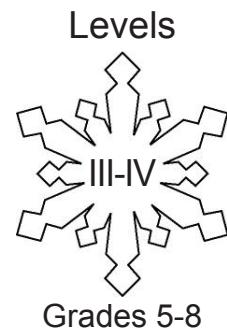


Google™ Earth Scavenger Hunt

Overview:

Satellite images of Earth are available through a wide variety of Web sources. Google Earth is a free downloadable software that allows students to have a "birds-eye view" of the world. Students will gain familiarity with Google Earth and develop an appreciation for the information it affords them.



Objectives:

The student will:

- learn to navigate Google Earth; and
- use Google Earth to go on a fact-finding scavenger hunt around Alaska.

GLEs Addressed:

Science

- [5-8] SA1.1 The student demonstrates an understanding of the processes of science by asking questions, predicting, observing, describing, measuring, classifying, making generalizations, inferring, and communicating.
- [6] SD2.1 The student demonstrates an understanding of the forces that shape Earth by describing the formation and composition (i.e., sand, silt, clay, organics) of soils.

Materials:

- OVERHEAD: "All Around Alaska"
- STUDENT WORKSHEET: "Google Earth Scavenger Hunt"

Activity Preparation:

If Google Earth is not installed on student computers, navigate to <http://earth.google.com> and click on Download Google Earth (free). Follow the on-screen instructions. Repeat for each student computer.

Activity Procedure:

1. Display the OVERHEAD: "All Around Alaska" on a multimedia projector in front of the class for the duration of this lesson.
2. Hand out the STUDENT WORKSHEET: "Google Earth Scavenger Hunt" and ask students to complete the activity. Assist with navigating Google Earth as needed.

Answers:

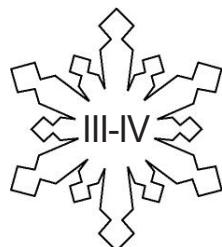
- | | |
|--|-----------------------|
| 5. 260,283 as of 9/06 | 10. Answers will vary |
| 7. Answers will vary between 8 and 40 feet | 12. Answers will vary |
| 8. West | 14. Answers will vary |

Name: _____

Google™ Earth Scavenger Hunt

Student Worksheet

Levels



Directions: In this lesson you will learn to navigate a Web site called Google Earth. Google Earth uses many satellite images that fit together like a puzzle to create an accurate image of Earth from space.

Imagine that your cousin Lucy, from Seattle, is coming to visit and wants you to go with her on a trip around Alaska. Lucy has several questions about the places she wants to visit. Use Google Earth to find the answers to her questions.

1. Log on to Google Earth by clicking on the blue and white ball among the icons on your computer screen.
2. Use the mouse until the hand is over Alaska. Click once and “grab” then drag to center Alaska in the globe. Double-click on it once to zoom in.
3. In the layers menu, on the lower left-hand side of the screen, click on the arrow next to the layer called “Primary Database.” This will reveal several options. First, click on the box to select “Terrain.” This layer will allow for three-dimensional (3-D) images. Next, scroll down and click on the box to select “Transportation.” This layer will show many of the airstrips in Alaska. Finally, click on the box to select “Populated Places.” This layer will identify major cities in Alaska.
4. Lucy will fly into Anchorage and wants to know how many people live there. Locate Anchorage on the classroom overhead, then find it on Google Earth. Hold the mouse over this spot and double click once to center the map over this area of Alaska. If necessary, use the rotation button in the upper corner to rotate the map so that Alaska is correctly oriented.
5. Now find the zoom tool on the upper right corner of the screen. It will have a plus sign (+) at one end and a minus sign (-) at the other end. This tool only appears when you move the mouse over it, and disappears when you move the mouse away. Zoom in by holding down on the plus sign until the red dot for Anchorage appears. The round compass is useful if you need to move the image to the east, west, north or south. Experiment by clicking the arrows until Anchorage is in the center of the screen. Then click on the red dot once to see the population of Anchorage. Write the answer below.

6. Lucy will fly from Anchorage to Nome to meet up with you. She wants to know the elevation of the Nome airport. Use the zoom tool to zoom back out until all of Alaska is displayed (hold down on the minus sign). Find Nome on the class overhead, then find it on Google Earth. Hold the mouse over this spot and double-click once to zoom in over Nome.
7. Find the airport and then hold the mouse over the airstrip and read the elevation (in feet) in the lower left corner of the screen. Write the answer below:

8. Lucy has always wanted to see the Yukon River. The shortest flight from Nome to the river will take you both to Kaltag. Lucy wants to know if Kaltag is on the west or east side of the river. Use what you’ve learned to find Kaltag and write the answer below.

Name: _____

Google™ Earth Scavenger Hunt Student Worksheet

9. Lucy is starting college next fall at the University of Alaska, in Fairbanks. Zoom in on Fairbanks (hint, hold the mouse over any airplanes in the center of the state until you find Fairbanks International Airport).
10. Lucy will need a job while she goes to school. She has experience working at a coffee house in Seattle. Find five businesses where she can work by clicking on “Dining” under “Primary Database” on the lower left side of the computer screen. In a moment several business names will appear on the screen. Write down any business names that contain the word “coffee,” “latte,” or “espresso.”

11. The last stop of your trip with Lucy will be to Juneau, Alaska’s state capitol. Use what you’ve learned to zoom into Juneau.
12. Lucy wants to know the name of three hotels near the airport. Find the airport and write the names of three hotels below.

13. Finally, Lucy wants to see a glacier. Use the terrain tool, located in the upper right corner (it has two plus (+) signs) to tilt the image so that you can see Juneau in 3-D! Then use the rotational tool to take a 360 degree look at Juneau until you see the white glacier to the north of town.
14. Lucy wants you to pick three more places to visit in Alaska. Use Google Earth to look at these locations and write their names below.

All Around Alaska Overhead

