to hunting and gathering.

**H. Getting the activity started.** Instruct tribes that they will have twenty minutes to “hunt” information to put on their **Hunting and Gathering Sheet** and then “gather” by bringing back that information so it can be placed on the tribe’s **Hunting and Gathering Tribal Question and Answer Sheets**. Remind the students that they need to return to their group after gathering two or three pieces of information and placing that information on the appropriate **Hunting and Gathering**

**Important!**

It is important to remember that the other tribes are not to know what this group is doing.



**Tribal Question and Answer Sheet**, which are kept at their group. When, through their joint efforts, they have put a complete question together a member of the tribe will then search the **Background Essay** that has been provided to each student in the tribe for the question's answer. The completed question and its answer gets the tribe one unit of food. They will continue this process, putting as many questions together and then finding the answer as they can in the allowed time.

Ask the students if they have any questions. Remind them that they will be given 20 minutes to hunt and gather and that their goal is to feed all the members of their group and to generate as much surplus as possible. After this, allow the students to start traveling around the room and find cards and write the information from those cards onto their **Hunting and Gathering Sheet**. Keep reminding them to return to their tribe after gathering two or three pieces of information so that the information can be recorded on the tribe's **Hunting and Gathering Tribal Question and Answer Sheets**. Keep announcing that once all four pieces of information have been recorded for a question (the A, B, C, and D columns) that they need to use the **Background Essay** to answer the question. Keep stressing that after they list their information on the appropriate **Hunting and Gathering Tribal Question and Answer Sheets** (and looking for answers if all the information to one of the numbers have been listed) they will go out and collect more information.

Periodically check with the farming group to make sure that they are progressing (which is very easy for them to do since they only need to find answers and write them down).

- I. **Be flexible with the time.** It is important that you do not rigidly stick to the 20 minute time frame. *You do not want the hunting and gathering tribes to create surpluses.* Instead of 20 minutes, stop the activity a minute or two after one of the tribes has completed enough question and answers on their **Hunting and Gathering Tribal Question and Answer Sheets** to feed all of their tribal members for the day. This means one tribe will have just enough while all the rest will come up short of what they needed. This is the situation you want. You will need to constantly monitor the tribe's progress so you will know exactly when to end the activity. It usually takes about 20 minutes to create this result but sometimes needs a little less or a little more time. The farming group will have had more than enough time to answer all of their questions.
- J. **End the activity.** Once you have verified that one group has completed enough questions and answers to feed all the members of their tribe, call a halt to the activity. Instruct all students to return to their tribes and for those in the tribe putting questions and answers

together to stop what they are doing. When all students have returned to their tribes and have stopped working, tell each tribe to count the number of complete questions and answers they have finished. For each complete question and answer they get a point which represents the ability to feed one person for one day. All the clues (A, B, C, and D) must be listed along with their answers to count as a point. While the tribes are computing their score quietly go to the farming group and ask them how many questions they answered. It is highly likely that they answered all of them (with time to spare). Tell them to report their score as "60." If for some reason they did not get all of the questions answered (again, this is unlikely) just have them report the number they did get done which should be in the high 50s.

- K. Have the tribes report how many people in their group they were able to feed.** Instruct all groups to report to the class points that they earned. Write all of the scores on the board. Remind them that each point represents a person being fed for a day. Each tribe will likely report two to six points. The teacher will point out that they either barely fed themselves for the day or if they got less points than they have group members that they could not feed everyone. If a group of five only got three points tell them that they will only have 60% of the food they needed that day. They will go to bed hungry.

Save the farming group for last. Their score should be 60 points or somewhere near it. Write all of the scores on the board. Remember, your tribes do not know that your farming group operated under different circumstances. This *is not* the time to tell them. Do not refer to this group as a farming group until the end of the debriefing.

- L. Debrief the Activator.** When all the scores have been announced begin to debrief the activity. Sternly, ask the tribes how one of them could score 60 points while the rest only got somewhere between two and six. They might respond to you that there were only 20 possible points to get. Tell them that you had 40 questions ready if they got the first twenty done. Stress that only one group was able to take advantage of this.

Then discuss how this group not only fed themselves for the day but produced enough food surpluses to feed themselves for many days. The teacher will ask the class why this group did so much better than the others. Reprimand your tribal groups for doing so poorly when compared to the farming group. Ask them to defend their lack of food production. The discussion will lead to the point being made that the farming group did not have to use time traveling throughout the room and that they had the whole question intact and just had to answer it.

Now discuss the advantages that farming had over hunting and gathering. Farmers could stay in place and where they had everything they needed to secure a food source. This was simulated by the fact that the farming group had everything it needed within its group. It did not have to go out and “hunt and gather” the clues and then bring them together to find the answer. It had the questions already intact and all it had to do was find answers. Ask the class that the fact that the farmers could remain stationary (not having to waste time and effort in a pursuit of the clues) was enough to account for the difference in productivity between the hunting and gathering groups and the farming group. The hunting and gathering tribes will strongly defend themselves and say that it was. It is here that the teacher contrasts farming versus hunting and gathering. Farming was so productive that for the first time in human history a surplus in food could be generated. Hunters and gatherers lived a life of great insecurity as they tried to secure the food they needed each day. Their whole time and energy had to be used to do this and because they rarely had a surplus, they had to repeat this cycle each day. Because food was so scarce, the population of the tribe had to stay low. But farming changed all of that. The group that “farmed” and acquired 60 points could support a much larger population than the four or five students in their group. Also, because farming is so productive, people do not have to spend their entire time procuring food. Human energy could now be released to do other things. Because farming generated a large surplus, not everyone had to farm. Some people could specialize in other jobs. This people could gather together in cities, secure in the fact that the farmers could provide the food source upon which civilization could be built.

### **3. Writing Prompts**

- A. How responsible are you for the food you eat each day? List any meal you had yesterday. Then discuss how responsible you were for its preparation? Did you grow or raise it? Milk or harvest it? Clean and cook it? Describe exactly what you did. If you were not 100% responsible, explain how that meal got to you.
- B. Write a letter of thanks to a farmer.
- C. Why were food shortages a problem for prehistoric man and how was this problem solved?
- D. How was the life of Paleolithic hunters and gatherers different from Neolithic farmers?
- E. Why was the discovery of farming called “the Agricultural Revolution?”

- F. How did farming make civilization possible?
- G. Describe your experience in the activity. What happened and what did you learn?



# Background Essay

1. History began about 5,000 years ago with the invention of writing. The many thousands of years that people lived before that is known as prehistory. Prehistoric people had no cities, countries, organized central governments, or organized religion. With no written records, we learn about these people through the artifacts they left. Artifacts include weapons, pottery, clothing, and jewelry.
2. Archeology is the study of these artifacts to determine how prehistoric people lived. Since we have no direct written records from the people themselves, archaeologists have to make educated guesses concerning their lives.
3. For 2.5 million years, humans lived nomadic lives of hunters and gatherers. This era of human existence was one of continual scarcity. All human energy had to be devoted to daily securing the food necessary to survival. All members of the hunting and gathering community had to be involved in this all-consuming task. Under these conditions, human civilization could not emerge. Before civilization could be created, human beings had to discover a way to secure food in a way that would not require all of their energy. Only on this foundation could civilization be started.
4. Humans who lived just prior to the discovery of civilization were known as Paleolithic people. They lived in small tribes of usually 20–30 people. They had minimal possessions since they were constantly on the move hunting and gathering food. All the people in the tribe participated in finding food. They had little time for anything else.
5. Paleolithic people did develop spoken language and expressed themselves through art, which may have had religious meaning. During this time, humans created tools such as spears and hand axes using stones called flint.
6. In hunting and gathering tribes, all the members knew one another and had daily face-to-face contact for communication. Their laws, called customs, were based on shared understandings about what was allowed and what wasn't allowed. These customs were maintained through the close, daily interaction of the members of the tribe or community and did not need to be written down.
7. The laws of the tribe or community were easily maintained by the fact that all of its members were very familiar with one another. The leaders of these tribes could direct their members through verbal communication. They had no real need for written language.
8. About 10,000 years ago, people learned how to plant seed and tame animals. These discoveries allowed people to farm for the first time. Nomadic people migrated to the fertile plains between the Tigris and Euphrates rivers (in an area known as Mesopotamia) and abandoned their previous ways of life and began to farm.
9. The transition from hunting and gathering to farming is known as the Neolithic Age. Farming in the Neolithic Age allowed people to live in settled communities and have surpluses of food. With surpluses of food, the population of farming communities began to grow.
10. With the discovery of farming, people began to live in farming communities for the first time. They were able to accumulate more possessions than their hunter and gatherer ancestors

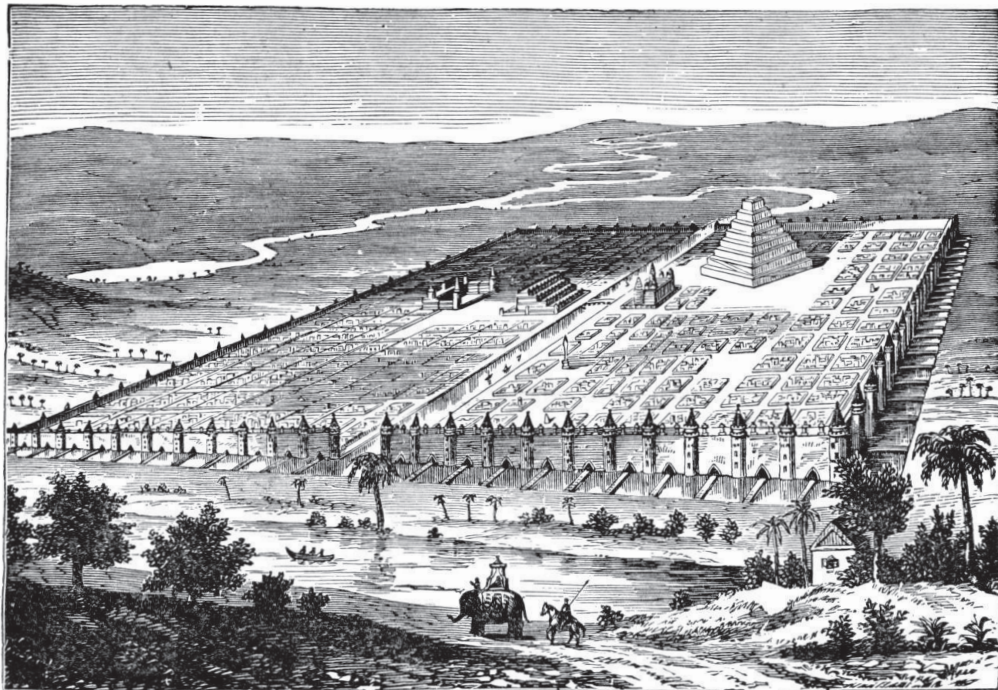
because they were able to stay in one place. They accumulated things like beads, pottery, and other prized objects. To farm successfully, Neolithic farmers had to develop new technologies. They had to protect their crops and invent accurate record systems for their seed. They also needed to measure time accurately so they would know when to plant and harvest. Gradually, they created the first calendar.

11. The first farming villages were usually settled in river valleys. Conditions in river valleys favored farming. Flood waters spread silt (fertilizer) across the valley, keeping it fertile. The animals that flocked to the rivers to drink were another source of food. In addition, rivers presented a regular water supply and a means of transporting goods. Because the condition for farming was so good in river valleys, the population of the small farming villages began to grow. Soon, many of them swelled into cities. This led to the emergence of civilization.
12. Civilizations are complex societies with cities, government, art, architecture, religion, class divisions, and writing systems. All the first civilizations were centered in cities. Since farming provided a surplus of food and an increased population, people were able to specialize in jobs. These people, who did not need to produce food, lived in cities. Here they did the many new jobs which made civilization possible.
13. Cities, for the first time in human history, created communities of strangers. It was not possible for all of the thousands of people who now lived in cities to interact and know one another. On the contrary, any one individual would just interact with and know a fairly small percentage of that cities population. As a result, customs could not be strong enough to maintain the laws necessary to regulate the behavior of the city's population. Since the people of the city did not have day-to-day contact with one another, the laws would have to be transmitted in an entirely new way. This meant the leaders of the city had to rely on something other than verbal communication to make their wishes known. They had to rely on the indirect method of communication of writing to express the cities laws. This led to the development of written laws in civilization.
14. Prior to the advent of cities and civilization, people lived in tight-knit small communities of hunting and gathering tribes or farming villages. All the people of the community knew one another and they were very often related. Their loyalty to their community and its customs and rituals were based on this close relationship, which all members of the community had with one another. When people began to live in cities this closeness that tied individuals to their communities was lost. The size of the city made it impossible to base individual identification with the community upon personal ties. As stated before, in a city of thousands of people this was no longer possible. But personal ties and loyalty was just as necessary for the city as it had been for those small, closer forms of contact. The leaders of the cities had to find a new way to bond its members to the city.
15. One of the most outstanding features of the ancient world was the construction of magnificent buildings in the midst of the city. Each city used these great architectural achievements to help create individual identification with their city (and to frighten those who may be enemies of the city). Great amounts of resources, wealth and labor went into the construction of these magnificent temples and palaces. They were a priority for the leaders so they could send the message they wanted the people they ruled over in the city to hear. They wanted to convey the greatness and power of the city in their great buildings. They wanted the people in the city to identify with the city and to their authority in part through the

magnificent structures within the city walls.

16. The cities leaders sought other ways to bond the people in the city. One of the most common was through organized religion. With its elaborate ceremonies and rituals carried out by professional priests, it helped to create the city's common culture. Like their nomadic ancestors, most ancient peoples were polytheistic. That is, they believed in many gods and goddesses. People appealed to sun gods, river goddesses, and other spirits they believed control natural forces. In ancient religions, priests and worshippers sought to gain the favor of the gods through complex rituals such as ceremonies, dances, prayers and hymns. To ensure divine help, people built temples and sacrificed animals, crops, or sometimes other people to the gods. Sacrifices and other ceremonies required the full-time attention of priests, who had special training and knowledge.
17. Ancient governments taxed the farmers who lived outside the city walls a portion of their crop. This allowed the city to maintain a steady food supply. With the surplus of food maintained by the government, people were able to specialize in jobs for the first time. Not everyone had to be a farmer. Some became artisans, or skilled craftsmen, who made pottery, woven goods, and metal items such as tools and weapons. Cities also had bricklayers who built city walls. Soldiers were needed for protection. Merchants sold goods in the marketplace. Singers, dancers, and storytellers entertained on public occasions. Such specialization made people dependent on one another for their various needs.
18. In cities, social life became more complex. People were ranked according to their jobs. Such rankings led to the growth of social classes. Priests and nobles usually occupied the highest level of an ancient society. They were followed by a small class of wealthy merchants, followed by humbler artisans. Below them stood the vast majority of people, peasant farmers who lived in the surrounding villages and produced food for the city. Slaves occupied the lowest level. Slaves often did the hardest physical labor in the city. Sometimes they came from poor families and sold themselves into slavery to pay off their debts. Others were prisoners captured in war. Since male captives were often killed, women and children made up the largest number of these slaves.
19. The leaders of ancient cities secured the obedience of the city's population through strict laws and rituals. The people of the city were not encouraged or even to dream of questioning the authority of their leaders, priests or accepted ways of doing things. But to a far greater degree than the earlier forms of human association (tribal hunting and gathering, and village based farming) life in cities was dynamic and depended on an injection of innovation to keep the city, and the civilization which rested on it, dynamic and thriving. The introduction of new ways of doing things was essential to the cities further progress. Also, cities found themselves in constant competition with other cities and their civilizations. If those other cities found better ways of doing things it could give them advantages over cities that did not progress. This could lead to the destruction of cities and their civilizations that were slow to progress and change. But the authoritarian structure of the city did not encourage the kind of innovation that led to progressive change. As a result, the needed injection of different ways of doing things most often did not come from within the city itself but through its contacts with cities from other civilizations.
20. Through trade and warfare, the members of different civilizations came into contact with one another. Though their intended purpose was not to learn from one another in these two

activities, the result was that they did. Close contact with peoples from different civilizations meant that these civilizations could not help but to learn from one another. When people of different civilizations came in contact through trade they could not help to learn from one another. They learned how other people did things and the different technologies they used. They learned about their beliefs and religions as well. They brought this knowledge back with them to their cities where it often provided the injection and impetus to change that was necessary to the city's future security and prosperity. This sharing of different ideas and ways of doing things between different peoples through contact is called cultural diffusion.



