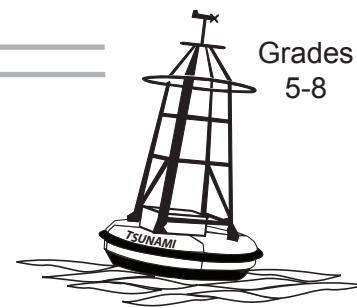


Placemarks in Google Earth

Grades
5-8



Overview:

Using Google Earth, students put “Placemarks” of emergency locations around their community. These locations include places that would be important during a tsunami such as the clinic, airport, school, safety offices and shelters. Placemarks also can add additional descriptions of the locations.

Targeted Alaska Grade Level Expectations:

Geography

- [A1] A student who meets this content standard should use maps and globes to locate places and regions.
- [A2] A student who meets this standard should make maps, globes, and graphs.
- [B1] A student who meets the content standard should know that places have distinctive geographic characteristics.

Technology

- [A1] A student who meets the content standard should use a computer to enter and retrieve information.
- [A2] A student who meets the content standard should use technological tools for learning, communications, and productivity.
- [A3] A student who meets the content standard should use local and worldwide networks.
- [B1] A student should be able to use technology to locate, select, and manage information. A student who meets the content standard should identify and locate information sources using technology.
- [E7] A student should be able to use technology responsibly and understand its impact on individuals and society. A student who meets the content standard should integrate the use of technology into daily living.

Objectives:

The student will:

- put Placemarks of emergency locations in Google Earth;
- customize the Placemarks; and
- add descriptions to Placemarks

Materials:

- Computer with Internet access and Google Earth installed (NOTE: Google Earth may be installed for free at <http://earth.google.com>)
- GPS (optional)
- STUDENT WORKSHEET “Placemarks in Google Earth”

Activity Preparation:

Before students locate places in their communities they should download satellite imagery of their community from the ATEP website at http://www.aktsunami.com/student_resources.html; choose the Satellite Imagery link and select the appropriate community. When they download the file it will open as an overlay in Google Earth and be listed under Places in Google Earth. For some communities this

imagery is more recent than what is available on Google Earth. Have students save this when they close Google Earth so it will be available when it opens next time. If the Google Earth imagery is more recent they can uncheck it so it is not visible.

Emergency locations can be saved using the **Save As** feature. The default file format is KMZ. The files will only be on the local computer it was created on. However, after the file has been saved it can be shared and emailed to others or put on a school website.

If there are tsunami sirens in the community they may be difficult to see in Google Earth. Obtain the coordinates ahead of class time or have students mark a waypoint with a GPS to enter the coordinates in Google Earth. (NOTE: For directions on marking and naming waypoints, see the GIT Exercise "GPS - Using the Global Positioning System," available at <http://www.aktsunami.org/lessons/GITExercises.html>.)

Activity Procedure:

- 1) Distribute the STUDENT WORKSHEET: "Placemarks in Google Earth."
- 2) Students brainstorm a list of places (medical services, police, fire, airport, tsunami shelters) that would be important to know the location of in case of an emergency such as a tsunami, fire, flood, etc., and write the places in the table in Section 1.
- 3) Students locate their community in Google Earth and find the places they listed in Section 1. They will create placemarks of the locations using the pushpin Placemark tool icon in Google Earth. They will customize the locations and add additional descriptions.

Extension Idea(s):

Students create a document with the information of the emergency locations and telephone numbers to be taken home and shared with their family.

Answers:

Section 1: The following checklist is to be used to assess student identification of important locations within the community. Check each location that should be identified on student maps. Add additional locations if necessary.

| ✓ | Locations noted with placemarks in our community |
|---|--|
| | Medical services (clinic, hospital) |
| | Police, VPSO |
| | Fire |
| | Airport |
| | Tsunami shelters |
| | Tsunami sirens |
| | Community center |
| | School |
| | |
| | |

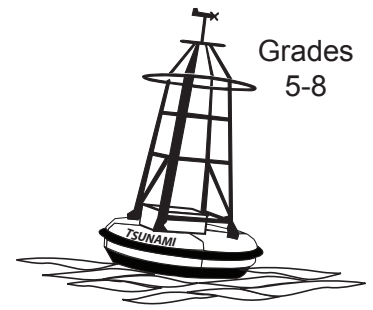
Section 2: Print out a map with all locations correctly noted with placemarks to serve as an answer key for student maps.

Name: _____

Student Worksheet

Placemarks in Google Earth (pg 1 of 2)

Grades
5-8



In Google Earth, Placemarks are used to identify locations. They are like pushpins that often are seen on paper maps. The default icon for a Placemark is a pushpin, but it can be changed. In addition to marking the location, additional information can be added in the description of a Placemark.

Section 1:

In the table below, list the places in your community that would be important to locate in case of a tsunami or other emergency.

| ✓ | Locations noted with placemarks in our community |
|---|--|
| | |
| | |
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| | |
| | |
| | |

Section 2:

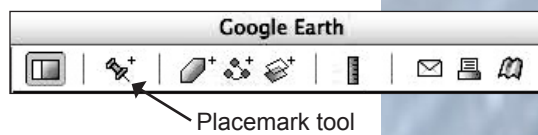
Locate your community in Google Earth.

