

Where Has NASA Been?
Organizing Research Data Using Bubbl.us
7th/8th Grade Technology Education

Time Allotted	50 minutes
Overview	Students will research NASA's history regarding unmanned missions to other planets and asteroids. Once data is collected, students can create a flowchart to neatly organize their information. In addition, students will be assigned one mission to research in greater detail.
Objective	Students will understand the following: <ol style="list-style-type: none">1. The evolution of outer space exploration2. How to look up data using the Internet and encyclopedias3. Organization of facts using flowchart programs, such as Bubbl.us
Standards	Standards for Technological Literacy <ul style="list-style-type: none">• Ch. 3 Benchmark 1: The Characteristics and Scope of Technology (Grades 6-8)• Ch. 6 Benchmark 11: Applying the Design Process (Grades 6-8)
Materials	<ul style="list-style-type: none">• Computer with Internet access• Free Bubbl.us account for each student
Procedure	<ol style="list-style-type: none">1. 5 min. Once the students are in the computer lab, make sure each one is logged into their Bubbl.us account. If you are choosing to use the free application, have the students go to the website.2. 5 min. Students will need to pick two or three planets/asteroids from the list below to research. The amount can be altered as time allows.<ul style="list-style-type: none">• The Sun• Mercury• Venus• The Moon• Mars• Saturn/Jupiter• Pluto• Braille• Vesta• Ceres

	<ol style="list-style-type: none">3. 15 min. Depending on the student's level of familiarity with Bubbl.us, a short tutorial may have to be prepared.4. 20 min. Assuming students are able to use the program, have them start on a web of information about unmanned space missions containing all of the data they have collected.5. 5 min. Finally, students can print their mind maps and either select their own topic for their next project or have it assigned to them by the instructor.
Evaluation	Since learning about unmanned space exploration is something that most students are unfamiliar with, an appropriate evaluation for this type of activity might be to scan the completed mind maps. Also, students could select their own topics for their next research paper/project and write a "cover letter" as to why they believe they have the requisite knowledge.

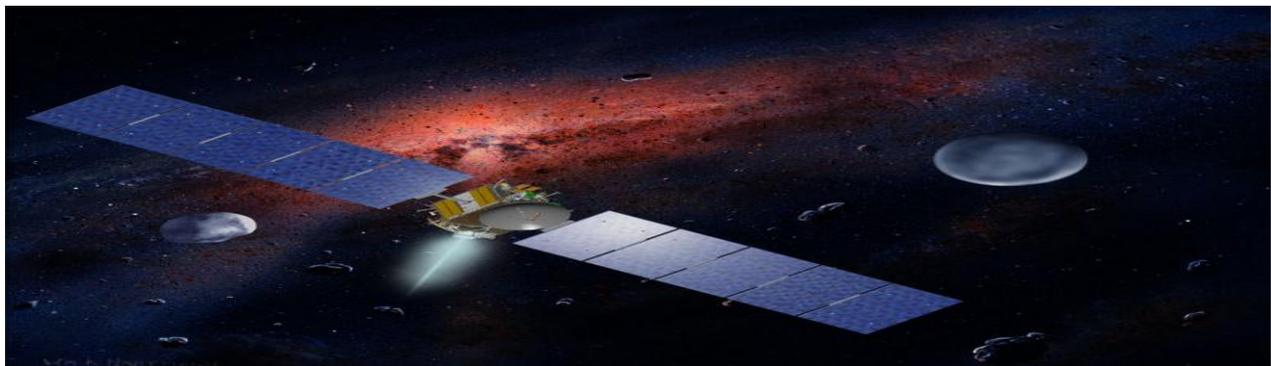


Image Reference

http://en.wikipedia.org/wiki/File:Dawn_Flight_Configuration_2.jpg