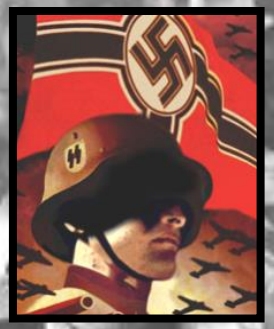
DR. HARTNELL

King America

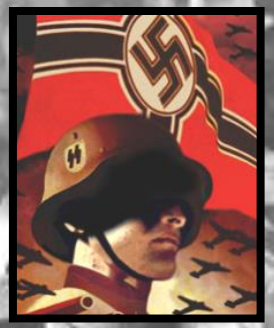


TODAY'S UNIT & LESSON

Unit #4:
King America

Lesson 12
(AH 4.12)

Dr. Hartnell's 135 LIVE!



1945

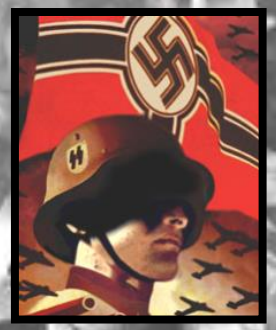
JULY – AUGUST

The **Potsdam Conference** is **held** from **July 17th** until **August 2nd** **in Germany**.

The city of Potsdam is occupied by the Allies and borders the city of Berlin.

The **U.S.**, **U.S.S.R.**, **and Britain participate**.

Dr. Hartnell's 135 LIVE!

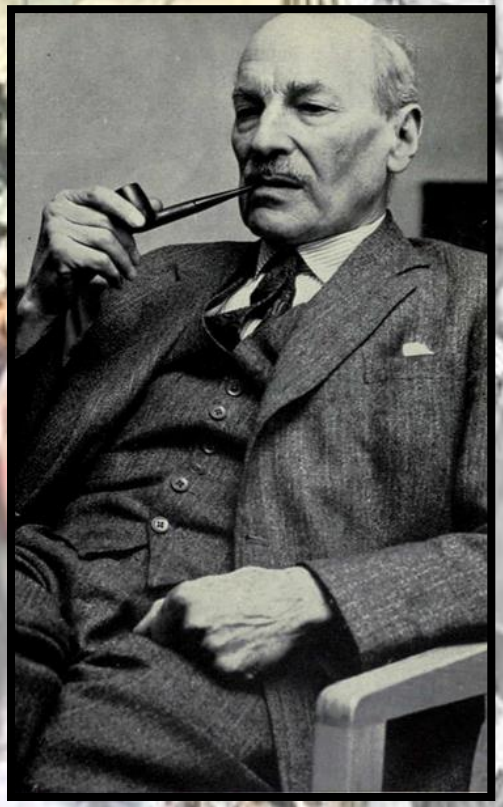


1945

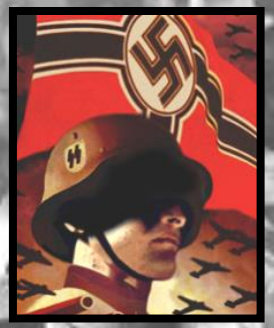
JULY – AUGUST

Truman, Stalin, and Clement Attlee attend.

Truman took over as President following FDR's passing in April. Attlee was Britain's new Prime Minister following Churchill's political party's defeat.



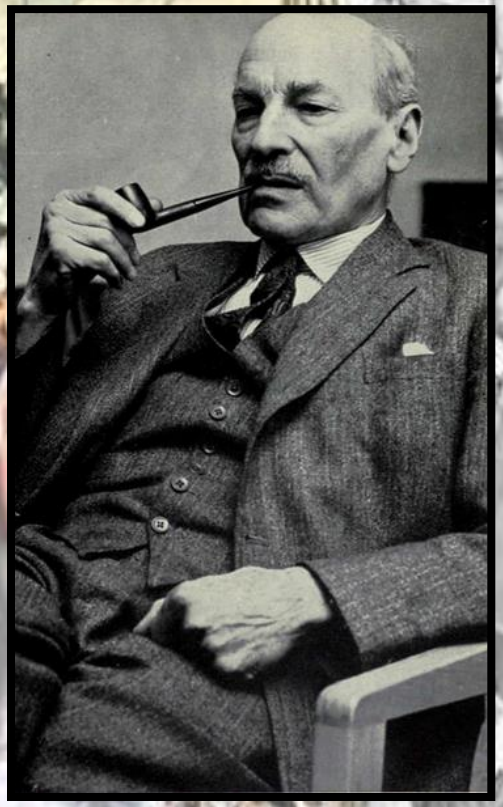
Dr. Hartnell's 135 LIVE!



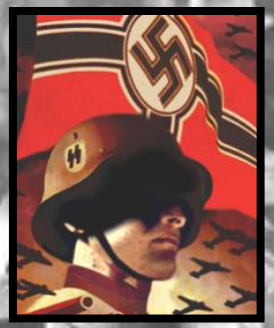
1945

JULY – AUGUST

In a Parliamentary system, whichever political party "wins" the most votes in their election gets to select the next Prime Minister. (It would be like Democrats winning Congress and then they get to pick the President.)



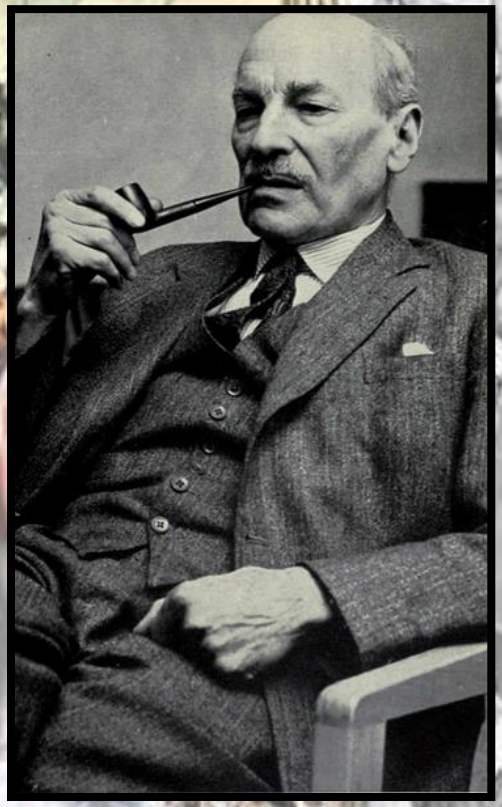
Dr. Hartnell's 135 LIVE!



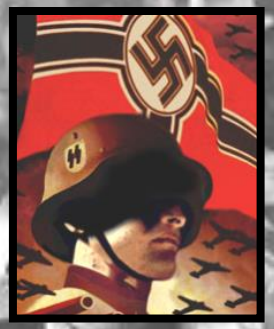
1945

JULY – AUGUST

There is no 22nd Amendment when it comes to the PM position. Margaret Thatcher (1979-1990) and Tony Blair (1997-2007) served as PM for the longest in modern history. (FYI: FDR served as U.S. President for the longest, from 1933-1945).



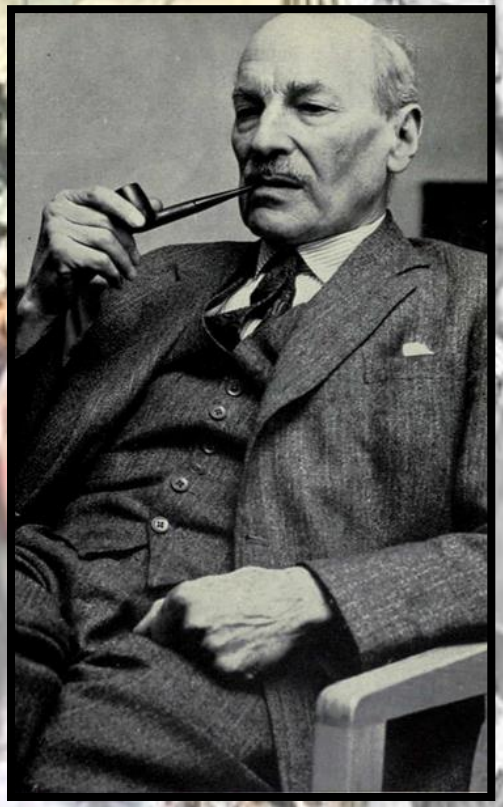
Dr. Hartnell's 135 LIVE!



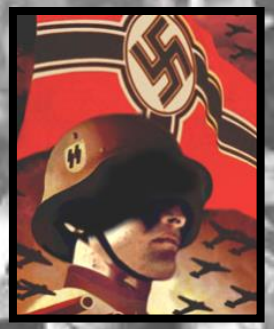
1945

JULY – AUGUST

While voters generally liked Churchill and approved of how he was running the war, they disliked many other decisions made by his political party (the Conservative Party) and voted for the Labour Party.



Dr. Hartnell's 135 LIVE!

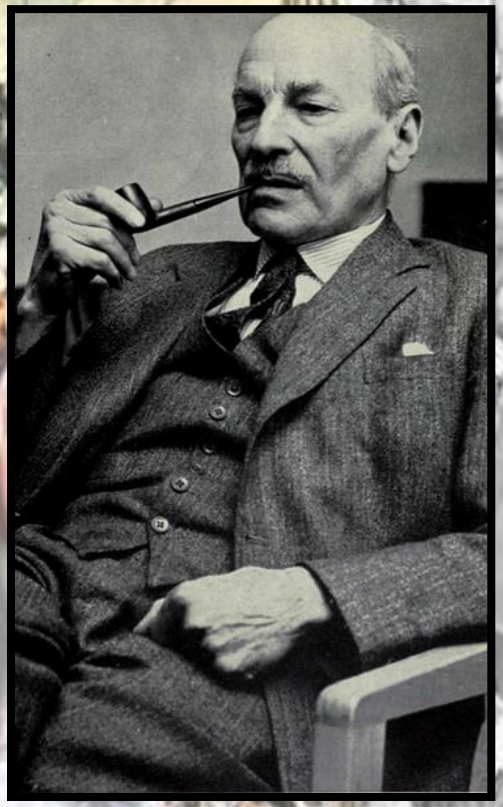


1945

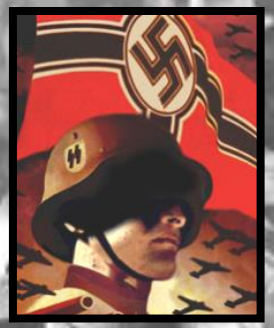
JULY – AUGUST

Labour won 393 seats in Parliament to 212 for Conservatives and 12 for the Liberal Party.

They also took the Popular Vote 47.7% to 39.9% (Conservative) and 9% (Liberal).



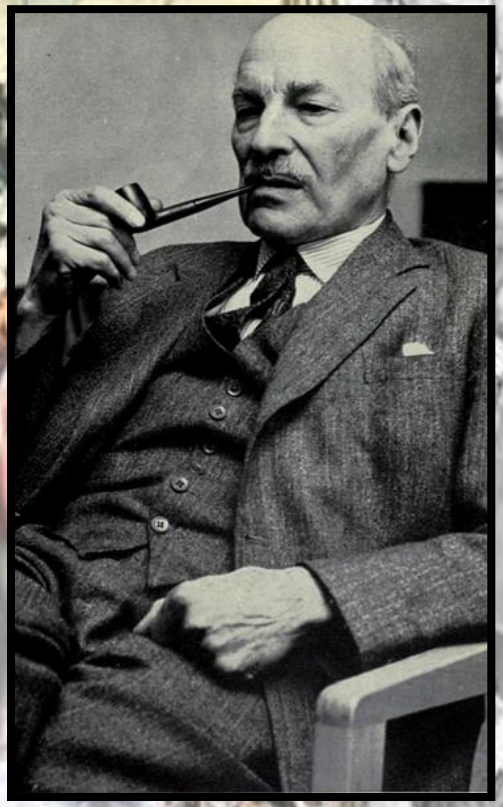
Dr. Hartnell's 135 LIVE!



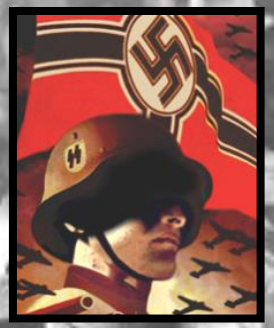
1945

JULY – AUGUST

Labour then selected Clement Attlee as the new Prime Minister. He began his term on July 26th and governed until he was replaced in 1951 by… Winston Churchill once again. (Churchill would serve as PM from 1940-1945 and 1951-1955.)



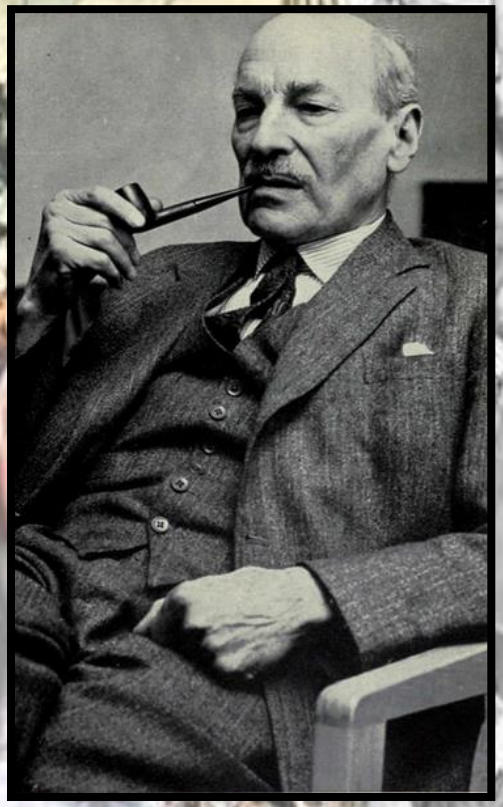
Dr. Hartnell's 135 LIVE!



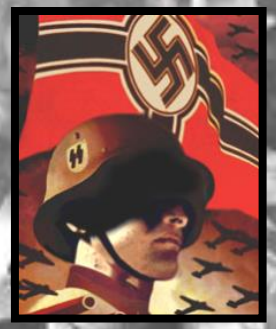
1945

JULY – AUGUST

At Potsdam, Truman, Stalin, and Attlee discuss how to govern Nazi Germany and how to establish post-war order in Europe. Many of their decisions result in future wars and world conflicts.

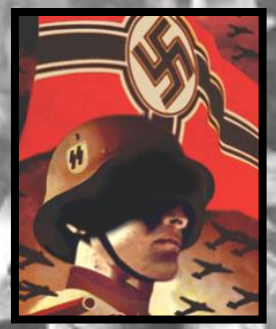


Dr. Hartnell's 135 LIVE!



1945

Dr. Hartnell's 135 LIVE!



1945

JULY – AUGUST

They decide:

1. To divide French Indochina (Vietnam) along the 17th parallel for operational convenience. Britain will accept Japan's surrender in the southern part; China will accept in the northern part.

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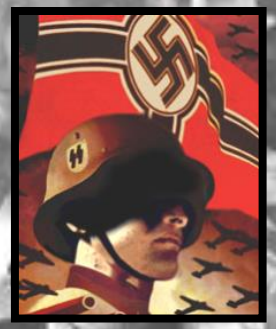
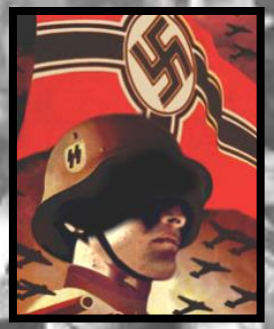


1945

Dr. Hartnell's 135 LIVE!



1945

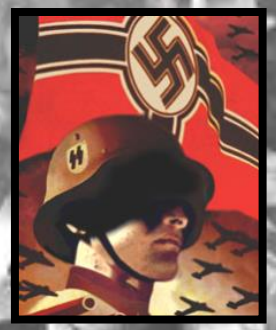
JULY – AUGUST

They decide:

Eventually, this division results in a Communist North Vietnam and a Democratic South Vietnam…

…and paves the way for the Vietnam War.

Dr. Hartnell's 135 LIVE!



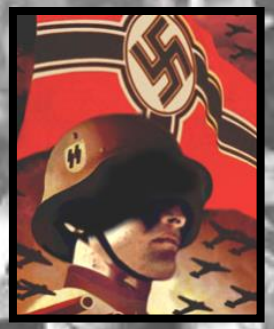
1945

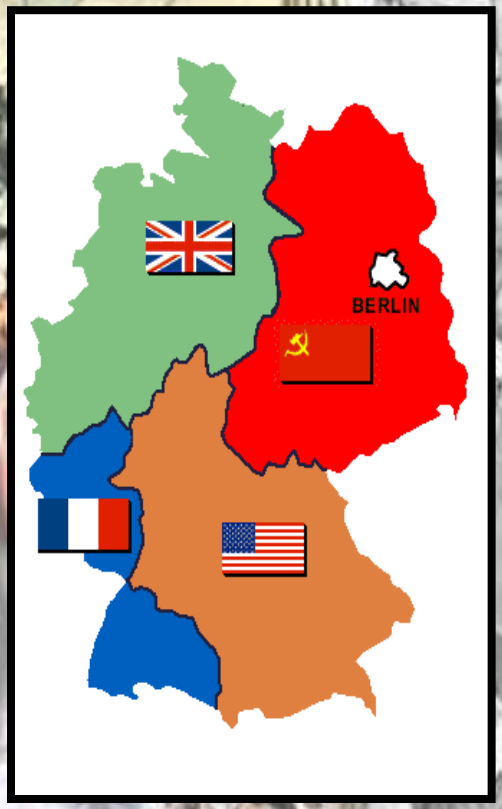
JULY – AUGUST

They decide:

2. To return Germany to its 1937 pre-expansion size, fix borders, and divide the capital of Berlin and all of Germany into 4 occupied zones.

Dr. Hartnell's 135 LIVE!





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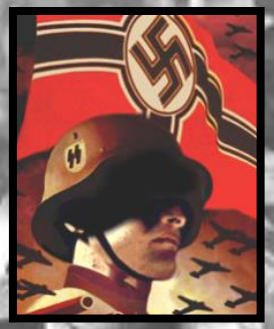


1945

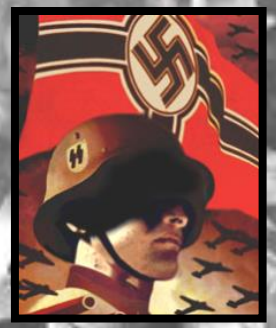
JULY – AUGUST

They decide:

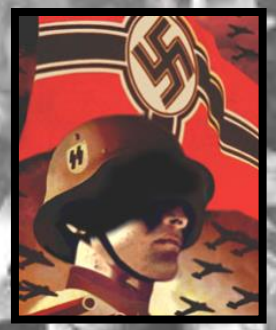
Eventually, this division results in a Communist East Berlin/East Germany and a Democratic West Berlin/West Germany…

…and paves the way for the Cold War.

Dr. Hartnell's 135 LIVE!



Dr. Hartnell's 135 LIVE!



1945

JULY – AUGUST

They decide:

3. To create a Provisional Government for Poland, who had been conquered by the Nazis AND Soviets. Stalin promises to see that "free and fair" elections are held in Poland.

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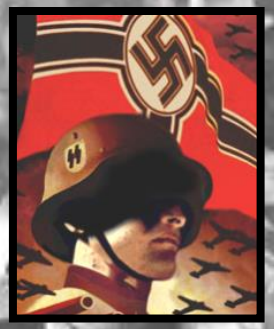


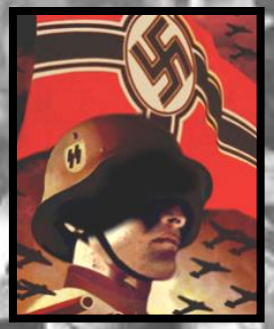
1945

JULY – AUGUST

They decide:

This most certainly does not happen. A sham election is held, and a new communist government is "elected".

Dr. Hartnell's 135 LIVE!



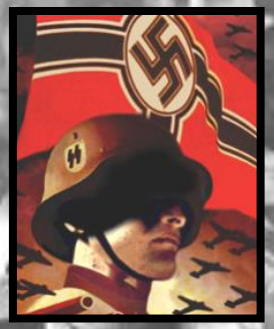
1945

JULY – AUGUST

They decide:

Poland remains a communist country until the Cold War ends in 1991.

Dr. Hartnell's 135 LIVE!



1945

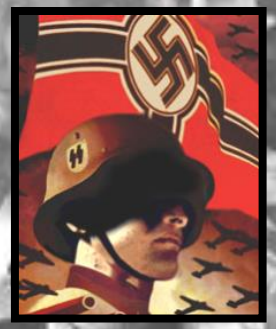
JULY – AUGUST

On July 26th, the Potsdam Declaration is issued, giving Japan an ultimatum…

…surrender NOW…

…or face *"prompt and utter destruction"*.

Dr. Hartnell's 135 LIVE!



1945

JULY – AUGUST

The Japanese Government receives the declaration but does not relay it to its people.

American bombers drop leaflets over many Japanese cities telling them to surrender.

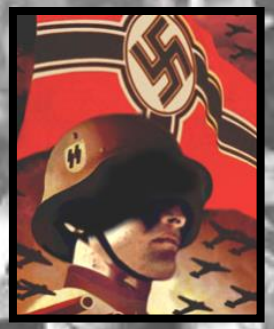
Japan does not comply.

日本國民に告ぐ!!

即刻都市より退避せよ

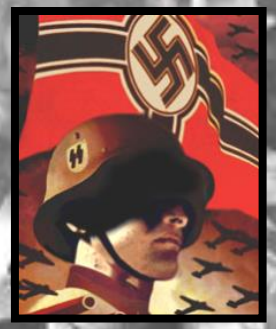
即刻都市より退避せよ。

Dr. Hartnell's 135 LIVE!



1945

Dr. Hartnell's
135 LIVE!



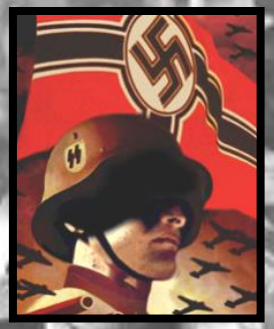
1945

日本國民に告ぐ!!

即刻都市より退避せよ

即刻都市より退避せよ

Dr. Hartnell's 135 LIVE!



1945

AUGUST

With the Nazis defeated, and the Potsdam Conference concluded, Truman now faces a big question.

a. Invade Japan?

b. Nuke Japan?

Dr. Hartnell's 135 LIVE!

Should the U.S. *Invade* or *Nuke* Japan?

The best generals say invading Japan could cost the U.S. 50,000 lives. Other estimates reach as high as 1 million American lives.

In the Pacific, the ratio of Japanese soldiers killed per American soldier killed has been 22:1.

Assuming best-case scenario, if 50,000 U.S. soldiers are killed, then approximately 1.1 million Japanese will die.

Should the U.S. *Invade* or *Nuke* Japan?

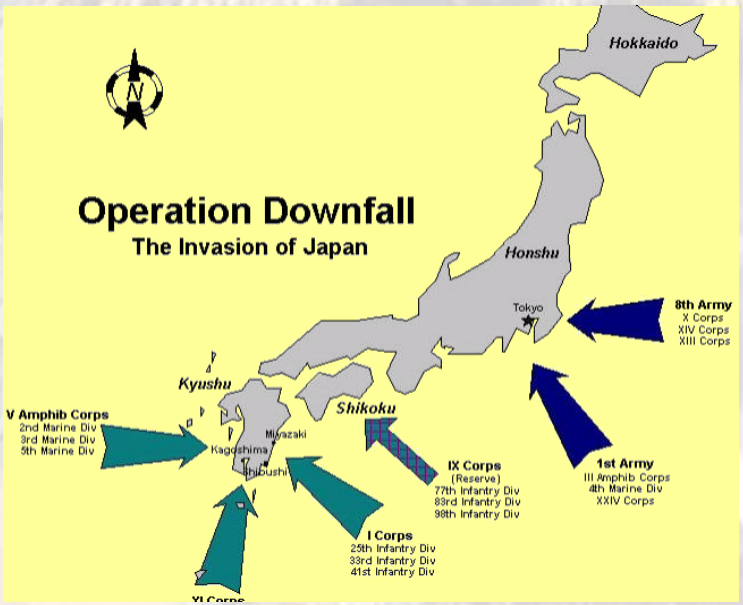
General MacArthur says the Japanese will continue guerrilla-style resistance for 10 years.