In a web browser, go to the ATEP website and download the satellite imagery for your community (http://www.aktsunami.com/student_resources.html). Open this file in Google Earth. This file will overlay the Google Earth image. Depending on your community this imagery may be more recent than what is on Google Earth.

Using the navigation tools, find the buildings where emergency services are located in your community.

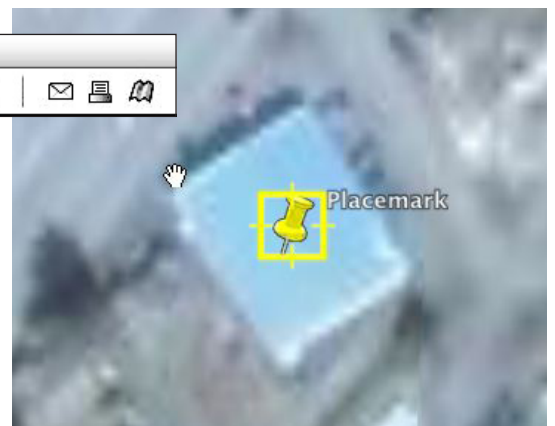
Zoom in close to one the emergency locations, such as a medical clinic.

Click on the Placemark tool or select **Add** -> **Placemark** from the menu.



Position the Placemark pushpin at the exact location of the emergency structure.

In the Placemark dialog box give a descriptive name to the location, such as "clinic."

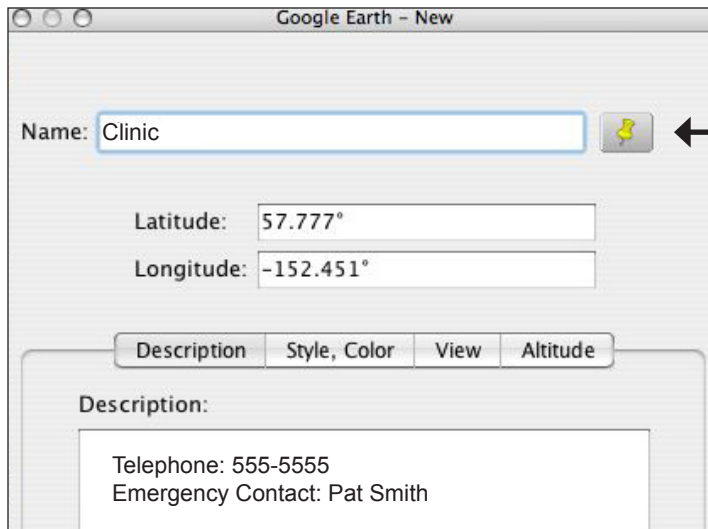
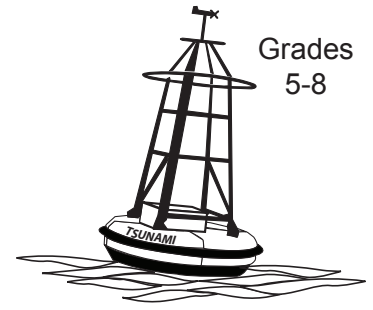


Name: _____

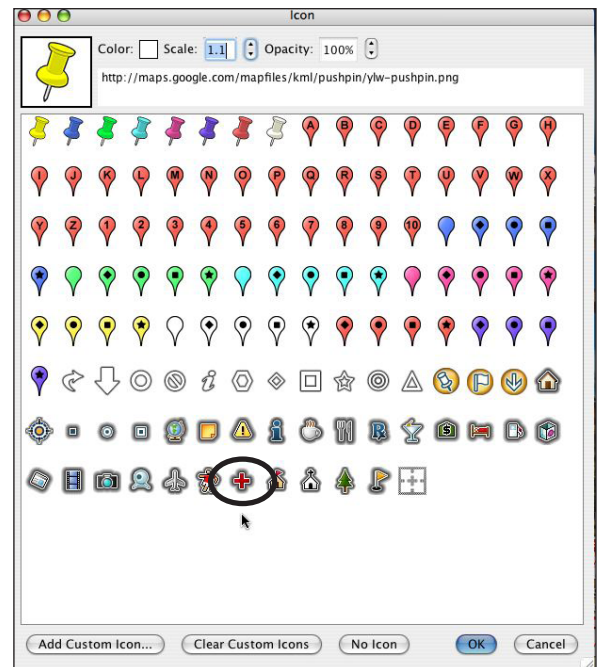
Student Worksheet

Placemarks in Google Earth (pg 2 of 2)

Grades
5-8



View additional icons



In the **Description** box type additional information, such as the telephone number(s) of the service, emergency contact name(s), etc.

Next to the **Name**, click on the pushpin icon to bring up additional icons. For the clinic, choose the red cross located near the bottom of the icon choices.

If a Placemark needs to be edited, right-click (PC) or ctrl-click (Mac) on the Placemark name in the **Places** sidebar. Select **Get Info** from the **Edit** menu to bring up the Placemark dialog box.

Add Placemarks of all the emergency locations in your community. In addition to the emergency locations, also add Placemarks such as the community center, school and location of tsunami sirens and others services that are on your list. In the description for the Placemark, add the telephone number or the service along with any other important information.

Print out a copy of the map from Google Earth (or take a screenshot of it and paste it in a word processing document). In addition to the printout of the map, also create a separate list of the telephone numbers for emergency services. Print it out with the map.

