



Critical Issues Forum (CIF) 2008-2009.

Benchmark I – Background Knowledge

In Benchmark I you will examine the objectives from the point of view of the scientific & environmental; social & cultural; economic; political & geopolitical domains to demonstrate a comprehensive understanding of the nuclear weapons in the world today.

Objective 1: Your task is to clearly demonstrate, in a carefully constructed project, an understanding of nuclear weapons in the world today. You will know the history of these weapons and their current numbers and locations. You will show your knowledge of the people and places that were (are) important in the story of nuclear weapons. The project must be your own work with clear and correct citations from any work borrowed from others. All work not your own, including photos, graphics, multimedia, charts, and graphs must be credited within your text and in a bibliography.

Suggestions: Note that these are suggested areas of research; they are not your tasks. You may choose to look at any, all, or none of these areas. The information you gain from doing research in these areas will help you to construct your project.

1. Start building your own glossary of terms and phrases related to nuclear weapons. Include the names of people and places.
2. Research the history of and development of nuclear weapons. You might want to pay particular attention to the Cold War.
3. Research different types of nuclear weapons and how they work.
4. Learn which countries:
 - a. have nuclear weapons,

- b. might have them,
 - c. have had nuclear weapons,
 - d. want them.
5. Develop a basic idea of the stockpiles of these weapons
 6. Have a knowledgeable person (scientist, politician, writer) come to your class to talk about nuclear weapons. Expand your research through questions to your invited expert.

Objective 2: Your task is to clearly demonstrate, in a carefully constructed project, an understanding of the processes involved in the production of nuclear weapons in countries around the world. Your project will show that you know the basic weapon types and their construction as well as the effects of nuclear weapon *use* and the effects of nuclear weapons *testing*. The project must be your own work with clear and correct citations from any work borrowed from others. All work not your own, including photos, graphics, multimedia, charts, and graphs must be credited within your text and in a bibliography.

Suggestions: Note that these are suggested areas of research; they are not your tasks. You may choose to look at any, all, or none of these areas. The information you gain from doing research in these areas will help you to construct your project.

1. Continue to build your glossary of nuclear weapons terms and phrases. Begin to include definitions of such concepts as proliferation, nonproliferation, deterrence and related ideas.
2. Investigate the effects of the use of nuclear weapons on Hiroshima and Nagasaki
3. Investigate the effects of nuclear weapons testing.
4. Research the nuclear fuel cycle. Learn to relate the cycle to how nuclear weapons are produced.
5. Research the sciences and technologies involved in nuclear weapons and how these scientific domains and technologies are used.

6. Do a job search for different kinds of workers in the weapons cycle. You may want to consider job duties, knowledge required, special skills, past experience, etc.
7. In your research, consider that science and technology are not the only assets necessary for the production of nuclear weapons; politics, economics, and other factors are equally important and must be included.
8. Visit or invite a nuclear expert to your classroom to discuss these issues. Expand your research through questions to your expert.

Objective 3: Your task is to clearly demonstrate, in a carefully constructed project, an understanding of the reasons/motivations behind efforts of various countries to acquire nuclear weapons. Distinguish between the motivations of “old” and “new” nuclear countries as well as potential nuclear countries. The project must be your own work with clear and correct citations from any work borrowed from others. All work not your own, including photos, graphics, multimedia, charts, and graphs must be credited within your text and in a bibliography.

Suggestions: Note that these are suggested areas of research; they are not your tasks. You may choose to look at any, all, or none of these areas. The information you gain from doing research in these areas will help you to construct your project.

1. Research why the earliest nuclear powers developed these weapons, e.g., the United States and Russia. You might want to pay particular attention to the Cold War.
2. Learn the reasons why more recent nuclear powers developed these weapons, e.g., India and Pakistan.
3. Investigate why some nations currently might want to become nuclear-weapons powers, e.g., Iran and North Korea.
4. Investigate the reasons why some countries have decided not to have nuclear weapons.

5. Compare and contrast the motivations a country might have for wanting a nuclear weapon with those a non-state organization might have for using a nuclear or radiological device.

NB: In the above investigations, in addition to national security, consider such factors as land and resource needs, religious history and doctrine, the personal ambitions of leaders, and other possible motivations.

At the end of Benchmark I you will have created an original project, which demonstrates your knowledge and understanding of the objectives of this Benchmark. Your project will be your own work. When you refer to the work of others, you must have complete internal citations. You must have a bibliography of the resources you have cited. All work not your own, including photos, graphics, multimedia, charts, and graphs must be credited.