## Card Sheet

<p><b>1A</b> <b>How did members</b></p>	<p><b>1B</b> <b>of different civilizations</b> <b>come into</b></p>
<p><b>1C</b> <b>contact with</b> <b>one another?</b></p>	<p><b>1D</b> <b>Paragraph 20</b></p>
<p><b>2A</b> <b>This word means</b></p>	<p><b>2B</b> <b>believing in many</b></p>
<p><b>2C</b> <b>gods and goddesses:</b></p>	<p><b>2D</b> <b>Paragraph 16</b></p>

## Card Sheet

<p><b>3A</b> How did the leaders of</p>	<p><b>3B</b> of hunting and gathering peoples</p>
<p><b>3C</b> direct their tribe?</p>	<p><b>3D</b> Paragraph 7</p>
<p><b>4A</b> What was one of</p>	<p><b>4B</b> the most outstanding features</p>
<p><b>4C</b> of the ancient world?</p>	<p><b>4D</b> Paragraph 15</p>

## Card Sheet

<p><b>5A</b> <b>How did leaders of ancient</b></p>	<p><b>5B</b> <b>cities secure the</b></p>
<p><b>5C</b> <b>obedience of the city's population?</b></p>	<p><b>5D</b> <b>Paragraph 19</b></p>
<p><b>6A.</b> <b>What did cities,</b></p>	<p><b>6B</b> <b>for the first time in</b></p>
<p><b>6C</b> <b>human history, create?</b></p>	<p><b>6D</b> <b>Paragraph 13</b></p>

## Card Sheet

<p><b>7A</b> <b>Great amounts of what</b></p>	<p><b>7B</b> <b>went into the construction of magnificent</b></p>
<p><b>7C</b> <b>temples and palaces?</b></p>	<p><b>7D</b> <b>Paragraph 15</b></p>
<p><b>8A</b> <b>Why were people</b></p>	<p><b>8B</b> <b>able to specialize</b></p>
<p><b>8C</b> <b>in jobs in cities?</b></p>	<p><b>8D</b> <b>Paragraph 12</b></p>

## Card Sheet

<p><b>9A</b> <b>How were</b></p>	<p><b>9B</b> <b>people ranked</b></p>
<p><b>9C</b> <b>in cities?</b></p>	<p><b>9D</b> <b>Paragraph 18</b></p>
<p><b>10A</b> <b>Where were the</b></p>	<p><b>10B</b> <b>first farming villages</b></p>
<p><b>10C</b> <b>usually settled?</b></p>	<p><b>10D</b> <b>Paragraph 11</b></p>

## Card Sheet

<p><b>11A</b> <b>Why did the governments</b></p>	<p><b>11B</b> <b>of cities tax the</b></p>
<p><b>11C</b> <b>farmers outside</b> <b>the city-walls?</b></p>	<p><b>11D</b> <b>Paragraph 17</b></p>
<p><b>12A</b> <b>Why were farmers able</b></p>	<p><b>12B</b> <b>to accumulate</b> <b>more possessions</b></p>
<p><b>12C</b> <b>than hunters</b> <b>and gatherers?</b></p>	<p><b>12D</b> <b>Paragraph 10</b></p>

## Card Sheet

<p><b>13A</b> <b>What is the area</b></p>	<p><b>13B</b> <b>between the Tigris and</b></p>
<p><b>13C</b> <b>Euphrates rivers</b> <b>known as?</b></p>	<p><b>13D</b> <b>Paragraph 8</b></p>
<p><b>14A</b> <b>When did people</b></p>	<p><b>14B</b> <b>learn how to plant</b></p>
<p><b>14C</b> <b>seeds and tame animals?</b></p>	<p><b>14D</b> <b>Paragraph 8</b></p>

## Card Sheet

<p><b>15A</b> <b>What was the usual</b></p>	<p><b>15B</b> <b>tribe size of</b></p>
<p><b>15C</b> <b>Paleolithic people?</b></p>	<p><b>15D</b> <b>Paragraph 4</b></p>
<p><b>16A</b> <b>What are laws based</b> <b>on shared</b></p>	<p><b>16B</b> <b>understandings about what</b> <b>is allowed and</b></p>
<p><b>16C</b> <b>what is not</b> <b>allowed called?</b></p>	<p><b>16D</b> <b>Paragraph 6</b></p>

## Card Sheet

<p><b>17A</b> <b>What is the transition</b></p>	<p><b>17B</b> <b>from hunting and gathering</b></p>
<p><b>17C</b> <b>to farming known as?</b></p>	<p><b>17D</b> <b>Paragraph 9</b></p>
<p><b>18A</b> <b>For how long did</b></p>	<p><b>18B</b> <b>people live the lives</b></p>
<p><b>18C</b> <b>of hunters and gatherers?</b></p>	<p><b>18D</b> <b>Paragraph 3</b></p>

## Card Sheet

<p><b>19A</b> What is the sharing of ideas and</p>	<p><b>19B</b> different ways of doing things between</p>
<p><b>19C</b> different people through contact called?</p>	<p><b>19D</b> Paragraph 20</p>
<p><b>20A</b> Why do archeologists have to</p>	<p><b>20B</b> make educated guesses regarding the</p>
<p><b>20C</b> lives of pre-historic peoples?</p>	<p><b>20D</b> Paragraph 2</p>

# Hunting and Gathering Sheet

Card Number	A Clue	B Clue	C Clue	D Clue
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				

## Hunting and Gathering Tribal Question and Answer Sheet #1-5

Card Number	Card A	Card B	Card C	Card D
Card 1				
Card 2				
Card 3				
Card 4				
Card 5				
Answer Card 1:				
Answer Card 2:				
Answer Card 3:				
Answer Card 4:				
Answer Card 5:				

## Hunting and Gathering Tribal Question and Answer Sheet #6-10

Card Number	Card A	Card B	Card C	Card D
Card 6				
Card 7				
Card 8				
Card 9				
Card 10				
Answer Card 6:				
Answer Card 7:				
Answer Card 8:				
Answer Card 9:				
Answer Card 10:				

Activator 1

# Hunting and Gathering Tribal Question and Answer Sheet #11-15

Card Number	Card A	Card B	Card C	Card D
Card 11				
Card 12				
Card 13				
Card 14				
Card 15				
<b>Answer Card 11:</b>				
<b>Answer Card 12:</b>				
<b>Answer Card 13:</b>				
<b>Answer Card 14:</b>				
<b>Answer Card 15:</b>				

# Hunting and Gathering Tribal Question and Answer Sheet #16-20

Card Number	Card A	Card B	Card C	Card D
Card 16				
Card 17				
Card 18				
Card 19				
Card 20				
<b>Answer Card 16:</b>				
<b>Answer Card 17:</b>				
<b>Answer Card 18:</b>				
<b>Answer Card 19:</b>				
<b>Answer Card 20:</b>				

# Farming Questions

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## ***Farming Questions 1 – Paragraphs in parenthesis***

1. History began 5000 years ago with this invention: (1)
  2. List three things prehistoric people did not have: (1)
  3. Give three examples of artifacts: (1)
  4. Define archeology: (2)
  5. Why do archeologists have to make educated guesses regarding the lives of pre-historic peoples? (2)
- 

## ***Farming Questions 2 – Paragraphs in parenthesis***

6. For how long did people live the lives of hunters and gatherers? (3)
  7. What did hunters and gatherers have to direct all of their energy towards? (3)
  8. What did human beings have to discover a way of doing before civilization could start? (3)
  9. What were people who lived prior to the discovery of farming and civilization known as? (4)
  10. What was the usual tribe size of Paleolithic people? (4)
- 

## ***Farming Questions 3 – Paragraphs in parenthesis***

11. Why did Paleolithic people have minimal possessions? (4)
  12. How did Paleolithic people sometimes express themselves? (5)
  13. Give two examples of tools created by Paleolithic peoples: (5)
  14. What kind of communication did hunting and gathering tribes rely upon? (6)
  15. What are laws based on shared understandings about what is allowed and what is not allowed called? (6)
-

# Farming Questions

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## ***Farming Questions 4 – Paragraphs in parenthesis***

16. How were customs maintained in hunting and gathering tribes? (6)
  17. How did the leaders of hunting and gathering peoples direct their tribe? (7)
  18. When did people learn how to plant seeds and tame animals? (8)
  19. Where did nomadic people migrate to so they could begin to farm? (8)
  20. What is the area between the Tigris and Euphrates rivers known as? (8)
- 

## ***Farming Questions 5 – Paragraphs in parenthesis***

21. What is the transition from hunting and gathering to farming known as? (9)
  22. What did farming allow people to do for the first time? (9)
  23. Why did the population for farming communities begin to grow? (9)
  24. Why were farmers able to accumulate more possessions than hunters and gatherers? (10)
  25. Give examples of things farmers accumulated: (10)
- 

## ***Farming Questions 6 – Paragraphs in parenthesis***

26. What did Neolithic farmers have to develop to farm successfully? (10)
  27. Why did farmers need to measure time accurately? (10)
  28. What was created so farmers could measure time accurately? (10)
  29. Where were the first farming villages usually settled? (11)
  30. What keep the soil in river valleys fertile? (11)
-

# Farming Questions

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## ***Farming Questions 7 – Paragraphs in parenthesis***

31. What is silt? (11)
  32. Why did animals flock to river valleys? (11)
  33. Where were all the first civilizations centered? (12)
  34. List three things that civilizations have: (12)
  35. Why were people able to specialize in jobs in cities? (12)
- 

## ***Farming Questions 8 – Paragraphs in parenthesis***

36. What did cities, for the first time in human history, create? (13)
  37. What was it not possible for the thousands of people who now lived in cities to do? (13)
  38. Why did the laws in the city have to be transmitted in an entirely new way? (13)
  39. What was lost when people began to live in cities? (14)
  40. What did the size of the city make it impossible to do? (14)
- 

## ***Farming Questions 9 – Paragraphs in parenthesis***

41. What did leaders of cities have to find a new way of doing? (14)
  42. What was one of the most outstanding features of the ancient world? (15)
  43. What did cities use their great architectural achievements to help create? (15)
  44. Great amounts of what went into the construction of magnificent temples and palaces? (15)
  45. What did the leaders of the city want to convey with their great buildings? (15)
-

# Farming Questions

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## ***Farming Questions 10 – paragraphs in parenthesis***

46. This word means believing in many gods and goddesses: (16)
  47. How did priests and worshippers seek to gain the favor of the gods? (16)
  48. What did sacrifices and ceremonies require? (16)
  49. Why did the governments of cities tax the farmers outside the city-walls? (17)
  50. What did surpluses of food allow the people in the city to specialize in? (17)
- 

## ***Farming Questions 11 – Paragraphs in parenthesis***

51. List three jobs the people in cities were able to specialize in: (17)
  52. How were people ranked in cities? (18)
  53. The ranking of people led to the growth of this: (18)
  54. Who occupied the highest level of an ancient society? (18)
  55. How did leaders of ancient cities secure the obedience of the city's population? (19)
- 

## ***Farming Questions 12 – Paragraphs in parenthesis***

56. What was the introduction of new ways of doing things essential for? (19)
  57. What could happen to cities that were slow to progress or change? (19)
  58. How did members of different civilizations come into contact with one another? (20)
  59. What did close contact between people from different civilizations result in? (20)
  60. What is the sharing of ideas and different ways of doing things between different people through contact called? (20)
-

## Activator 2

### *Controlling the Flooding of Rivers: The Birth of Government*

#### Overview

Each of the Activators is intended to pose problems that ancient peoples had to overcome in their efforts to establish civilization. By participating in the Activator the students will realize what the solutions to those problems were. Each overview will present the problem and the solution that the Activator is designed to solve.

**Problem:** Farming created the conditions which made civilization possible. But farming depended on the fertile soil found in river valleys. Located adjacent to great rivers, these first farms were constantly imperiled by the annual flooding of the very rivers that farming depended upon. That flooding needed to be controlled and channeled before farming could be relied upon as being the new and vastly improved source of securing food.

**Solution:** The flooding of the great rivers required widespread organization and cooperation to build the vast systems of levees, channels and reservoirs needed to control it and turn its potentially destructive force to productive ends. Leaders had to be given authority to unite the various farming villages in this task. This authority became the first organized governments in history. The solution to the problem was the creation of these organized governments.

**Summary:** In the first activator, we showed our students how farming revolutionized human life by creating a stable food source that could produce surpluses. This meant that people could stay in one place and accumulate possessions, the increase in food meant that the population could grow and that not everyone was needed to produce food. All these factors worked together to lead to the establishment of the first cities and the birth of civilization.

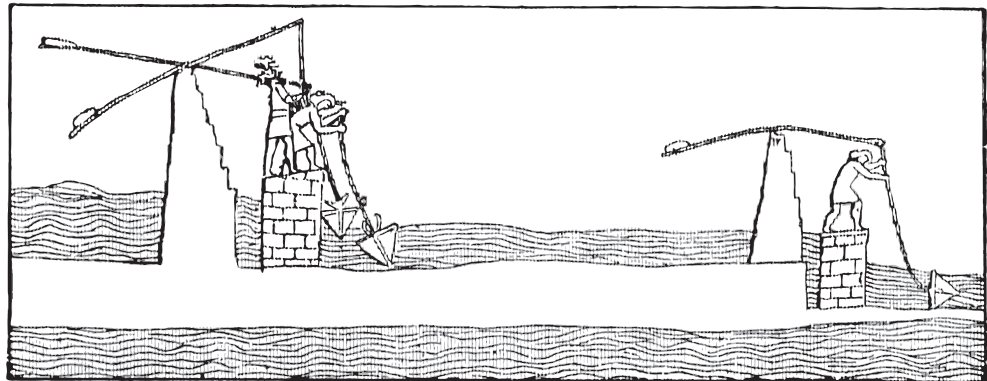
The first cities (whether in Egypt, Mesopotamia, India or China) were all started next to great rivers. These rivers would flood annually and fertilize the surrounding land with silt. That gave these areas the best natural farm land in the world. Cities were allowed to exist because farming was so productive that it could support people who lived in cities and did things other than food production. But one problem had to be solved before farming could provide the secure and necessary foundation to civilization. While flooding was necessary to create the fertile plains that made farming successful, it was also a destructive force that could wipe away the very farms it supported. It became necessary that if farming was going to replace hunting and gathering these great rivers were going to have to be controlled and harnessed.

## Overview

### Activator 2

Controlling the flooding of great rivers such as the Nile or the Tigris and Euphrates was a job too big for any one farmer or even for any one farming village. It was necessary for the members of different villages to coordinate and cooperate with one another if they were to hope to control the mighty rivers. This kind of cooperation and coordination took leadership that had authority over large areas. The leadership necessary to control flooding was the basis for the first organized government in history.

In this simulation, you will give your classes 30 minutes to control a "river of marbles" that threatens to flood the classroom. They will work together to build a system of levees, channels, and reservoirs across the middle of the classroom to stop marbles from flooding into areas beyond the "river" in the middle of the classroom and also to "capture" some of these marbles in channels and reservoirs. You will give them the specifications of how they will accomplish this but leave it to them to organize it themselves. To be successful, they will need to organize themselves efficiently and rely on strong leadership to coordinate the various activities that the task requires. Through this effort, the students will realize that extensive cooperation was needed to solve the problem of flooding which will allow you to explain that this cooperation was secured by the creation of the first organized governments.



## Setup Directions

**1. Duplications**—None are needed for this activity.

### 2. Materials

The following materials will need to be provided to your classes:

- Clear tape—the class will need access to three dispensers of clear tape throughout the simulation. If one runs out you will need to provide a new one to replace it.
- Colored pencils—three sets. Each set has a blue, green, red, orange and brown colored pencil in it.
- Scissors—the class will be given three pairs of scissors.
- Yardsticks—the class will be given two yardsticks.
- Rulers—the class will be given three rulers.
- Copy or scratch paper—the class will be given 100 sheets (have more ready if needed).
- Marbles—100 marbles. These can be purchased cheaply at Wal-Mart or other discount stores.
- Large garbage bag—to clean up at the end of the activity.

### 3. Procedures

**A. Arrange the room**—Divide the desks in the room into two halves facing one another. (See diagram below). Create a space of about ten feet between the facing groups of desks. It is best to do this before the students enter class (which saves time). Either instruct them to sit where they want or prepare them for this arrangement a day in advance.

Desk	Desk	Desk	Desk	Desk
Desk	Desk	Desk	Desk	Desk
Desk	Desk	Desk	Desk	Desk

10 feet

Desk	Desk	Desk	Desk	Desk
Desk	Desk	Desk	Desk	Desk
Desk	Desk	Desk	Desk	Desk



**Teaching tip**

It is a good idea to ask students to voluntarily bring in clear tape a couple of days before planning to run the simulation.



**Important!**

It is important that students only use the materials that you provide.