Based on the horrific battle experience from Guadalcanal to Okinawa, it is known that the Japanese will fight to the death.

Japan has 6 million troops who have shown their willingness to sacrifice themselves.

Should the U.S. *Invade* or *Nuke* Japan?

Operation Downfall:
November 1, 1945 – 1947
(projected); invasion of Japan.



Should the U.S. *Invade* or *Nuke* Japan?

The U.S. public remembers the Rape of Nanking, Pearl Harbor, and the Bataan Death March…

The U.S. has bombs with the power of 15,000-21,000 tons of TNT. They worked in tests in the desert, but will they work when dropped out of planes?

Should the U.S. bomb a remote island near Japan to show the Japanese its power? This might scare them into surrendering…

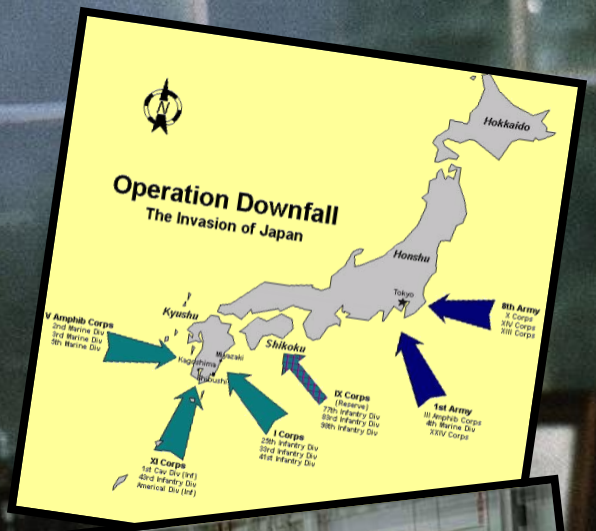
Should the U.S. *Invade* or *Nuke* Japan?

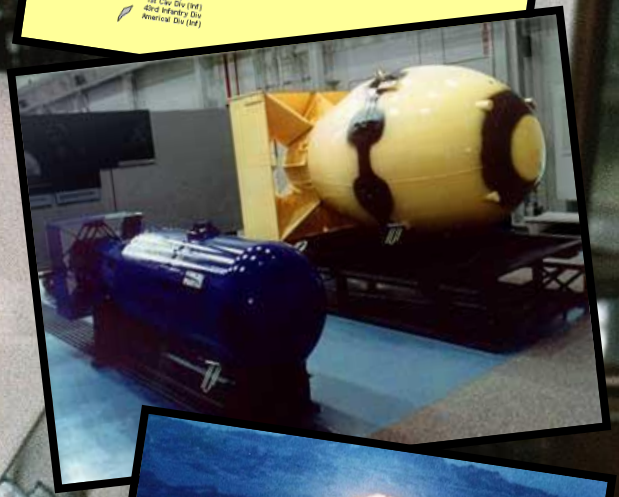
…but, if the demonstration is a dud, Japanese resistance will harden.

How will history treat Truman if he sends 1 million U.S. soldiers to their deaths when he could have dropped these bombs?

How will history treat Truman if millions of innocent civilians die because he dropped the bombs?

What decision should President Truman have made?





Dr. Hartnell's 135 LIVE!

Dr. Hartnell's Decision Making Model

Decision You're Facing:	

	a.	b.	c.	d.	e.
CRITERIA →					
WEIGHT →					

POSSIBLE SOLUTIONS ↓						SCORE
A.	___ x ___ = ___ *rating x weight = total*	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
B.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
C.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
D.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
E.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	

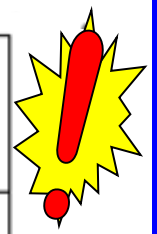
Your Final Decision:	

Dr. Hartnell's 135 LIVE!

Dr. Hartnell's Decision Making Model

Decision You're Facing:	

	a.	b.	c.	d.	e.
CRITERIA →					
WEIGHT →					



Welcome to Dr. Hartnell's "Decision Making Model" (or DMM)! The DMM helps you make a decision about anything… like what movie to see this weekend, what video game to buy, or what college to attend. It can also be applied to historical events (such as the dropping of the atomic bomb). To help you understand how the DMM works, let's tackle the question: *"What kind of vehicle should Dr. Hartnell buy?"*

D.	___x___=____	___x___=____	___x___=____	___x___=____	___x___=____	
E.	___x___=____	___x___=____	___x___=____	___x___=____	___x___=____	

Your Final Decision:	

Dr. Hartnell's 135 LIVE!

Dr. Hartnell's [illegible]

What decision do you wish to make? Write it in the space below.

Decision You're Facing:	

	a.	b.	c.	d.	e.
CRITERIA →					
WEIGHT →					

POSSIBLE SOLUTIONS ↓						SCORE
A.	___ x ___ = ___ *rating x weight = total*	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
B.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
C.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
D.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
E.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	

Your Final Decision:	

Dr. Hartnell's 135 LIVE!

Dr. Hartnell's Decision Making Model

Decision You're Facing:	What kind of vehicle should Dr. Hartnell buy?

Criteria →	a.	b.	c.	d.	e.
Weight →					

Possible Solutions ↓						Score
A.	___ x ___ = ___ *rating x weight = total*	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
B.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
C.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
D.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
E.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	

Your Final Decision:	

Dr. Hartnell's 135 LIVE!

Dr. Hartnell's Decision Making Model

Decision You're Facing:	What kind of vehicle should Dr. Hartnell buy?

	CRITERIA → a.	b.	c.	d.	e.	
C.	___ x ___ = ____	___ x ___ = ____	___ x ___ = ____	___ x ___ = ____	___ x ___ = ____	
D.	___ x ___ = ____	___ x ___ = ____	___ x ___ = ____	___ x ___ = ____	___ x ___ = ____	
E.	___ x ___ = ____	___ x ___ = ____	___ x ___ = ____	___ x ___ = ____	___ x ___ = ____	

Start listing out all of the things that you need to take into consideration when making your decision. Pick the Top 5 and write them (in any order) in the spaces above (labeled a, b, c, d, e). Keep in mind that this criteria can be very different depending on who you ask! When discussing what kind of vehicle to purchase, the criteria that an 18-year-old comes up with will probably vary from a 45-year-old.

Your Final Decision:	

Dr. Hartnell's 135 LIVE!

Dr. Hartnell's Decision Making Model

Decision You're Facing:	What kind of vehicle should Dr. Hartnell buy?

	a.	b.	c.	d.	e.	
CRITERIA →	Cost $$$	Sex Appeal	Safety	Longevity	Gas Mileage	
WEIGHT →						
POSSIBLE SOLUTIONS ↓						SCORE
A.	___ x ___ = ___ *rating x weight = total*	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
B.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
C.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
D.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
E.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	

Your Final Decision:	

Dr. Hartnell's 135 LIVE!

Dr. Hartnell's Decision Making Model

Decision You're Facing:	What kind of vehicle should Dr. Hartnell buy?

	a.	b.	c.	d.	e.	
CRITERIA →	Cost $$$	Sex Appeal	Safety	Longevity	Gas Mileage	
WEIGHT →						
POSSIBLE SOLUTIONS ↓						SCORE
D.	___x___=___	___x___=___	___x___=___	___x___=___	___x___=___	
E.	___x___=___	___x___=___	___x___=___	___x___=___	___x___=___	

Once you have your criteria, go through and rank each of them using a 1-5 scale. Please note that "5" means it is the most important criteria and "1" means it is the least important. There can't be any ties, so you need to rank them: 5, 4, 3, 2, 1. Of course, what you see as the most important might be different from someone else!

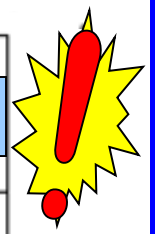
Your Final Decision:	

Dr. Hartnell's 135 LIVE!

Dr. Hartnell's Decision Making Model

Decision You're Facing: What kind of vehicle should Dr. Hartnell buy?

Criteria →	a. Cost $$$	b. Sex Appeal	c. Safety	d. Longevity	e. Gas Mileage	
Weight →	5	1	4	3	2	
Possible Solutions ↓						Score
A.	___ x ___ = ___ *rating x weight = total*	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
B.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
C.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
D.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
E.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	



Your Final Decision:

Dr. Hartnell's 135 LIVE!

Dr. Hartnell's Decision Making Model

Decision You're Facing:	What kind of vehicle should Dr. Hartnell buy?

Criteria →	a. Cost $$$	b. Sex Appeal	c. Safety	d. Longevity	e. Gas Mileage	
Weight →	5	1	4	3	2	
Possible Solutions ↓						Score
	___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
	___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
	___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
	___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
	___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	

Now take the weight's score (1-5) and write it in the line after the multiplication sign. Do this for all 5 of your criteria.

Your Final Decision:	

Dr. Hartnell's 135 LIVE!

Dr. Hartnell's Decision Making Model

Decision You're Facing: What kind of vehicle should Dr. Hartnell buy?

Criteria →	a. Cost $$$	b. Sex Appeal	c. Safety	d. Longevity	e. Gas Mileage	
Weight →	5	1	4	3	2	
Possible Solutions ↓						Score
A.	___ x 5 = ___ (rating x weight = total)	___ x 1 ___	___ x 4 ___	___ x 3 ___	___ x 2 ___	
B.	___ x 5 = ___	___ x 1 ___	___ x 4 ___	___ x 3 ___	___ x 2 ___	
C.	___ x 5 = ___	___ x 1 ___	___ x 4 ___	___ x 3 ___	___ x 2 ___	
D.	___ x 5 = ___	___ x 1 ___	___ x 4 ___	___ x 3 ___	___ x 2 ___	
E.	___ x 5 = ___	___ x 1 ___	___ x 4 ___	___ x 3 ___	___ x 2 ___	

Your Final Decision:

Dr. Hartnell's 135 LIVE!

Dr. Hartnell's Decision Making Model

Decision You're Facing:	What kind of vehicle should Dr. Hartnell buy?

Criteria →	a. Cost $$$	b. Sex Appeal	c. Safety	d. Longevity	e. Gas Mileage	
Weight →	5	1	4	3	2	
Possible Solutions ↓						Score
A.					___ x 2 ___	
B.					___ x 2 ___	
C.					___ x 2 ___	
D.					___ x 2 ___	
E.					___ x 2 ___	

Now you need to brainstorm all the possible solutions or answers to making your decision. Pick the Top 5 and write them (in any order) in the spaces to the left (labeled A, B, C, D, E). Like what happened with the criteria, your solutions/answers can be very different depending on who you ask!

Your Final Decision:	

Dr. Hartnell's 135 LIVE!

Dr. Hartnell's Decision Making Model

Decision You're Facing: What kind of vehicle should Dr. Hartnell buy?

Criteria →	a. Cost $$$	b. Sex Appeal	c. Safety	d. Longevity	e. Gas Mileage	
Weight →	5	1	4	3	2	
Possible Solutions ↓						Score
A. Sports car	___ x 5 = ___	___ x 1 = ___	___ x 4 = ___	___ x 3 = ___	___ x 2 = ___	
B. SUV	___ x 5 = ___	___ x 1 = ___	___ x 4 = ___	___ x 3 = ___	___ x 2 = ___	
C. Mini-van	___ x 5 = ___	___ x 1 = ___	___ x 4 = ___	___ x 3 = ___	___ x 2 = ___	
D. Sedan	___ x 5 = ___	___ x 1 = ___	___ x 4 = ___	___ x 3 = ___	___ x 2 = ___	
E. Truck	___ x 5 = ___	___ x 1 = ___	___ x 4 = ___	___ x 3 = ___	___ x 2 = ___	

Your Final Decision:

Dr. Hartnell's 135 LIVE!

Dr. Hartnell's Decision Making Model

Decision You're Facing:	What kind of vehicle should Dr. Hartnell buy?

Criteria →	a. Cost $$$	b. Sex Appeal	c. Safety	d. Longevity	e. Gas Mileage	
Weight →	5	1	4	3	2	
Possible Solutions ↓						Score
A. Sports car	x 5	x 1	x 4	x 3	x 2	
B. SUV	x 5	x 1	x 4	x 3	x 2	

Pay close attention here. The number that is multiplied by the criteria's weight is based on a scale of 1-5. Using the selected criteria, a rating of a "1" is given to solutions that are "bad", "costly", "weak", "dangerous", etc. A rating of a "5" is given to solutions that are "good", "efficient", "strong", "safe", etc. Unlike with the criteria, you MAY use ratings that are the same (i.e. you give three criteria a "2"). The cost of a sports car is "very high". This is a "bad" thing, which is why it should receive a "1". By contrast, the sex appeal of a sports car is "strong", which is why it should receive a "5". This example continues on the next slide. →

Dr. Hartnell's Decision Making Model

Decision You're Facing:	What kind of vehicle should Dr. Hartnell buy?

	a.	b.	c.	d.	e.	
Criteria →	Cost $$$	Sex Appeal	Safety	Longevity	Gas Mileage	
Weight →	5	1	4	3	2	
Possible Solutions ↓						Score
A. Sports car	1 x 5 = 5	5 x 1 = 5	1 x 4 = 4	4 x 3 = 12	2 x 2 = 4	
B. SUV	x 5 = 10	x 1 = 3	x 4 = 8	x 3 = 6	x 2 = 2	

The cost of a sports car is "very high". This is "bad", so it gets "1".

The sex appeal of a sports car is "strong", so it gets "5".

The safety of a sports car is "low" (smaller, high speeds), so it gets "1".

The longevity of a sports car is "good" but not "great" (its life can be extended if driven only in nice weather, babied, etc.), so it gets "4".

The gas mileage of a sports car is "low" but not "awful" (goosing the car at stop lights or racing eats away at its efficiency), so it gets "2".

Dr. Hartnell's Decision Making Model

Decision You're Facing: What kind of vehicle should Dr. Hartnell buy?

	a.	b.	c.	d.	e.	
Criteria →	Cost $$$	Sex Appeal	Safety	Longevity	Gas Mileage	
Weight →	5	1	4	3	2	
Possible Solutions ↓						**Score**
A. Sports car	1 x 5 = 5	5 x 1 = 5	1 x 4 = 4	4 x 3 = 12	2 x 2 = 4	
B. SUV	2 x 5 = 10	3 x 1 = 3	2 x 4 = 8	2 x 3 = 6	1 x 2 = 2	
C. Mini-van	2 x 5 = 10	1 x 1 = 1	4 x 4 = 16	4 x 3 = 12	2 x 2 = 4	
D. Sedan	3 x 5 = 15	2 x 1 = 2	4 x 4 = 16	5 x 3 = 15	4 x 2 = 8	
E. Truck	2 x 5 = 10	2 x 1 = 2	3 x 4 = 12	3 x 3 = 9	2 x 2 = 4	

Your Final Decision:

Dr. Hartnell's 135 LIVE!

Dr. Hartnell's Decision Making Model

Decision You're Facing:	What kind of vehicle should Dr. Hartnell buy?

Add up your scores from each box. For instance, for sports car, we add 5 + 5 + 4 + 12 + 4 = 30

Criteria → / Weight → / Possible Solutions ↓	a.	b.	c.	d.	e.	
A. Sports car	1 x 5 = 5	5 x 1 = 5	1 x 4 = 4	4 x 3 = 12	2 x 2 = 4	30
B. SUV	2 x 5 = 10	3 x 1 = 3	2 x 4 = 8	2 x 3 = 6	1 x 2 = 2	
C. Mini-van	2 x 5 = 10	1 x 1 = 1	4 x 4 = 16	4 x 3 = 12	2 x 2 = 4	
D. Sedan	3 x 5 = 15	2 x 1 = 2	4 x 4 = 16	5 x 3 = 15	4 x 2 = 8	
E. Truck	2 x 5 = 10	2 x 1 = 2	3 x 4 = 12	3 x 3 = 9	2 x 2 = 4	

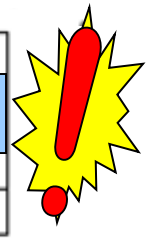
Your Final Decision:	

Dr. Hartnell's 135 LIVE!

Dr. Hartnell's Decision Making Model

Decision You're Facing: What kind of vehicle should Dr. Hartnell buy?

	a.	b.	c.	d.	e.	
Criteria →	Cost $$$	Sex Appeal	Safety	Longevity	Gas Mileage	
Weight →	5	1	4	3	2	
Possible Solutions ↓						Score
A. Sports car	1 x 5 = 5	5 x 1 = 5	1 x 4 = 4	4 x 3 = 12	2 x 2 = 4	30
B. SUV	2 x 5 = 10	3 x 1 = 3	2 x 4 = 8	2 x 3 = 6	1 x 2 = 2	29
C. Mini-van	2 x 5 = 10	1 x 1 = 1	4 x 4 = 16	4 x 3 = 12	2 x 2 = 4	43
D. Sedan	3 x 5 = 15	2 x 1 = 2	4 x 4 = 16	5 x 3 = 15	4 x 2 = 8	56
E. Truck	2 x 5 = 10	2 x 1 = 2	3 x 4 = 12	3 x 3 = 9	2 x 2 = 4	37



Your Final Decision:

Dr. Hartnell's 135 LIVE!

Dr. Hartnell's Decision Making Model

Decision You're Facing: What kind of vehicle should Dr. Hartnell buy?

Criteria →	a. Cost $$$	b. Sex Appeal	c. Safety	d. Longevity	e. Gas Mileage	
Weight →	5	1	4	3	2	
Possible Solutions ↓						Score
A. Sports car	1 x 5 = 5	5 x 1 = 5	1 x 4 = 4	4 x 3 = 12	2 x 2 = 4	30
B. SUV	2 x 5 = 10	3 x 1 = 3	2 x 4 = 8	2 x 3 = 6	1 x 2 = 2	29
C. Mini-van	2 x 5 = 10	1 x 1 = 1	4 x 4 = 16	4 x 3 = 12	2 x 2 = 4	43
D. Sedan	3 x 5 = 15	2 x 1 = 2	4 x 4 = 16	5 x 3 = 15	4 x 2 = 8	56

Which decision had the highest score? This is the decision you should make. Write it in the space at the bottom of the page.

Your Final Decision:

Dr. Hartnell's 135 LIVE!

Dr. Hartnell's Decision Making Model

Decision You're Facing: What kind of vehicle should Dr. Hartnell buy?

	a.	b.	c.	d.	e.	
Criteria →	**Cost $$$**	**Sex Appeal**	**Safety**	**Longevity**	**Gas Mileage**	
Weight →	**5**	**1**	**4**	**3**	**2**	
Possible Solutions ↓						**Score**
A. **Sports car**	1 x 5 = 5	5 x 1 = 5	1 x 4 = 4	4 x 3 = 12	2 x 2 = 4	30
B. **SUV**	2 x 5 = 10	3 x 1 = 3	2 x 4 = 8	2 x 3 = 6	1 x 2 = 2	29
C. **Mini-van**	2 x 5 = 10	1 x 1 = 1	4 x 4 = 16	4 x 3 = 12	2 x 2 = 4	43
D. **Sedan**	3 x 5 = 15	2 x 1 = 2	4 x 4 = 16	5 x 3 = 15	4 x 2 = 8	56
E. **Truck**	2 x 5 = 10	2 x 1 = 2	3 x 4 = 12	3 x 3 = 9	2 x 2 = 4	37

Your Final Decision: Dr. Hartnell should buy a sedan (ex: Honda).

Dr. Hartnell's 135 LIVE!

Dr. Hartnell's Decision Making Model

Decision You're Facing:	

	a.	b.	c.	d.	e.
CRITERIA →					
WEIGHT →					

Now that you understand how to fill out the DMM, let's tackle the historical question as it pertains to the dropping of the atomic bombs on Hiroshima and Nagasaki: *"What decision should President Truman make?"*

C.	___ x ___ = ____	___ x ___ = ____	___ x ___ = ____	___ x ___ = ____	___ x ___ = ____	
D.	___ x ___ = ____	___ x ___ = ____	___ x ___ = ____	___ x ___ = ____	___ x ___ = ____	
E.	___ x ___ = ____	___ x ___ = ____	___ x ___ = ____	___ x ___ = ____	___ x ___ = ____	

Your Final Decision:	

Dr. Hartnell's 135 LIVE!

Dr. Hartnell's Decision Making Model

Decision You're Facing:	What decision should President Truman make?

	a.	b.	c.	d.	e.
CRITERIA →					
WEIGHT →					

POSSIBLE SOLUTIONS ↓						SCORE
A.	___ x ___ = ___ *rating x weight = total*	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
B.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
C.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
D.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
E.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	

Your Final Decision:	

Dr. Hartnell's 135 LIVE!

Dr. Hartnell's Decision Making Model

Decision You're Facing:	What decision should President Truman make?

	a.	b.	c.	d.	e.	
CRITERIA →	U.S. KIA	Japan KIA	Cost $$$	Fast End to WW2	World Respect	
WEIGHT →						
POSSIBLE SOLUTIONS ↓						SCORE
A.	___ x ___ = ___ *rating x weight = total*	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
B.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
C.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
D.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
E.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	

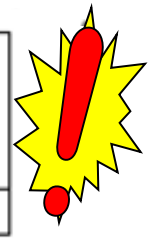
Your Final Decision:	

Dr. Hartnell's 135 LIVE!

Dr. Hartnell's Decision Making Model

Decision You're Facing:	What decision should President Truman make?

Criteria →	a. U.S. KIA	b. Japan KIA	c. Cost $$$	d. Fast End to WW2	e. World Respect	
Weight →	5	2	1	4	3	
Possible Solutions ↓						Score
A.	___ x ___ = ___ *rating x weight = total*	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
B.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
C.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
D.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
E.	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	



Your Final Decision:	

Dr. Hartnell's 135 LIVE!

Dr. Hartnell's Decision Making Model

Decision You're Facing: What decision should President Truman make?

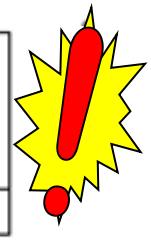
Criteria →	a. U.S. KIA	b. Japan KIA	c. Cost $$$	d. Fast End to WW2	e. World Respect	
Weight →	5	2	1	4	3	
Possible Solutions ↓						Score
A. A-bombs	___ x ___ = ___ (rating x weight = total)	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
B. Invade	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
C. Blockade	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
D. Let Russia handle it	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	
E. Negotiate	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	___ x ___ = ___	

Your Final Decision:

Dr. Hartnell's 135 LIVE!

Dr. Hartnell's Decision Making Model

Decision You're Facing: What decision should President Truman make?



		a.	b.	c.	d.	e.	
	CRITERIA →	U.S. KIA	Japan KIA	Cost $$$	Fast End to WW2	World Respect	
	WEIGHT →	5	2	1	4	3	
	POSSIBLE SOLUTIONS ↓						SCORE
A.	A-bombs	5 x 5 = 25	1 x 2 = 2	4 x 1 = 4	5 x 4 = 20	3 x 3 = 9	
B.	Invade	1 x 5 = 5	1 x 2 = 2	1 x 1 = 1	1 x 4 = 4	4 x 3 = 12	
C.	Blockade	3 x 5 = 15	2 x 2 = 4	2 x 1 = 2	1 x 4 = 4	3 x 3 = 9	
D.	Let Russia handle it	1 x 5 = 5	1 x 2 = 2	5 x 1 = 5	3 x 4 = 12	1 x 3 = 3	
E.	Negotiate	5 x 5 = 25	5 x 2 = 10	5 x 1 = 5	1 x 4 = 4	1 x 3 = 3	

Your Final Decision:

Dr. Hartnell's 135 LIVE!

Dr. Hartnell's Decision Making Model

Decision You're Facing: What decision should President Truman make?

	Criteria →	a. U.S. KIA	b. Japan KIA	c. Cost $$$	d. Fast End to WW2	e. World Respect	
	Weight →	5	2	1	4	3	
	Possible Solutions ↓						Score
A.	A-bombs	5 x 5 = 25	1 x 2 = 2	4 x 1 = 4	5 x 4 = 20	3 x 3 = 9	60
B.	Invade	1 x 5 = 5	1 x 2 = 2	1 x 1 = 1	1 x 4 = 4	4 x 3 = 12	24
C.	Blockade	3 x 5 = 15	2 x 2 = 4	2 x 1 = 2	1 x 4 = 4	3 x 3 = 9	34
D.	Let Russia handle it	1 x 5 = 5	1 x 2 = 2	5 x 1 = 5	3 x 4 = 12	1 x 3 = 3	27
E.	Negotiate	5 x 5 = 25	5 x 2 = 10	5 x 1 = 5	1 x 4 = 4	1 x 3 = 3	47

Your Final Decision:

Dr. Hartnell's 135 LIVE!

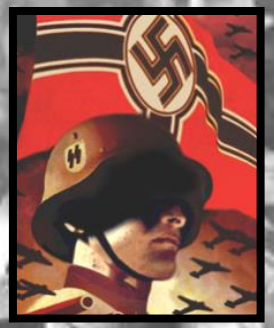
Dr. Hartnell's Decision Making Model

Decision You're Facing: What decision should President Truman make?

Criteria →	a. U.S. KIA	b. Japan KIA	c. Cost $$$	d. Fast End to WW2	e. World Respect	
Weight →	5	2	1	4	3	
Possible Solutions ↓						Score
A. A-bombs	5 x 5 = 25	1 x 2 = 2	4 x 1 = 4	5 x 4 = 20	3 x 3 = 9	60
B. Invade	1 x 5 = 5	1 x 2 = 2	1 x 1 = 1	1 x 4 = 4	4 x 3 = 12	24
C. Blockade	3 x 5 = 15	2 x 2 = 4	2 x 1 = 2	1 x 4 = 4	3 x 3 = 9	34
D. Let Russia handle it	1 x 5 = 5	1 x 2 = 2	5 x 1 = 5	3 x 4 = 12	1 x 3 = 3	27
E. Negotiate	5 x 5 = 25	5 x 2 = 10	5 x 1 = 5	1 x 4 = 4	1 x 3 = 3	47

Your Final Decision: President Truman should drop the A-bombs.

Dr. Hartnell's 135 LIVE!



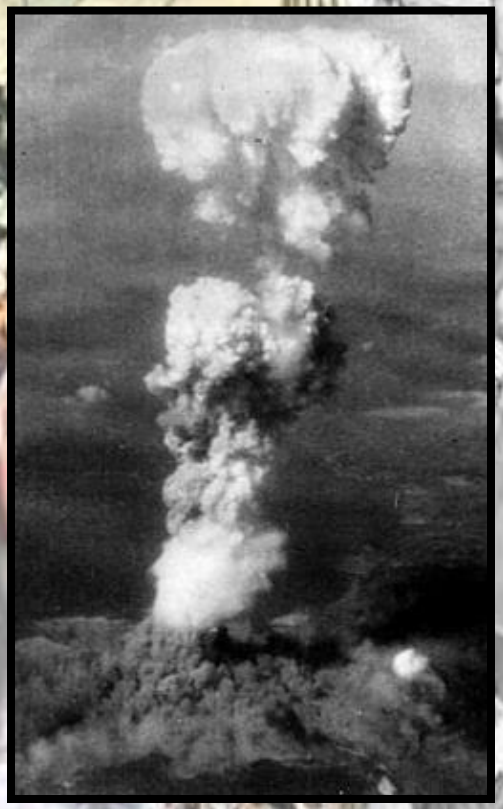
1945

AUGUST

Dropping of the Bombs

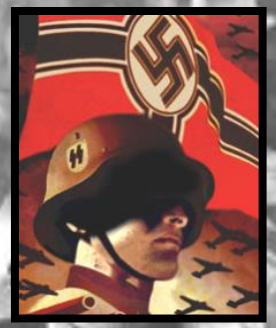
At 8:16 am JST on August 6th, the B-29 bomber *Enola Gay* drops the first A-bomb, code-named "Little Boy", on the city of Hiroshima.

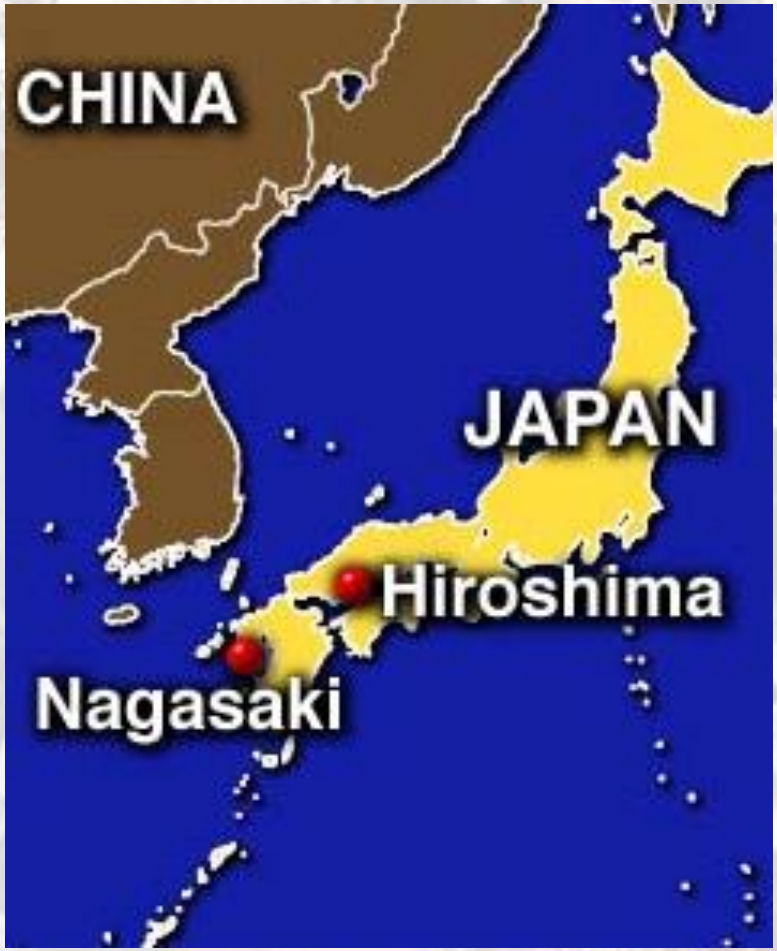
Population: 344,000.

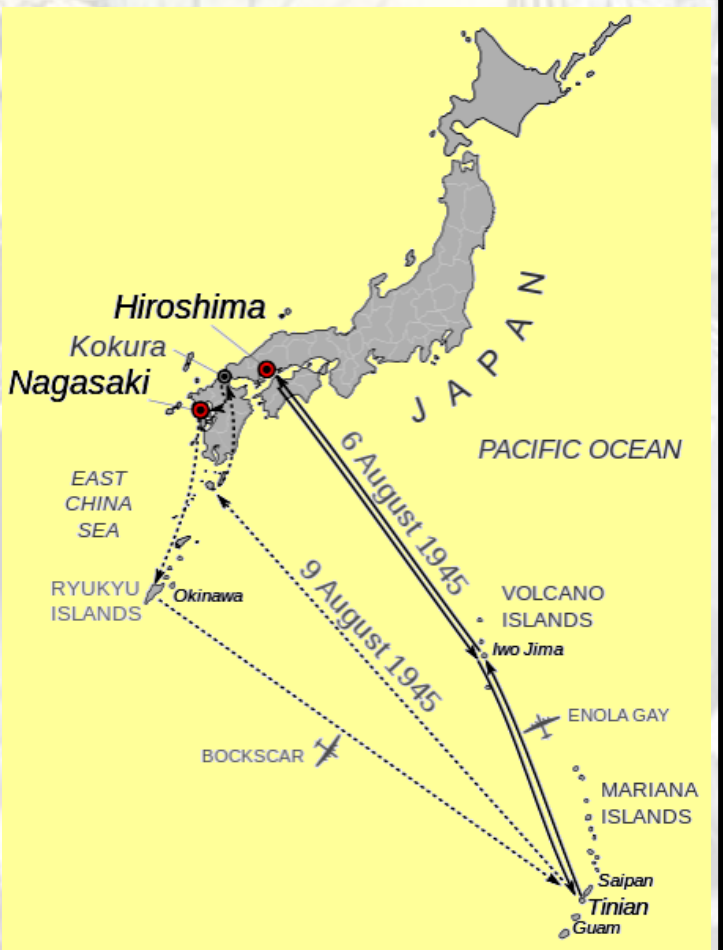


Dr. Hartnell's 135 LIVE!

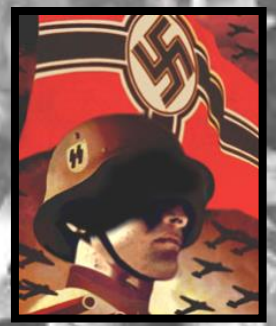
We Can Do It!




CHINA
JAPAN
Hiroshima
Nagasaki

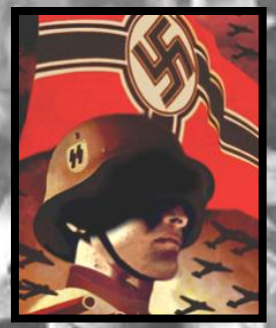

Hiroshima
Kokura
Nagasaki
JAPAN
PACIFIC OCEAN
EAST CHINA SEA
RYUKYU ISLANDS
Okinawa
6 August 1945
9 August 1945
VOLCANO ISLANDS
Iwo Jima
ENOLA GAY
BOCKSCAR
MARIANA ISLANDS
Saipan
Tinian
Guam

We Can Do It!



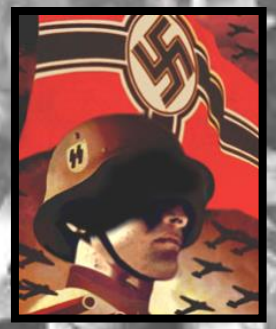
82
ENOLA
GAY
Paul Tibbets
Pilot

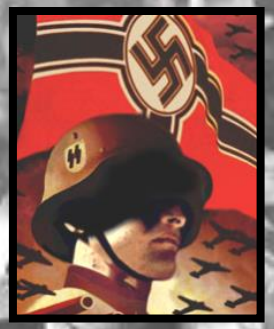
We Can Do It!



ENOLA GAY
82

We Can Do It!





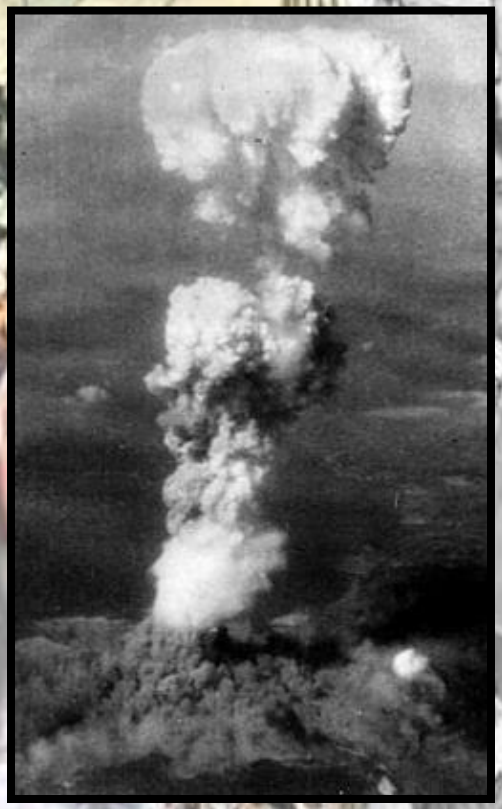
1945

AUGUST

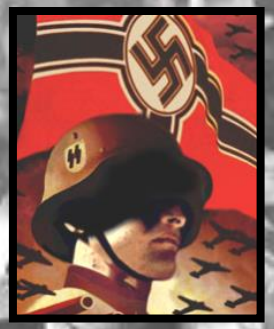
Dropping of the Bombs

The Hiroshima bomb is 10’ long, 2’4” wide, weighs 9,700 lbs., and is filled with 140 lbs. of Uranium.

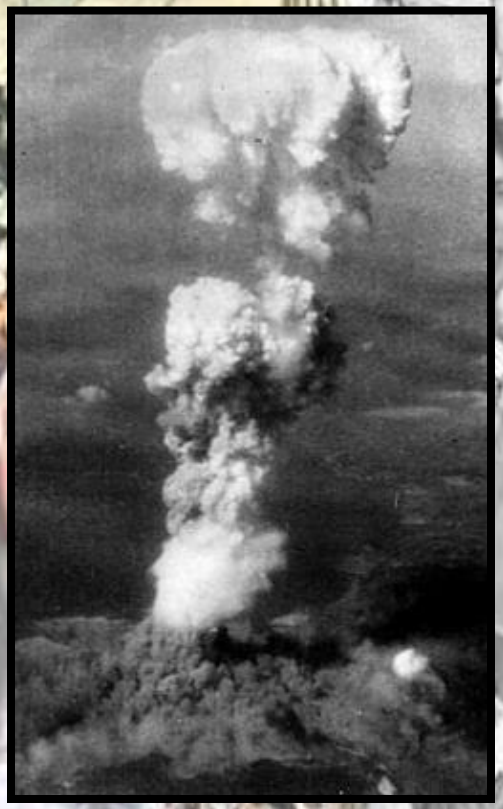
It has the explosive power of 15,000 tons of TNT (or 30,000,000 lbs. of TNT).



Dr. Hartnell’s 135 LIVE!



1945



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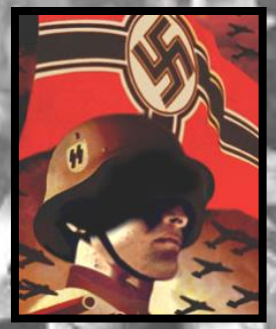

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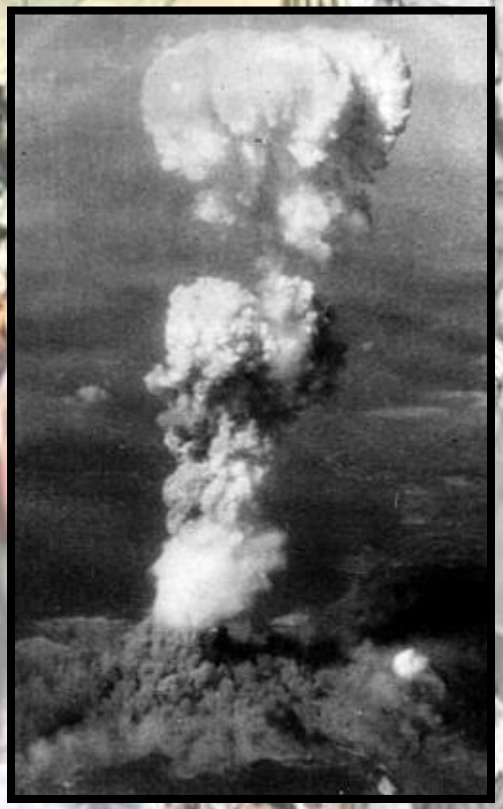

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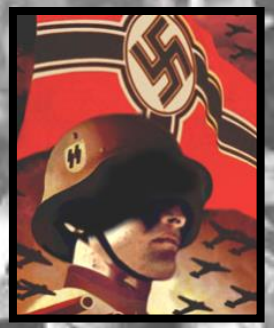


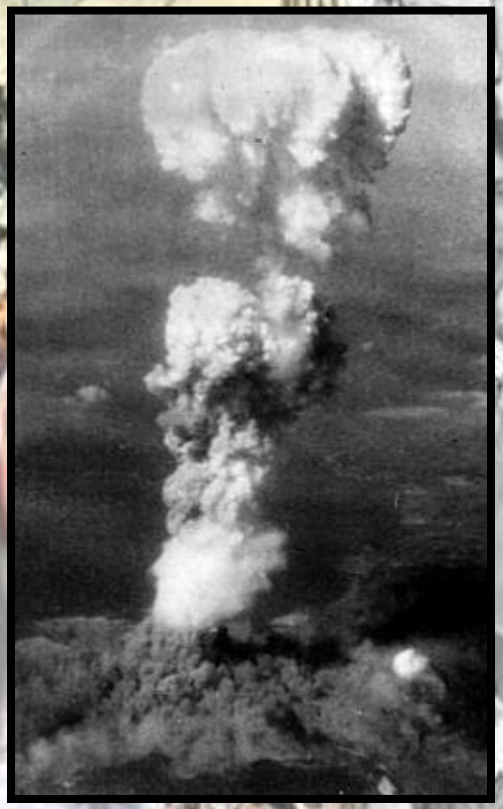
1945

AUGUST

Dropping of the Bombs

"Little Boy" falls for 44 seconds before the time and barometric triggers start the firing mechanism.

A bullet is fired down the barrel, hitting the Uranium targets.



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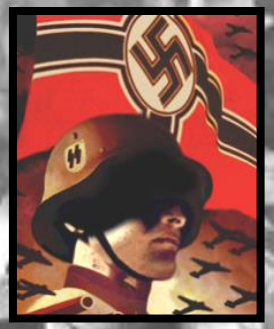
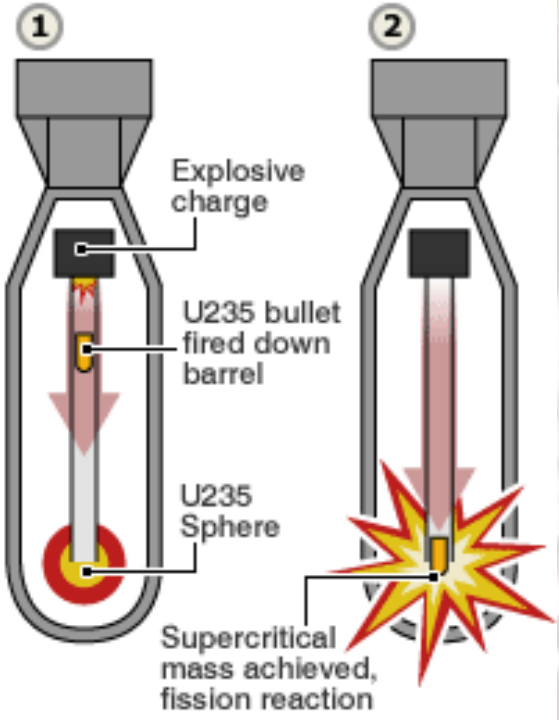
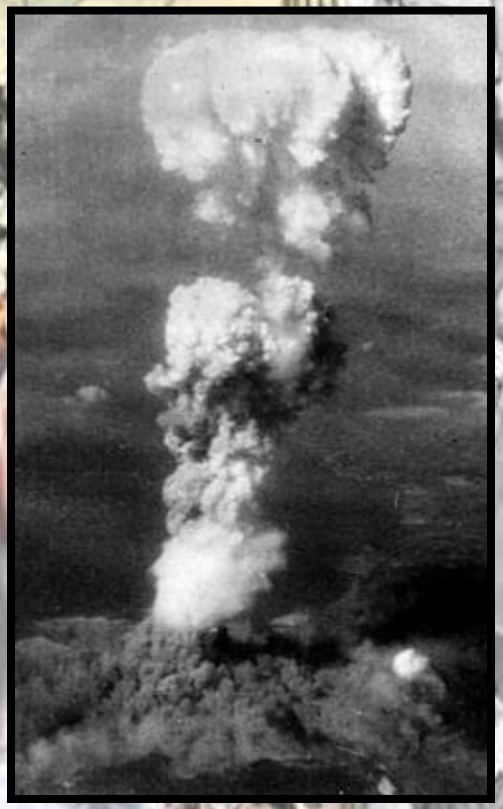


1945

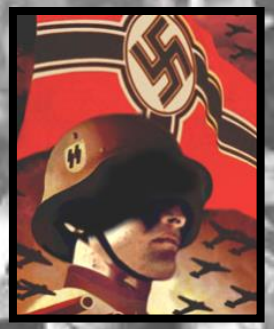
Gun-triggered fission bomb

'Little boy' dropped on Hiroshima, 1945





Dr. Hartnell's 135 LIVE!



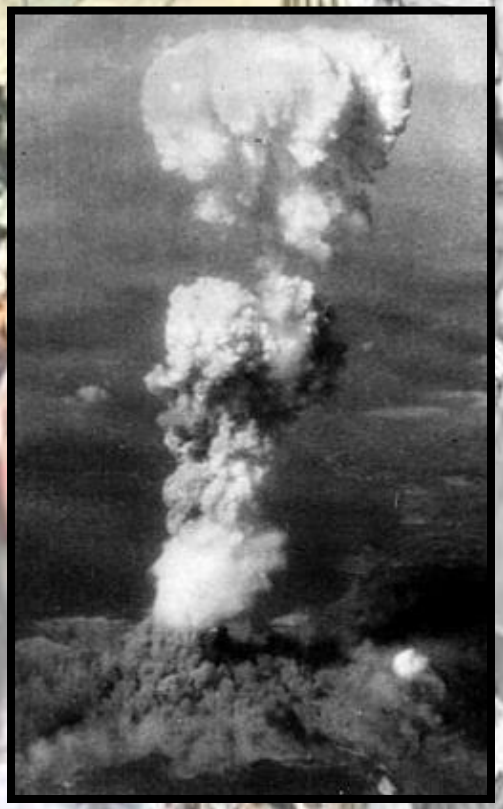
1945

AUGUST

Dropping of the Bombs

When the bomb explodes 1,968 feet above the city, the temperature at its epicenter soars to 1,800,032°F.

Solid materials on the ground below the atomic burst hit temps of 7,200°F.



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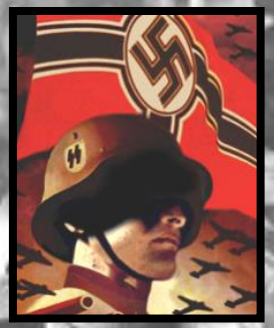


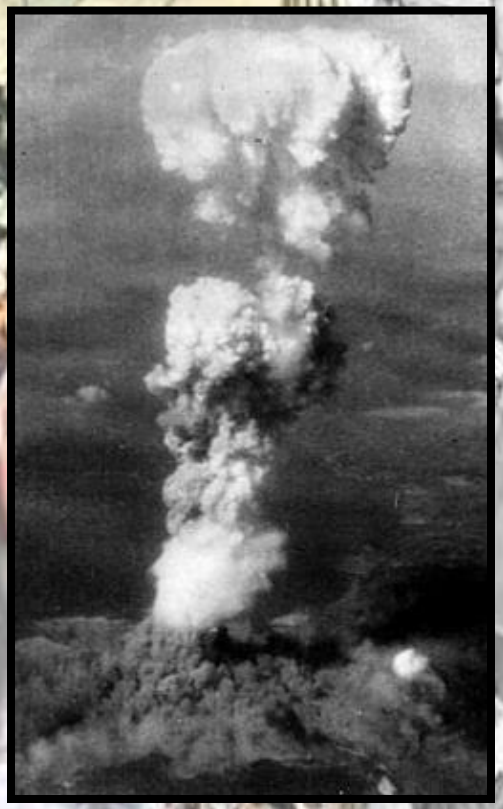
1945

AUGUST

Dropping of the Bombs

Temps hit 3,270°F just 0.61 miles from the blast.

Keep in mind that iron melts at 2,797°F… and the human body can be incinerated/vaporized between 1,400-2,100°F.



