Space Exploration Merit Badge

Pre-requisite Worksheet

Name: _____ Troop/Pack Number: _____

Scout Masters, please give pre-requisites to scouts prior to workshop.

Scouts must complete pre-requisites prior to workshop. Be sure to answer all parts of each question, otherwise pre-requisites will be incomplete. Scouts must be at least 13 years or hold first class scouts status. Scouts must arrive in uniform and have a Merit Badge Application fully filled out and signed by their Scout Master. Scouts must have read the Space Exploration Merit Badge pamphlet.

Scouts must bring pamphlet and completed pre-requisites to the workshop session.

The Detroit Science Center Merit Badge Counselor reserves the right to give partial or no credit to scouts not completing the above requirements.

Requirement 1: Tell the purpose of space exploration and include the following:

a. Historical reasons,
b. Immediate goals in terms of specific knowledge,
c. Benefits related to Earth resources, technology, and new products.

Historical reasons:

_____

_____

_____

_____

Immediate goals in terms of specific knowledge:

_____

_____

_____

Benefits related to Earth resources, technology, and new products:

Requirement 2: Design a collector's card, with a picture on the front and information on the back, about your favorite space pioneer. Share your card and discuss four other space pioneers with your counselor.

FRONT	BACK
Name of Space Pioneer:	Information about Space Pioneer

Space Pioneer:

Space Pioneer:

_____

_____

_____

Space Pioneer:

_____

_____

_____

Space Pioneer:

_____

_____

_____

Requirement 4: Discuss and demonstrate each of the following:

c. How satellites stay in orbit

_____

_____

_____

d. How satellite pictures of Earth and pictures of other planets are made and transmitted

_____

_____

_____

Requirement 5: Do the following: (Attach to worksheet and bring to the Detroit Science Center workshop on May 31, 2008)

a. Using magazine photographs, news clippings, and electronic articles (such as from the Internet), make a scrapbook about a current planetary mission.
b. Design an unmanned mission to another planet or moon that will return samples of its surface to Earth. Name the planet or moon your spacecraft will visit. Show how your design will cope with the conditions of the planet's or moon's environment.

Requirement 8: Discuss with your counselor two possible careers in space exploration that interest you. Find out the qualifications, education, and preparation required and discuss the major responsibilities of those positions.

Possible Career: _____

Qualifications: _____

_____

_____

Education: _____

_____

_____

Preparation required:

_____

_____

_____

Major Responsibilities of this position:

_____

_____

_____

Possible Career: _____

Qualifications: _____

_____

_____

Education: _____

_____

_____

Preparation required:

_____

_____

_____

Major Responsibilities of this position:

_____

_____

_____

Scoutmaster Signature: _____ Date: _____