**Teaching tip**

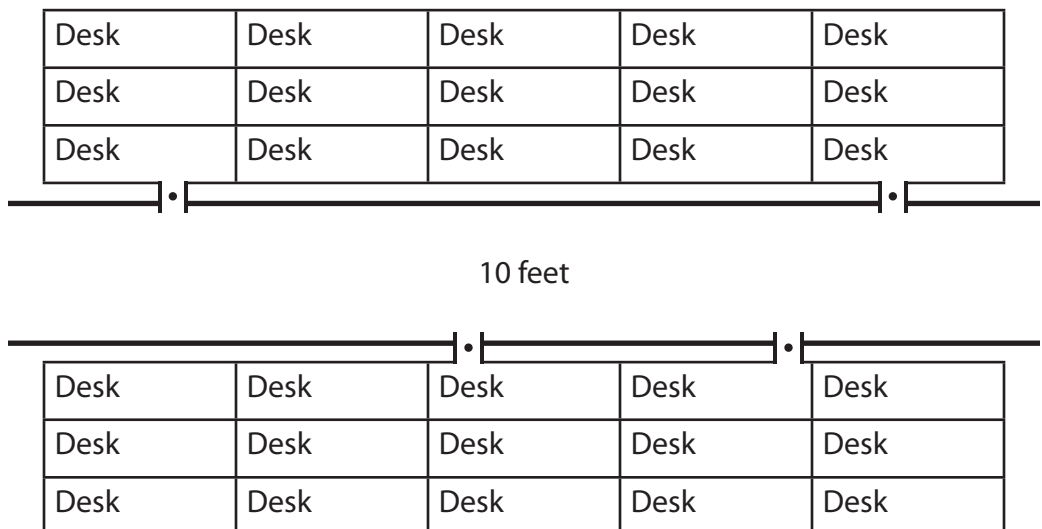
This activity takes 40–45 minutes. If class time is less than 60 minutes, you may want to consider giving all directions a day in advance.

## Setup Directions

### Activator 2

**B. Summarize the activity**—Explain to the class that the space between the two halved set of desks represents a river. Tell the class that in 30 minutes you will be releasing marbles from the 10 foot space between the two sets of desks and direct the marbles at the desks. The marbles represent the flood waters of rivers and the desks represent the farmland on the banks of the rivers. Explain to the students that their job is to stop the marbles from flooding over the banks of the river and onto the farmland. They will get one point for every marble that they can stop from leaving the “river” and flooding onto the “land”. This means that they will stop the marbles from rolling under the desks on either side of the room. Now *stress* that while this floodwater is potentially damaging, it is also necessary because of the silt that the flood waters carry, which fertilizes the farmland. Also, these waters provide a tremendous source of irrigation. In an effort to use the beneficial aspects of the flooding, you will tell the students that they will build channels and reservoirs to “capture” the flooding (represented by the marbles) so that it can be used for fertilization and irrigation. For every marble that can be diverted through the channels to the reservoirs will count as five points. The goal of the class is to get as many points as possible by stopping and controlling the “flooding” marbles.

Explain to the students that they will begin making their levees, channels, and reservoirs right in front of the first row of desks closest to the 10 foot river area is where the levees, channels, and reservoirs are placed. You may want to draw the following diagram on the board:



The |•| symbol above shows where some channels might be built. Do not allow the students to tape pieces to the desks (but they can tape them to the floor). Allow the students to rearrange the desks a little to make room for channels and reservoirs.

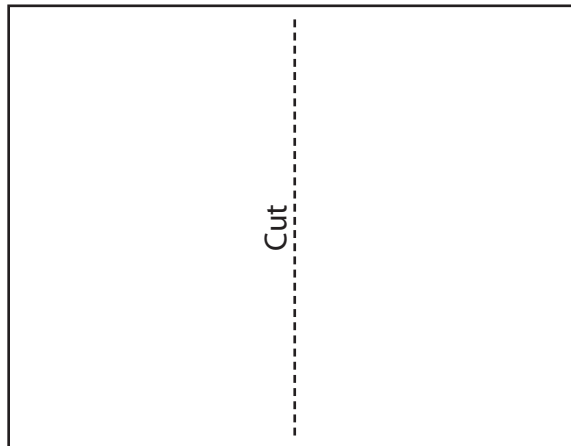
It is a good idea to make this a competition between your classes

with the highest scoring class receiving a reward. If you are doing the activity with just one class tell them that their score must be 100 (which matches the 100 marbles rolled).

If you have a class of 26 or above, five rows of desks on either side will be the appropriate length. For classes smaller than 25 start at the second row.

- C. Getting specific**—After giving your students a general overview of the activity you will begin to explain to the class the specifications for creating the structures to control and put to productive use the flooding marbles. You will begin to instruct the students on how to create levees, channels and reservoirs. Explain to them that levees are raised fortifications to keep the flood water from spilling over onto the land. Channels are narrow passageways used to direct the flood water into reservoirs. Reservoirs are circular basins in which flood water can be captured and stored to be used for fertilization and irrigation of the land. You will then instruct the students to make their levees, channels and reservoirs in the following way:
- D. Creating the structure**—Tell the class that you are going to provide them with 100 sheets of paper. Explain to the class that each piece of paper will be folded in half and then cut along the crease. Instruct them that you will provide the class three pairs of scissors to do this. See example below:

Full Sheet:



In example above, the copy paper is folded in half. It is then cut along the fold. This creates two half sheets.

After each sheet is cut in half, the resulting half sheets are then folded in half again.



**Teaching tip**

The idea behind this is that the class will have to follow many specifications that will make efficient coordination necessary to their success. **Do not tell this in advance** (wait for the debriefing at the end of the activity).



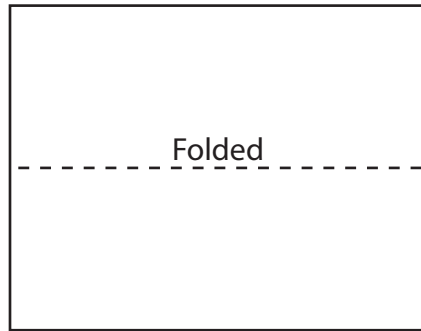
**Teaching tip**

This is a good time to remind students that the class can only use the materials you provide for them.

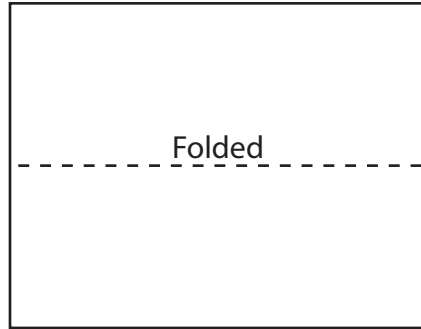
## Setup Directions

### Activator 2

Half Sheet 1:



Half Sheet 2:



#### Teaching tip

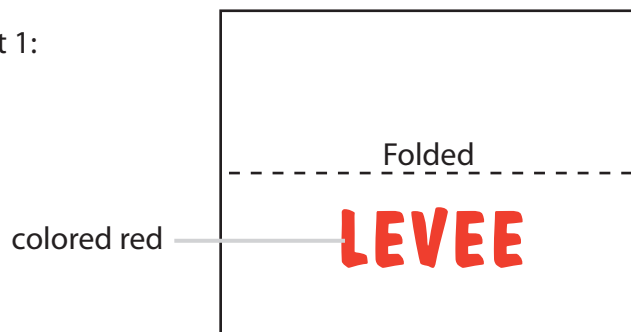
Again, remind students they are not to pull out their own colored pencils.



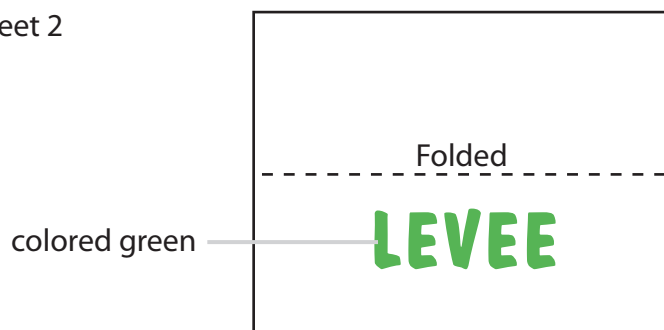
After folding the half sheets, tell the students that they will write the word **Levee**, **Channel**, or **Reservoir** depending on what they want to use the piece for. Inform them that they will do this with colored pencils provided by you. Tell the class that you are providing them with three sets of colored pencils with each set containing a red, orange, blue, green and brown pencil.

- E. Making the Levees**—Tell the students that the levee pieces will be the ones they will need in the greatest number. To make a levee piece they are to take one of the colored pencils provided by you. On one side of the folded half piece they are to write the word **Levee**. Instruct them that they are to do this using one of the color pencils provided by you. See example below:

Half Sheet 1:



Half Sheet 2



Once this is done, this piece of **Levee** can now be used. Explain to the students that the students who are creating the **Levee** pieces will deliver them to the students who are putting the pieces of the levees together. They will lay it on the floor so the two folded ends touch the floor to make the piece free standing. Instruct them to place the pieces next to one another so that they overlap. The students will then tape the pieces together. Tell the students they may also slightly crease the bottom of the pieces so they can be taped to the floor. Remind them that the pieces may not be taped to the desks in any way. Allow them to rearrange desks as needed to give them room to make the **Channels**. Inform the class that you are providing three rolls of tape for them to do this. Explain to them that if a roll runs out it will be replaced, but that they may not use their own tape.

Instruct the students that as they lay the **Levee** pieces down on the floor on both sides of the banks of the rivers (represented by the division of the desks) they must place the **Levee** pieces in an arrangement that places each individual **Levee** in such a way that no colored pencil marking of levee is displayed until that other four colors have been placed down. See diagram below:

Levee RED	Levee ORANGE	Levee BLUE	Levee GREEN	Levee BROWN	Levee RED	Levee ORANGE	Levee BLUE	Levee GREEN	Levee BROWN
--------------	-----------------	---------------	----------------	----------------	--------------	-----------------	---------------	----------------	----------------

If the first piece of folded paper placed on the floor is marked **Levee** with a red colored pencil, the next four pieces laid next to it must use one of each of the other colored pencils to designate levee before the red colored pencil can be used again. Following this scheme, if “**Levee**” is designated by a red colored pencil on the first piece, it would also be used on the sixth piece (see diagram above).

Explain to the students that they will have to organize themselves to do this. Some students will have to use the three pairs of scissors to cut the paper used to make the levees in half. Others will fold these papers in half and use the three sets of colored pencils to mark each individual folded piece of divided paper and mark levee on it.

Others will take these **Levee** sheets and lay them on the floor so that each **Levee** is designated by a different color pencil before one of the colors can be used again. They will then use tape to secure them to one another.

**F. Making the Channels**—Instruct the students they will want to try to build two **Channels** that are connected to **Reservoirs** on both sides of the river. Remind them that it is through these **Channels** that the marbles (floodwaters) will be diverted so they can be captured. Explain to them that in the **Reservoirs** floodwater will become still and that the fertile silt carried by the current will then sink where



**Teaching tip**

In this way, the activity increases the amount of coordination that will be necessary for the class to complete the task of protecting the land from the flooding of marbles.

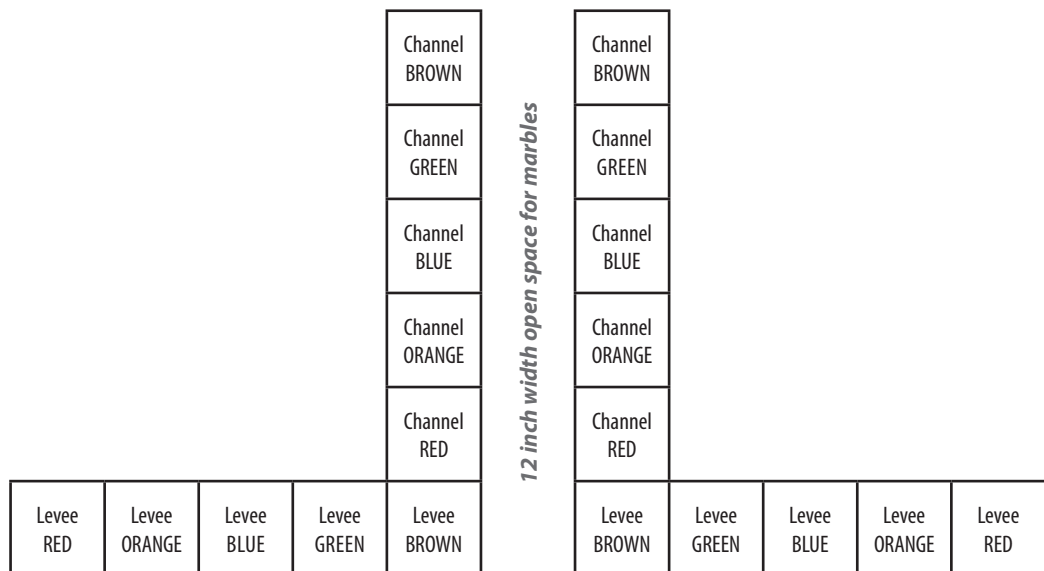
## Setup Directions

### Activator 2

it can be dredged up and used to fertilize farm land. Also, the **Reservoirs** are used as a source of irrigation.

Remind the students that for this activity any marble captured in a **Reservoir** will be worth five points to the class; this is why it is important for them to try to create four **Channels** leading to **Reservoirs**.

Instruct the students they make the **Channel** pieces in the same way that they made the **Levee** pieces. They take a piece of copy paper and cut it in half. That piece is then folded and labeled with **Channel**. **Channels** are placed and taped perpendicular to the **Levee**. Inform the students that they are to continue the pattern of designation of the colored pencils from the **Levee** pieces. The width of the channel can be *no more* than 12 inches and must be *at least* 12 inches in length. Instruct the students that the tape is used to secure the **Channel** pieces to the **Levee** pieces. See diagram below:

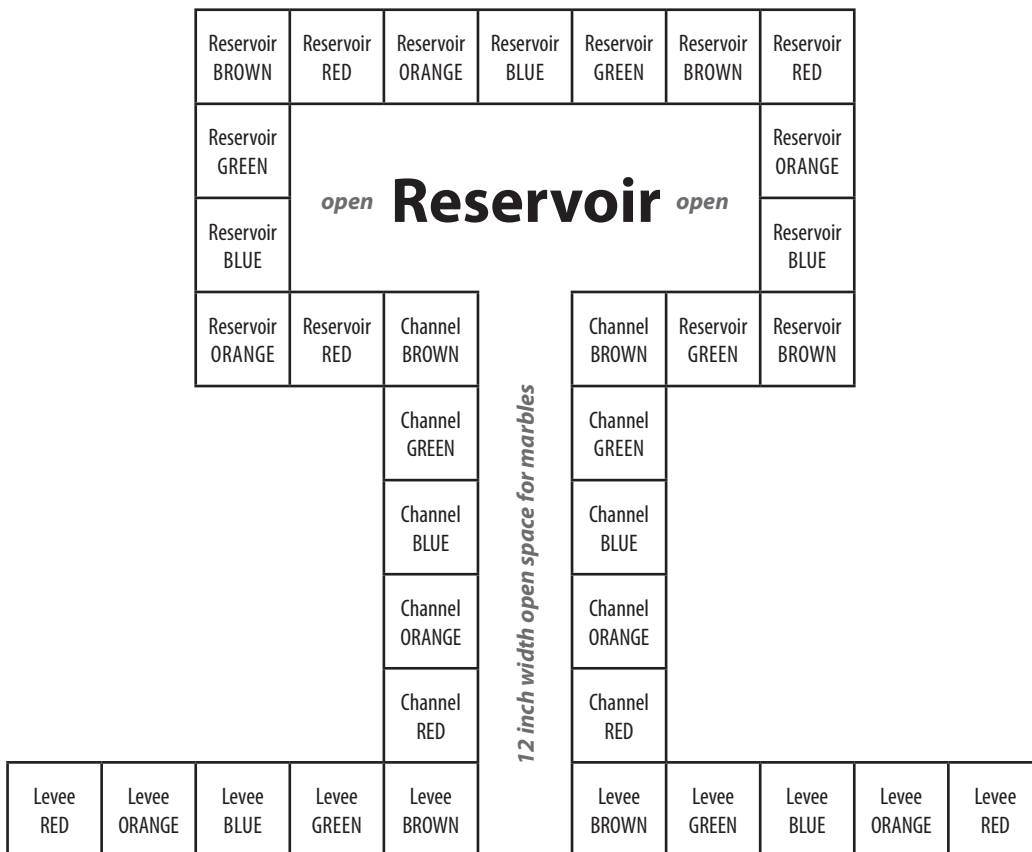


In the example above, the cut out and folded papers that have been marked **Channel** are put down perpendicular to the **Levee** pieces. The students just continue the existing order of using colored pencils to identify the pieces. In the above example, the last **Levee** piece prior to the construction of the channel was brown so the first **Channel** piece would be designated in red. On the **Channels** other side, the last **Channel** piece was marked in red so the first **Levee** piece which it will be taped to is labeled in brown. Again, the **Levee** pieces are intended to keep the marbles from flowing out into the classroom and thus stop the destructive effects of flooding. The **Channels** are meant to capture some of the marbles and direct them to **Reservoirs** where the silt from these waters can be put to productive use as fertilizer and the water can also be used for irrigation.

