The Ultimate Issue – Nuclear War – Your Choice

Humans and the Environment Lab

Name ___________________________

Answer the following questions after you have read, studied, and thought about the sixteen stations (panels) on the effects of nuclear weapons.

The questions can be answered in order (except the last one). Be brief....... Answer on these Sheets

Plate # 1

1. Read the last sentence of the quote by Albert Einstein. What does he mean we need to change our way of thinking?

2. Name three of the sponsors of this plate

   1) ____________________________________

   2) ____________________________________

   3) ____________________________________

Plate # 2

1. How quickly can the United States be destroyed? __________________________

2. What does this plate say about Limited Nuclear War?

3. What do you think they mean when they say the U.S. and the Soviet Union (now called the Union of Soviet Socialist Republics) are holding each other’s population hostage?

Plate # 3

1. Why do you think they wrote, “Persons killed 1,400,000 up to 12 – 31 – 45”?

2. Compare the before and after pictures of Nagasaki and try to find and list five areas or structures that are still recognizable after the bomb hit.

   1) ____________________________ 2) ____________________________ 3) ____________________________

   4) ____________________________ 5) ____________________________

3. According to this plate, what was the main cause of the destruction shown?
Plate # 4

1. In this plate, the figure of the person indicates that he/she was killed. Why do you think his/her image was left on the wood? Can you make a guess?

2. Why do you think cloth would burn patterns into their skin?

3. According to this plate, could the United States handle the amount of burn victims a nuclear explosion would produce? Why?

Plate # 5

1. What does “PSI” stand for? _______________________________________________________

2. What condition is the courthouse in? _________________________ How many “PSI”? _____

3. What is the “shock front” and how does it affect objects in its path?

4. The human body can endure a blast better than buildings. According to this plate, what are three reasons a person would die by the blast?
   1) ______________________  2) ______________________  3) ______________________

5. Can you guess why the paint burns off before the blast wave strikes?

Plate # 6

1. The Hiroshima and Nagasaki bombs are now obsolete. What kind of bombs are now being used? ______________________________ ______________________________

2. What does ground zero mean? ______________________________

3. Why do you think a nuclear bomb is exploded above the ground (air burst) and not exploded on the ground? ______________________________

4. At what distance from ground zero would you guess your home would remain in a livable condition? ______________________________

5. Do you think the stature of liberty remained standing? ______________________________

6. What does on megaton (one-mt) mean? ______________________________
Plate # 7
1. Why do you think thermal effects are more severe than blast effects? _____________________
2. List the thermals effects of Circle # 5. ______________________________________________
3. List the blast effects of Circle # 2. ___________________________________________________
4. The thermal effects of circle # 3 include the melting of asphalt surfaces. List three asphalt surfaces and explain how they may affect your daily existence.
   1) __________________________ Effect _____________________________________________
   2) __________________________ Effect _____________________________________________
   3) __________________________ Effect _____________________________________________
5. What county is the Statue of Liberty found in? (Approximately 5 miles from ground zero – Do not mark the map) ______________________________________________________________

Plate # 8
1. What is a “REM”? _________________________________________________________________
2. What is the maximum dosage of “REMs” that can be absorbed by the human body without serious effects? _________________________________________________________________
3. Even though the people in the white areas escape the short-term damage of radiation, are they completely safe from the radiation effects? _________________________________________________________________
4. How many times greater is the dose of radiation from a one megaton bomb compared to a nuclear power plant like Three Mile Island? _________________________________________________________________

Plate # 9
1. Studying the chart...Do you think the Russians should be more concerned with nuclear casualties or the United States? ___________ Why? __________________________________________
2. Can you think of any reasons why the two super powers would want to continue the arms race? (Look at past war statistics from the soviets for one of their reasons) List those reasons.
   ________________ ______________________________________________________________
   ________________ ______________________________________________________________
   ________________ ______________________________________________________________
3. How does the loss in nuclear war compare to the loss in past wars for the United States? (loss of lives) Past ___________ Nuclear War ________________
4. Who will be the real causalities in a nuclear war for the United States?
5. Regardless of this Plate, ________________ there will be a winner in a thermonuclear war? Why?
Plate # 10

1. How does the effect of the sun on the human skin now compare with the sun’s effect after a nuclear attack?

2. If the Soviets and the U.S. engage in nuclear war, will they be the only countries affected after the fighting has stopped?

3. Can you guess (and list) some of the environmental changes that may occur after a nuclear war?

___________________  ___________________  ___________________  ___________________

___________________  ___________________  ___________________  ___________________

4. When were the nuclear tests done on Bikini Island? _________________________________

How much longer before it can be inhabited? _________________________________

5. Important Question!!!! Would you want to survive a full scale nuclear exchange between the superpowers? _________

Why?

Plate # 11

1. After reading this plate, do you think that the cartoon of the two hunters has any validity? ____
   Why or why not? _________________________________

2. Briefly compare the U.S.’s destructive power today over what it was in World War II.

3. What does “MIRV” mean? ___________________  ___________________  _________________  _______________
Plate # 12

1. What was former Secretary of State McNamara’s decision on how much force we needed to defeat the soviets? 

How much do we now have?

2. Based on this knowledge (previous question), how do you feel about the arms race? Is it time to stop?

3. What does “ICBM” stand for? (You may have to ask)

Plate # 13 (There is not plate – it is an exhibit on the desk)

1. Who are the Hibakusha?

2. What is the significance of the origami animals?

3. Look at the artwork done by the survivors. How do these pictures make your feel?

Plate # 14

1. What does “Mission Limited” mean in the cartoon?

2. What does the American Air Force Association think of Nuclear War?

3. What is considered “Acceptable Damage” according to Think Tank Analysts?

4. What is Billy Graham’s View on Nuclear Weapons?
Plate # 15

1. Of the agreements reached with the Soviet Union, which one do you think is the most substantial?

2. Do you think both sides have a willingness to drop the Arms Race?

3. Do you think we will achieve a treaty banning nuclear arms with the Soviets? ____ Why?

4. Do you think the Soviets will achieve a treaty banning nuclear arms with us? ____ Why?

Plate # 16

1. How has Hiroshima reacted to Nuclear War? What is their stand?

2. What does Dwight D. Eisenhower say about Peace, People and the Government?

Answer the following Questions after completing all others

Has what you have learned today changed your views in any way on nuclear war? Explain what your general feelings are on this subject.
Bibliography

Books


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Additional Sources: