



Stewardship  
Education  
Resource Kit

# Question List

## "The Manhattan Project"

*Read over these questions before watching the film. Write the answer to the questions as you hear the topic discussed on the film, "The Manhattan Project."*

### **FACTUAL QUESTIONS FROM THE MOVIE**

1. What happened in 1933 that caused the immigration of many German Jewish scientists to the United States and to U.S. university faculty?
2. Who approached President Roosevelt concerning the German research on nuclear fission? Who influenced this individual?
3. What U.S. Army general was in charge of the Manhattan Engineering District, construction of the Pentagon, and construction of the industrial facilities of the Manhattan Project?
4. List two processes that have been used to process uranium. What is weapons grade uranium fuel?
5. What scientist did General Groves choose to manage the Manhattan Project?
6. What was the code name of the facility that contained the calutrons for electromagnetic separation of uranium? Complete the sentence: The magnets of the calutrons were "so strong that they could pull..."
7. What was the name of the facility that had a cascade of barriers for gaseous diffusion separation of uranium-235 and uranium-238 in uranium enrichment?

8. What were some of the worker's replies when asked what they did at the nuclear enrichment facilities in the early years during the war?
9. What percentage of U.S. electricity was consumed by the industrial facilities involved in the production of the first atomic bomb?
10. What was the name of the 10 foot (10,000 lb) uranium "gun-bomb"? What was the name of the "rotund" plutonium implosion bomb?
11. What is the significance of the date July 16, 1945? What word expresses the concept of "destroy to renew"? What 17<sup>th</sup> century poet expressed this in a poem?
12. What was the name of the plane that delivered the first atom bomb to its target at Hiroshima, Japan?

### **RATE THE VIDEO**

*Circle the rating you choose for this video.*

- 4 Interesting, flows smoothly, good transitions, well-organized
- 3 Mostly interesting, some poor transitions, organized but with weaknesses
- 2 Lower interest level due to lapses in focus, poor transitions in parts, weak organization, strays from topic
- 1 No clear focus, jerky and rambling, poorly organized

## **SMALL GROUP DISCUSSION**

*Discuss these questions relating to the long-term stewardship aspects of the Manhattan Project.*

1. What is the environmental legacy from the production of the atom bomb? What impact does long-term stewardship, as defined in class, have on the environment?
2. What agency or organization should provide funding for environmental remediation of nuclear waste generated during weapons production? What agency or organization should provide funding for long-term stewardship?
3. How has long-term stewardship changed over time?
4. What changes in long-term stewardship would you like to see happen?
5. Who or what groups are the most active in long-term stewardship?