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Geography/Technology Spring 2009
GES 516-C01

Unit Name:	**Pioneers**
Lesson Name:	**Following the Oregon Trail**
Author:	**Natalie Warshaw**
Grade Level:	**Third Grade**
Time Allotted:	**Two Forty-five minute periods**
Description of Lesson:	**Students will use Google Earth to study the Oregon Trail. By using the software, students will specifically study the terrain, the actual distance of travel, and to infer the difficulties the settlers encountered in their travels west using the satellite images provided through Google Earth.**
Classroom Layout and Grouping of students:	**Computer lab with one computer per student.**
State Curriculum Standards:	**Colorado History Content Standard #2: Students know how to use the processes and resources of historical inquiry.** **Colorado Geography Content Standard #1: Students know how to use and construct maps, globes, and other geographic tools to locate and derive information about people, places, and environments.** **Colorado Geography Content Standard #2: Students apply knowledge of people, places, and environments to understand the past and present and to plan for the future.**
NETS*S (2007) Performance Indicators:	**Standard #3 (Research and Information Fluency): Students apply digital tools to gather, evaluate, and use information.**

Instructional Objectives: **The objective for the lesson is for students to:**

- **Observe geographical formations the settlers encountered on the trail.**
- **Design a path the settlers traveled from each fort.**
- **Use the measurement tool on Google Earth to determine the distance the settlers traveled from each fort and the distance of the entire trail.**
- **Infer through the use of Google Earth satellite images some of the difficulties the settlers experienced while traveling from fort to fort.**

Materials, resources, and Technology: **A computer lab, ideally with one computer per student. Google Earth software and Student worksheet (attached).**

Students' Present Level of Performance and skill: **For the students to be successful with this lesson, they will need a number of prerequisites. Students will need:**

- **Background knowledge of the Oregon Trail including but not limited to a brief overview of why settlers traveled west, what the Oregon Trail was, and the time period in which the Oregon Trail was used.**
- **Basic technology skills such as using a mouse, being able to open and close various applications, navigating different screens, and a basic foundation for using the computer as a learning tool.**
- **Ability to calculate simple addition problems**

Instructional Procedures: **Day One:**

1. **Students will gather as a group in the computer lab. The teacher, using a digital projector, will introduce students to Google Earth. The introduction will include how to open Google Earth, how to manipulate the Earth to rotate, spin and move in (closer) and out (farther). The teacher will then provide the students 20 minutes of just playing with the software to get use to the basic manipulations of the program.**

2. **The teacher will regroup the students and present how to use thumbtacks, how to make a path, and how to measure the distance of a path. Then provide the students their first challenge of thumb tacking the location of the school. They can also design a path from the west coast to the east coast and measure the distance. Students are given 15 minutes to accomplish these tasks.**

3. **Regroup the students and provide 5 minutes for closure that will include a review of the features covered and time for the students to share their thoughts and questions about their new learning.**

Day Two:

1. **The second lesson begins with the teacher briefly reviewing the features covered in lesson one (using the mouse, thumbtacks, designing paths, measuring distance).**

2. **Then present the feature of how to type in an address or place to locate it on Google Earth. Provide the students various addresses for them to explore (i.e. school, their home, The White House, etc.) Allow time for students to explore using this feature.**

3. **Regroup and present them with the worksheet they will use to develop the Oregon Trail using Google Earth. Model how they will use the guide and accompanying questions to locate the various forts the settlers stopped at, how to thumbtack that specific spot then design a path, including measuring distance, from fort to fort.**

4. **Students return to the computers to continue their work independently.**

5. **Regroup the students to discuss the questions they were required to answer and any new knowledge they acquired about the Oregon Trail by using Google Earth.**

Extensions and Remediation:	**Extensions for the lesson could include having the students add pictures and descriptions of each fort. If necessary, for remedial support, provide a premade temporary file of the Oregon Trail for a student to refer to while developing their own map.**
Adaptations for Special Learners:	**Sheltered instruction will be used for second language learners by introducing new concepts and skills with pertinent vocabulary and accompanying pictures.**
Assessment:	**Due to this being an introductory lesson, informal assessments will be done through observation and question/answer period. Also, this can be done through a review of student worksheet (attached).**
Student Products:	**Student artifacts will include worksheet answers and saved Google Earth temporary file of the Oregon Trail.**

Name:_____

Oregon Trail on Google Earth

1. **Locate these forts or towns. Thumbtack the locations on Google Earth.**
    a. **Independence, Missouri**
    b. **Fort Kearny**
    c. **Fort Laramie**
    d. **Fort Bridger**
    e. **Fort Hall**
    f. **Fort Boise**
    g. **Whitman's Mission**
    h. **Oregon City, Oregon**

2. **Create a path from fort to fort to represent the trail. What is the total distance of the Oregon Trail?**

3. **What was the shortest distance traveled between forts? Which forts were they?**

4. **Using the scroll to zoom in and out, determine what section of the trail was the most difficult to navigate. Why do you think so?**

5. **Which states does the Oregon Trail pass through?**

6. **Bonus:**
   Find these landmarks and mark them.
    a. **Jail Rock**
    b. **Chimney Rock**
    c. **South Pass**
    d. **Courthouse Rock**
    e. **Independence Rock**