



Activity One:
Are You Smarter Than An Antelope?



Subject Area / Grade Level:

US History 4th or 5th grade,
Colorado Standards.

Standard 4:

Students understand how science, technology and economic activity have developed, changed and affected societies throughout history.

Benchmark 1:

Identifying and explaining the consequences of scientific and technological changes (for example, navigation, transportation, printing, weaponry, agriculture, communication, and medicine).



Lesson Objective:

The students will play an interactive game that challenges and guides students to discover the answers to clues about the origins of America's trails and roadways.

Diversity/Differentiation:

The students will be paired into groups so lower level students can work with high level students.

Technology:

A promethium board (preferred, if available) will be used to write the clues on.

Materials:

A set of Dice

Chalk board

White Board or poster board paper

Procedures:

The students would be broken up into teams (depending on class size).

The first and hardest clue will be written up on the board, as well as the spaces for the answers (as seen below).

The students in the first team roll the dice to see how much each letter will be worth and then pick a letter of the alphabet that they think is in the answer. If, for example, they roll a seven and they choose S, they would get 14 points if there were two S's in the answer.

If the letter that's chosen is not in the answer, it becomes

the next teams turn.

If the letter chosen by the group is present in the answer, the group must do the math to determine how many points they get and what their total score is. Then they have one



chance to answer the puzzle. They must work as a group and only one answer counts. If they can't solve the puzzle, it's the next teams turn to play.

A group can spend 10 of their points to "buy" an easier clue if they want to. If they do, the next hardest clue is written on the board and the team loses 10 points. If they "buy" another clue, the team gets another chance to try and solve the puzzle, but cannot pick another letter if they have already picked one during their current turn. If they can't figure out the answer, then it's the next teams turn.

This process continues until the correct answer is reached and the winning team gets a prize or reward.

Game One

Spaces:

_____ & _____

Clues:

They call these becks in Yorkshire, burns in Scotland and kills in the northwest United States.

They contain something that exists in the same quantity today as at the beginning of the earth.

They are big or small, curvy or straight, and bring life and sometimes death.

They carry the only known substance that exists naturally as a liquid, solid, and a gas.

They contain a substance that requires a lot of energy to warm or cool.

They contain the only known substance that is lighter when it's solid.

These hold the most abundance substance on earth and compose up to 60% of our bodies.

Look for these and you'll almost always find a trail or a road nearby.

They contain something that covers 70% of the earth's surface.

Answer: Rivers & Streams

Game Two

Spaces:

Clues:

Indian, porcupine, lupine, turkey foot, and blazing star are all species of this, often found near trails.

Since the European settlement of the United States, only 3% of this has remained in its natural state.

There are more than 5,000 varieties of this organism present on the earth today.

Bison, deer, antelope, moose and others use this for a source of energy.

Since this can thrive in soils with less water and nutrients than many others, it is often used in modern day xeriscape gardens.

Answer: Prairie Grass

Game Three

Spaces:

_____ &

Clues:

Wildebeest populations are one of the largest of these.

Food supply, water, seasonal change and reproduction drive their movement.

Internal hormonal changes can cause these to seek new environments.

They may look different and sound different, but they share a love (and need) of vegetation and movement which has caused them, along with the help of others, to create the first prairie paths and trails.

Water and plants may provide the blueprints, but these act as the construction workers for the production of prairie trails.

It was the instinct for survival of these that created paths leading to new prairie frontiers.

Answer: Grazing & Migratory Animals

Game Four (extra credit)

Clues:

These terms for the formation and expansion of towns; pursuit of new frontiers, the advancement of technology;

and movement of constantly increasing populations, have been the cause for trail to superhighway conversion.

In the sequence of human history, what four things have driven major transportation changes?

**Answer: Civilization, Exploration,
Industrialism**

and Urban Sprawl