Exploration of Mars
Grade: High School

Objectives
- Since the dawn of the space age in the 1960's, we have sent spacecraft to the most easily reached places in our solar system, such as Mars.
- For exploration of celestial bodies, NASA has developed a three-phase strategy; reconnaissance, surveillance, and in-depth study.
- Each mission to Mars has made specific discoveries and raised questions to be answered by future missions.

Materials
- Research materials about recent exploration within our solar system.
- Computer with Internet access
- FriendFeed account

Procedure
1. Begin the activity by initiating a brief discussion in which your students express their opinions about whether there is life on Mars. Ask them to back up their opinions with facts they have learned.

2. Conclude the discussion by reviewing with our students what they know about spacecraft that have been sent by NASA to explore our solar system. Let students know that since the 1960's, we have sent spacecraft to explore Mars and other places in our solar system that are most easily reached.

3. Mention that NASA has developed a three-phase strategy for scientific exploration of celestial bodies. Then tell the class that they are going to be finding out more about NASA's program and plans for further exploration of the solar system. Invite them to suggest ways of conducting their research.

4. Have groups of students contact NASA to learn the basic outline of the three-phase strategy (reconnaissance, surveillance, in-depth study). They should find out the criteria and limits that define each phase, discover which technologies each phase utilizes for exploration, and understand how each phase builds on information learned from previous phases.

5. Have groups make FriendFeed accounts and find others in the network who have information and opinions on Mars, past missions, what discoveries these missions have made and any questions that were raised by each mission.

6. Have them then work together after collecting information from NASA and FriendFeed information to compile a report on their findings.

1: Adapted from: [http://school.discoveryeducation.com/lessonplans/program/lifeonmars/](http://school.discoveryeducation.com/lessonplans/program/lifeonmars/)