**Channels** must be at least 36 inches apart from one another. To insure that the **Channel** pieces are 36 inches apart, have a length of at least 12 inches and a width of no more than 12 inches; inform the students that you will provide one yardstick and three rulers for measurement.

- G. Making the Reservoirs**—Explain to the students that the **Reservoirs** are to be circular or rectangular enclosures joined to both sides of the channel. Remind them that it is in the **Reservoirs** that marbles can be captured for bonus points. Stress again that this simulates the need not only to control the destructive effects of flooding but to also turn it to a benefit (use for irrigation and fertilization).

The **Reservoir** pieces will be made in the same way that the **Levee** and **Channel** pieces were. Copy paper will be cut in half, folded and then marked **Reservoir** with one of the colored pencils. They continue the pattern of designation of the colored pencils from the **Channel** pieces. Students will use tape to secure the RESERVIOR pieces to the channel pieces. The first piece of **Reservoir** on either side of the **Channel** must be perpendicular to the **Channel** piece. After that there is no requirement as to how big the **Reservoir** has to be. See diagram below:



The above diagram illustrates how the pattern of colored pencils is followed throughout the whole structure of the combined **Levees**, **Channels**, and **Reservoirs**.

In the above example the **Reservoir** is where the marbles that traveled through the narrow channels get captured and stored. The value of these marbles is five points (as opposed to one point for every marble that is stopped by the **Levee** pieces). *It is through these **Reservoirs** and the higher value of the marbles that end up in them that you will make the point that ancient civilizations did not only try to protect themselves from the destructive aspects of flooding but also needed to use that flood water for productive use.* It was the channels and **Reservoirs** that allowed them to do this.

- H. Getting the class started**—Instruct the students that they will have exactly 30 minutes to get the task completed. Inform them that while you will provide the materials **they must organize themselves**. Emphasize that they will need all class members to contribute and that class success will to a large extent be based on how well they can organize themselves and work productively together.

Take time to answer any remaining questions and then hand out the materials. After that, allow the activity to begin. Limit yourself to answering questions and moving throughout room as the task is going on. Be ready to replace rolls of tape as needed.

The activity will be intense and frantic as the class builds **Levees**, **Channels**, and **Reservoirs** on both banks of the rivers (represented by the divided desks). Natural leaders will emerge and the class will begin to organize itself efficiently. Let the class know how much time is left every five minutes. For an added flourish, occasionally flick the classroom lights on and off and warn how a bad storm is quickly approaching.

At the end of 30 minutes call a halt to the activity. Direct the students to put materials away and have a large garbage bag available so that pieces that were created but not used can be thrown away.

- I. Rolling the marbles**—Instruct all of the students to get at one side of the room or the other, leaving the middle part which represents the river clear.

Go around and inspect the structure. Deduct two points for areas where they did not follow the correct color patterns. Deduct three points for areas that do not have the correct **Channel** and **Reservoir** measurements. Expect there will be a few deductions so the class will start with a negative number. If the class worked hard try not to let the deductions exceed 20 points.

Next take out the container with the 100 marbles. Select four students to retrieve the marbles (two for each side of room or river) after they have been rolled and scored. Have a separate container that the roll marble can be placed in after they are retrieved by the students

assigned to do this job. Roll six or seven marbles at a time. Tally up the score each time the marbles are rolled. Give one point for every marble that the **Levees** hold or stop. Give them three points for every marble that stopped in a **Channel** (you did not tell them about this beforehand, but we have to assume that marbles in a **Channel** would eventually end up in a **Reservoir** so you want to give them some credit for this). Marbles that end up in the **Reservoirs** count as five points.

After scoring the first group of marbles, keep rolling six or seven marbles at a time. Aim the marbles at different parts of the **Levee**, **Channel**, and **Reservoir** construction. Make sure to alternate sides with each roll. You want to make sure every part of the structure is tested. Score after each roll. An alternative could be, if you do not want to slow down the pace of the rolls, to tally the score all at once at the end. You also might find that the students are enjoying this so much that you may want to go ahead and roll some marbles again (ones that have already been used) if time allows.

After all 100 marbles (or more if you choose) have been rolled, you will figure out the final score of the class. This score can be compared to the score of other classes to give out a prize. If this is the only class doing the simulation, the class gets a prize if their score tops 100 (or if you did extra marbles, adjust the score to reflect this-125 marbles would require 125 points, etc.) If there is at least five minutes remaining, then get the class to pull up the levees, channels, and reservoirs and clean up room. If there is not enough time, the next class will pull it up first thing. If your next class is also doing the activity it is a good idea to leave the previous class's structure up as it will be much easier to explain the activity to them by using it as a visual example.

- J. Debrief the simulation**—Based on time remaining, debrief the Activator immediately after completion or do it first thing the next day. Ask the class why rivers were important to the first farmers. Elicit responses until it is understood that silt from the rivers fertilized the plains next to the rivers and that the rivers provided a source of irrigation.

Then ask the students why rivers also posed dangers to the first farmers? The obvious answer will be that the very flooding needed to create fertile river valleys also threatened to wipe away farms if not controlled. Lead a discussion about how farmers had to block the flood waters from spilling over the river banks and endangering their farms through the construction of levees. Then stress they had to do more than just block those flood waters. Since the flood water contained the silt necessary for fertilization and the water was needed for irrigation, they had to devise a way to channel flood waters so they

could be used productively. Discussed how this task required a large amount of cooperation from many independent villages that were next to the river.

Then have the students reflect upon their own experience and asked them what they needed to do to successfully stop the marbles from spilling out into the classroom. They will answer that they needed to organize and cooperate. The teacher will ask if any leaders emerged in the classroom who took charge to organize the class. Ask the students who gave those leaders authority. Remind them that you didn't. Ask them why it is they followed the directives of some of their classmates?

Then ask your students if giving authority to some of their classmates made them more effective in this task? Ask them if they think they could have been successful without this leadership?

Have your students further reflect upon their experience by asking them what was the purpose of the levees, channels and reservoirs they built? Question the students about how their problem was similar to those of the first farmers. Point out to your students that these farmers had to figure out a way to enjoy the benefits of the river while minimizing the risks. Ask them why they think these farmers had to organize and cooperate? This line of questioning will allow your students see that authority had to be given to certain individuals to direct this large project. Conclude by discussing how this problem and its solution required organized government.

#### **4. Writing Prompts**

- A. Describe how your class got organized to complete the task. What did your class do that worked well and what things could have been better?
- B. Describe the activity. Why did you construct levees, channels, and reservoirs? How did it simulate the problem faced by the first farmers in river valleys?
- C. Imagine you are a farmer. Write a speech trying to convince other farmers to organize to control the river. Make sure to tell them why they should organize and then offer suggestions about how they can organize.
- D. Why did the flooding of rivers lead to the creation of the first organized governments?

## ● Activator 3 ●

### *Counting the Grain Harvest: The Birth of Writing*

#### **Overview**

Each of the Activators is intended to present problems that ancient people had to overcome in their efforts to establish civilization. By participating in the Activator the students will realize what the solutions to those problems were. Each overview will present the problem and the solution that the Activator is designed to solve.

**Problem:** The first cities depended on farms outside the city walls to provide the necessary food so the inhabitants of the city could perform the tasks that allowed civilization to emerge. Collecting, storing and distributing this food was one of the most important jobs that the organized government in charge of the city had to perform. Therefore it was extremely important that the priests (who were usually assigned this job) in the city be able to keep an accurate count of the food collected. The problem was that doing so by mere memory was difficult and often inaccurate. For cities to sustain themselves, they needed a means of keeping an accurate count of the food coming into the city.

**Solution:** Ancient governments had to collect, store and distribute grain and foodstuffs for the city to survive. One of the main functions of the government and the priests who served it was to keep an accurate count of the food as it came in and was parceled out. Because of the great quantities of food involved, the priests needed a tool that would allow them to record as accurate a count as possible. If this job was not done with great precision the city was liable to experience food shortages, starvation and ultimately ruin. The tool needed was writing and with it they could complete the task with precision.

**Summary:** In the “Hunting and Gathering” Activator the students see how farming was a vastly more productive way to secure food as compared to human beings previous nomadic way of hunting and gathering. This increased production led to a growth in population and the freedom of some people to pursue livelihoods beyond the direct production of food. In the “Controlling Flooding” Activator the students learned that before the farming way of life could take hold, the mighty rivers that supported the first farmers had to be controlled and harnessed. This led to the creation of the first organized governments to accomplish this task.

In the first two Activators your students came to an understanding that farming and the organization that was required to control and harness rivers created the conditions that made cities and civilization possible. Farms in river valleys were protected from the destructive forces of flooding while benefiting from those same forces through the coordination provided by organized government.

In this third Activator you want your students to understand that cities were the heart of civilization. The surplus of food provided by farming made it possible for large numbers of people to live in cities where they specialized in the jobs that created civilization. To allow this to happen, further organization was required from organized governments. Since the people in the cities were not farmers they depended on the farmers to produce and provide the food which made life in the city possible. To do this, the government of the city would tax by force (through an armed military—one of the specialized jobs created by cities) the farmers a substantial portion of their crops. Because it was necessary to do this for the city to survive, the city needed to be in control of large amounts of farm land which surrounded the city. That is why all ancient cities were city-states.

The grain taken from the farmers would be brought into the city and stored. It was vital that the city keep accurate records of the food it was storing and then distributing to the members of the city. If they could not keep track of what they had and what they were giving out, it is very likely that the inhabitants of the city would run out of food and starve. Ancient governments employed priests and scribes to undertake this immensely important task. But the amount of food coming in and out was very difficult to remember. The priests and scribes working at the grain warehouses needed a tool in order to do their job accurately. If they could not do this job accurately there was the very likely consequence that the city would fail. Organized governments faced their second major challenge (the first being the control of rivers) which was to create a tool which would aid human memory and allow them to know precisely the amount of grain under their control. The city's survival depended upon the solution of this problem. The solution found was writing.

In this Activator students will confront this problem and understand how the development of the tool of writing was its solution. Each student will be placed in charge of accounting for a different type of grain entering the city warehouses. It will be made clear how important this task is to the survival of the city. Students will be informed the amount and type of grain that is arriving in the warehouse. As you read the amounts of different grains rapidly, the students responsible for keeping track of each grain will have to add the numbers in their heads. As each student will be responsible for 15 different large numbers, this task proves virtually impossible for them to do accurately. At the end of reading all the numbers, you will ask each group what total number they got for each grain. Since students could use no pens or pencils to write the numbers down, the vast majority of their totals will be wildly inaccurate. You will point out that the city depends on their precision in tracking the grain and ask them how their city would fare with these grossly inaccurate numbers. The discussion will lead to recognition that such inaccuracies would threaten the survival of the city.

Students should be asked how they could do their job better. The students will respond that if they could write down the numbers and then add them they would do a better job. You will then allow them to use paper and pencil and begin reading out numbers for the grains again. This time a student is allowed to write the number down (different numbers are used than were used the first time this was done) and when the teacher concludes the students can add those numbers up. The students will then report their numbers again. This time their numbers will be perfect or very close to it. You will then debrief with a discussion on how writing was a vital and necessary tool to the city.



## Setup Directions

### 1. Duplications

Duplicate the following in the quantities indicated in *Italics*:

- **Grain Wagons Sheet 1**—*one copy to be used by teacher to be read aloud to class*
- **Grain Wagons Sheet 2**—*one copy to be used by teacher to be read aloud to class*
- **Warehouse Grain Count Sheet 1**—*one per group. Cut along line to make three copies per sheet*
- **Warehouse Grain Count Sheet 2**—*one per group. Cut along line to make three copies per sheet*
- **Grain Count Sheet**—*one copy per student. Cut along line to create two sheets per copy.*

### 2. Procedures

**A. Draw grid on board**—Before the students enter the class draw the following grid on the board:

	Wheat	Maize	Rice	Barley	Oats	Total Difference
Group 1						
Group 2						
Group 3						
Group 4						
Group 5						
Group 6						
Number						

*Group* represents the groups who are participating in the simulation and number designation next to *Group* represents the number that the teacher assigned to them. The number of groups you will use will depend on your class size. Try to create as many groups of five students as you can. Remaining groups can have four members. Use the number of groups you are using for your grid. The bottom row on the grid, *Number*, represents the correct number for each individual grain.

The first five columns of the grid represent the five different grains which your students will try to account for. The *Total Difference* column shows the difference between students count and the actual count (combining all five grain columns).

- B. Group the students**—Divide class up to form groups of five students. If all groups cannot have five members, put four students in the remaining groups. If you cannot make at least one group five members, use groups of four with some groups having three members as your class number dictates.
- C. Explain the activity**—Briefly discuss with your class the concept of city-state and how the city depended on the farmland the city controlled to feed the people of the city. Discuss the importance of keeping an accurate count of the grain coming into the city to ensure that the people of the city would be fed. Explain to the students that they are going to imagine that each group is responsible for one of the cities' warehouses. They will be the priests whose job it is to keep accurate count of the grain coming into the city. Stress why this job is important. Tell the students that the city could face starvation and ruin if they do not do their job accurately.

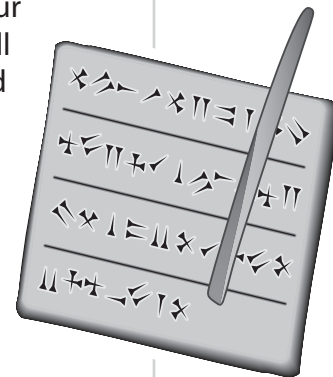
Number the students off 1–5 in each group. If a group has four students number them off 1–4. Tell the students that they will be assigned keeping track of a particular grain for their based on their numbers. The assignments are as follows:

- Student 1: **Wheat**
- Student 2: **Maize**
- Student 3: **Rice**
- Student 4: **Barley**
- Student 5: **Oats**

If a group does not have a fifth member no one in that group will be assigned **Oats**. If a group only has three members omit **Barley** and **Oats**.

Explain to your students that wagons of these grains will be brought and unloaded at their warehouse. It will be their jobs, as priests in charge of the warehouse, to keep an accurate record of the grain as it comes in. Tell the students that you will read each of the grains and it will be the responsibility of the priest assigned to that grain to keep count of that grain as it comes in. Inform the students that they can not use pencils, paper or calculators. *They must keep the count in their heads.* Inform the students that fifteen wagons will drop off a certain amount of each grain. This will be represented by the teacher orally telling the students how much of each grain was on the wagon. Each student in the group will keep track of the grain they are assigned. Once one wagon has been unloaded (orally read out) the next wagon will come in and the process will continue until all fifteen wagons have visited their warehouse. Make sure to stress that the survival of their city depends on an accurate count!

- D. Announce the arrival of the first fifteen wagons**—After you have checked for understanding, announce the arrival of the first wagon and



## Setup Directions

### Activator 3

the amount of grain on it. Use the **Grain Wagons Sheet 1** to do this.

Announce the totals in a very rapid fashion and do not repeat the amount. You want the students to experience a difficult time keeping count of their assigned grain in their head. As soon as you announce all of the totals off one wagon immediately announce the arrival and the totals of the next wagon. Again, all of this is to be done very rapidly and no repeats are allowed. You want the students to lose count and come up with wildly inaccurate numbers. Continue declaring the wagon totals rapidly until all 15 have been unloaded (announced).

- E. List the totals on the board**—Give a group the **Warehouse Grain Count Sheet 1** and have them record the number each student got for their assigned grain. Tell one student from each group to get out a pencil so these totals can be recorded. Pencil and paper must be used at this point because we don't want a student who hopelessly lost count to just copy the number of a student who was in charge of the same grain from another group which might happen if we have them report their totals orally. Give the groups a couple of minutes to fill out their **Warehouse Grain Count Sheet 1**. Remind them to put their group number in the designated area on the sheet. Collect the sheets from the groups.

Using the **Warehouse Grain Count Sheet 1** turned in by the groups, you will record each grain in turn starting with WHEAT. Rotating through each sheet, each group's total will be read and placed next to the row that has that group's number under the column of the grain. After all the counts for each group have been placed on the grid, it will look like the following:

	Wheat	Maize	Rice	Barley	Oats	Total Difference
Group 1	817					
Group 2	408					
Group 3	693					
Group 4	949					
Group 5	660					
Group 6	438					
Number						

After each group's count for *Wheat* has been read and recorded on the grid, announce what the actual number is and place that number next to the row labeled *Number* under the column labeled *Wheat*. It will look like the following:

	Wheat	Maize	Rice	Barley	Oats	Total Difference
Group 1	817					
Group 2	408					
Group 3	693					
Group 4	949					
Group 5	660					
Group 6	438					
Number	<b>618</b>					

You will then go to each group's number and in parenthesis will put the difference between the group's count for *Wheat* and the actual number. You may want to have a calculator handy while doing this. When you are done it will look like the following:

	Wheat	Maize	Rice	Barley	Oats	Total Difference
Group 1	817 ( <b>199</b> )					
Group 2	408 ( <b>210</b> )					
Group 3	693 ( <b>75</b> )					
Group 4	949 ( <b>331</b> )					
Group 5	660 ( <b>42</b> )					
Group 6	438 ( <b>180</b> )					
Number	<b>618</b>					

The vast majority of group counts will be wildly inaccurate (which is what you want). It is very likely that more than 90% of the counts won't even be within 25. Many are off by hundreds of points. Continue this procedure for each of the other four grains. When completed, the grid will look something like this:

	Wheat	Maize	Rice	Barley	Oats	Total Difference
Group 1	817 (199)	500 (255)	657 (54)	182 (492)	444 (127)	
Group 2	408 (210)	457 (298)	766 (55)	904 (230)	603 (32)	
Group 3	693 (75)	743 (12)	622 (89)	599 (75)	505 (66)	
Group 4	949 (331)	799 (44)	981 (270)	704 (30)	578 (7)	
Group 5	660 (42)	723 (32)	527 (184)	670 (4)	462 (109)	
Group 6	438 (180)	656 (99)	686 (25)	430 (244)	500 (71)	
Number	618	755	711	674	571	

## Setup Directions

### Activator 3

Unless your class can be divided by five evenly, you will have groups that only have four members. You compensated for this by not making those groups count the *Oats*. In that case you will just draw a line in the space where the *Oats* count is recorded as shown below:

	Wheat	Maize	Rice	Barley	Oats	Total Difference
Group 1	817 (199)	500 (255)	657 (54)	182 (492)	444 (127)	
Group 2	408 (210)	457 (298)	766 (55)	904 (230)	603 (32)	
Group 3	693 (75)	743 (12)	622 (89)	599 (75)	505 (66)	
Group 4	949 (331)	799 (44)	981 (270)	704 (30)	578 (7)	
Group 5	660 (42)	723 (32)	527 (184)	670 (4)	—	
Group 6	438 (180)	656 (99)	686 (25)	430 (244)	—	
Number	618	755	711	674	571	

You will do the same if you have groups of three. Just draw a line through the space where *Barley* is recorded for that group.

Next use a calculator to quickly figure out the total difference of each group. This is done by adding that group's number in the parentheses across its rows. The numbers combined will add up to that group's *Total Difference*. Using the examples above, the grid would look like the following:

	Wheat	Maize	Rice	Barley	Oats	Total Difference
Group 1	817 (199)	500 (255)	657 (54)	182 (492)	444 (127)	<b>1127</b>
Group 2	408 (210)	457 (298)	766 (55)	904 (230)	603 (32)	<b>825</b>
Group 3	693 (75)	743 (12)	622 (89)	599 (75)	505 (66)	<b>317</b>
Group 4	949 (331)	799 (44)	981 (270)	704 (30)	578 (7)	<b>682</b>
Group 5	660 (42)	723 (32)	527 (184)	670 (4)	—	<b>262</b>
Group 6	438 (180)	656 (99)	686 (25)	430 (244)	—	<b>548</b>
Number	618	755	711	674	571	

Reward the group that has the smallest *Total Difference*. This would seem to favor groups 4 & 5 in the example above as they were only responsible for four grains instead of five. To remedy this, divide the *Total Difference* score of each group by the number of grains they were responsible for counting. This adjusted score would look like this:

- Group 1:  $1127/5 = 225.4$
- Group 2:  $825/5 = 165$
- Group 3:  $317/5 = 63.4$
- Group 4:  $682/5 = 136.8$

- Group 5:  $262/4 = 65.5$
- Group 6:  $548/4 = 137$

Using this adjusted score, Group 3 would come closest to the actual count while Group 5 would be a close second.

- F. Discuss the results**—Ask the groups how they think they performed. Remind the students that the city’s survival (because a city does not produce food – it depends upon the food it receives from the farms that surround the city) depends on keeping an accurate count of the food that comes to the city through the grain warehouses. The discussion should lead to the point where you have the students admitting that their counts were dangerously inadequate. Ask your students that if the city relies on an accurate count of grain, could a city survive for long if it could not keep count better than what they achieved?

Then ask the groups what could be done to make the count more accurate. Quickly it will be suggested that if they could use pencil and paper to write down the numbers as the teacher announces them and then add them at the end that the results will likely be much better. Tell the students that you will test this assertion to see if it is true.

- G. Hand out and explain “Grain Count Sheets”**—Tell the class that they will repeat the procedure they followed in the first part of the simulation. Each student will be assigned the same grain as they were responsible for earlier and the teacher will announce the arrival of fifteen different wagons and the amount of each grain (different numbers from the first time) that it is unloading. The only difference this time is that you will allow the students to use pencils and write those numbers on a piece of paper. Give each student a **Grain Count Sheet** to mark the numbers for each wagon that comes in.

You now want the counts to be as accurate as possible and the **Grain Count Sheets** will help your students achieve this. When the student receives this sheet they are to designate which grain they are responsible for by writing this down next to the spot that designates “*Grain:*” on the top of the sheet. The first column represents the Wagon number from which the grain is counted. This had already been filled out so the student will not have to do anything under this column. In the second column, under *Count*, the student writes down the number that the teacher reads for their grain. An example for *Wheat* would be the following:

## Setup Directions

### Activator 3

Grain Count Sheet Grain: <u>Wheat</u>			
Wagon Number	Count	Add to Previous Total	New Total
1	21		
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

The third column is designated *Add to Previous Total*. This allows the students to keep a running count of their total by adding the number brought in from the new wagon to the total number that has already come in. In the above example, in the first line there would be no previous total so 21 would be added to 0. When giving examples, use different numbers than the ones that will be actually used. The real numbers are being used in these examples. See below:

Grain Count Sheet Grain: <u>Wheat</u>			
Wagon Number	Count	Add to Previous Total	New Total
1	21	$21 + 0 = 21$	
2			

The number produced by two numbers added in the *Add to Previous Total* column would then be placed under the *New Total* column. See below:

Grain Count Sheet Grain: <u>Wheat</u>			
Wagon Number	Count	Add to Previous Total	New Total
1	21	$21 + 0 = 21$	21
2			

The student would then repeat procedure as you announce *Wagon Number: #2*. See below:

Grain Count Sheet Grain: <u>Wheat</u>			
Wagon Number	Count	Add to Previous Total	New Total
1	21	$21 + 0 = 21$	21
2	42	$42 + 21 = 63$	63
3			

The **Grain Count Sheet** allows the students to keep a running count of their totals. By using this sheet, they are much more likely to get the accurate numbers as opposed to just writing down the fifteen numbers and adding them all at the same time after the last wagon is announced. Addition errors are much more likely to occur trying to add fifteen numbers all at once as opposed to two at a time.

When the last wagon is announced, the student in the group responsible for *Wheat* should have a **Grain Count Sheet** that looks like the following:

Wagon Number	Count	Add to Previous Total	New Total
1	21	$21 + 0 = 21$	21
2	42	$42 + 21 = 63$	63
3	51	$51 + 63 = 114$	114
4	30	$30 + 114 = 144$	144
5	47	$47 + 144 = 191$	191
6	62	$62 + 191 = 253$	253
7	40	$40 + 253 = 293$	293
8	44	$44 + 293 = 337$	337
9	33	$33 + 337 = 370$	370
10	50	$50 + 370 = 420$	420
11	25	$25 + 420 = 445$	445
12	56	$56 + 445 = 501$	501
13	41	$41 + 501 = 542$	542
14	18	$18 + 542 = 560$	560
15	73	$73 + 560 = 633$	633

Explain to the students how this sheet will allow them to keep a running total of their grain. You may want to consider drawing the **Grain Count Sheet** on the board (using made up numbers) so you can work through an example for them to see.

Most students will be able to add the new number to the previous total in the time that the teacher is announcing the other grains. Stress that this is what they should try to do and advise them to get out some scratch paper for this. Tell them to help one another with addition as needed. You will read the numbers at a much slower pace this time to give the students time to do this. If they need add numbers after the announcement of the last wagon they will be given time to do so.

- H. Announce the arrival of the second fifteen wagons**—After checking that students understand, you will use **Grain Wagons Sheet 2** to start announcing the arrival of the first wagon and the amount of grain on it. Remind the students that they will be responsible for the same grain they were responsible for the first round. This set of numbers will be different from the first set so that the students can



**Teaching tip**

Stress to students that the most important thing is to record the number for each *Count*.

## Setup Directions

### Activator 3

not merely remember what the first totals were. Read the numbers at a slower pace than you did the first time to make sure that each student gets the number written down (you want them to be as accurate as possible with this count) and added to the previous total. After giving out the totals for each wagon, check and make sure that all students got them written down. If not, go ahead and repeat a number as needed.

- I. **List the totals on the board**—After announcing the totals for *Wagon #15* instruct the students to get a final total for their numbers. Since the accuracy of these numbers is so important (for the city) the teacher will tell them to check each others totals when they finish (again, you want these numbers to be as accurate as possible). Groups will be given five minutes to check one another's sheets. While they begin to do this, hand out a copy of **Warehouse Grain Count Sheet 2** to each group. Inform the groups that they will, like they did earlier, designate their group number and write down the count they got for each of the grains.

As the groups are doing this, erase the numbers on the grid on the board in order to write down the new numbers. After five minutes, collect the paper that has each group's total and start placing those numbers on the board, one grain at a time.

As was done the first time, the teacher will list the numbers for *Wheat* one group at a time. When completed, the grid will look like the following:

	Wheat	Maize	Rice	Barley	Oats	Total Difference
Group 1	633					
Group 2	633					
Group 3	643					
Group 4	633					
Group 5	633					
Group 6	633					
Number						

While a group may have made an addition mistake (try to have them avoid this by double-checking each others numbers before submitting their totals) they will most likely be minor mistakes while most if not all of the groups will get the correct number.

You will place the correct number for *Wheat* in its appropriate spot on the grid. It might look like the following:

	Wheat	Maize	Rice	Barley	Oats	Total Difference
Group 1	633					
Group 2	633					
Group 3	643					
Group 4	633					
Group 5	633					
Group 6	633					
Number	<b>633</b>					

As you did before, place in parentheses the difference between the group's count and the actual number. See below:

	Wheat	Maize	Rice	Barley	Oats	Total Difference
Group 1	633 (0)					
Group 2	633 (0)					
Group 3	643 (10)					
Group 4	633 (0)					
Group 5	633 (0)					
Group 6	633 (0)					
Number	633					

Like before, you will continue this process until all the group's numbers for each grain, the actual number of the grains, and the difference between the group's number and the actual number (in parentheses) have been listed. The grid will look like the following:

	Wheat	Maize	Rice	Barley	Oats	Total Difference
Group 1	633 (0)	869 (0)	497 (0)	730 (0)	512 (10)	
Group 2	633 (0)	873 (4)	497 (0)	730 (0)	522 (0)	
Group 3	643 (10)	869 (0)	499 (2)	730 (0)	525 (3)	
Group 4	633 (0)	897 (28)	497 (0)	730 (0)	522 (0)	
Group 5	633 (0)	869 (0)	497 (0)	730 (0)	—	
Group 6	633 (0)	869 (0)	497 (0)	730 (0)	—	
Number	633	869	497	730	685	

As you did before, add the numbers in each group's parentheses to get that group's *Total Difference*. Using the example above, the grid would look like the following:

## Setup Directions

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	Wheat	Maize	Rice	Barley	Oats	Total Difference
Group 1	633 (0)	869 (0)	497 (0)	730 (0)	512 (10)	<b>10</b>
Group 2	633 (0)	873 (4)	497 (0)	730 (0)	522 (0)	<b>4</b>
Group 3	643 (10)	869 (0)	499 (2)	730 (0)	525 (3)	<b>15</b>
Group 4	633 (0)	897 (28)	497 (0)	730 (0)	522 (0)	<b>28</b>
Group 5	633 (0)	869 (0)	497 (0)	730 (0)	—	<b>0</b>
Group 6	633 (0)	869 (0)	497 (0)	730 (0)	—	<b>0</b>
Number	633	869	497	730	685	

Divide the group's *Total Difference* by the number of grains they were responsible for to get their average counting error per grain. The results would be the following:

- Group 1:  $10/5 = 2$
- Group 2:  $4/5 = 0.8$
- Group 3:  $15/5 = 3$
- Group 4:  $28/5 = 5.6$
- Group 5:  $0/4 = 0$
- Group 6:  $0/4 = 0$

Using the adjusted score, groups 4 & 5 would have the best averages. But each group will make a tremendous improvement compared to the first time this was done.

**J. Debrief the Activator**—When the grid has been completed and scores computed, ask the groups how they did this time. The students will respond that they did a whole lot better. Ask your students to account for the difference. The clear answer will be that the ability to write down the number greatly enhanced their ability to keep accurate counts. The teacher will ask the students why they think the invention of writing was necessary for civilization. The obvious answer will be that keeping count in their head was not nearly accurate enough for such a vital job to the city. That job required the tool of writing.

### 3. Writing Prompts

- A. Why was the class so inaccurate in the first wagon counts? Why did they improve the second time around?
- B. Why were accurate grain counts so important to the first civilizations? What problem did the first civilizations have with grain counts? How was that problem solved?

## ● Grain Wagons Sheet 1 ●



Read or say

Wagon	Wheat	Maize	Rice	Barley	Oats
1	23	17	48	37	49
2	29	57	34	68	47
3	17	46	56	28	19
4	56	27	37	43	28
5	48	47	29	36	38
6	27	97	31	58	23
7	85	72	63	79	66
8	42	49	77	76	57
9	58	79	63	46	27
10	38	28	46	17	33
11	36	81	68	38	18
12	49	37	26	48	28
13	27	55	67	37	41
14	26	29	37	36	58
15	57	34	29	27	39

### Correct Total Counts

Wheat	Maize	Rice	Barley	Oats
618	755	711	674	571



Read or say

**Grain Wagons Sheet 2**

Wagon	Wheat	Maize	Rice	Barley	Oats
1	21	53	44	67	12
2	42	55	33	20	21
3	51	72	14	45	35
4	30	46	27	54	26
5	47	50	31	72	31
6	62	84	52	27	50
7	40	52	21	63	14
8	44	61	33	65	25
9	33	47	26	11	37
10	50	75	42	50	65
11	25	31	14	42	24
12	56	53	30	64	23
13	41	46	25	50	33
14	18	80	70	68	45
15	73	64	35	32	81

**Correct Total Counts**

Wheat	Maize	Rice	Barley	Oats
633	869	497	730	522

# Warehouse Grain Count Sheet 1

Group: \_\_\_\_\_

Grain	Count
Wheat	
Maize	
Rice	
Barley	
Oats	

---

# Warehouse Grain Count Sheet 2

Group: \_\_\_\_\_

Grain	Count
Wheat	
Maize	
Rice	
Barley	
Oats	

# Grain Count Sheet Grain: \_\_\_\_\_

Wagon Number	Count	Add to Previous Total	New Total
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

---

# Grain Count Sheet Grain: \_\_\_\_\_

Wagon Number	Count	Add to Previous Total	New Total
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

## ● Activator 4 ●

### *City of Strangers: The Need for Written Laws*

#### **Overview**

Each of the Activators is intended to present problems that ancient people had to overcome in their efforts to establish civilization. By participating in the Activator students will realize what the solutions to those problems were. Each overview will present the problem and the solution that the Activator is designed to solve.

**Problem:** Hunting and gathering tribes and farming communities were small in size. The leaders of the tribes and farming communities knew everyone within them. Because of the small size and close association, people's conduct could be regulated by unwritten customs. This situation changed with the birth of cities. Unwritten custom could no longer serve to regulate the behavior in the much larger cities. Something more was needed.