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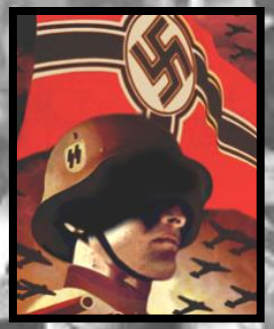


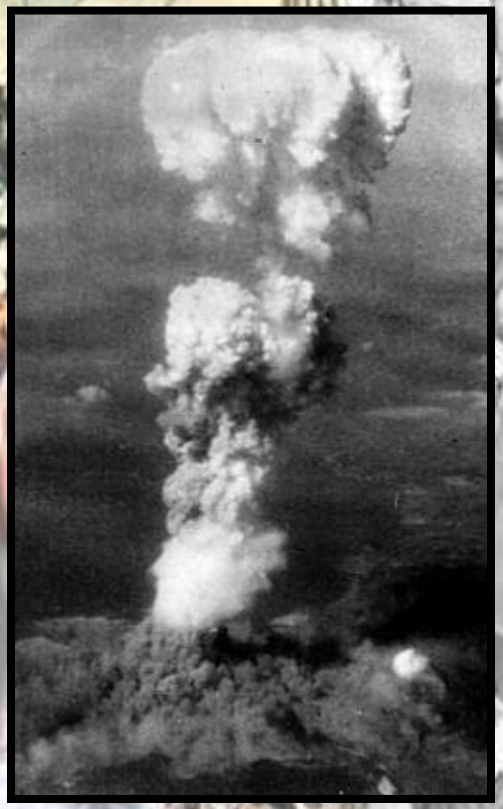
1945

AUGUST

Dropping of the Bombs

The **bomb levels** almost **70% of all buildings**.

80,000 are **killed instantly**… some so fast that shadows of where people were standing can be found; **70,000 injured**.



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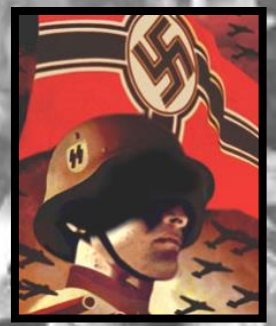

San Francisco Chronicle

THE CITY'S ONLY HOME-OWNED NEWSPAPER

FINAL

FOUNDED 1865—VOL. CLXI, NO. 23 CCCCAAA SAN FRANCISCO, TUESDAY, AUG. 7, 1945 DAILY 5 CENTS, SUNDAY 15 CENTS

Japan Hit By Atom Bomb---Mightiest Weapon in History! Tokyo Admits Heavy Damage

New Epoch in Science, War

Single Missile Dropped---More Force Than 2000 B-29 Raid; Capitulation May Be Hastened

Japs Cancel Rail Service Near Target

'Basic Power of Universe' Harnessed in Secret Tests; Truman Reveals the Story

By the Associated Press

WASHINGTON, Aug. 6—The most terrible destructive

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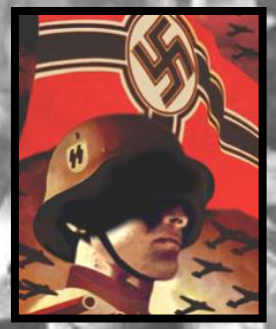

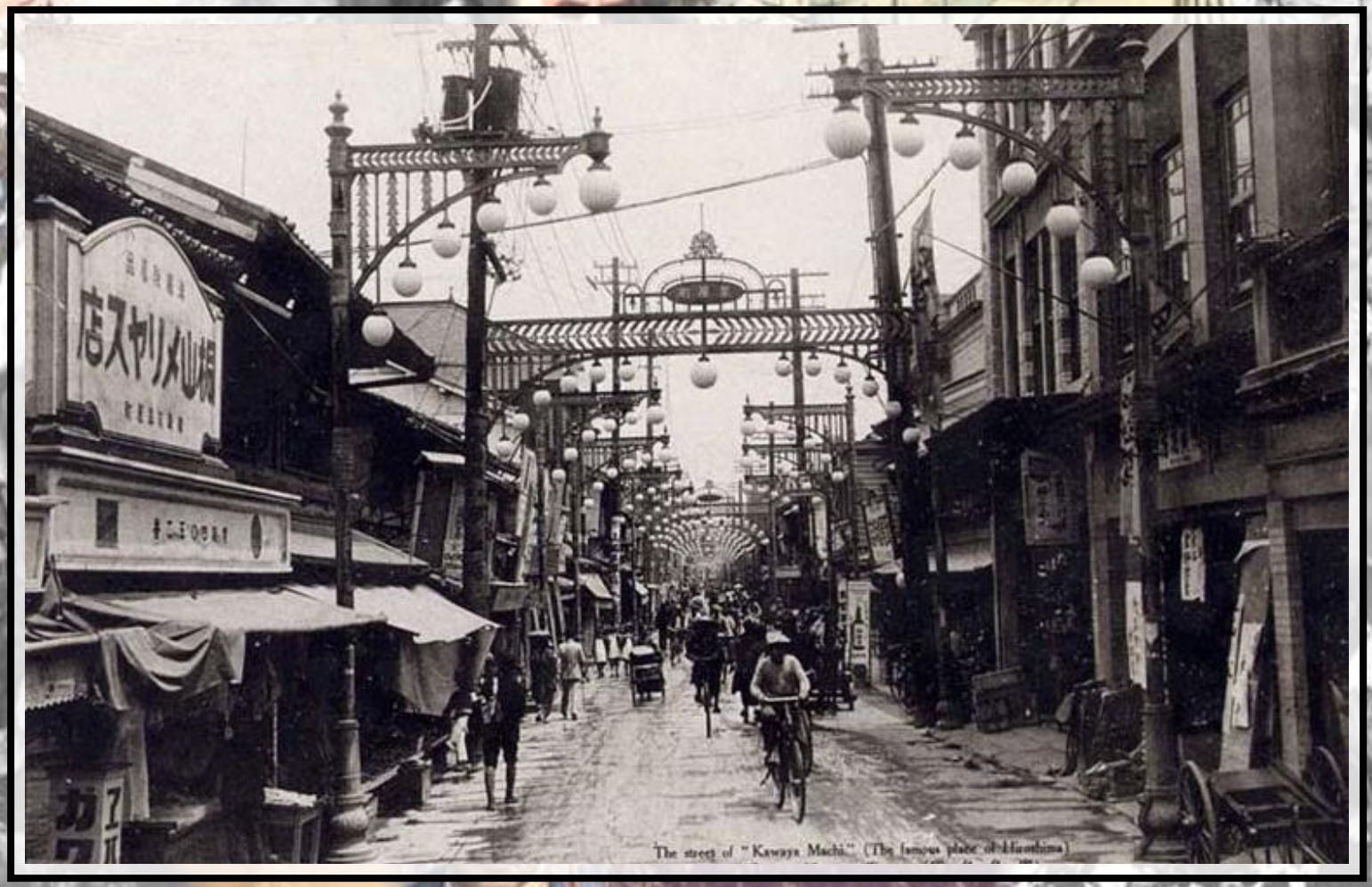
The street of "Kawaya Machi." (The famous place of Hiroshima)

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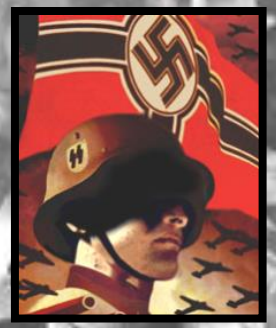

The cross-road of "Kamiyamachi." (The famous place of Hiroshima)
店支本山
店品洋井村

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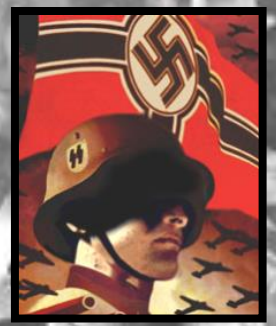

館勵奬業產及橋生相 （島廣）
The Aioibashi and The Sangyo-shoreikan.

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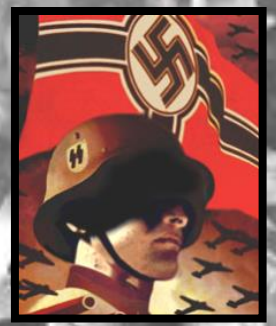

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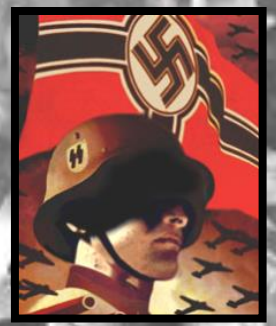

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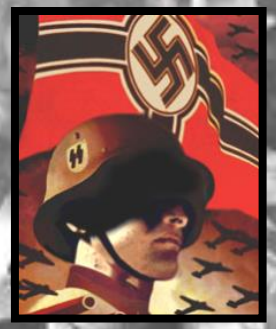

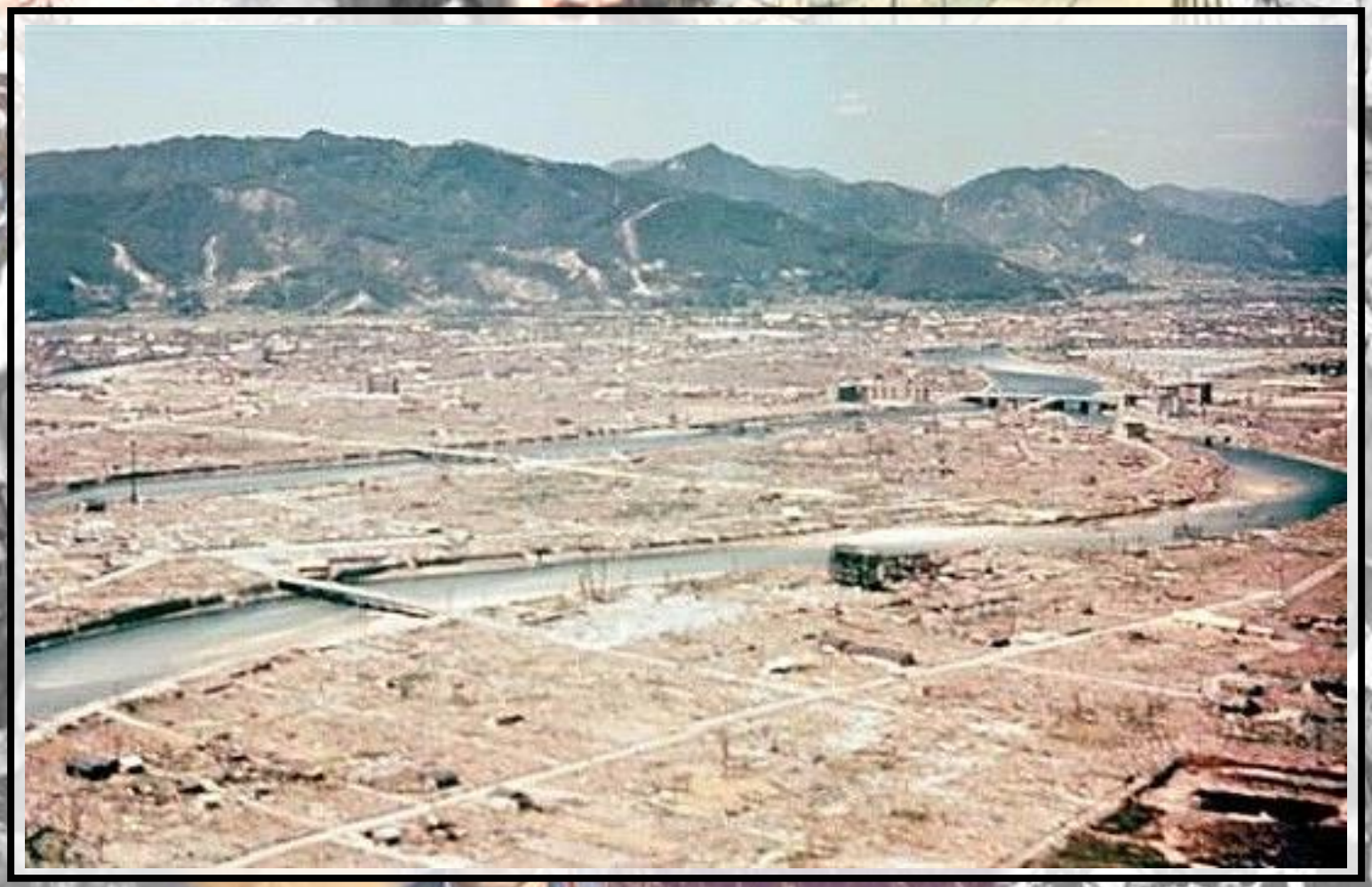

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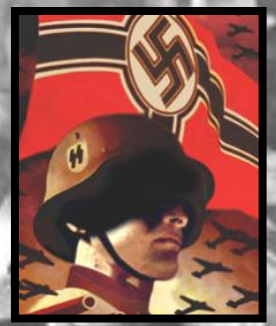

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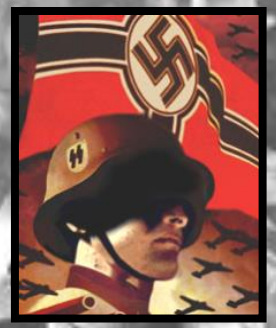
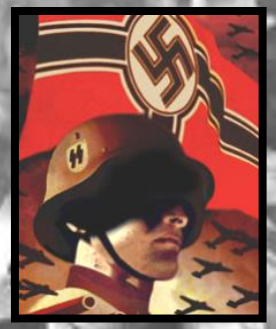
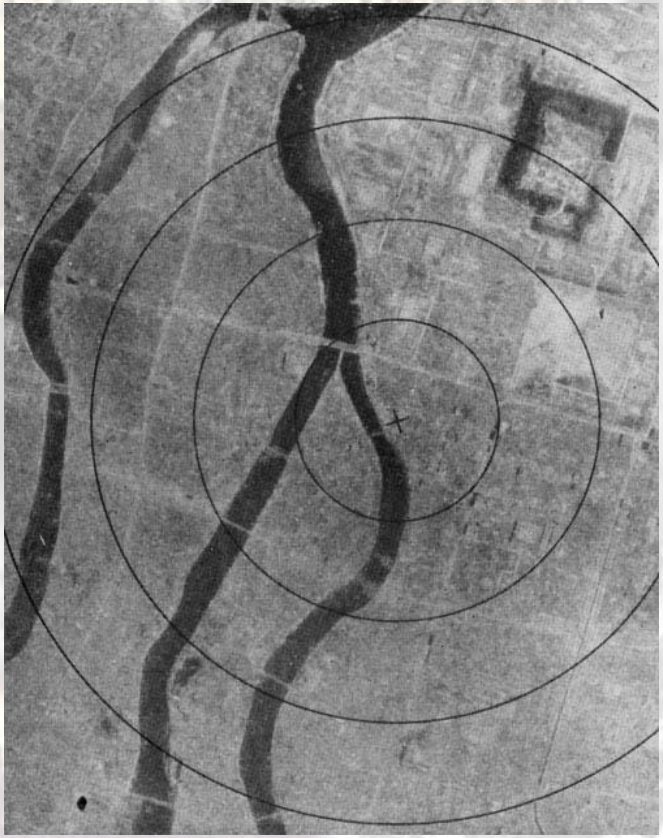
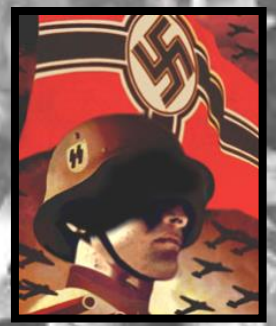




Before

After





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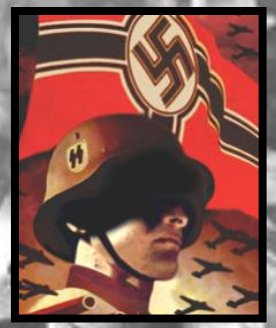

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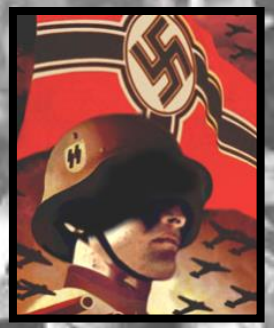

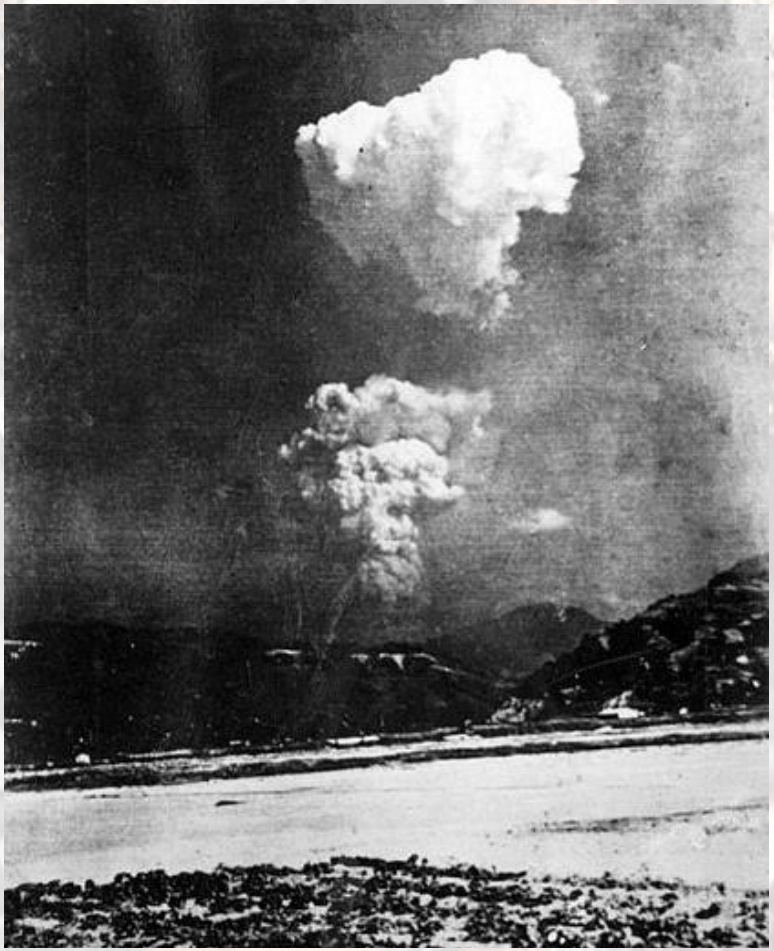

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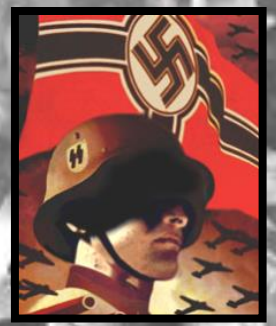

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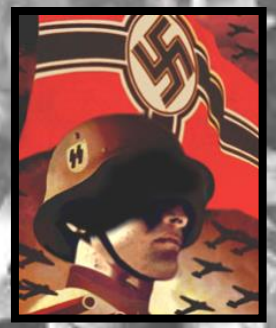

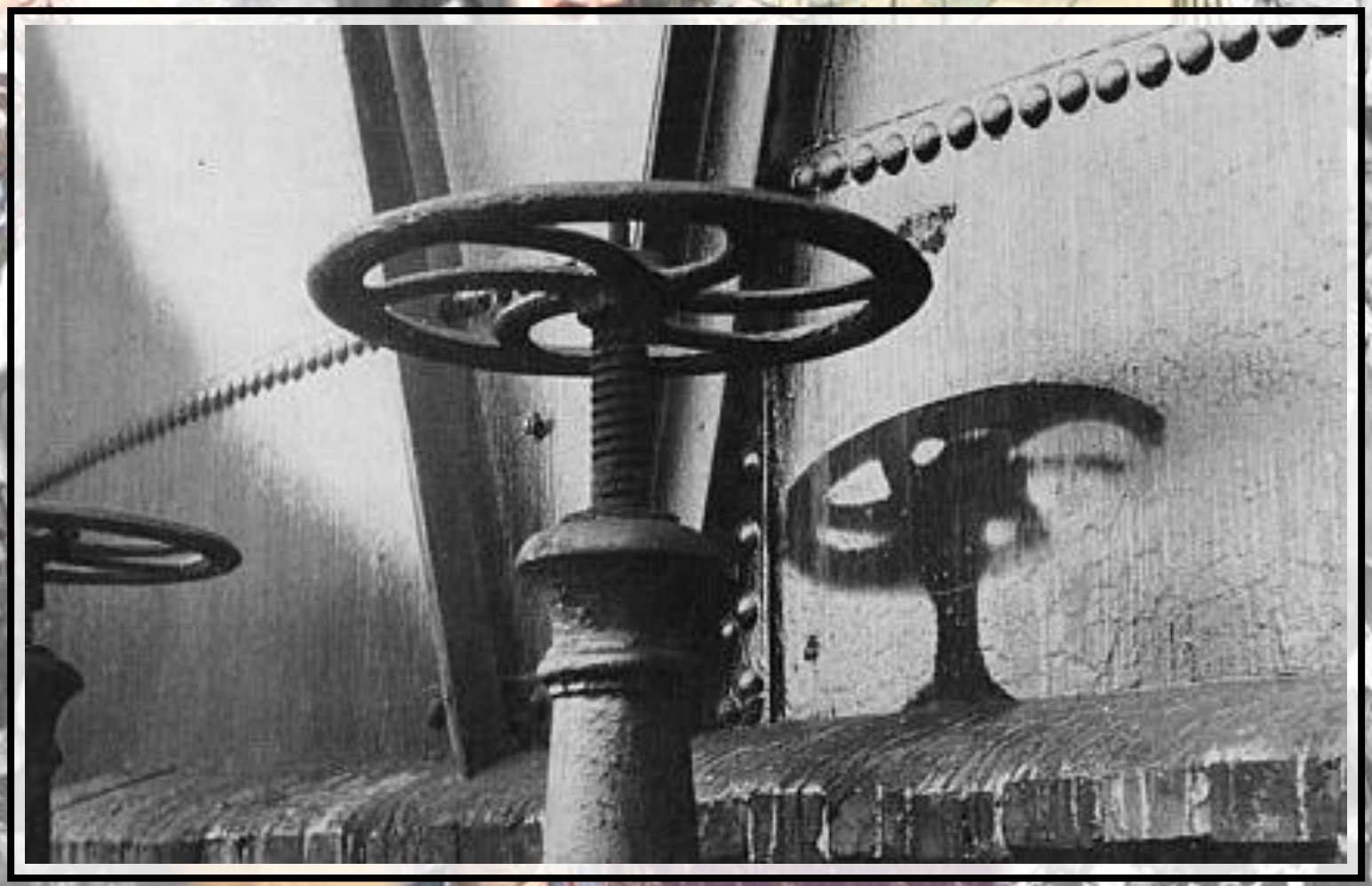

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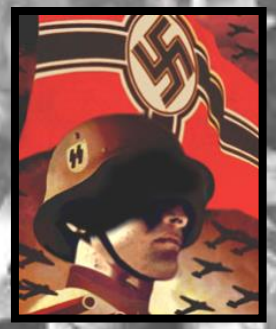

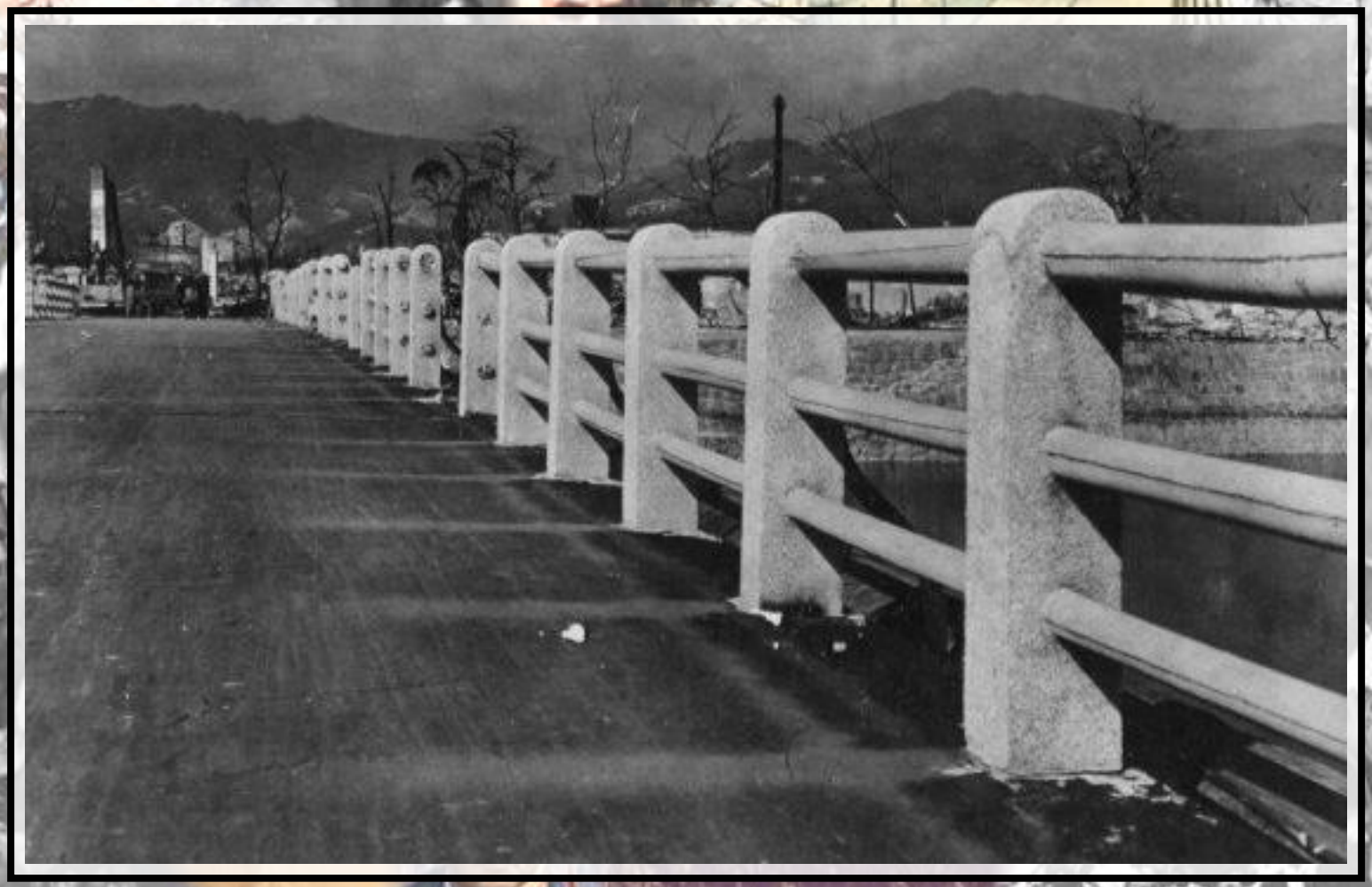

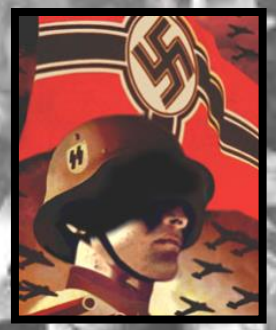

WARNING

The next 7 slides contain graphic images. You do NOT need to view them in order to understand the material and/or answer the “Fast 5” Questions.

