

INTERNET EXERCISE: EXPLORING THE SOLAR SYSTEM

23

OBJECTIVES

After completing this lab, the student will be able to:

1. make a list of current NASA missions involved in exploration of the Solar System.
2. discuss each mission's purpose and/or current results.
3. describe any new technological developments related to each mission.
4. discuss the relevance of each mission to society.

STUDENT MATERIALS

pencil
note pad

LAB MATERIALS

The instructor should provide the following item:
high speed computer with Internet connections

STUDENT REQUIREMENTS

Students may work alone or in teams of not more than three. However, each student is expected to write his own mission reports, not simply copy from other team members. Turn in all of your mission reports at the end of your lab period.

INTRODUCTION

At any given time, NASA may have missions related to exploring the Solar System. These may include direct flights to planets, asteroids, or comets. Sometimes these missions are carried out using high altitude balloons or as part of a Space Shuttle flight.

In order to be cost-effective, some missions may have multiple purposes. For example, the Voyager missions to the outer planets also made measurements of the interplanetary medium and observations of bright stars while in route to each planet. No sense wasting time just coasting when you could also take advantage of the space craft's other abilities.

In this lab you will attempt to find several current Solar System missions. These may include the most recent completed mission, a mission in progress, or a mission about to be launched. Do not use missions which have been superseded by a more current mission. However, you may need to refer to these previous missions in order to best interpret the most recent results of the current mission or to explain why another mission is needed.

PROCEDURE

1. Read over the report forms so that you will know what type of information to look for about each mission. Use a note pad to write down bits of this information as you find it.
2. The NASA site at <http://www.nasa.gov> is a great place to begin your search. You may also want to use a search engine such as Lycos, Yahoo, etc., to locate additional information or to locate any private missions. Try to identify at least three missions.
3. On separate Mission Report forms give the title and launch date of each mission found.
4. Answer the questions on the report forms about each mission. Use additional pages if necessary.
5. Staple your report forms together and turn them in by the end of lab class.

NAME: _____

LAB SECTION: _____

MISSION REPORT FORM 1

MISSION TITLE: _____ LAUNCH DATE: _____

1. Make a list of any URLs you located which contain information about this mission.

2. Describe the mission's purpose.

3. Describe any new technology (if any) developed for this mission.

4. State any results obtained by the mission or anticipated results from the mission.

5. Discuss the relevance of this mission to society (i.e., why would anyone other than a scientist care about such a mission?).

NAME: _____

LAB SECTION: _____

MISSION REPORT FORM 2

MISSION TITLE: _____ LAUNCH DATE: _____

1. Make a list of any URLs you located which contain information about this mission.

2. Describe the mission's purpose.

3. Describe any new technology (if any) developed for this mission.

4. State any results obtained by the mission or anticipated results from the mission.

5. Discuss the relevance of this mission to society (i.e., why would anyone other than a scientist care about such a mission?).

NAME: _____

LAB SECTION: _____

MISSION REPORT FORM 3

MISSION TITLE: _____ LAUNCH DATE: _____

1. Make a list of any URLs you located which contain information about this mission.

2. Describe the mission's purpose.

3. Describe any new technology (if any) developed for this mission.

4. State any results obtained by the mission or anticipated results from the mission.

5. Discuss the relevance of this mission to society (i.e., why would anyone other than a scientist care about such a mission?).