**Solution:** Life in cities was drastically different from what life in hunting and gathering and farming societies had been. The larger size of cities meant that all the members of a society could not directly communicate with one another on a regular basis (or even know one another) and that the leaders of the city also could not rely on direct communication. Unwritten customs that were effective in the smaller societies would not suffice in a city. Exclusive reliance on face to face communication would not work. This meant the leaders of the city had to rely on something other than verbal communication to make their wishes known. They had to rely on the indirect method of communicating through writing to express the cities' laws. Students in this simulation will experience frustration when verbal communication is significantly reduced. This leads them to readily suggest that a list be given to them so they can complete the task. This will allow you to make the point vividly that verbal communication was not effective in the changed circumstances of the city. Lists of directives had to be made and they had to be conveyed by non-verbal communication. These lists were the first written laws and the non-verbal communication method to transmit them was writing.

**Summary:** Living in cities was an entirely new way of life for individuals. Prior to cities, all people lived in small hunting and gathering tribes or in small farming communities. In these environments, all the members knew one another and had daily face to face contact for communication. Their laws were based on shared understanding about what was allowed and what was not allowed called customs. These customs were maintained through the close, daily interaction of the members of the tribe or community and did not need to be written down. The laws of the tribe or community were easily maintained by the fact that all of its members could easily communicate. The

leaders of these tribes and communities could direct their members through verbal communication.

Cities, for the first time in human history, created communities of strangers. It was not possible for all of the thousands of people who lived in cities to interact and know one another. On the contrary, any one individual would just interact with and know a fairly small percentage of that city's population. Also, cities generated much more complex associations between people that had to be regulated. As a result, customs could not be strong enough to maintain the laws necessary to regulate the behavior of the city's population. Since the people of the city did not have day to day contact with one another, the laws would have to be transmitted in an entirely novel fashion.

This was further complicated by the fact that few people personally knew or had access to the city's rulers. The leaders were remote from the majority of the population of the city and probably knew only a very few of them personally. This was very different from the close personal interaction and communication that leaders of hunting and gathering tribes and farming communities had with all the members of their society.

The new conditions in the city required a method of indirect communication by which the people of the city would understand how they were to regulate their behavior (and the consequences if they did not) and as a means for leaders to communicate their laws and directives to the large population of the city.

In this Activator, students will be asked to complete a large number of tasks. You will quickly read off these tasks. Students in the groups will ask to have the directions repeated quite often which you will gladly do. Once all groups have completed their tasks, you will announce another series of tasks for the groups to do. This time, refuse all requests to repeat any directions. Without the direct communication from the teacher, the group's efforts to complete the second set of tasks will fail. They will be left to think why they succeeded the first time and failed the second. They will see that their success the first time was a result of their immediate and constant communication with the teacher. In the second task they will see that it was the withdrawal of direct communication that led to their failure.

They will be left to ponder what could have been done to allow them to complete the tasks the second time even without direct communication from the teacher. They will come to understand that if the tasks had been written down and given to them they could have completed them just as easily as they did when they had direct contact with the teacher. Through this process, they will learn that direct communication was not possible on a regular basis in cities and that the city, especially its rulers, needed an indirect method of communication. They will understand why written laws were needed. It will also reinforce the student's understanding of the need for writing in civilization (which was the theme of Activator 3).

## Setup Directions

### 1. Duplications

Duplicate the following in the quantities indicated in *Italics*:

- **Task Sheet 1**—*one copy for the teacher*
- **Task Sheet 2**—*one copy for each student*

### 2. Materials

The following materials will need to be provided to your classes:

- **Butcher paper or poster paper**—*one per group. Needs to be large enough that all the students of the group can write on it.*

### 3. Procedures

- A. Prepare groups**—Create groups of four or five students (depending on class size). Have the students in the groups move their desks together so that the desks form one large surface. Give each group a large piece of **butcher paper** or **poster paper**. The sheet must be large enough that all the students in the group can write on it easily.
- B. Explain the activity**—Instruct the students that their groups will be given 50 tasks to complete on their butcher or poster paper. They must number the task on the sheet and then complete it. *For a task to be completed it must have both the number of the task and the completed task itself.* Since the students will be facing one another in their groups, it does not matter in what direction the task is written. They need to get the task number and the completed task on the sheet. A task is required to be completed just once. Inform the students that they may devise anyway to delegate the tasks they choose. Tell the students that they do not have to place the tasks in order on their paper as long as the numbers are recorded. Inform the groups that they will earn one point for each completed task. Their goal is to complete as many tasks as possible.
- C. Begin reading the first set of tasks**—After checking groups for understanding, tell the students to put their pencils and pens down. They may not start writing until you have read all of the tasks. Begin reading (rapidly) the tasks listed on **Task Sheet 1**.

The groups will be able to do these simple tasks with ease (which is what you want—because the activity is not about the tasks). Their problem will be to remember the task and especially the task number once you have read it out. Instruct the groups to raise their hand if they want the task number and task repeated. You will rapidly repeat the task number and task to the groups as they raise their hand. This is the point of the first half of this activity. You want the students to



#### Teaching tip

Providing butcher or poster paper is preferable but you can give the groups five or six sheets of copy paper if you choose.

depend on verbal communication with the teacher to complete the tasks. You will respond to numerous requests for repeats from each group. You might want to just move from group to group repeating three or four tasks at a time. It will take about ten to fifteen minutes for this process to wear down and for the groups to complete all or nearly all of the tasks.

- D. Read additional tasks**—At the end of fifteen minutes of working on the 50 tasks, inform the groups that they will now try to complete 50 additional tasks. Provide the groups with more paper (or have them use the other side of the butcher or poster paper) if they need it. Instruct the groups, as was required the first time, that each task will be numbered and that they will need to record the number and the completed task on their group's paper to earn a point. Remind the students that the task number and the task itself will be read verbally to them.
- E. The second set of tasks**—Begin reading the second set of tasks from **Task Sheet 2** in the same way the first set of tasks were read. Remember to tell them to put pens and pencils down while you read out the tasks.

After you have read the tasks and the numbers, the groups will immediately raise their hands for repeats. But, this time, *you refuse* to repeat any tasks. Other than letting the groups know that questions will not be repeated, say as little as possible to the groups. Explain that you helped the first time but that they shouldn't need your help now. Or, instead, you don't have to openly refuse them at all. Act distracted or pre-occupied (go to the computer, grade book or maybe fake a phone call). Either way you want to cut off the verbal communication which the groups relied upon during the first half of the activity. The students will complain and beg you to repeat the task numbers and tasks. You will either steadfastly refuse to do so or seem so occupied that you cannot.

Very soon, the activity will come to a standstill. The students will be able to remember only a very few of the tasks and their numbers. Without repeats from you they will be unable to complete the vast majority of the tasks. Ask them what is wrong? They will tell you that they are unable to remember what they were supposed to do. Ask the students how this problem could be resolved? The students will respond that you could repeat the tasks like was done in the first half of the activity. Refuse to do this and ask the students if there is another way that they could complete the task? The students will respond that they could do the tasks if you would provide them with a written list of the tasks and their numbers. Agree to investigate if this would make a difference.

- F. Pass out Task Sheet 2**—Give each student a copy of **Task Sheet 2** so they can now complete the second set of tasks. After receiving the second set of tasks, the groups will quickly complete them.
- G. Debrief the Activator**—after five to ten minutes (the time they need to complete the second set of tasks) have students turn in their butcher paper and return the task sheets given to them.

Once everything has been turned in, ask the students what accounted for the relative ease in which they answered the first tasks? The students will answer that the teacher repeating the tasks upon request allowed them to complete them. Then ask them to describe why they had problems with the second set of tasks? The students will reply that they no longer could communicate with the teacher and request repeats. You will ask them how this problem was solved. The students will say it was solved by the teacher providing a written list of the tasks.

This will lead to a class discussion in which you will explain to students that hunting and gathering tribes and farming communities were very small societies in which everyone knew everyone else well and could communicate with one another readily. This meant that the leaders of these societies could verbally tell its members what had to be done. Discuss with the class how all of this changed with cities. Thousands of people lived in cities and most were strangers to one another; very few of the individuals would have access to the leaders. This meant that verbal communication would not suffice for the running of the city. A new way of communicating would be necessary for people to know what to do and for leaders to direct the people in the city.

#### 4. Writing Prompts

- A. Why was the second set of tasks initially more difficult to complete than the first set? How was the problem solved?
- B. Why did the rulers of ancient cities have difficulty communicating with the people of the city? How was the problem solved?





Read or say

**Task Sheet 1**

1. List seven words beginning with A:	26. List four major U.S. cities:
2. List four states beginning with M:	27. Draw six squares with circles inside:
3. List four countries in Europe:	28. List six words of six letters:
4. Add $1+7+5+3+6+8+2$ :	29. Name seven US Presidents:
5. List three types of birds:	30. List five mathematical terms:
6. Name five types of car:	31. List five computer terms:
7. Name four current popular bands:	32. List five famous athletes:
8. Draw six triangles:	33. Draw two squares and five diamonds:
9. Draw seven circles with squares inside:	34. Name five Olympic Events:
10. List four different school subjects:	35. List five songs:
11. List five states east of the Mississippi:	36. Name three streets close to school:
12. List four countries of South America:	37. List three colleges in the state:
13. Write seven words beginning with D:	38. Add $45+34+21+46+87+34$ :
14. List ten teachers from the school:	39. List three words beginning with U:
15. List the colors of the rainbow:	40. List four two syllable words:
16. Draw three pentagons:	41. List six terms from science:
17. Write down five words of four letters:	42. Name all the planets:
18. Add $11+13+15+17+19$ :	43. List five State Capitols:
19. Write six words of five letters:	44. List five local stores:
20. List three books by Dr. Seuss:	45. List four states that have coast line:
21. List four African countries:	46. List four cities in the state:
22. List 8 words beginning with W:	47. List two types of clouds:
23. List six types of musical instruments:	48. Draw four hexagons.
24. Draw four octagons:	49. List three nursery rhymes:
25. Add $21+23+25+27+29$ :	50. Write group members names:

# Task Sheet 2

51. List three military ranks:	76. List four European cities:
52. List three states beginning with A:	77. List the seven continents:
53. List four characters on Sesame Street:	78. List four popular movies:
54. Add $54+21+37+56$ :	79. List five words beginning with T:
55. Draw two right triangles:	80. List six different colors of crayons:
56. List five terms used in grammar:	81. List three cities in Europe:
57. List four popular T.V. shows:	82. List five area high schools:
58. List three different computer makers:	83. List four popular actresses:
59. List four countries in Asia:	84. Add $56+34+10$ :
60. List five states west of the Mississippi:	85. Write down four words which rhyme:
61. List four of the original 13 colonies:	86. Write five words beginning with W:
62. List five books of literature:	87. List four popular bands:
63. Add $22+37+46+55+68$ :	88. List three prime numbers:
64. Draw four connected circles:	89. List four elements:
65. Write down five verbs:	90. List three Nickelodeon shows:
66. Name four rivers:	91. Name four breeds of dogs:
67. List three sports which use a ball:	92. List states beginning with M:
68. List three types of cereal:	93. Name the last four Presidents:
69. List three different types of music:	94. Subtract $173 - 23 - 45 - 67$ :
70. Subtract $71 - 34 - 22 - 6 - 2$ :	95. Write down four words of six letters:
71. Name three of the Great Lakes:	96. List four pizza toppings:
72. List three words with seven letters:	97. List four types of Mexican food:
73. Name four zoo animals:	98. List four kinds of salad dressings:
74. List the four oceans:	99. List three local tourist attractions:
75. List ten classmates:	100. List three types of toothpaste:

## ● Activator 5 ●

### *Making an Impression: The Power of Ancient Architecture*

#### **Overview**

Each of the Activators is intended to present problems that ancient people had to overcome in their efforts to establish civilization. By participating in the Activator the students will realize what the solutions to those problems were. Each overview will present the problem and the solution that the Activator is designed to solve.

**Problem:** People in hunting and gathering societies and farming communities felt a strong attachment to their society because they were so close to all of its members. The leaders of these societies were usually well-respected and well known to all the members of the small society. Compliance to authority was based on the close ties between the members of the society. In the new organization of the city those close ties were broken. As shown in Activator 4, most of the people of the city were strangers to one another and to the leaders who ruled them. New ties of attachment had to be established to guarantee the loyalty and compliance necessary for the city to function. The problem was how to generate these new ties.

**Solution:** One of the most outstanding features of ancient civilizations was the construction of great temples and palaces. Students will learn that the reason behind this construction was the need to create a large impression on the inhabitants of the city in order to create an attachment to the civilization. The students will take great pride in their “temples.” It is this pride and the awe inspired by the architecture that helped build personal attachment to the city and civilization. This explains the importance of the temples to ancient civilization.

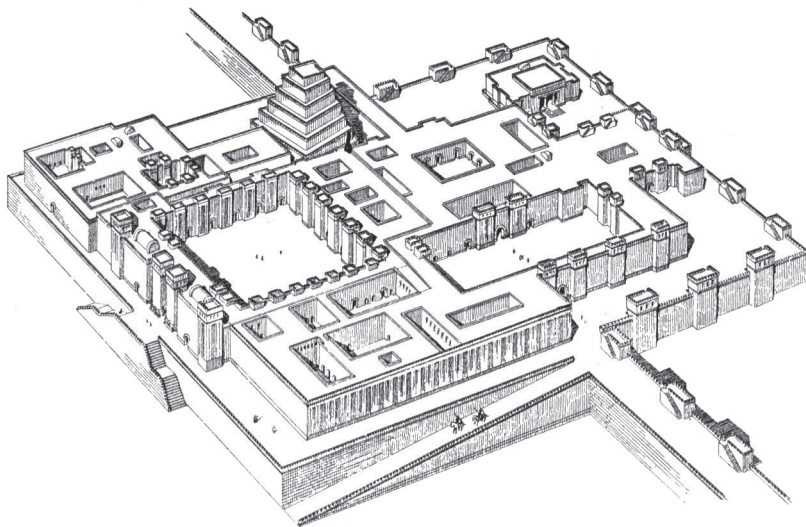
**Summary:** Prior to the advent of cities and civilization, people lived in tight-knit small communities of hunting and gathering tribes or farming villages. All the people of the community knew one another and they were often related. Their loyalty and attachment to their community and its customs and rituals was based on this close relationship which all members of the community had with one another.

When people began to live in cities the closeness that tied individuals to their communities was severed. The large size of the city made it impossible to base individual identification with the community upon personal associations. In a city of thousands of people this was no longer possible. But personal identification and loyalty was just as necessary for the city as it had been for those small, more intimate forms of association. The leaders of the cities had to find a new way to generate strong feelings of attachments for the city.

This was done in a number of ways. One of the most common was through organized religion, with its elaborate ceremonies and rituals carried out by professional priests, which helped to forge the city's common culture. Another powerful way to impress the individuals in the city was to build great temples and palaces which endowed a sense of power and majesty. In part, the great architectural wonders of the ancient world were meant to instill pride, awe, reverence and fear in the inhabitants of the city. They were meant to make the city dwellers feel pride and a sense of awe for their city's glory and power.

One of the most outstanding features of the ancient world was the construction of magnificent buildings in the midst of the city. Each city used these great architectural achievements to help create individual identification with their city (and to frighten those who might be enemies of the city). Great amounts of resources, wealth and labor went into the construction of these magnificent temples and palaces. They were a priority for the leaders so they could convey the message they wanted the people they ruled over to hear. They wanted to demonstrate the greatness and power of the city through these majestic buildings. The rulers of the city wanted the people in the city to identify with it and to their authority in part through the magnificent structures within the city walls.

In this Activator you give groups a class period to create a temple that would fill the inhabitants of an ancient city with awe and wonder at its majesty. This would make them proud to live in such a city and fill them with reverence towards the city's rulers. To accomplish this, the students will be given materials and instructions and told that their "temple" will be judged based on the sense of grandeur and power that it displays.



## Setup Directions

**1. Duplications**—None are needed for this activity.

**2. Materials**

The following materials will need to be provided to your classes:

- Copy paper—twenty sheets per group.
- Construction paper—four sheets of different colors for each group.
- Scissors—two pair for each group.
- Colored pencils—a set of at least four different colors for each group.
- Clear tape—one roll per group.

**3. Procedures**

- A. Group the Students**—Divide the class into groups of four (make some groups of three if the class size is not divisible by four).
- B. Discuss the problem**—Ask you students to imagine that they are the rulers of an ancient city. Explain to the students that ancient cities had a problem that hunting and gathering and farming villages did not have: securing the loyalty and attachment of the members of the society. Discuss with the students how personal attachment within society was eroded in the large cities and how one of the remedies to this problem was the building of great palaces and temples which projected the cities strength and power. Point out to your students that it was the intention of the rulers who had these structures built to fill the members of the city with wonder, fear and awe at their majesty. In this way, the people of the city would identify with it despite of the fact that they had lost the close personal association with the society that had been the norm in the smaller communities.
- C. Explain the Activator**—Inform the groups that they will have 30 minutes to create a temple that will project grandeur, power and strength to the inhabitants of their city. Take out an object that is approximately two inches in height. Tell your students that they are to use this as a measure of how a person would stand in relation to their temple. Their goal is to build a massive structure in relation to the object. Stress to your students that their structure should fill a person with a sense of awe when they stand before it.