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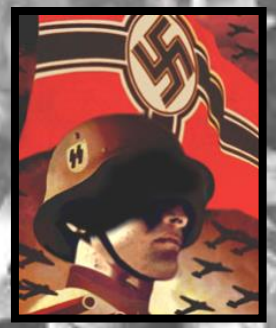

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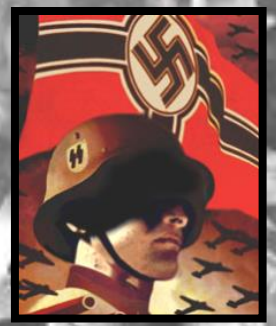

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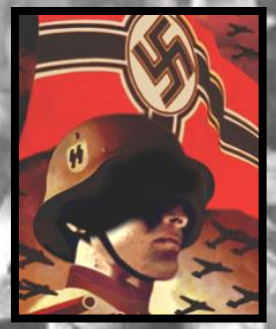

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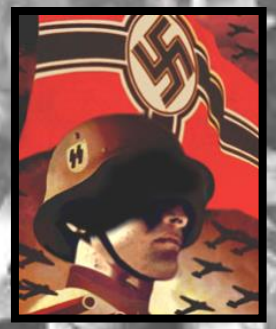

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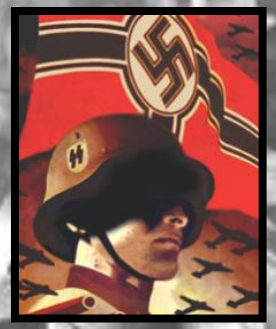

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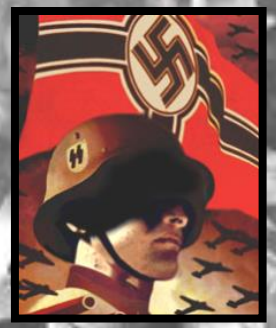

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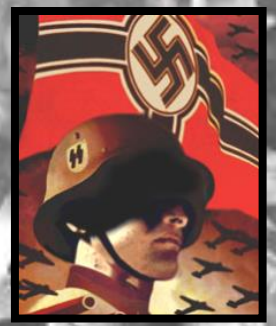
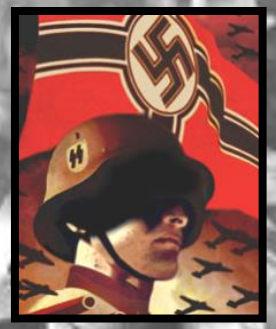


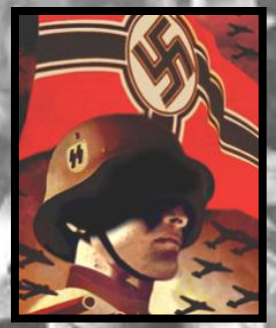
やっぱり 肉親がいて 故郷が
ここにあると 感動が湧いて…

We Can Do It!

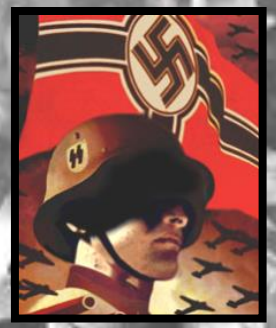


Before

The street of "Kawaya Machi." (The famous place of Hiroshima)

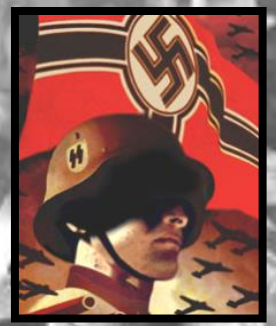


After



Today

We Can Do It!



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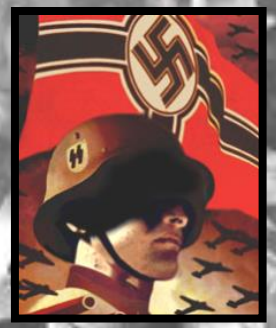

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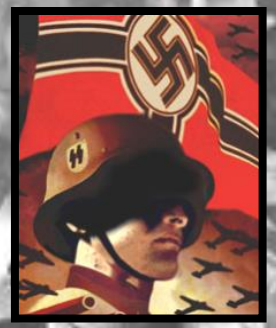
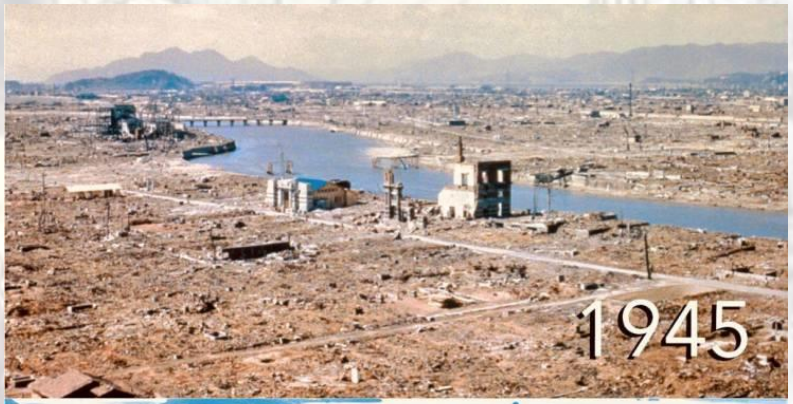
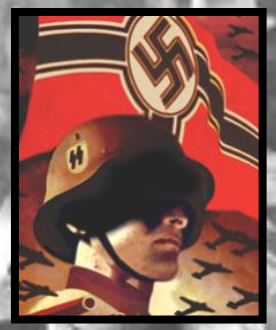



1945

2020



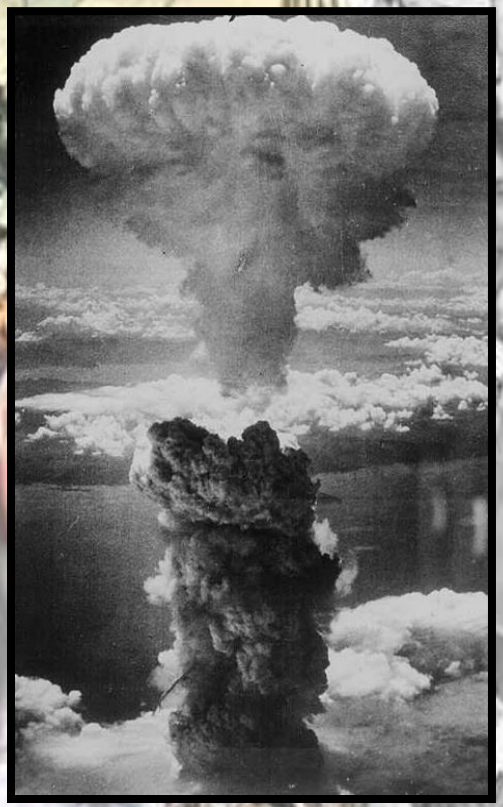
1945

AUGUST

Dropping of the Bombs

At 11:02 am JST on August 9th, a second A-bomb, code-named "Fat Man", is dropped from the B-29 bomber *Bockscar* on the city of Nagasaki.

Population: 240,000.



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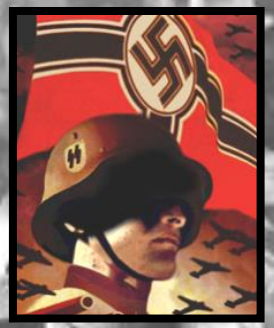


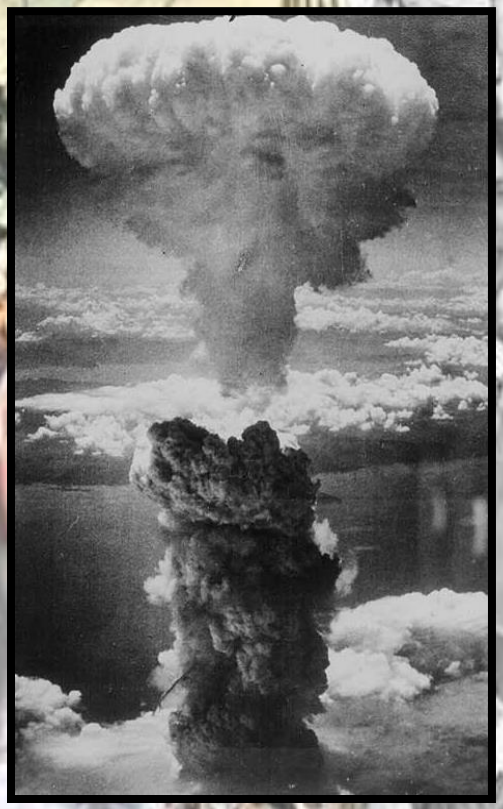
1945

AUGUST

Dropping of the Bombs

Nagasaki was actually the secondary target.

The target city of Kokura had been covered by clouds, so it was passed over by the B-29.



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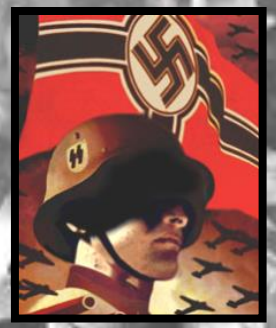
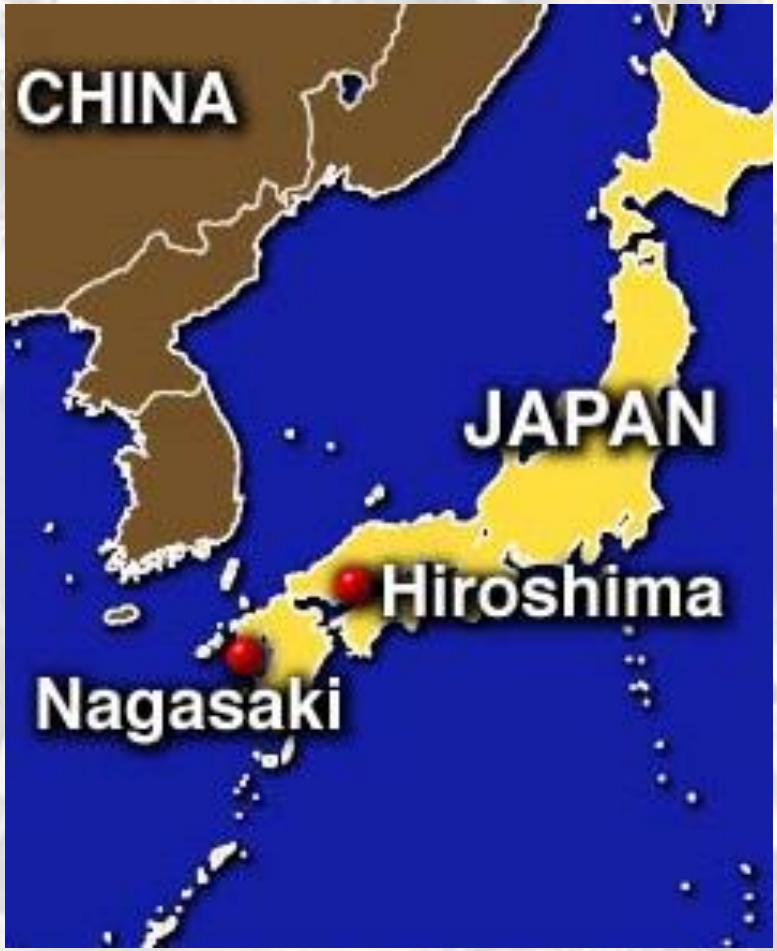
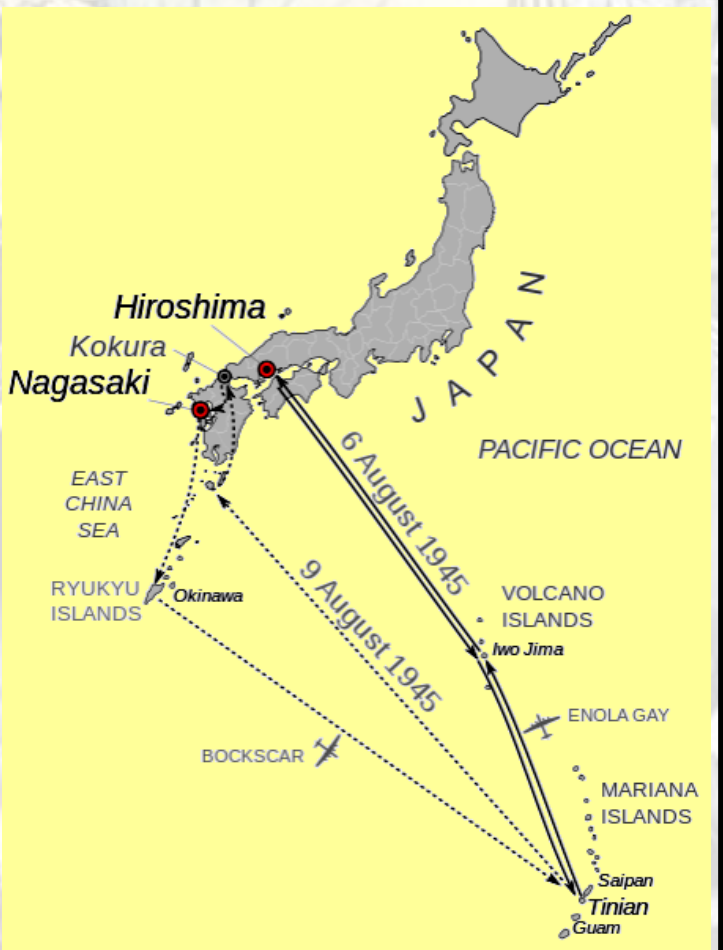
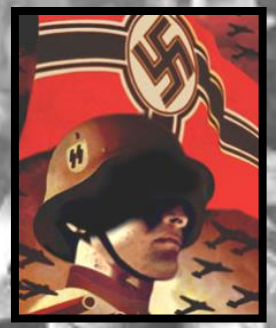



CHINA
JAPAN
Hiroshima
Nagasaki

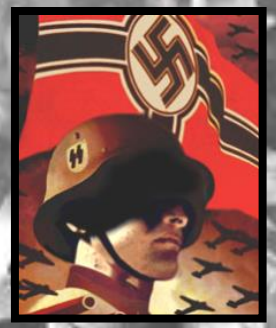

Hiroshima
Kokura
Nagasaki
JAPAN
PACIFIC OCEAN
EAST CHINA SEA
RYUKYU ISLANDS
Okinawa
6 August 1945
9 August 1945
VOLCANO ISLANDS
Iwo Jima
ENOLA GAY
BOCKSCAR
MARIANA ISLANDS
Saipan
Tinian
Guam

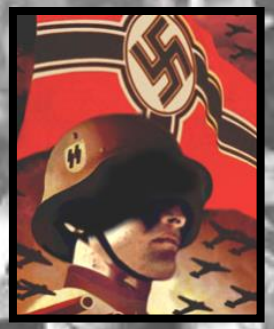
We Can Do It!



BUCKSCAR
77
NO SMOKING WITHIN
100 FT.

We Can Do It!





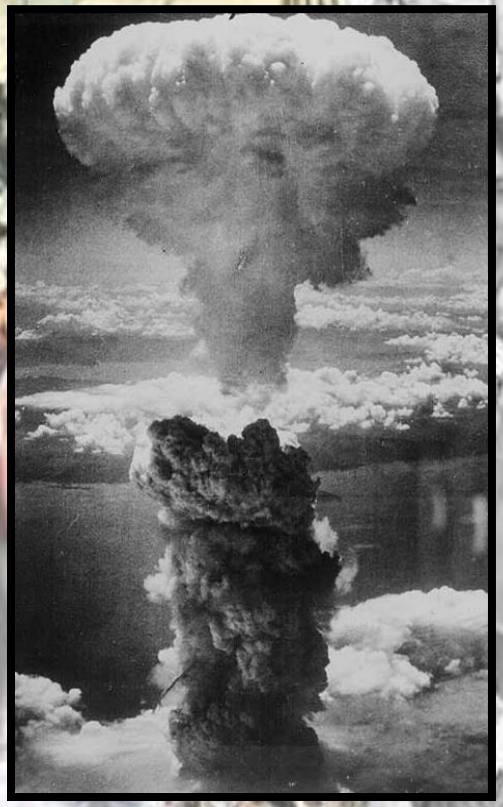
1945

AUGUST

Dropping of the Bombs

The Nagasaki bomb is 10’8” long, 5’ wide, weighs 10,300 lbs., and is filled with 14 lbs. of Plutonium.

It has the explosive power of 21,000 tons of TNT (or 42,000,000 lbs. of TNT).



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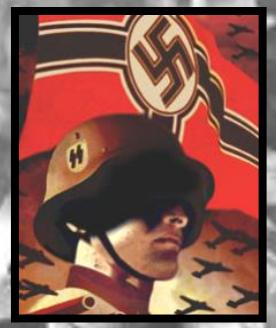
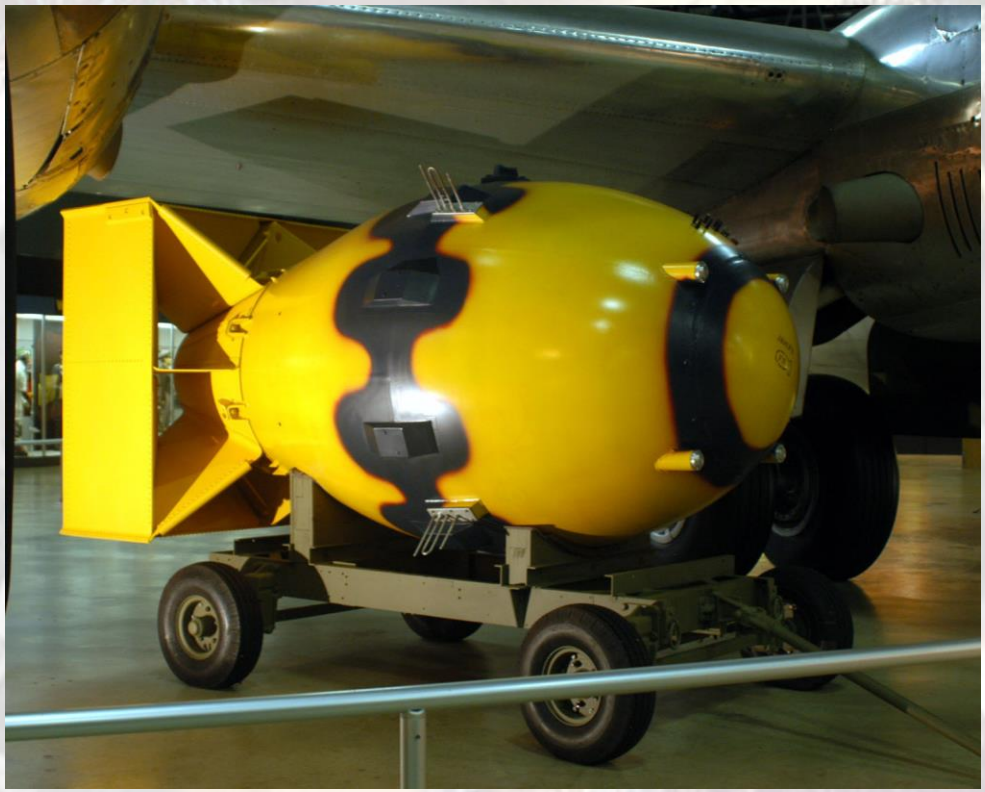
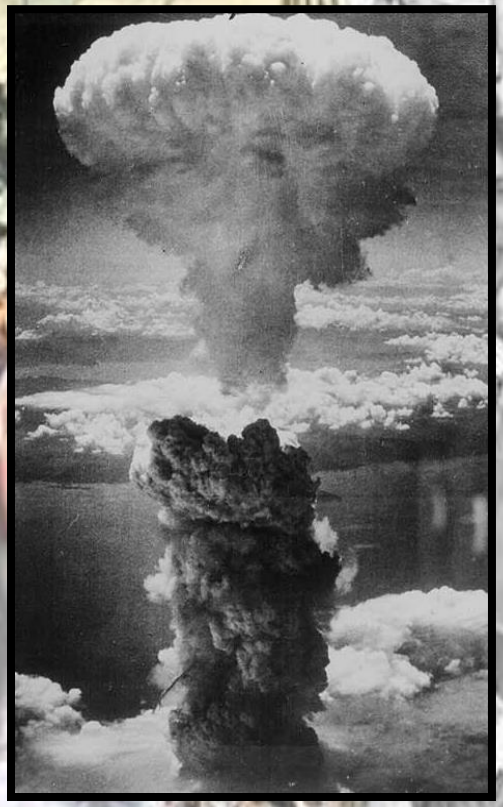


1945





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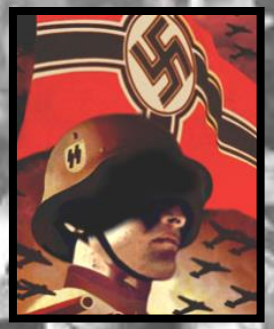

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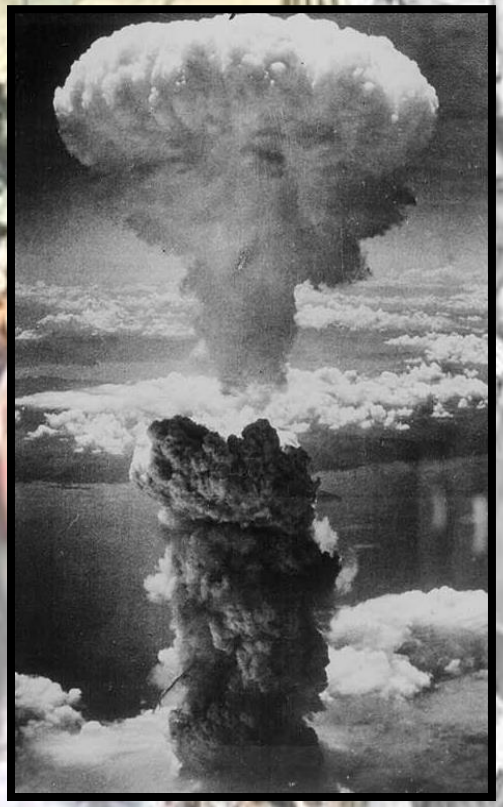

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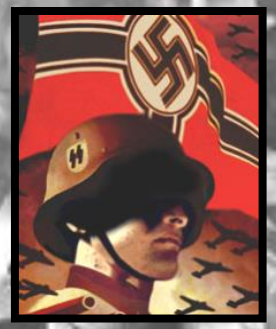

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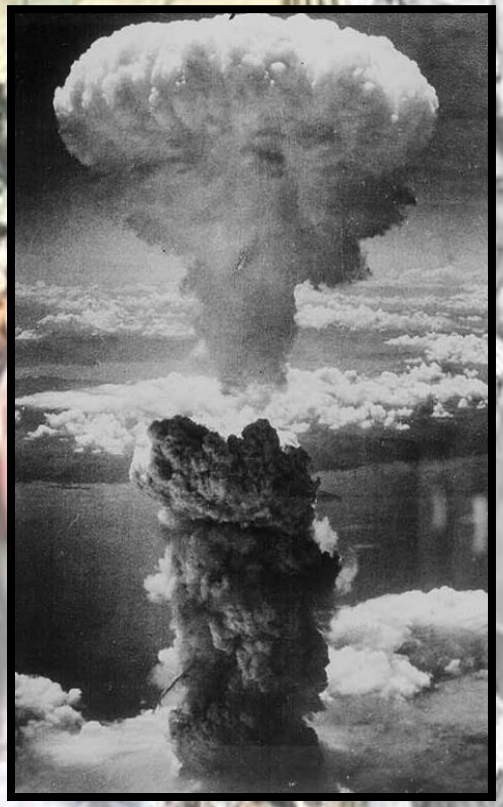
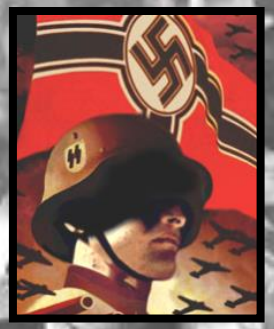


Dr. Hartnell's
135 LIVE!



