

Title: The Satellite Presentation Project

http://www.exploratorium.edu/learning_studio/satellite/lesson.html

Introduction:

You are the project manager for a satellite. Your assignment is to obtain continued funding (many people are depending on you). In order to accomplish your assignment, you must convince the Congressional Subcommittee on NASA Spending (your classmates) that your mission merits continued funding. Should you fail to convince committee, your satellite will be decommissioned and allowed to burn up in the atmosphere.

Assignment:

1. You and your team will convince the committee (your classmates) that your satellite should be allowed to continue its mission.
2. Your assignment is to "surf" the internet to look up information on your satellite (including; launch date, purpose, data and pictures collected, and other little known facts).
3. Using the information, make a presentation to the class to convince them that you should receive funding to continue your mission. Remember your life's work is tied to this piece of hardware. You should have visual aids (poster, overhead transparencies, or models) and handouts for your presentation.
4. Hand in a research log (where did you get the information; title and address) of all information used.
5. Hand in printouts of all information used

Materials:

- computer(s) with modem
- printer
- telephone line
- Internet access (program and account)
- handouts
- material for visual aids

References: The Internet - Places to start:

1. History of Space Exploration
 - <http://www.c3.lanl.gov/~cjhamil/SolarSystem/history.html>

2. Satellites

- <http://spacelink.msfc.nasa.gov/NASA.Projects/Satellites/>

Assessment: You will be graded on your:

□ Presentation -

- preparation (were you ready?)
- clarity and effectiveness of the presentation (were you interesting and convincing?)
- effectiveness of visually aids used
- were handouts used?

□ Written report submitted (to include)

- outline of presentation (may be the same as handout)
- research log (title and address of all information used)
- print out of all information used

Presentation Methods:

1. Illustrate drawing and data on blackboard
 - materials: chalk (colored), blackboard, eraser,
2. Flip Chart -
 - materials: flip chart, color markers,
3. Hand Drawn Poster
 - materials: Poster boards, paints or markers
4. Overhead Transparencies
 - materials: overhead projector, screen, laser printer (color), color markers, scanner, and programs
5. Imported Images, Graphs, and Data
 - materials: big screen monitor(s), computer, disk space, paint/drawing program, method of display
6. Student generate images
 - materials: paint/drawing program, method of display
7. Video Movies
 - materials: video camera, video tape,
8. Computer Assisted Presentation
 - materials: big screen monitor(s), computer, disk space, computer programs, such as PowerPoint, HyperCard, video spigots, and others (unlimited possibilities)

The Great Satellite Search

http://www.exploratorium.edu/learning_studio/satellite/sat.html

Time Required:

3 to 4 weeks

intermixed with
other lesson
plans

Concepts:

1. The uses of satellites
2. The development of satellite technology

Objective: The students will be able to:

1. Use the Internet to do research.
2. Organize information and make a presentation on a satellite to the class.
3. Discuss the capability of the leading edge of technology for a given time
4. Use modern technology* (computer graphic programs, computer presentation programs, or other forms of reproduction of information) to make an effective presentation. This objective is optional and will depend on the resources available at your school.

Preparation:

1. Make handouts outlining the assignment (or use the one provided below, see "Assignment Handout" button).
2. Prepare students to use the internet.
3. Teach the computer skills necessary to make an effective presentation.*

Materials:

- computer(s) with modem and printer
- telephone line
- Internet access (program and account)
- handouts (provided)
- computer application programs*

*Note: Although this is not a computer application class, it is important for the students to know how to use the computer. The programs required are a word processor, a graphic program to import graphics, some form of presentation program, and communication program. The extent that you include computer application skills into your class will depend on the resources at your school and your comfort level with computers. You may want to team teach with the computer teacher at your school.

Assignment:

Assessment:

Students will be graded on:

1. Your assignment is to browse the Internet to look up information on the history of your satellite (list of possibilities are enclosed, see the "Assignment List" button below).
 2. Using the information, make a presentation (including visual aids and handouts, see the "Presentation Methods" button below) to the class.
 3. Hand in an outline of your presentation
 4. Hand in a research log (where did you get the information; title and address, see the "Research Log Form" button below) of all information used.
 5. Hand in printouts of all information used.
1. Presentation -
 - Preparation (were you ready)
 - Clarity and effectiveness of the presentation (were you interesting and convincing?)
 - Effectiveness of visual aids used
 - Were handouts used?
 2. Written report submitted (to include)
 - Outline of presentation (may be the same as handout)
 - Research log (title and address of all information used)
 - Print out of all information used

Presentation Methods

Below is a list of possible presentation methods. Each method requires different levels of technical sophistication.

1. Illustrate drawing and data on blackboard
 - materials: chalk (colored), blackboard, eraser,
2. Flip Chart -
 - materials: flip chart, color markers,
3. Hand Drawn Poster
 - materials: Poster boards, paints or markers
4. Overhead Transparencies
 - materials: overhead projector, screen, laser printer (color), color markers, scanner, and programs
5. Imported Images, Graphs, and Data
 - materials: big screen monitor(s), computer, disk space, paint/drawing program, method of display
6. Student generate images
 - materials: paint/drawing program, method of display
7. Video Movies
 - materials: video camera, video tape,
8. Computer Assisted Presentation

Extensions and Feedback

1. Satellites are on the cutting edge of technology. The information may be compiled and put on a timeline to see the evolution of the satellite and technology.
2. This format may be used for just about any topic or subject. A list of missions involving human space flight is also available at <http://spacelink.msfc.nasa.gov:80/NASA.Project/Human.Space.Flight/>
3. The class may also obtain and analyze to data from specific satellites.
4. Cross-curricular possibilities are social studies, history, and computers.