

## Hunter-Gatherer Simulation

**Purpose:** To simulate the importance of the environment in the development of civilizations.

### Game Set-Up:

- Divide the class into six groups
- Each group is given, or chooses, a block of land on a grid that is sub-divided into nine other regions. Do not tell the students what landforms are in each region, allow them to discover the layout of the land as they travel through the region. As they enter a land describe it and have the students draw it on their own map. Do not allow them to leave their own piece of land until one has developed the technology to conquer the other regions.
- Explain that the goal of the game is for the students to make sure that they have enough food to feed their people, and to hopefully advance as a civilization. They feed their people by gathering food or hunting which earns them food points. Those food points then turn into energy points that they can use to move, hunt, gather or turn into intelligence and technology points.
- When a group builds up five extra energy points that they are not using to move or gather food, then they can turn those into one intelligence point. This simulates that they have the time and energy to something other than looking for food. Once they accumulate three intelligence points they can trade those in for a new technology. This simulates that groups that use their energy to accumulate knowledge can advance. The technology can be anything you feel is appropriate for the particular group (farm equipment, new hunting or fishing gear, etc.) Once they get the new technology allow them to use fewer energy points to accomplish whatever task for which that piece of technology is used.
- Have all students start in the upper right hand corner of their grid. Explain to each group what they find in their land and then give them time to decide what they will do (move after a herd, hunt, farm, etc.) Start each region with the herd of large game moving out of the initial section of land so the group has to leave in order to follow the food. This forces them to use all of their energy to move and hunt in the first round. Example statement: "Land One, you are currently located in section 1a. It has a river that flows from the northwest corner to southeast corner. The land surrounding the river is dry and hard. The remainder of the region is grasslands. There is a heard of bison that have just left the region and moved into section 1e. What would you like to do?"
- After each group explains what they will do determine their fate using the suggestions below, or use your imagination to reward innovative thinking or punish lack of thought. Example: A group may say we follow the bison to 1e and hunt them. You respond by saying that it will take two energy points to move and three to hunt, this will cost you five energy points. Because you hunted large game you will receive five food points. They will then subtract the five energy points and add five food points. After every group has made a move allow them to convert the food back to energy 1 point= 1point to simulate that people get energy from eating food. Allow them to convert energy to intelligence and technology when it is their turn to move again.
- Every class will play the game differently and try to do something new. Be flexible and modify it any way that you wish.

- Every class I have played this with has had a group at some point resort to cannibalism because they have chosen to take a chance and not follow a herd. They get to a point where they do not have enough energy to hunt for food; therefore the group is sick and losing members. Feel free to deal with this as you see fit. You can give them energy for eating the dead members of the group, but you may want to charge them more energy points to hunt because there are less people available. You may want to not allow it.

### **Land Descriptions:**

**Land Region One:** This land contains a herd of large game, I usually choose Bison because it is easy for me to remember, that travels a path from 1a to 1e to 1c to 1f to 1h to 1d to 1a and then repeats itself. A group could survive by simply following the herd and hunting each time. They will not build up any extra energy, but they will survive. Do not tell the students the path, but have them follow and discover.

1a contains a river that flows diagonally through it and plains around it. The land is hard and rocky and does not contain much vegetation or other type of game.

1b, d, g and are simply plains that have no game.

1c contains a sparse forest with some medium size game, but no river. Allow the students to gather and hunt in the region, but after two or three turns, have the food begin to run out and force them to use more energy to acquire the same amount of food from the land. Each successive turn can be more difficult. Do allow them to see that their trash and restrooms are starting to grow many big-seed grains that they are eating. This simulates the reality of hunter-gatherer groups noticing that if they use the seeds from those big grains, it will grow more of them.

1e and 1i have the river from one 1a flowing through them. If the students try to plant seeds that they gather from 1c along the river allow them to do it, but make it difficult. The first two or three times charge them five energy points to get five food points, but as they continue, charge them less energy for five food because they can start to gather more seeds and are becoming more skilled.

1h contains a sparse forest with some medium size game, but no river. Allow the students to gather and hunt in the region, but after two or three turns, have the food begin to run out and force them to use more energy to acquire the same amount of food from the land. Each successive turn can be more difficult. Do allow them to see that their trash and restrooms are starting to grow many big-seed grains that they are eating. This simulates the reality of hunter-gatherer groups noticing that if they use the seeds from those big grains, it will grow more of them.

**Land 2** This land contains a herd of large game that travels a path from 2a to 2e to 2f to 2i and then goes back and forth. A group could survive by simply following the herd and hunting each time. They will not build up any extra energy, but they will survive. Do not tell the students the path, but have them follow and discover.

2a, b, c, e and f all contain a medium size forest with medium game, but contain no water supply that is appropriate for farming. Allow groups to gather and settle in the region. Feel free to have the food supply start to dwindle after five or six turns to again simulate the difficulty of hunter-gatherer groups being able to settle in one region.

2d and 2i are simply plains that have no game.

2g has a river that flows through it and occasionally attracts a small amount of small game.

**Land 3** This land contains a herd of large game that travels a path from 3a to 3b to 3c to 3f to 3e to 3d and back to 3a and then repeats itself. The only way this group can survive is to follow the herd. There are no other resources in the region to help them. Do not tell the students the path, but have them follow and discover. This is used to simulate the idea that some groups had to spend all of their energy looking for food.