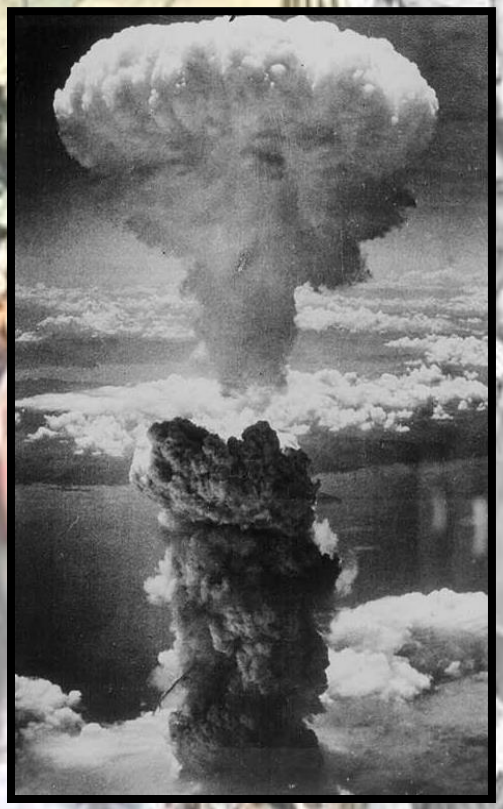
1945

AUGUST

Dropping of the Bombs

"Fat Man" falls for 43 seconds before the time and barometric triggers the firing mechanisms.

The outer ring of high explosives fire and crush the Plutonium core.



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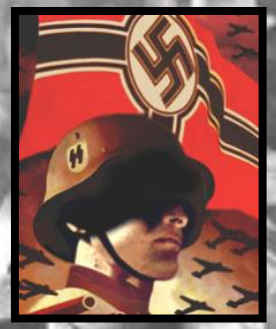
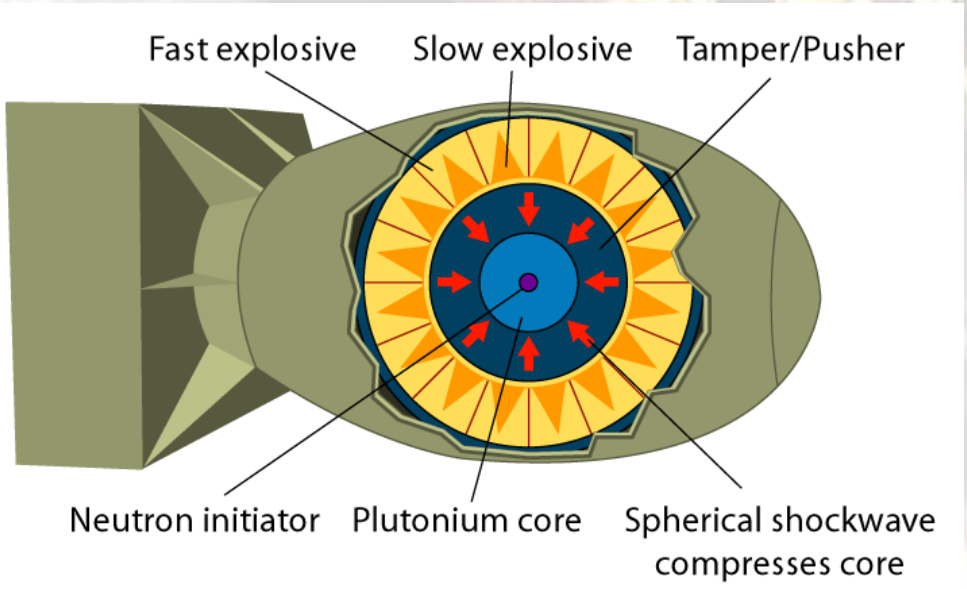
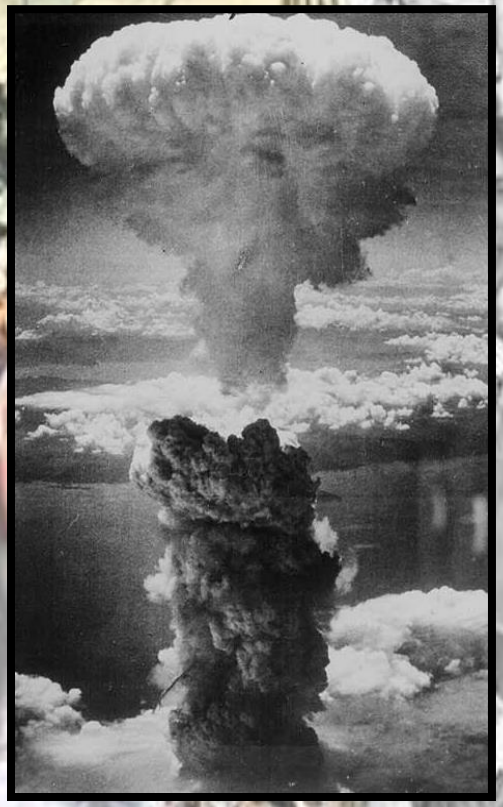


1945





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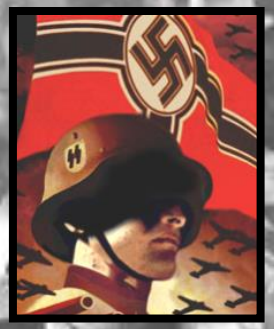


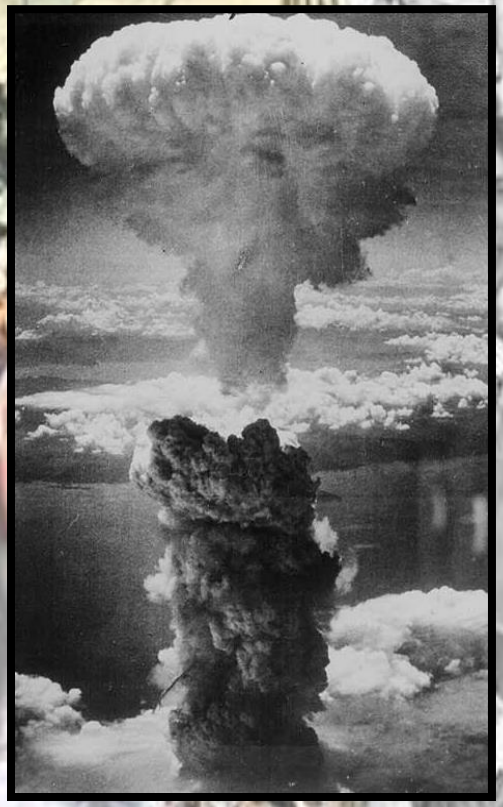
1945

AUGUST

Dropping of the Bombs

The bomb detonates 1,640 feet above the city. (Detonations above cities were done to maximize the damage.)

The explosion is 700 times greater than “Little Boy”.



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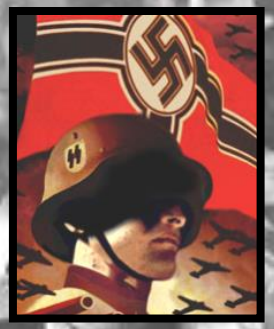


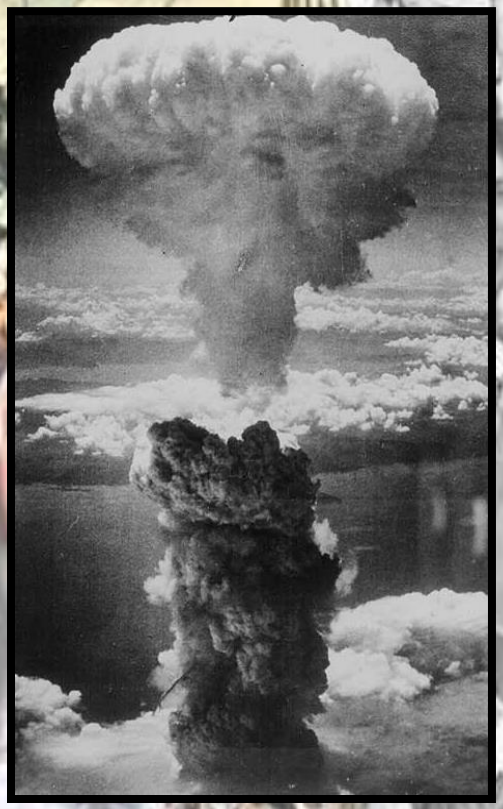
1945

AUGUST

Dropping of the Bombs

Nagasaki's mushroom cloud travels up 11 miles (58,080 feet).

40,000 civilians are vaporized in 1 second.



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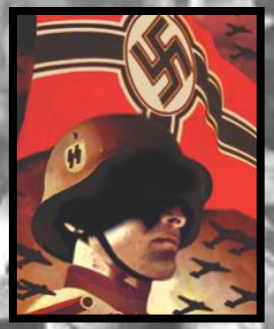


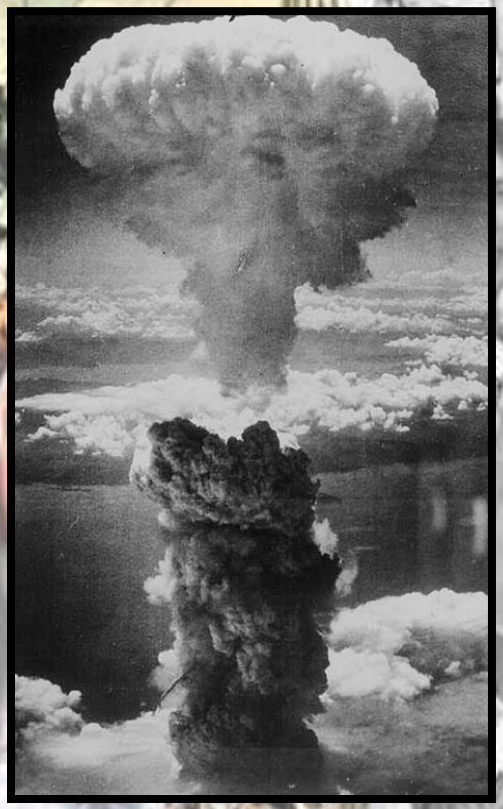
1945

AUGUST

Dropping of the Bombs

Due to radiation poisoning and injuries, thousands more die by December. (Rivers/land remain radioactive for 4 months.)

Between 90,000-166,000 died in Hiroshima; 60,000-80,000 died in Nagasaki.



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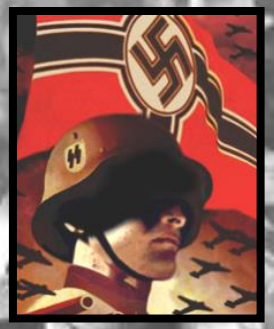


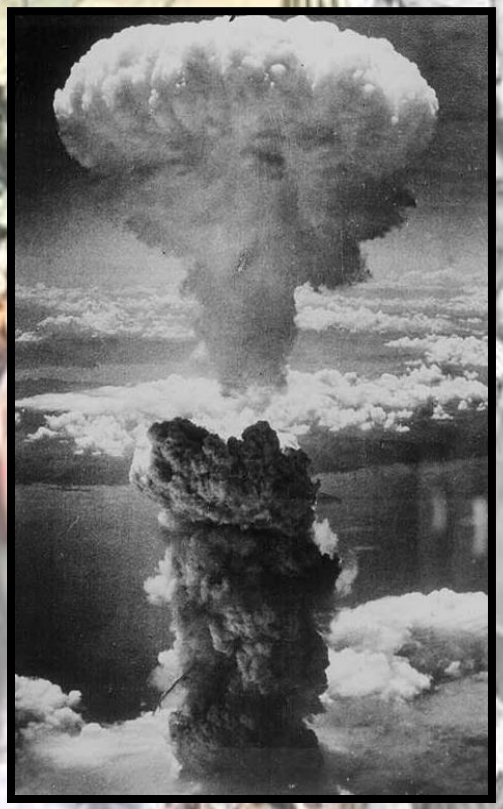
1945

AUGUST

Dropping of the Bombs

In all, anywhere between 150,000 – 246,000 people died from the 2 bombings.

The higher estimate (246,000) is over 100 times the number of Americans lost at Pearl Harbor.



Dr. Hartnell's 135 LIVE!

Fair, Continued Warm

THE BOSTON HERALD

LATE CITY EDITION

BOSTON, THURSDAY, AUGUST 9, 1945—TWENTY-FOUR PAGES

THREE CENTS

ATOMIC BOMB HITS NAGASAKI, SOVIET ENTERS WAR, U.S. BIDS TOKYO QUIT

By FELIX BELAIR

WASHINGTON, Aug. 8—Russia went to war tonight against Japan. The action was taken at the request of the United States, Britain and China, as of 5 P. M. (EWT), or midnight in Russia.

A few hours later the Tokyo radio reported Soviet troops were attacking on the eastern Manchurian border. The broadcast said ground assaults were launched, while a few Russian planes bombed strategic points in the Asiatic mainland province. The report, issued as a Kwantung army communique, was unconfirmed and did not give the exact location of the attacks.

Thus, almost three days to the hour after the atomic bombing of Hiroshima, the Russian war declaration, coupled with a renewed ultimatum by this government confronted Japan with the inescapable alternatives of unconditional surrender or annihilation on a scale never before known on earth.

Allied Capitals See Early Doom of Japan

Reaction in Washington and in other Allied capitals was that the early doom of the Pacific enemy was near.

Vital Kyushu City Is Second Atom Target

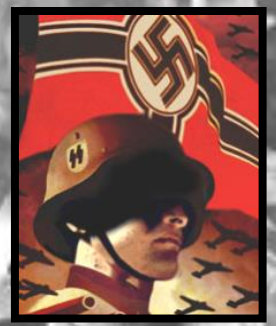
GUAM, Thursday, Aug. 9 (AP)—The second atomic bomb, most destructive explosive invented by man, was dropped on strategically important Nagasaki on western Kyushu island at noon today.

Crew members radioed that results were good, but General Spaatz said additional details would not be disclosed until the mission returns.

BYRNES TELLS HOW TRUMAN PRODDED REDS

Warns Tokyo It Has Little Time Left to Avoid Annihilation

We Can Do It!



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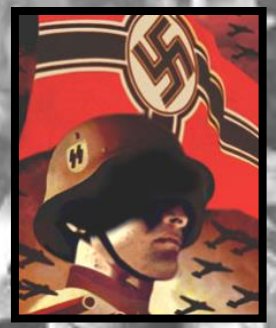

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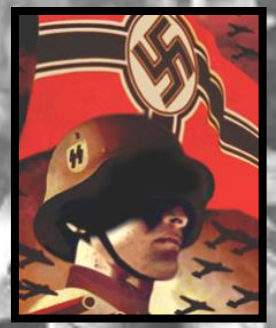

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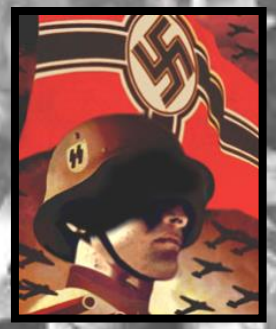

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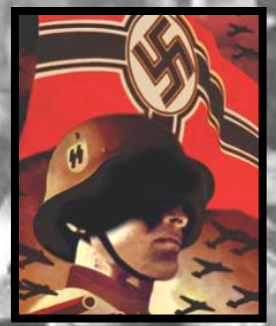

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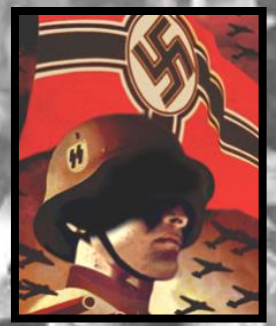

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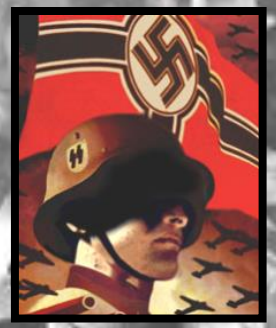

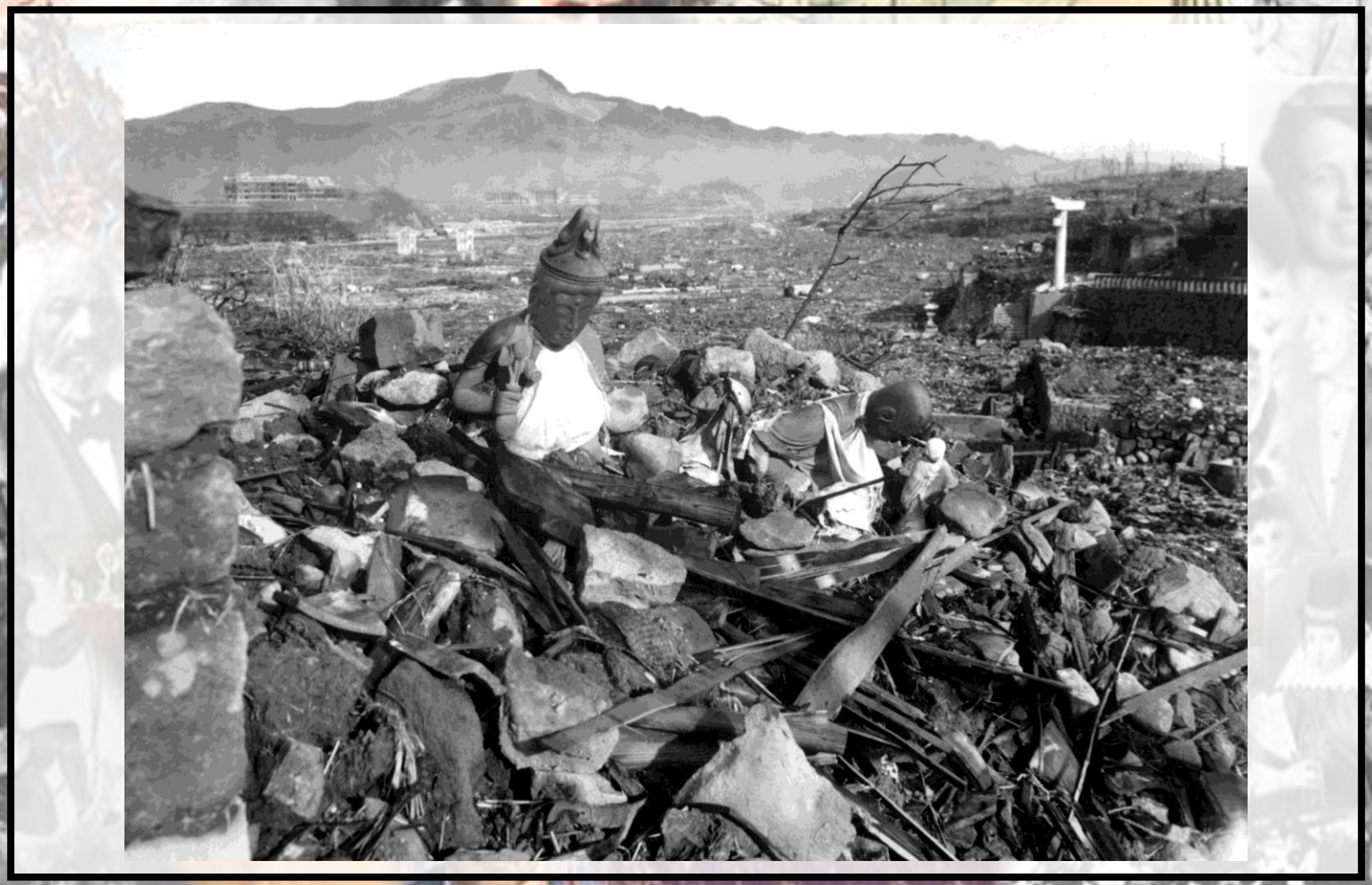

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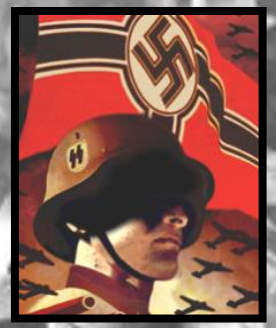

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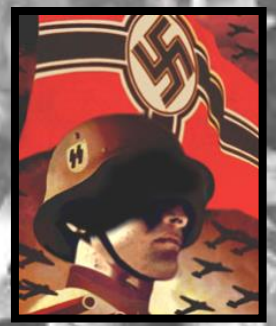
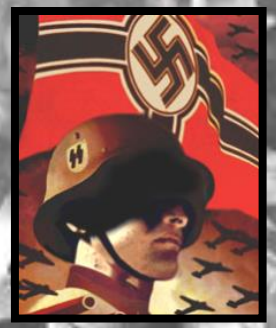
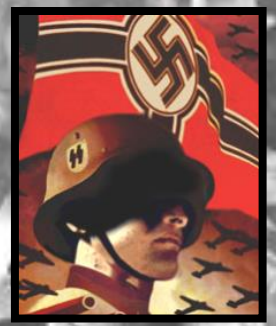


五大神宮

We Can Do It!



