Clark Fork Watershed Education Program Education Portal Lesson: Cultural Survey Scientist "A day in the field on the Clark Fork River."

Prep time: 20 -25 minutes **Time:** Two 55 minute periods

Grade: 8 (Adapt for other grade levels)

Teacher Lesson Plan Outline:

Page 2: Key Vocabulary Page 3: Lesson Procedure Page 6: Standards Alignment

Materials:

- Compass for each student
- World Map
- List of place names for survey sites
- Video of Terry Tanner

For mock survey site:

- Survey Tape
- Survey Flags
- Meter tapes
- Compass or GPS units
- Field Notebook
- Bags for each team packed with mock artifacts

Objectives: Students will be able to:

- Relate the role of cultural survey scientist
- Understand the importance of cultural surveys
- Role play the part of a survey scientist
- Practice methods of survey
- Make inferences about their survey sites— "What happened here?"
- Collect data related to their site
- Report findings about their survey site

Correlations to Montana Curriculum

Standards (NOTE: detailed text of content standards and benchmarks appear at the end of this document.)

Benchmarks noted are for grade 8.

Science Standards:

Standard 1: Benchmarks 1, 2, 3, 6 **Standard 5:** Benchmarks 1, 2, 3, 4, 5

Standard 6: Benchmark 1

Mathematics Standards:

Standard 1: Benchmarks 2,5 Standard 5: Benchmarks 1, 2 Standard 6: Benchmark 1

Social Studies Standards:

Standard 1: Benchmarks 1,2,3 **Standard 3:** Benchmark 2

Additional Resource Documents and Websites

Education Portal Lesson: Cultural Survey Scientist (cont.)

Vocabulary

Archaeology
Cultural Resource Scientist (officer)
Survey
Compass Rose
Cardinal Directions
Map legend/key
Transect
*Place Names for important SK sites along the Clark Fork

Lesson Procedure

1. Engage (Pre-assessment)

- Who can describe what an archeologist does?
- Why would it be important to identify cultural sites?
- Who conducts investigations to discover cultural sites?
- Is archaeology science? Is it history?
- How do archaeologists know what happened at a certain site?
- How do archaeologists collect data?

Making Connections:

Students often think of Indian scientists only in the past tense and do not often recognize that Indian scientists are actively at work in today's society. Cultural surveys are mandated by the state of Montana for new state and federal building/construction projects. The goal of the cultural survey is to preserve important cultural sites that may or may not have been identified to date. The Montana State Historical Preservation Office and the Tribal Preservation Offices work in conjunction with the state departments completing the proposed projects.

The project manager typically contracts with a private archeological firm to conduct a site survey. Included in the site survey are plant surveys, soil surveys, and the cultural survey. The private firm in turn involves tribal leaders and tribal cultural survey scientists. Once the survey is completed, the firm will make a recommendation about the project site including the environmental and cultural impacts. Some recommendations for the site may be the need for re-routing, identification/location of artifacts, whether or not to distribute artifacts or keep artifacts in place at the site. In the event of a major disturbance such as disturbance of a burial site, the firm may recommend that a project be stopped.

Early archaeology practices in Montana were relatively crude and often resulted in complete removal of all artifacts from the site, with numerous artifacts ending up in the hands of private collectors and out of state museums. In the early 1990's The US government adopted the sacred sites law which provided protections over historic sites.

2. Explore

Complete the mock cultural survey activity.....

 Record transect information in field notebooks and note location of cultural items on grid paper

Education Portal Lesson: Cultural Survey Scientist (cont.)

- For each item, students should record location, description of the item, and try to create a story/profile for the owner of the item
 - o What did this person do?
 - o What was this item used for?
 - o Did this item belong to a man, woman, or child?
 - o How does this item relate to other items found in this transect?

3. Explain

Students share site survey information and make inferences about their cultural artifacts.

Students view the video "A day in the field on the Clark Fork River" featuring Terry Tanner. Students should reflect on the scientific process skills that Terry Tanner discusses in the video.

... Need to develop more here....

4. Elaborate/Extend

Mapping and Orienteering lesson
Compass Rose/cardinal directions
Indian map directions
Google Earth Place Names

<u>And Still the Turtle Watched</u> → book reflecting on a vandalized cultural site
Review of laws governing removal of artifacts

5. Evaluate (Assessment)

Evaluation for this lesson consists of the student science notebook activities and in-class presentation.