

Critical Issues Forum
Benchmark II
(2006-2007)

* In Benchmark I you developed a working definition of space to use throughout the rest of the project. You also learned about the history of people's interest in and interaction with space, why space might be interesting or fascinating, and you began to learn about the technologies needed for use in space.

* The purpose of Benchmark II is for you to research deeper into people's interactions in space. Your task is to examine decisions that have been made by various nations to use or "to develop" space and you will investigate people's approaches to controlling the use of space.

* You are to analyze these issues in the context of the four domains (scientific/environmental, economic, social/cultural, and political/geo-political) that help you to build an understanding of what has happened in the past and what is happening in the present.

* Make sure you carefully reference all materials you use in your text and in a bibliography.

Objective 1 - Space Programs: Who has Them?

You will do research to understand the kinds of space programs that have been done in the past, are in existence now, and what programs might be being planned for the future.

Suggested Activities: 1. Refer back to Benchmark I and create a database of the scientific and technical requirements to develop a space program. Give some estimates of a) necessary raw materials, b) necessary personnel, and c) possible costs.

2. Write a persuasive essay examining the benefits of a space program to society.

3. Make a list of nations that have space programs, and a further list of nations that have the potential of developing space programs. Indicate the purpose/use of each program. Indicate if these programs are civilian, military or dual use.

4. Compare and contrast space exploration with terrestrial exploration.

5. Create a timeline or an outline that shows US-Soviet competition in space. Use government pronouncements of policy; indicate the

uses, success/failure of the programs. Be prepared to give a carefully prepared comparison of the two nations.

6. Choose two other nations and create case studies of the space programs of those nations.

7. Make a list of movies or TV shows (series, mini-series) that have as their theme "Conflict in space." View one and write a review of it.

8. From the books you researched in Benchmark I make a list of books that discuss "Conflict in space." Write a book report on one of these books.

9. Explain if there are different kinds of space weapons, how they would be used in conflict. Prepare graphical examples.

Objective 2 – Treaties and other Agreements

You will develop an understanding of the international treaties and agreements dealing with space. You will examine these treaties from the perspective of the nations and programs you identified in Objective 1.

Suggested Activities

1. Prepare a database of the treaties and agreements that govern uses of space. Indicate the purpose of each document; who has agreed to/signed/ratified each.

2. Prepare a debate on the effectiveness of one of the agreements you researched above.

3. Research and collect editorial cartoons that relate to space politics.

4. Research and present the arguments for and against one of the treaties or agreements you have in your database.

5. Prepare a debate to support or reject ratification of a space treaty.

6. Prepare a report on the scientific and technological resources needed to monitor and verify compliance with any space treaties. Be prepared to explain how these resources work.

Objective 3 – Non-Treaty approaches to Space Security

You will investigate approaches that are outside treaty obligations.

Suggested Activities:

1. Research and prepare a listing of space-based defenses; indicate existing and future defenses. What are the qualities of a space-based defense?
2. Create a time line of the development space-based defenses.
3. Compare and contrast “space weapons” and “space-based defense.”
4. Prepare a debate on whether some, any, or all “missile defense systems” are related to space security.
5. Prepare a position paper on whether space-based defenses violate existing treaties and agreements.
6. Prepare a position paper on how confidence-building efforts such as the International Space Station (ISS) promote cooperation in space and lessen competition among nations.

Objective 4– Issues of Accountability

Using the agreements you identified in Objective 2, learn about the policy positions that different nations have toward these agreements.

Suggested Activities:

1. Prepare a chart to show what scientific and technical measures are needed to assure adherence to treaties regarding space. Explain how these work.
2. Prepare a database of national and international organizations that monitor possible military activities in space. Give examples of their work.
3. Prepare a debate on the topic: “Resolved, because space is not owned by anybody or any nation it does not require security.”
4. Write an Op-Ed piece on the need for more open communications about the use of space.

5. Prepare a debate on the role of public opinion regarding space issues.

6. Prepare a list of topics about space security that interest you, but about which you are unable to find more information.

7. Prepare a paper on some of the acknowledged problems in space development (e.g., space debris). Explain your approach to solving these problems.