Instruct the students that they will be provided with copy paper, construction paper, colored pencils, scissors and tape to build their Temple. Explain to them that you will provide no guidelines for the construction of their temple. The temple is to be completely of their own design. Inform your students that their temple will be judged on

**Teaching tip**  
It is a good idea to ask students to voluntarily bring in clear tape a couple of days before planning to run the simulation.



the sense of strength, power, and majesty that it conveys. In addition, it should be pleasing to the eye showing evidence of being both well built and well proportioned. This would be a good time to show some illustrations of ancient temples.

**D. Explain how the temples will be judged**—There are a few options for how you may want your student’s temples judged. These are:

1. You (and possibly fellow teachers you recruit) judge them.
2. The structures are saved and the groups judge each others work the next day.
3. The structures can be judged by another one of your classes.

Choose one the methods above and then explain the judging to your students. It is a good motivational tool to offer some sort of reward to the winners.

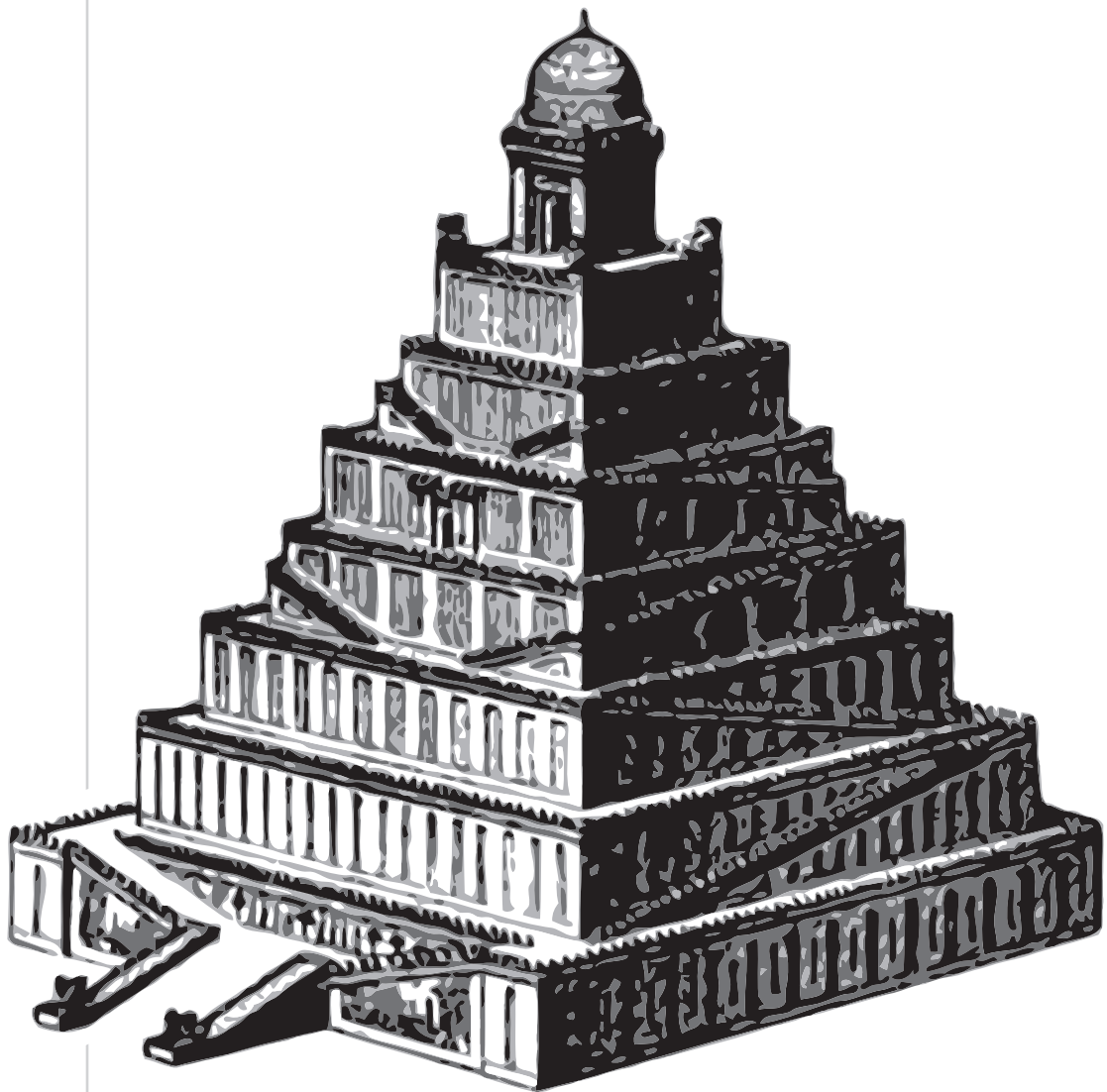
**D. Start the Activator**—Give the students a few minutes to discuss the activity amongst them selves and then field any questions they may have. Hand out materials to the groups in the amounts specified. Once this is done allow the groups to begin. As the activity is going on it would be a good idea to take a trash bag from group to group to ensure there will not be too big a clean-up at the end. Throughout the activity move from group to group evaluating what the group has done and reminding them that their “temple” is meant to project power and strength.

**E. Ending the Activator**—At end of the 30 minutes you will instruct the groups to stop. Designate a place in the room for the temples and have the students place their temples there. Use one of the suggested alternatives for judging and tell your students that they will receive the results tomorrow. You will announce those results on the next class day.

**F. Debrief the Activator**—Do the debriefing on the day you announce the results. Announce to your students which temple was determined to be the one that would instill a sense of awe and reverence in the average inhabitant of an ancient city. Place the two inch object in front of that temple. Ask your students to describe how a person the size of the two inch object would feel standing before the temple. Ask the class why ancient cities devoted so much of their time, wealth and labor creating magnificent architectural structures. Discuss again with the class how life in cities was different from lives in hunter and gatherer and farming societies. The discussion will lead to the students recognizing that these structures were meant to create in the individual a strong personal attachment and pride in the city and the civilization.

**4. Writing prompts**

- A. Why was it hard for the people of ancient cities to closely identify with their city? What steps did the rulers of cities take to help them identify with the city more closely?
- B. Imagine that you are an individual living within the walls of an ancient city. Describe what you are feeling and thinking as you stand in front of one of the city's great temples.
- C. Imagine you were a worker who helped build a temple or palace in your city. Describe your feelings of accomplishment when the task was completed.



## Activator 6

### *The Need to Introduce the New: Cultural Diffusion*

#### Overview

Each of the Activators is intended to present problems that ancient people had to overcome in their efforts to establish civilization. By participating in the Activator the students will realize what the solutions to those problems were. Each overview will present the problem and the solution that the Activator is designed to solve.

**Problem:** Ancient cities had very rigid and traditional societies. The laws were strict and severe. Political and religious leaders were to be obeyed at all times. Introducing change within the city was very difficult and often dangerous. Yet cities, more than earlier types of human communities, needed the vitality of new ways of doing things to survive and grow. What was needed was a way to introduce needed change without directly threatening the authority of the established ways of doing things.

**Solution:** Authoritarian and conservative ancient civilizations needed ways to be introduced to new ideas and ways of doing things to keep it vital. The main source of this necessary progress was the unintentional result of learning from other civilizations through the process of trade. Cultural Diffusion served the function of keeping the civilization vital.

**Summary:** Leaders of ancient cities secured the obedience of the city's population through strict laws and rituals. The people of the city were not encouraged or even to dream of questioning the authority of their leaders, priests or accepted ways of doing things.

But to a far greater degree than the earlier forms of human association (tribal hunting and gathering, and village based farming) life in cities was dynamic and depended on the introduction of new and improved ways of doing things to keep the city, and the civilization which rested upon it, dynamic and thriving. The introduction of new ways of doing things was essential to the cities further progress. Also, cities found themselves in constant competition with other cities and their civilizations. If those other cities found better ways of doing things it would give them advantages over cities that did not progress. This could lead to the extinction of cities and their civilizations that were slow to progress and change. But the authoritarian structure of the city did not encourage the kind of innovation that led to progressive change. As a result, the needed introduction of new and different ways of doing things most often did not come from within the city itself but through its contacts with cities from other civilizations.

Through trade and warfare, the members of different civilizations came into contact with one another. Though their intended purpose was not to learn from one another in these two situations, the result was that they did. Close contact with people from different civilizations meant that these civilizations could not help but to learn from one another. This Activator focuses on trade as a means of cultural diffusion and the unintended consequence of civilizations learning new ways of doing things through their contact.

When people of different civilizations came in contact through trade they could not help but to learn from one another. They learned how other people did things and the different technologies they used. They brought this knowledge back with them to their cities where it often provided the catalyst to change that was necessary to the cities future security and prosperity.

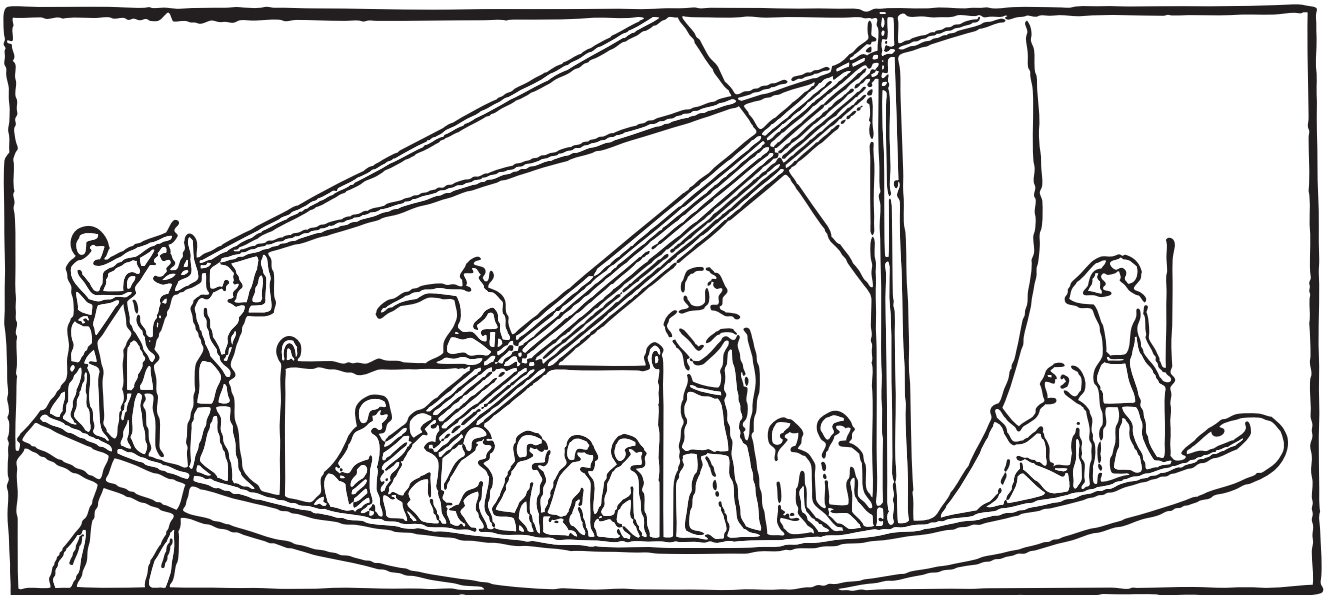
In this Activator five groups will be created within the classroom. Each group will be assigned to one of five different ancient civilizations and given one resource to create. Their goal is to trade that resource for the resources created by the other civilizations. You will tell your students that growing civilizations needed a wide variety of resources and very often had to trade with other civilizations to secure these resources. The groups will be given a large number of blank cards of paper which are called **Resource Cards**. On one side they will write the name of their civilization and the resource that they have been assigned to create. On the other side of the cards they will write one of eight facts about that civilization.

After giving them time to make a large number of **Resource Cards** they will be ready to start trading. They will be told that they will get a point for every **Resource Packet** that they can put together and get stapled. A packet consists of one of each of the other four resources that were created by the other four groups (they do not need to include their own resource in the packet). They will keep one student in their group to organize the incoming resources into the packets (you will be moving from group to group stapling the completed packets together) and informing the group members who are out trading resources which ones they need. The rest of the students will be out trading the resources that their group (civilization) created. They will be reminded by the instructor to make sure that each card has a civilization name and resource marked on one side and a fact on the other. At various intervals you will have the students return to their groups to create more resources for trade. At the end of 30 minutes you will collect all the packets that the group was able to put together and put that group's packet in an individual folder. Any resource that was not able to be stabled into a packet will be discarded.

On the next day you will return the **Resource Packets** the groups created through trade. They will be instructed to count them and you will record this count, each completed packet earning the group one point. Groups will be instructed to take the staples out of the packets and place the

individual cards fact side up on the group's desks. Each student will be given a **Civilization Answer Sheet** which has forty questions on it. These questions are created from the eight facts that each group was assigned to put on the back of their cards (five groups  $\times$  eight facts = forty questions). The groups will then be told to use the facts on the back of their cards to answer the questions. They will be given one point for each correct answer. This score will be added to the score they received for creating the packets to get the total group score.

Through this Activator your students will experience how unintended and inevitable learning from one another allowed ancient civilizations to learn about different ways of doing things and incorporate those ways into the cities way of doing things.



## Setup Directions

### 1. Duplications

Duplicate the following in the quantities indicated in *Italics*:

- **Greece Resource Sheet**—*one for each student in group assigned to Greece*
- **Egypt Resource Sheet**—*one for each student in group assigned to Egypt*
- **Persia Resource Sheet**—*one for each student in group assigned to Persia*
- **India Resource Sheet**—*one for each student in group assigned to India*
- **North Africa Resource Sheet**—*one for each student in group assigned to North Africa*
- **Civilization Answer Sheet**—*one for each student*

### 2. Materials

The following materials will need to be provided to your classes:

- **Resource Cards**—(each slip is  $\frac{1}{8}$ <sup>th</sup> of a piece of computer paper). *100 cards per group*

### 3. Procedures

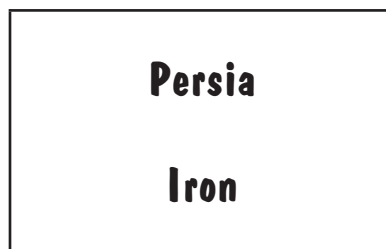
- Prepare the materials**—Create eight cards of paper from a piece of copy paper. This is accomplished by dividing the paper in half three times and then cutting along the creases. You will need to make 500 of these cards per class (100 per the five groups in the activity).
- Group the students**—Divide the class into five different groups. You will tell the class that each group will represent a different civilization of the ancient world. Each civilization will be given one resource for that civilization to create. Discuss how ancient civilizations traded with one another to acquire what they lacked in their own civilization.
- Introduce the activity**—Inform the students that their goal today will be to create the resource that their civilization has been assigned and to use it to trade for the resources created by the other civilization. Each group will be given different **Resource Sheets** depending on the civilization that has been assigned to their group. Each different **Resource Sheet** will have the name of the civilization on it, the resource that the civilization can create and eight facts about that civilization. The five civilizations and their resources are as follows:
  1. Greece—Marble
  2. North Africa—Cotton Cloth

- 3. Egypt—Wheat
- 4. Persia—Iron
- 5. India—Spices

Explain to the students that each **Resource Sheet** be assigned eight numbers that correspond to their eight facts. This will be done in the following way:

- 1. Greece—Fact numbers 1–8
- 2. North Africa—Fact numbers 9–16
- 3. Egypt—Fact numbers 17–24
- 4. Persia—Fact numbers 25–32
- 5. India—Fact numbers 33–40

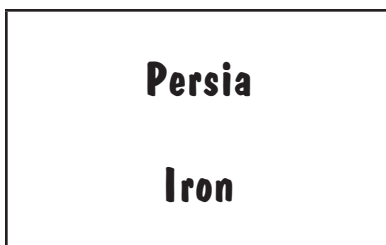
**D. Assign the civilizations and hand out Resource Cards**—You will assign each group one of the five civilizations and tell them which resource that civilization is going to make. Give each group their 100 **Resource Cards**. Tell the groups to divide the cards up evenly amongst the group members (each student will have 20-25 slips depending on the size of the group.) Instruct the students to put their Civilization name and Resource on each of the **Resource Cards** they have been given. The civilization name and the resource are to go on the same side of the card. See example below:



This will take a couple of minutes. When they are finished, tell the students that each card they individually possess needs to be numbered on the side opposite to where they just placed the civilization name and the resource. See below:

Front side of card

Back side of card



Inform the groups that these cards will be numbered differently based on which civilization they were assigned. The group that represents Greece will number all of their cards #1–8. The group that represents North Africa will number all of their cards #9–16. Egypt will number theirs #17–24, Persia #25–32, and India #33–40.

