



March 13, 2010

Merit Badge Information Sheet [MBIS]

Merit Badge: Space Exploration

Counselor Name: Joan D. Mimnaugh

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Counselor Number: 801

Prerequisites:

list all requirements which need to be completed in advance

- 2. Design a collector's card about your favorite space pioneer. Discuss with your counselor 4 other space pioneers.
- 5. Do two of the following:
 - a. Discuss a manned and unmanned exploration mission.
 - b. Make a scrapbook about a current planetary mission.
 - c. Design an unmanned mission to another planet.
- 8. Discuss two possible careers in space exploration. Find out the qualifications, education and preparation.

Class Work:

list all requirements which will be completed in class

- 1. Tell the purpose of space exploration.
- 3. Identify and explain rocket parts.
- 4. Discuss and demonstrate
 - a. The law of action-reaction
 - b. How rocket engines work
 - c. How satellites stay in orbit
 - d. How satellite pictures of Earth are made and transmitted.
- 6. Describe the purpose, operation and components of the Space Shuttle or International Space Station.
- 7. Design an inhabited base located on the Moon or Mars.

Home Work:

list all requirements which need to be completed "at home"

- 3. Build, launch, and recover a model rocket. Make a second launch to accomplish a specific objective. (Please bring a note from Scoutmaster or parent explaining what you have done.)

Use of "Online" Workbook: Please bring the worksheets with prerequisites done!

Purchase of Merit Badge Booklet: You will need your own book in class.

Number of Sessions needed: 4 Sessions = all day
each session is 1 hour 25 minutes

Maximum Class Size: 10 Scouts

Notes and/or Comments:

We will NOT build or launch model rockets at the MB Academy. You may have already done this. If so, please bring a note from your Scoutmaster or parents indicating that you have built and done two launches of a model rocket. One of the launches must have been for a specific purpose, such as to hit a specific spot, to carry a payload, or to carry a camera, etc. You will receive the Merit Badge. If you have not already built and launched a rocket, you may do this after the Merit Badge Academy, and then this will be the only requirement that you have left to do. I will sign you off when you complete this requirement and I can help you make arrangements to a launch.