All pieces of land are plains. The students will become very frustrated when they hear that their buffalo move each round and they are forced to chase them again.

**Land 4** This land contains a herd of large game that travels a path from 4a to 4b to 4f to 4e to 4d to 4a and then repeats itself. This group is given the ideal land for development of civilization. When they reach 4f most groups realize that by settling here they can support themselves without having to chase the large game.

4a, 4c, 4g, 4h and 4i are plains and contain no game other than when the large game wanders through.

4b has a sparse forest that gets picked clean quickly if a group tries to stay there.

4e and 4d have a river that flows through both regions. The land here is similar to the river land in region one. It can be farmed but is more difficult.

4f has a lush forest with a large amount of medium and small game. Hopefully, groups will see the benefit of trying to settle in this region and stay. After two or three turns, allow them to see that large numbers of grains are starting to grow in their trash piles and lavatories (the students love this part.) It allows them to see that the adoption of farming was a gradual discovery process. If groups start to build farms here they can receive five food cards for each energy they spend farming. This shows them that farms produce more food than hunting and gathering. Over time, allow the population of the group to grow. As they gather improved technology for farming by trading in energy cards for intelligence, allow them to gain more food for each energy point they spend farming. They will then start to accumulate intelligence/technology quickly which will simulate the rapid rise of civilization once farming started.

**Land 5** This land contains a herd of large game that travels a path from 5a to 5b to 5c to 5f and then travels back and forth along the same path.

5a and 5b contain a river that flows through the middle of the land. This is the same river that flows into 4f. If the group in land 5 starts to use the river to farm, then you can use this as an excuse to alter the flow of the river and create tension between groups four and five. If they decide to go to war then you can force them to roll against each other. I usually charge them one energy point for each attack and

determine the number they have to roll by looking at how advanced they are as a civilization and how much military technology they have developed by trading in intelligence points. For example, if group four has stored 50 intelligence points and have received advanced military technology such as steel weapons, then they can roll fifty times and may only have to roll a 2 on the die to take away an energy point from the other group. While group five may only have five energy points and no technology so they only get five rolls and must roll a six to take away an energy point from group four. Once a group has lost all of its energy in battle they have lost. The winning group can do what they wish with the losing group, kill or enslave them for example. The fight should be rigged so that region four who has more energy and intelligence is easily able to defeat region five. This simulates the manner in which European powers were easily able to defeat groups in the Americas because they developed at a much earlier time due to the favorable environmental conditions. This should only be done as the game is ending because you do not want a group lose and have nothing to do but watch the game.

5d, 5g, 5h and 5i are plains and do not have game.

5c and 5f are mountain regions. They have little vegetation, but do contain some medium size game. I have put copper and iron in the region to simulate resources that can be used to advance technology and promote trade, but the game is usually too involved by the time I get to that point that I usually leave it out.

**Land 6** This land is isolated by mountains and water and represents how Asia developed independently of the other regions because of its geographic isolation.

6a contains mountains and medium size game. The group can stay here for a small amount of time, but have the game start to thin so that the group is forced to explore other areas.

6b and 6d have mountains a sparse forest and medium size game. Again, you can allow them to stay here, but the ultimate goal is to push them into the middle and lower boxes.

6g has mountains and a forest to the left to isolate it, a river to the right and an ocean at the bottom. The river is suitable for farming, although not as productive as land four. The coast contains a tremendous amount of fish. This is used to simulate how permanent hunter-gatherer settlements developed along the coast in Asia because of the large number of fish and forest resources available in one place.

6e contains a river that is comparable to the river in land 1.

6h contains the delta of the river from 6e and an ocean with abundant fish.

6i is ocean

6f is plains and coast

6c is desert

Below are the student instructions

## Hunter and Gatherer Simulation

You are members of a hunter-gatherer society that consists of 100 people. Your job is to find a way to keep your group alive and become a more advanced civilization. You must find ways to use the environment around you to accomplish your goals. There are several types of cards that you will receive and use throughout the game. The first is energy cards, you will need these to move, hunt, gather food and build objects. The second type of card is a food card. You will need to earn food cards in order to feed the people of your tribe. You earn these cards by hunting and gathering. It costs five food cards to feed a tribe of 100 people each round. The third type of card that you can earn is an intelligence card. These cards can be used to develop new technology that will help your group succeed in the world. Five intelligence cards earn you a new technology. You earn intelligence cards by trading in unused energy cards or finding a new way to use the items found in the environment in a creative and inventive manner that improves the quality of life for your people. Each group will start with five energy cards. In addition to the energy cards, each group will start with some technology. All of you have the ability to control fire, use spears, and sew clothes.

Energy cards can be spent in the following ways:

Action	Cost	Food Cards
• Moving your entire tribe 200 miles	2 Energy Cards	
• Successfully hunting small game	1 Energy Card	2
• Successfully hunting medium game	2 Energy Cards	3
• Successfully hunting large game	3 Energy Cards	5
• Gathering from a sparse forest	2 Energy Cards	2
• Gathering from a lush forest	1 Energy Card	3
• Building a permanent shelter	3 Energy Cards	
• Building a semi permanent shelter	1 Energy Card	
• Transportable Shelter	0 Energy Cards	