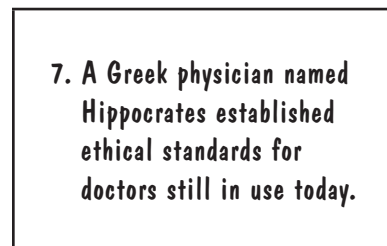
Use the example of the students in the “Greek” group who will take their first card and in the left-hand corner of the blank side number it #1. They will take their second card and record #2 and continue doing so until they number the eighth card #8. They will then start the process again (individually numbering each card with one of the numbers #1-8) until they have numbered all of the cards. The “North Africa” group will do the same but will use the numbers #9–16 on their cards. Each of the other groups will number their cards with the numbers assigned their group (Egypt #17–24, Persia #25–32, India #33–40).

- E. Hand out the Resource Sheets**—Each group will receive the **Resource Sheet** for the group they have been assigned. You will pass out enough sheets for each student in the group.

Have the students place all 100 of the group’s cards in one pile in a position central to all the members of the group. Instruct each student to draw a card Using the **Greece Resource Sheet** as an example, that card should have *Greece* and *Marble* one side and a number #1–8 on the other. Tell the students to turn the card over to the side which has the number. They will then be told to copy the fact which has the same number on it as the fact on the card. An example would be a student who has a slip which has #7 on it. The student will then look to their Resource Sheet and copy fact #7 from the sheet onto the card. See below:

Front side of card

Back side of card



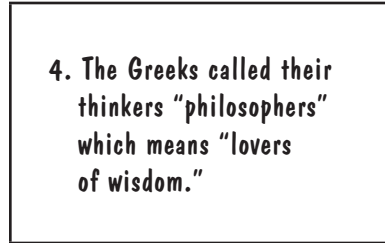
Instruct the students that they will set the completed card in a second pile which has **Resource Cards** which have facts on them. Tell them that a **Resource Card** will be considered a resource when it has the civilization name and resource name on one side and one of the group’s numbered facts on the other. Inform the groups that their ultimate goal is to trade these resources with other groups to obtain their resources. Stress to your students that this makes it important to make as many “resources” as they can to be able to complete many trades. After

completing one card tell the students to draw another from the group's common stack. If that card is numbered #4 the student would write fact #4 from the **Greece Resource Sheet** on it. See below:

Front side of card



Back side of card



Remind the students that every group has a different eight numbers. A student in the Egypt group might write down a fact from their **Egypt Resource Sheet** onto the card for #18 and their next card might be number #23. See examples below:

Front side of card



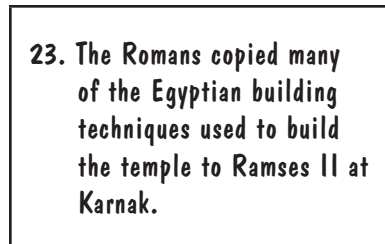
Back side of card



Front side of card



Back side of card



Give the groups ten minutes to write the facts on their **Resource Cards** and create their group's resources. Move from group to group making sure that students understand how to fill out cards and encouraging them to create as many resource cards as possible.

- F. Explain how to trade resources and make Resource Packets**—At end of the ten minutes you will have the students put down their pens and pencils. Instruct the groups that they are now going to take the **Resource Cards** they have created and trade them for cards created by other groups. Their goal is create a **Resource Packet** of each of the resources created by the other four groups. They will put together stacks of four "resource cards" one from each group. An example would be the group that represents Greece would put a North Africa

## Setup Directions

### Activator 6

(Cotton Cloth), Egypt (Wheat), Persia (Iron) and India (Spices) slip together. See example below:

Resource card stacks for Greece:

Stack 1:

<b>North Africa</b>
<b>Cotton Cloth</b>

Stack 2:

<b>Egypt</b>
<b>Wheat</b>

Stack 3:

<b>Persia</b>
<b>Iron</b>

Stack 4:

<b>India</b>
<b>Spice</b>

When resources from the other civilizations have been traded for, they will be brought back to the "civilization" group. Each **Resource Card** will be placed in the appropriate stack (the particular stack for that resource). An example would be that a student would bring back a resource card for spice. That card would be placed in Stack 4 using the example above.

Once four stacks are made, the group can begin to make the **Resource Packets** that will earn points. This is done by drawing the top card off each stack. This will give the group a packet of each of the four resources created by the other civilizations. Using Greece as an example of the group making the stacks, a **Resource Packet** would look like the following:

<b>North Africa</b>	<b>Egypt</b>	<b>Persia</b>	<b>India</b>
<b>Cotton Cloth</b>	<b>Wheat</b>	<b>Iron</b>	<b>Spices</b>

These four cards would be set aside. You will move through the room continually during this activity and will staple all the **Resource Packets** that the group has set aside. Their goal is to make as many of these packets of four cards as they can. When a group uses all the cards from a particular stack, they must wait until they can trade for more of those cards before they can put a packet together. Inform the

students that they *do not* have to have one of their group's resources in the **Resource Packets**.

Tell the students that it does not matter what particular fact is on the back of the card, the students are just reminded just to make sure that it does have a fact (so it will be counted as a resource). Inform them that while the trade is going on you will constantly move from group to group and staple the **Resource Packets** together. Their goal is to put as many of these packets of four "resource cards" together as they can. They will get one point for every **Resource Packet** they can put together and get stapled by the teacher.

Instruct the groups to designate one person to stay in the group and coordinate putting the **Resource Packets** together. Explain that this student will create four stacks (one for each of the four resources created by the other groups) and from these stacks they will then draw one "resource card" off the top of each stack to create a **Resource Packet**. These will be set aside to be stapled when you come by. This person will also be able to relay to the rest of the group members (who are trading resources) what resources they need to trade for.

- G. Getting ready to trade**—Have the groups divide out all the *completed Resource Cards* made earlier (not all of the 100 will have been made) equally amongst all of the group members. Tell them to keep **Resource Cards** that have not been completed off to the side in the group. These cannot be traded until they are complete.

The student chosen to stay in the group and put the **Resource Packets** together will not get any of the group's **Resource Cards**. Instruct the students that the rest of the group member will go out and trade for the **Resource Cards** of other groups. Tell your students that they cannot trade any more than two cards with any other student from another group at a time. After making a trade, tell the students that they are to go to their group and to give the newly acquired **Resource Cards** to the person in their group coordinating stacking the cards and creating the **Resource Packets**. They will then be informed by that group member what resources they need to go out and obtain before they make their next trade.

- H. Starting the Activity**—After giving the students time to organize and ask questions, tell them to go and trade with another. As they are doing this, you will constantly move from group to group stapling any **Resource Packets** that have been put together. When a student has traded all of their **Resource Cards** they can return to their group and take two of the cards that contain no facts and complete them by writing a fact on the back. They can then take these out and trade them.

## Setup Directions

### Activator 6

#### Teaching tip

Have extra cards available if the group finishes their original 100 and need more.



Give the groups ten minutes to trade. At the end of ten minutes instruct the students to go back to their groups. Announce that the groups have five minutes to replenish their resource cards. During this time they can write the facts on the back of any uncompleted **Resource Cards**. During this break from the trading make sure that every completed packet to this point has been stapled.

At the end of the five minutes, allow the groups to trade again for another five minutes. As before, you move around the room stapling the group's **Resource Packets**. At end of the five minutes have all the students return to their groups. Then give them a couple minutes to put all the packets they can make together as you go around and staple them together.

When all **Resource Packets** have been stapled, have each group count the packets they have put together. Give the groups a piece of paper and instruct the groups to fold it in half and put their completed **Resource Packets** inside of it. Have the groups list their civilization and how many **Resource Packets** they completed on the folded paper then staple it shut so the packets are secure inside. Inform the students that these will be used for the second part of the Activator tomorrow. Any **Resource Cards** that did not get into a **Resource Packet** is to be discarded.

- I. **Prepare for activity on Day 2**—On Day 2, return the group's **Resource Packets** to them. On the board, list the five civilizations and the number of **Resource Packets** they completed.

Instruct the students to get into their groups and to move their desks together close. Tell them to take the staples out of each the **Resource Packets**. Instruct the students to lay out all of the cards on the group's desks fact side up.

Give each student a copy of the **Civilization Answer Sheet**. Inform the students that they are to answer the questions on the sheet. It is highly unlikely that they will know very many (if any) of the answers to these questions. Explain to them that the answer to the questions can be found in the facts they received yesterday through trade on the back of the **Resource Cards**. Inform the students that the question number matches up with the fact number on the card. An example would be that the information needed to answer question number seventeen can be found on the fact that is numbered seventeen. Instruct the students that each of them is to write as many answers on their sheet as they can. They will be given fifteen minutes. At the end of that time, tell the students that you will collect the sheets from the group and get a group average from each of their individual sheets. Each correct answer will count as one point meaning that there are forty possible points on the sheet. This score will be combined with the score the group earned for creating the **Resource Packets**. Tell

them that rewards will be based on the group's combined scores.

- J. Starting the activity**—After asking for and answering questions, allow the groups to begin. The groups will have the hardest time answering the questions from the facts of their own civilization. Since they did not have to keep their own card in the **Resource Packets** they will be forced to remember the facts that they wrote on those cards yesterday. But they will be able to answer nearly all of the other questions from the facts they now have in front of them on the **Resource Cards**. At the end of fifteen minutes collect the **Civilization Answer Sheets** from the groups. Explain that these will be scored and these scores will be added to the groups **Resource Packet** score to get a final score for the group.
- K. Debrief the Activator**—Ask the students what they thought they were getting yesterday when they were trading **Resource Cards**. They will answer that they thought they were getting resources. Then ask them if they were getting something that they were not aware of. They will answer that they were also getting information. Ask them if when they traded they were concerned about getting information (the facts) from the other groups. The students will answer that all they were concerned with was getting a completed **Resource Card**. Stress that through the process of trade the different civilizations could not help but to learn about one another even if they did not realize it was happening. Explain to the students how this unintended and inevitable learning from one another allowed ancient civilizations to learn about different ways of doing things and incorporate those ways into their cities way of doing things. Through this contact they learned how the other person spoke, what they wore, what they ate, what their customs and beliefs were and how they did things differently. The person who made the trade will then return to his civilization with more than the resource traded for. They will also (even if this was not their intent) bring back information about the other civilization involved in the trade. Often that information picked up through trade would become the basis of positive change in their civilization. This process is known as “Cultural Diffusion.”

#### 4. Writing prompts

- A. What were you trying to do when you traded **Resource Cards**? What else did you do without knowing it?
- B. How did trade lead to cultural diffusion among different civilizations in the ancient world?

# Greece Resource Sheet

## Marble

1. It was in Greece where democracy was born. Democracy is government of the people.
  2. Greeks used olive oil as cooking oil and a spread.
  3. Greek thinkers were the first to consistently use observation and reason to find causes for why things happened.
  4. The Greeks called their thinkers “philosophers” which means “lovers of wisdom.”
  5. The basic plan for the magnificent Greek temples was simple rectangles, with columns supporting a gently sloping roof.
  6. Greek sculptures emphasized natural poses.
  7. A Greek physician named Hippocrates established ethical standards for doctors still in use today.
  8. Greek playwrights wrote some of the greatest plays in history. The three masters of Greek drama were Aeschylus, Sophocles and Euripides.
- 

# North Africa Resource Sheet

## Cotton Cloth

9. North Africa was a great center for Africa’s mineral wealth.
10. The African root language is Bantu.
11. Romans imported lions from North Africa for gladiatorial matches.
12. North Africans used camels to cross the Sahara desert to trade with Central Africa.
13. African artists used ivory, wood and bronze.
14. In many parts of Africa, it was believed that people could turn to the spirits of deceased ancestors for help.
15. African histories and folk tales were handed down through the generations by oral storytellers called griots.
16. In many parts of Africa families belonged to a lineage. These were groups of households that claimed a common ancestor.

# Egypt Resource Sheet

## Wheat

17. The Egyptians learned to make a paper-like material called papyrus.
  18. The sun god Amon-Re was the chief Egyptian god.
  19. Egyptians believed in an afterlife for the deceased.
  20. Egyptian doctors prescribed medicines still used today such as anise, saffron and castor.
  21. Egyptian priests-astronomers invented a calendar that became the basis for the modern calendar.
  22. Egyptian artists usually drew people's heads and limbs in profile.
  23. The Romans copied many of the Egyptian building techniques used to build the temple to Ramses II at Karnak.
  24. Egyptian mathematician Euclid wrote "The Elements". This book became the foundation for modern geometry.
- 

# Persia Resource Sheet

## Iron

25. The use of coins for trade was first introduced by the Persians.
26. A Persian thinker named Zoroaster taught that a single wise god ruled the world.
27. The wise god of Zoroaster's religion was called *Ahura Mazda*.
28. Zoroaster taught that Ahura Mazda was in constant battle with Ahriman (who was the prince of lies and evil).
29. According to Zoroaster, each individual had to choose to side with good or evil.
30. The Persians set up a common measure of weights and measure to improve trade.
31. Darius of Persia was the first ruler to divide up his empire into provinces.
32. Persian scholars catalogued 3000 years of Middle Eastern cultural achievements. This allowed those achievements to spread to India and Europe.

# India Resource Sheet

## Spices

33. "The Vedas" is a collection of Indian prayers, hymns and other religious teachings.
  34. Indian mathematicians developed concepts such as zero, decimals and fractions.
  35. Indian astronomers discovered the length of the earth's year.
  36. Indian sculptors worked with a clay called terra cotta.
  37. Indian medicine stressed a balance between body and mind.
  38. Yoga was developed in India to create a balance between body and mind.
  39. Indian mathematicians developed the system of writing numerals that is used today.
  40. The Indian religion of Hinduism taught that people would be reincarnated until they achieved a union with god.
-

# Civilization Answer Sheet

Name: \_\_\_\_\_ Group: \_\_\_\_\_

1. What is democracy? \_\_\_\_\_
2. How did the Greeks use olive oil in cooking? \_\_\_\_\_
3. What did Greek thinkers use to find the reason why things happened? \_\_\_\_\_
4. What does "philosopher" mean? \_\_\_\_\_
5. What was the basic plan for Greek temples? \_\_\_\_\_
6. What did Greek sculptors emphasize? \_\_\_\_\_
7. What standards did Hippocrates set? \_\_\_\_\_
8. Name the three masters of Greek drama: \_\_\_\_\_
9. North Africa was a great center for Africa's: \_\_\_\_\_
10. What is the African root language? \_\_\_\_\_
11. Why did the Romans import lions from North Africa? \_\_\_\_\_
12. How did North Africans use camels? \_\_\_\_\_
13. What kinds of materials did African artists use? \_\_\_\_\_
14. Who did Africans believe they could turn to for help? \_\_\_\_\_
15. Name of African storytellers who recited folk tales orally: \_\_\_\_\_
16. What is a lineage? \_\_\_\_\_
17. What was papyrus? \_\_\_\_\_
18. Name of the chief Egyptian god: \_\_\_\_\_
19. What did the Egyptians believe would happen to a person when they died? \_\_\_\_\_

*Activator 6*

20. What kind of medicines did Egyptian doctors prescribe? \_\_\_\_\_
21. What did Egyptian priest-astronomers develop? \_\_\_\_\_
22. How did Egyptian artists draw people? \_\_\_\_\_
23. Who was the Egyptian temple at Karnak dedicated to? \_\_\_\_\_
24. This Egyptian wrote "the Elements" which became the basis for geometry: \_\_\_\_\_
25. This was first introduced by the Persians: \_\_\_\_\_
26. What did the Persian thinker Zoroaster teach? \_\_\_\_\_
27. What was the god of Zoroaster's religion called? \_\_\_\_\_
28. Who was Ahriman? \_\_\_\_\_
29. What did Zoroaster teach that each individual must choose? \_\_\_\_\_
30. What common measures did the Persians establish? \_\_\_\_\_
31. Darius was the first ruler to do this: \_\_\_\_\_
32. What did Persian scholars catalogue? \_\_\_\_\_
33. What are "the Vedas?" \_\_\_\_\_
34. What did Indian mathematicians develop? \_\_\_\_\_
35. What did Indian astronomers discover? \_\_\_\_\_
36. What kind of clay did Indian sculptors use? \_\_\_\_\_
37. What did medicine in India stress? \_\_\_\_\_
38. What does Yoga attempt to do? \_\_\_\_\_
39. What system did Indian mathematicians develop? \_\_\_\_\_
40. What did India's Hindus teach people? \_\_\_\_\_

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# Release Form for Photographic Images

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