LIFE



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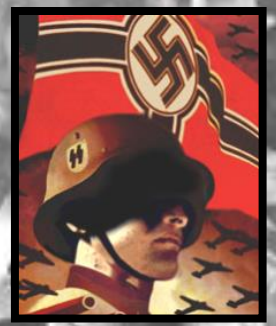

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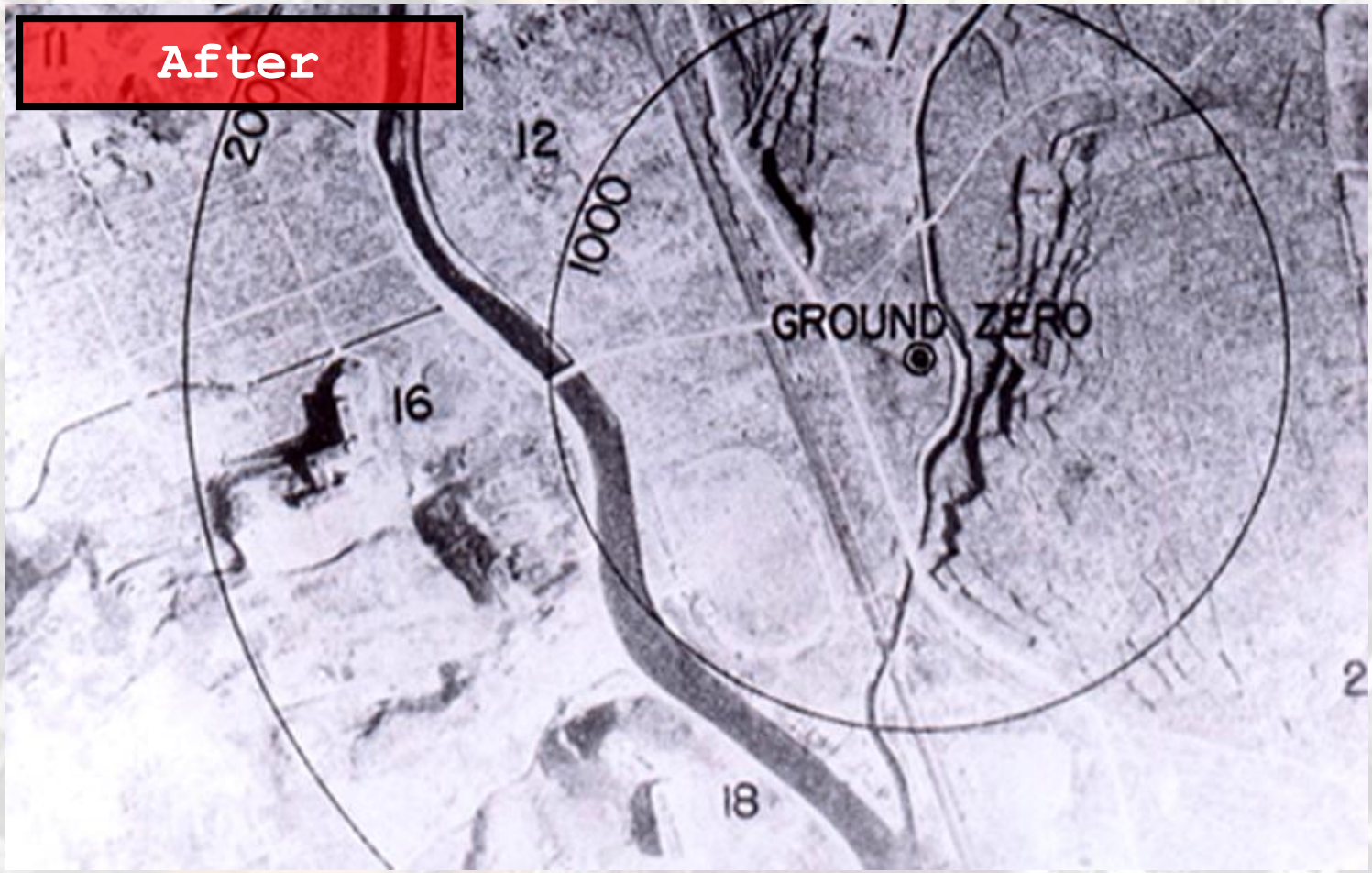

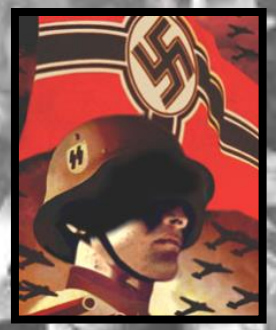

WARNING

The next 7 slides contain graphic images. You do NOT need to view them in order to understand the material and/or answer the “Fast 5” Questions.

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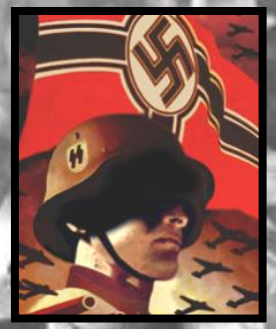

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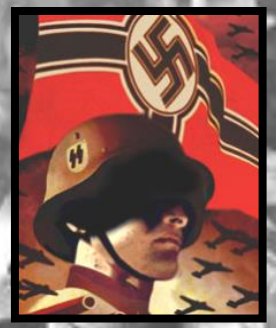

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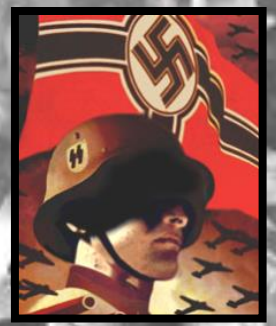

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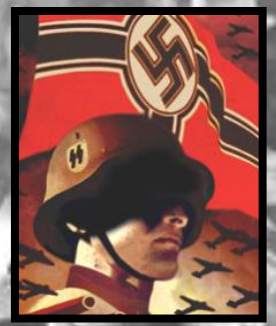

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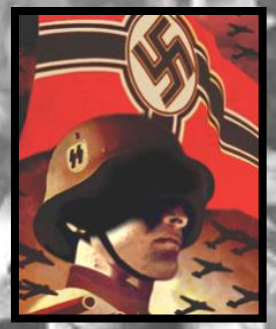

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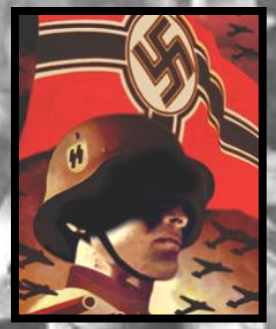

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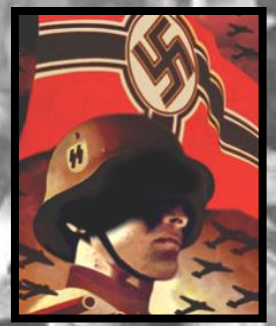

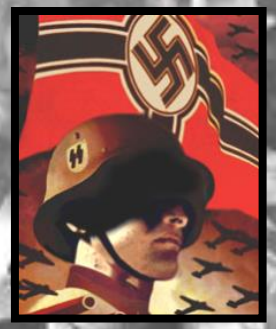

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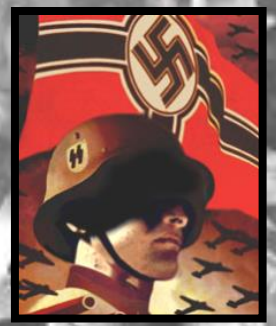

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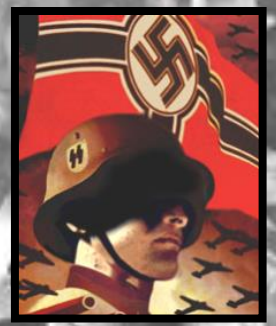

Today

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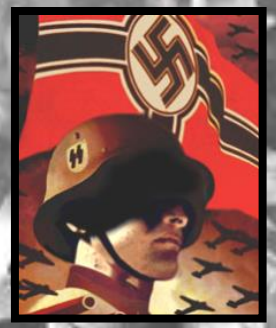
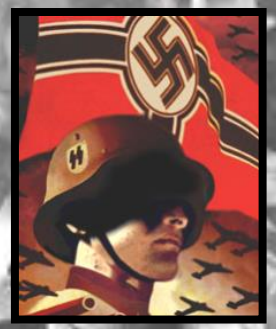




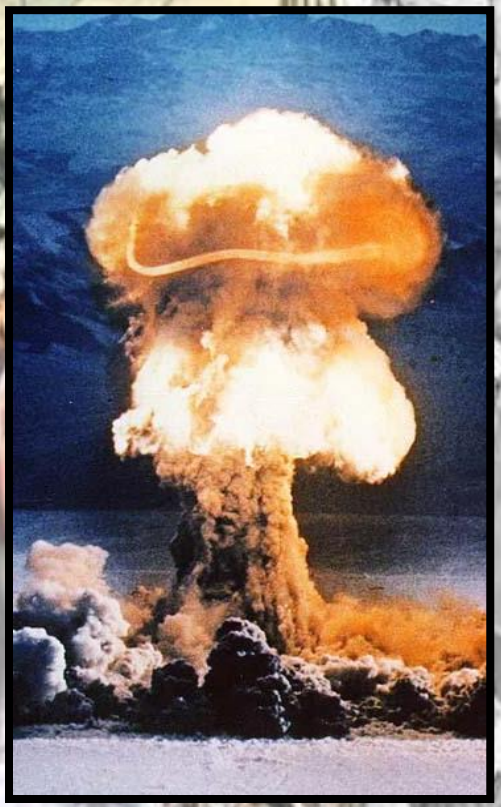
1945

HOW IT WORKS

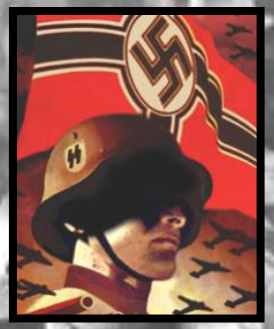
Dropping of the Bombs

How is an atomic bomb this destructive?

A-bombs involve the forces that hold together the nucleus of an atom… until the desired time when it breaks apart and unleashes its energy.



Dr. Hartnell's 135 LIVE!



1945

HOW IT WORKS

Dropping of the Bombs

There are 2 ways nuclear energy can be released from an atom…

1. Nuclear fission.

2. Nuclear fusion.

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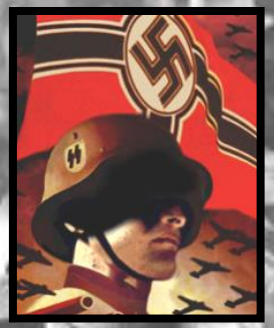
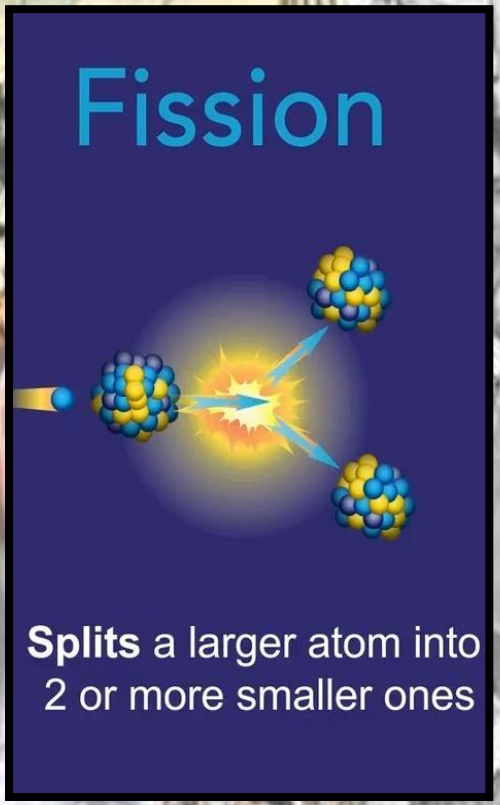


1945

HOW IT WORKS

Dropping of the Bombs

Nuclear **fission**: You **split** the **nucleus** of an atom into 2 smaller fragments with a neutron. This method involves isotopes of uranium or plutonium (**this is how nuclear power plants work**).



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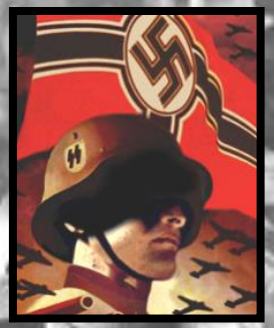


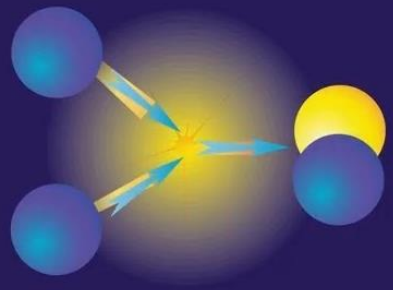
1945

HOW IT WORKS

Dropping of the Bombs

Nuclear **fusion** – You **bring together 2 atoms**, usually hydrogen or hydrogen isotopes (like deuterium or tritium), to form a larger one (helium or helium isotopes); **this is how** the **sun makes energy**.

Fusion



Joins 2 or more lighter atoms into a larger one

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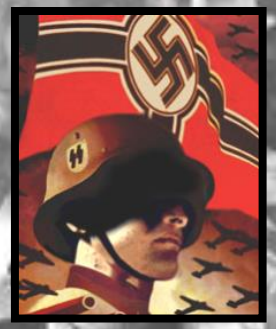
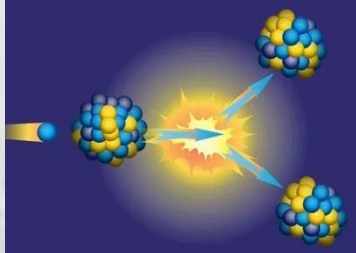
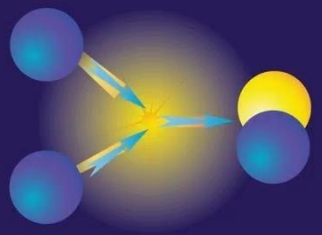


1945

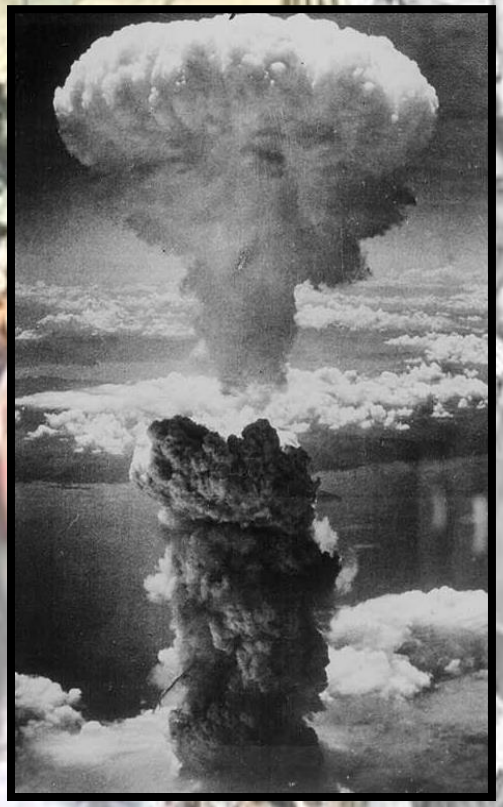
Fission vs. Fusion



Splits a larger atom into 2 or more smaller ones



Joins 2 or more lighter atoms into a larger one



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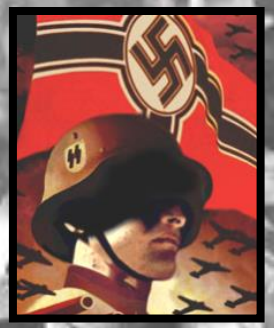


1945

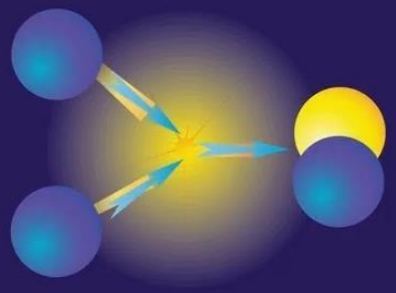
HOW IT WORKS

Dropping of the Bombs

The **Hiroshima and Nagasaki** atomic bombs **were fission** bombs.

Hydrogen bombs (nicknamed "H-bombs") – also called thermonuclear bombs – **use fusion**.

Fusion



Joins 2 or more lighter atoms into a larger one

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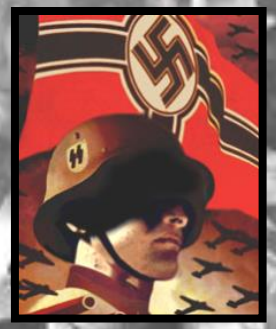
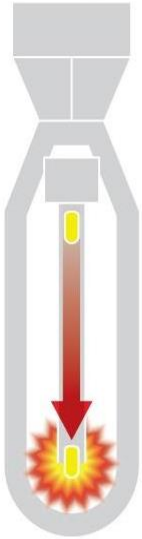
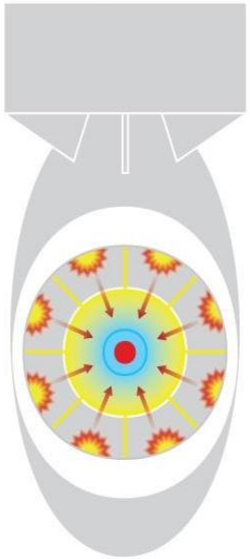
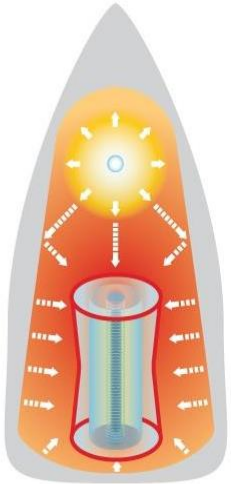
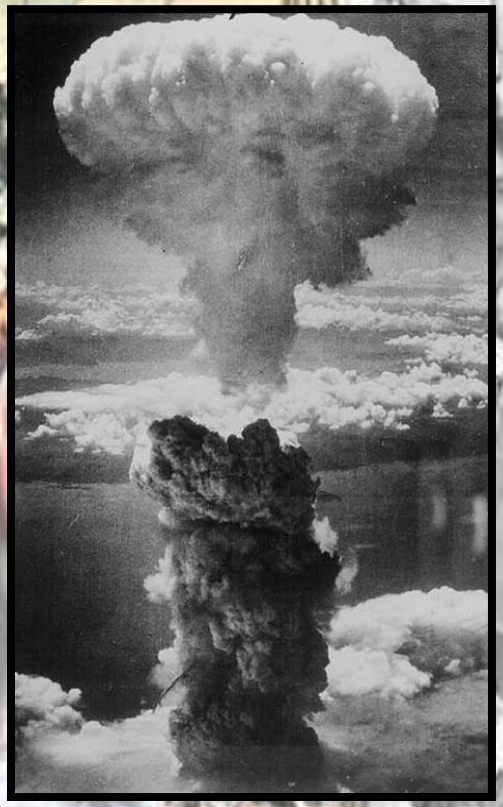


Nuclear warheads

Examples

Uranium bomb	Plutonium bomb	Hydrogen bomb
Gun type	**Implosion**	**Chain reaction**
		
One piece of uranium is fired into another	An outer ring of high explosives fire and crush a plutonium core	First nuclear explosion triggers massive second stage nuclear explosion



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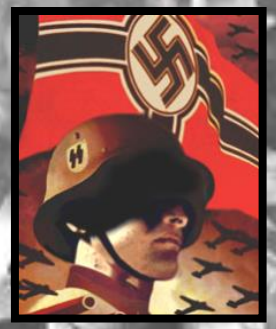

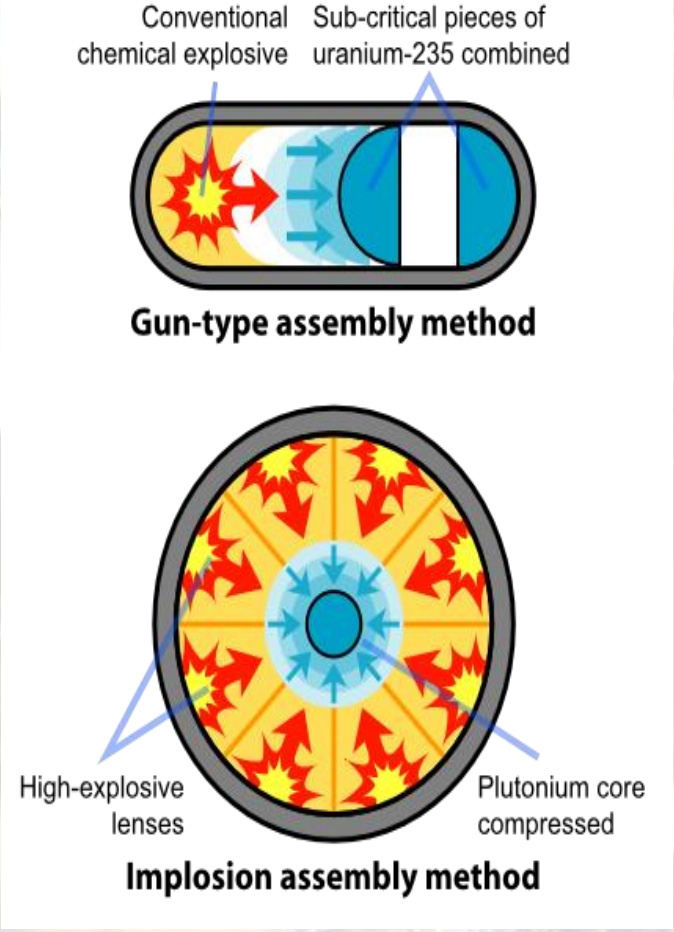

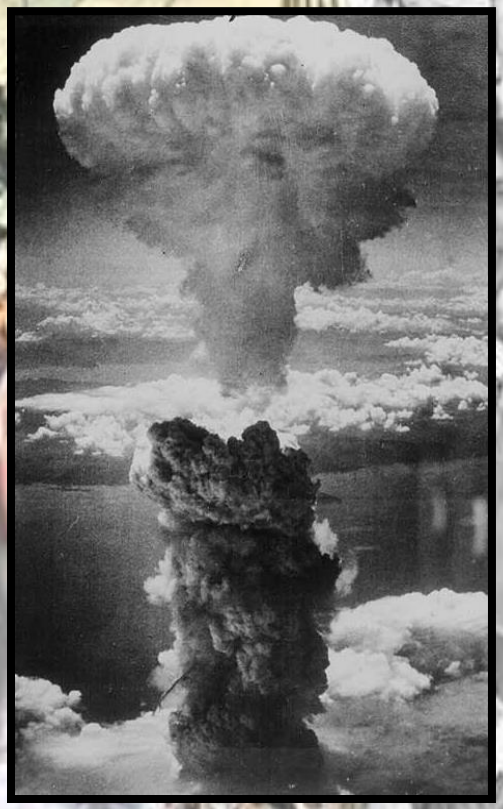

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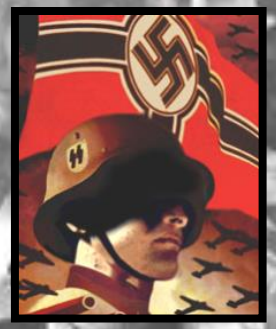
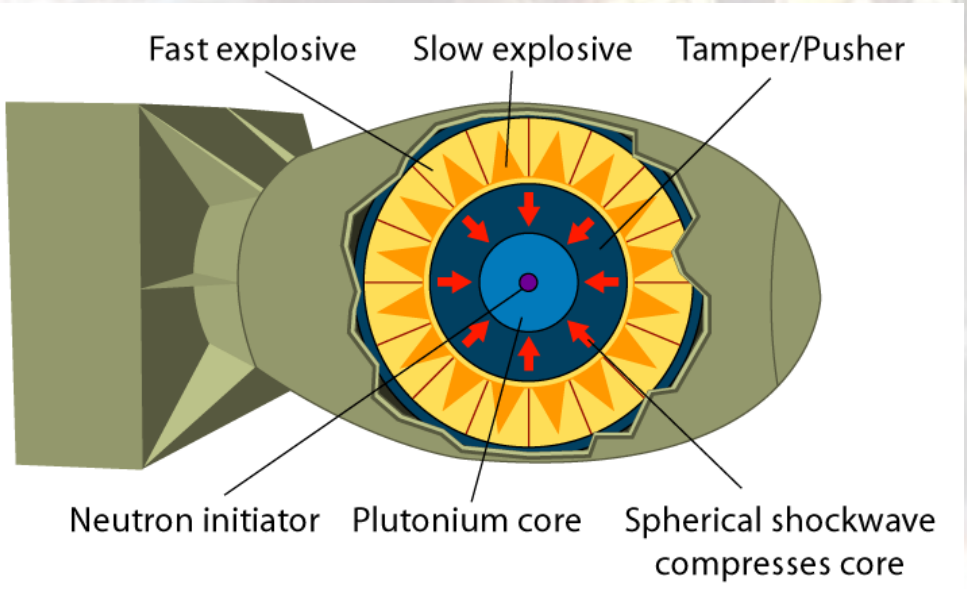
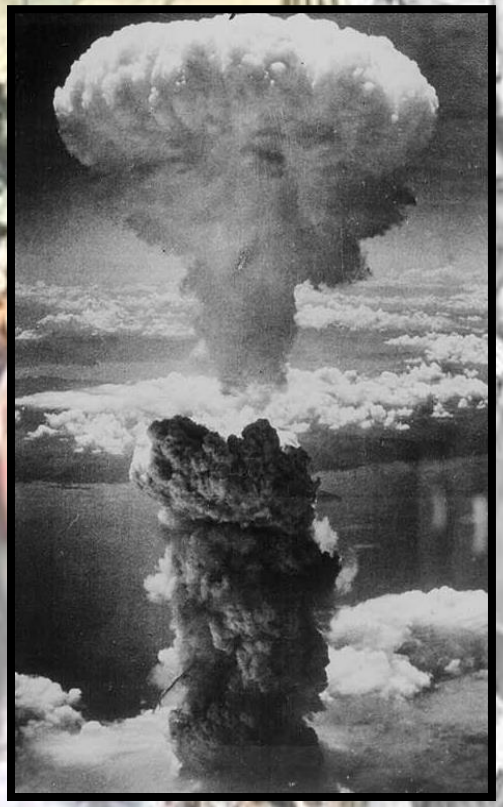


1945





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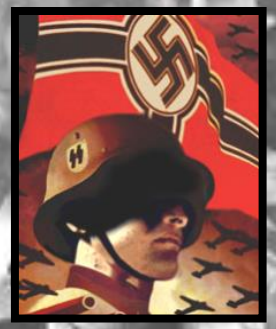
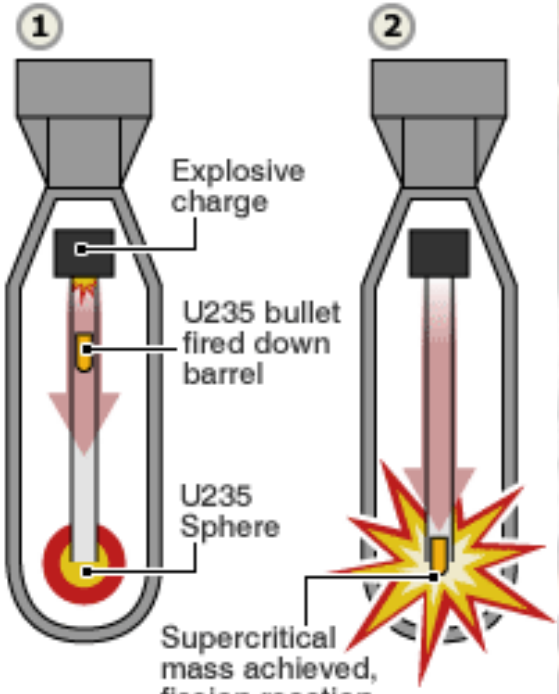
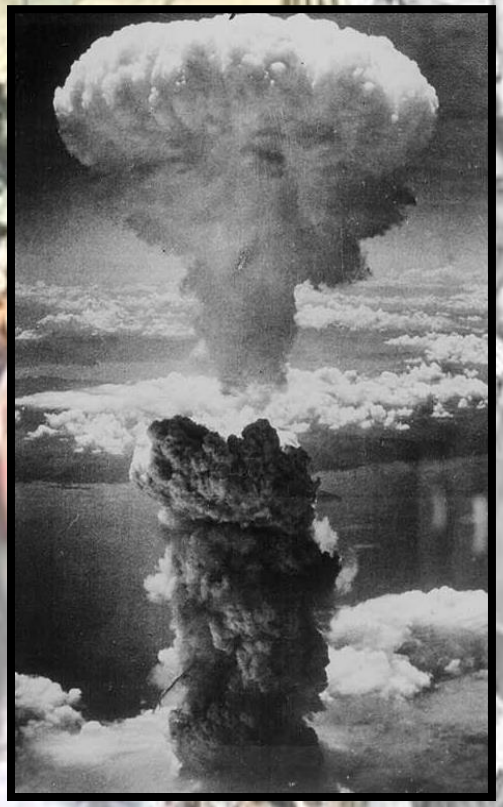


1945

Gun-triggered fission bomb

'Little boy' dropped on Hiroshima, 1945





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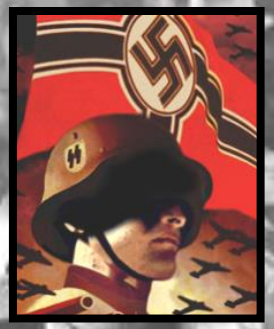


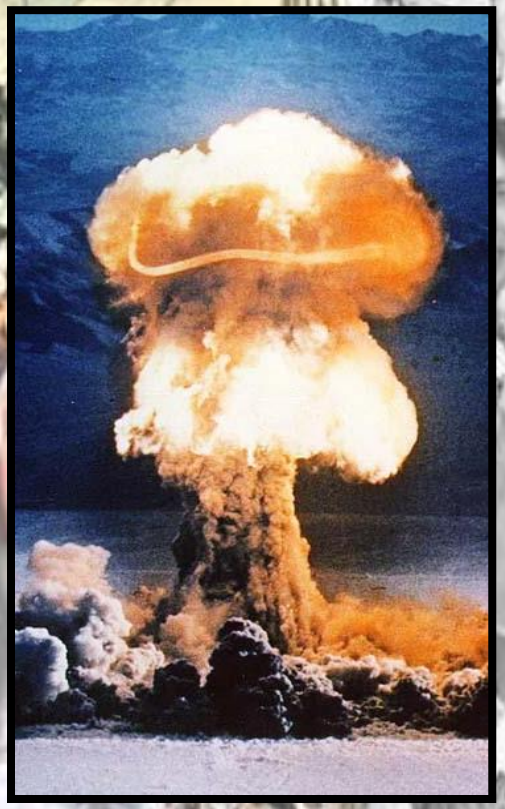
1945

HOW IT WORKS

Dropping of the Bombs

Detonation over cities causes immense damage.

The degree of damage depends on the distance from the center of the bomb blast (hypocenter or ground zero).



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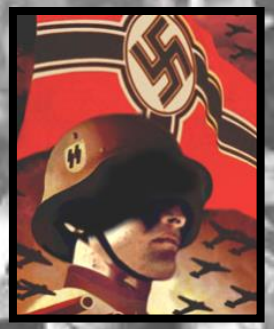

1945

HOW IT WORKS

Dropping of the Bombs

Damage is caused by…

1. A wave of intense heat.
2. A shock wave created by the blast.
3. Radiation.
4. Radioactive fallout.

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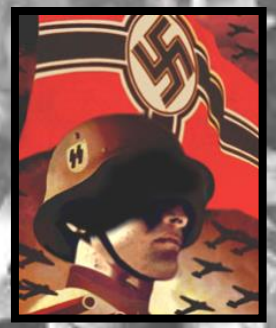

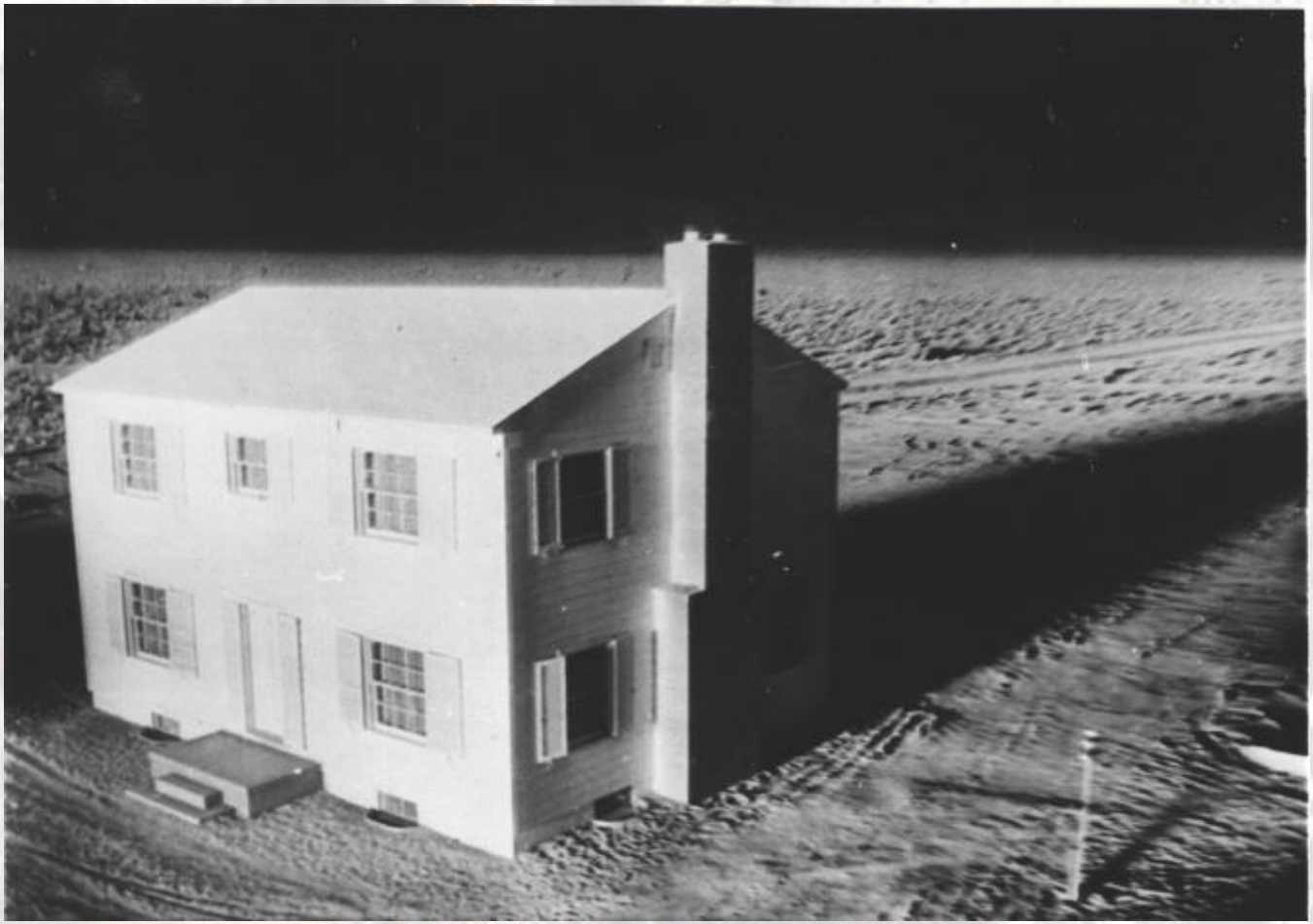

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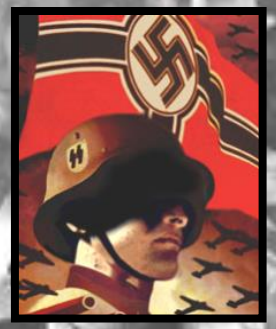

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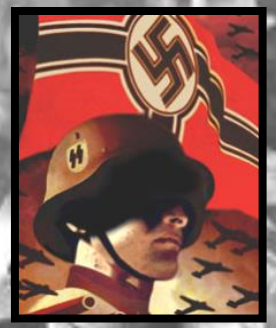
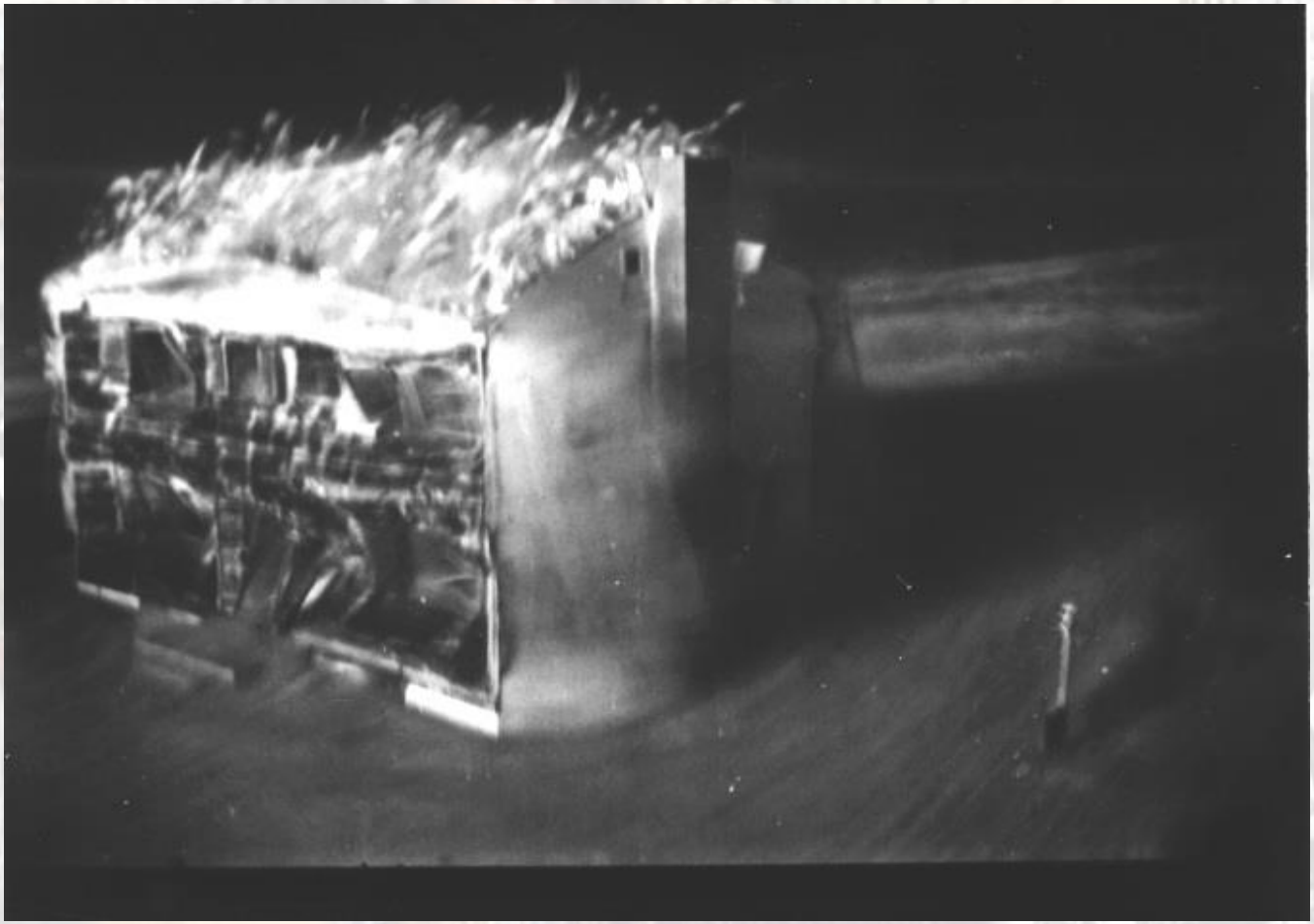
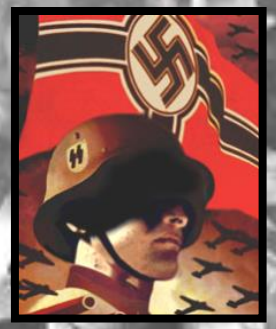
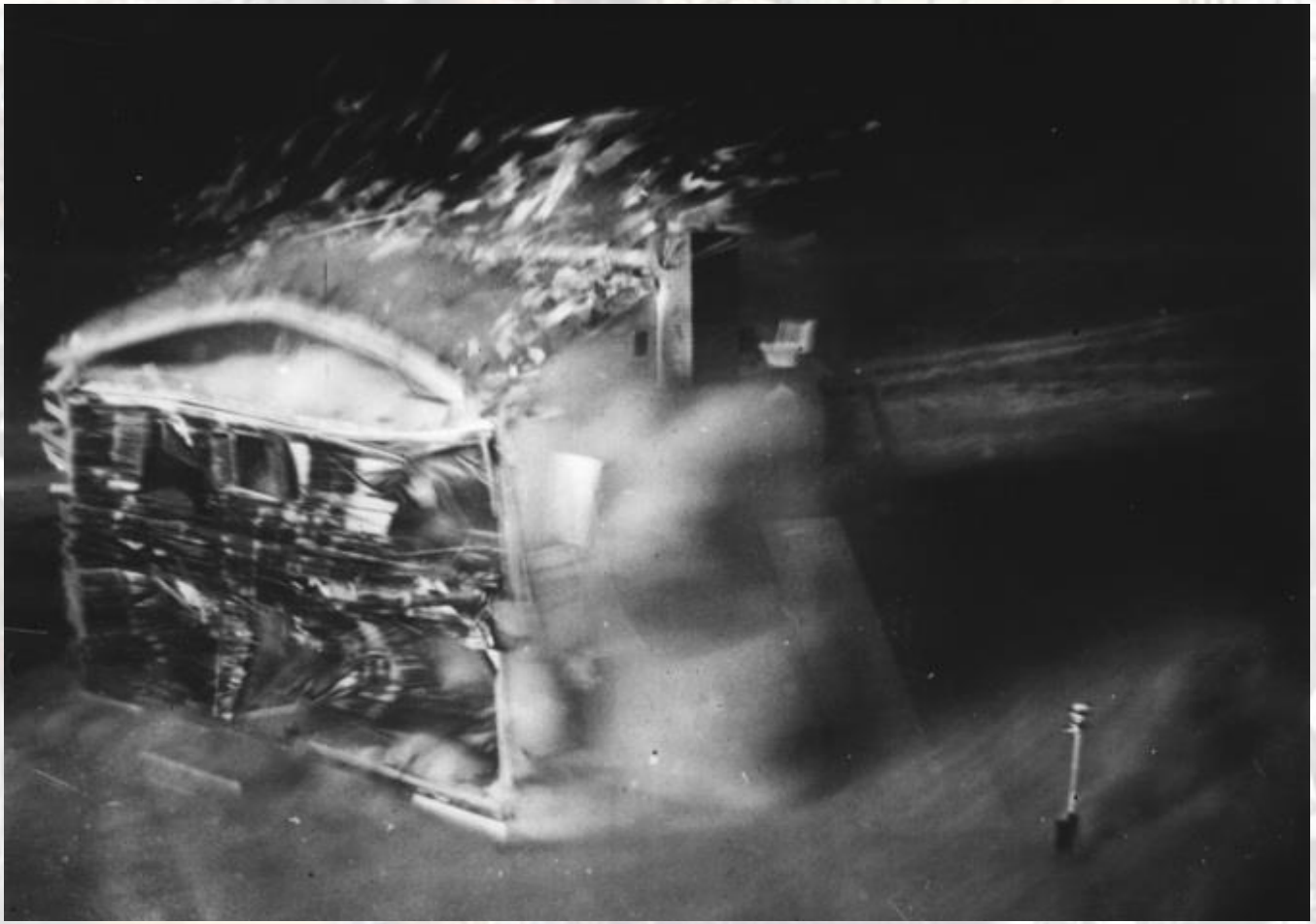




We Can Do It!





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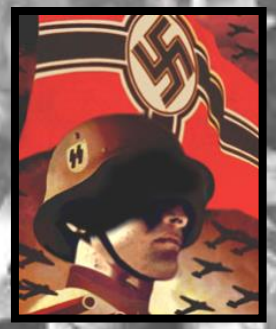

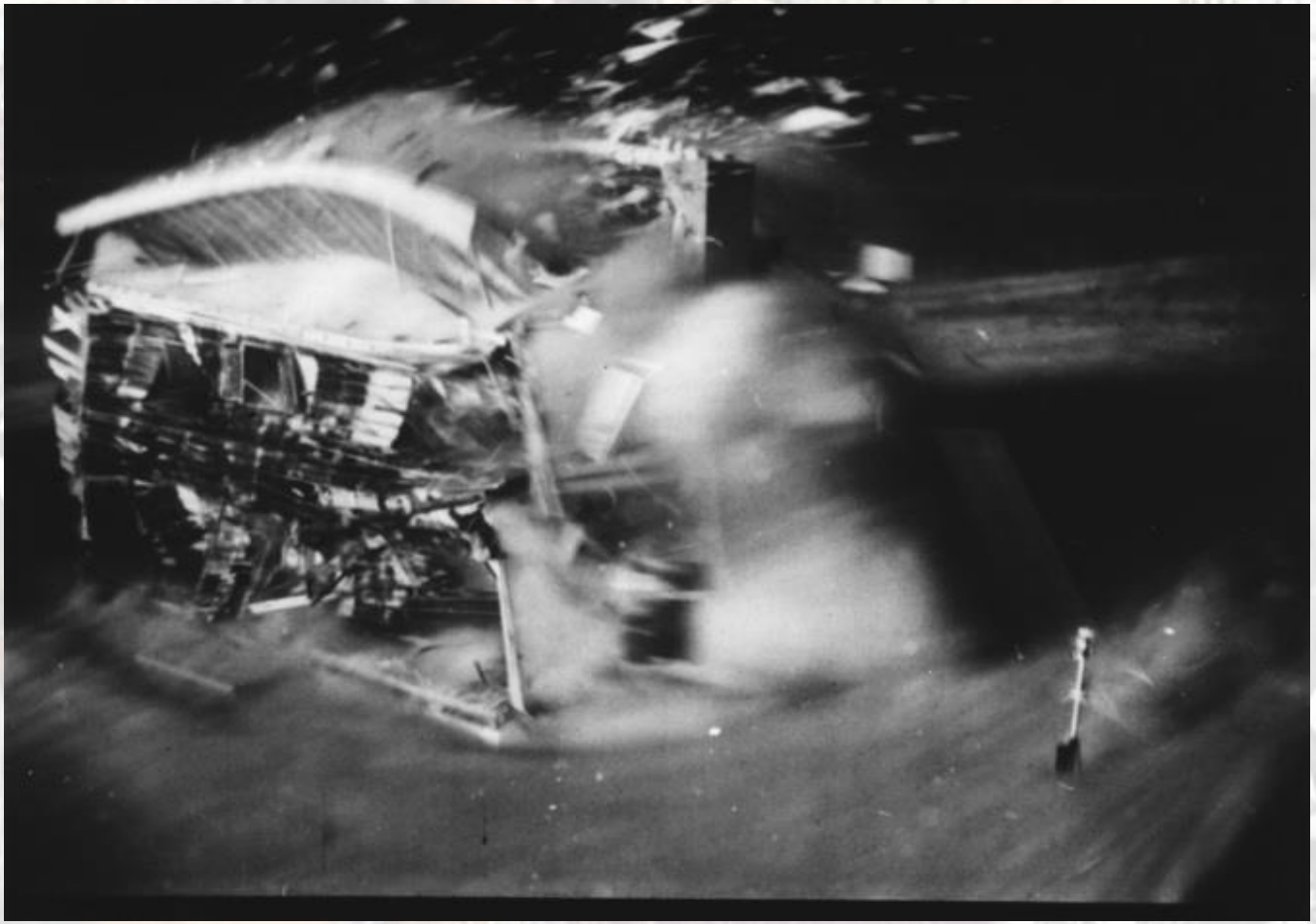

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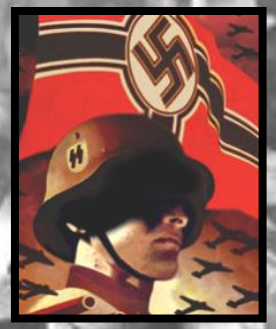

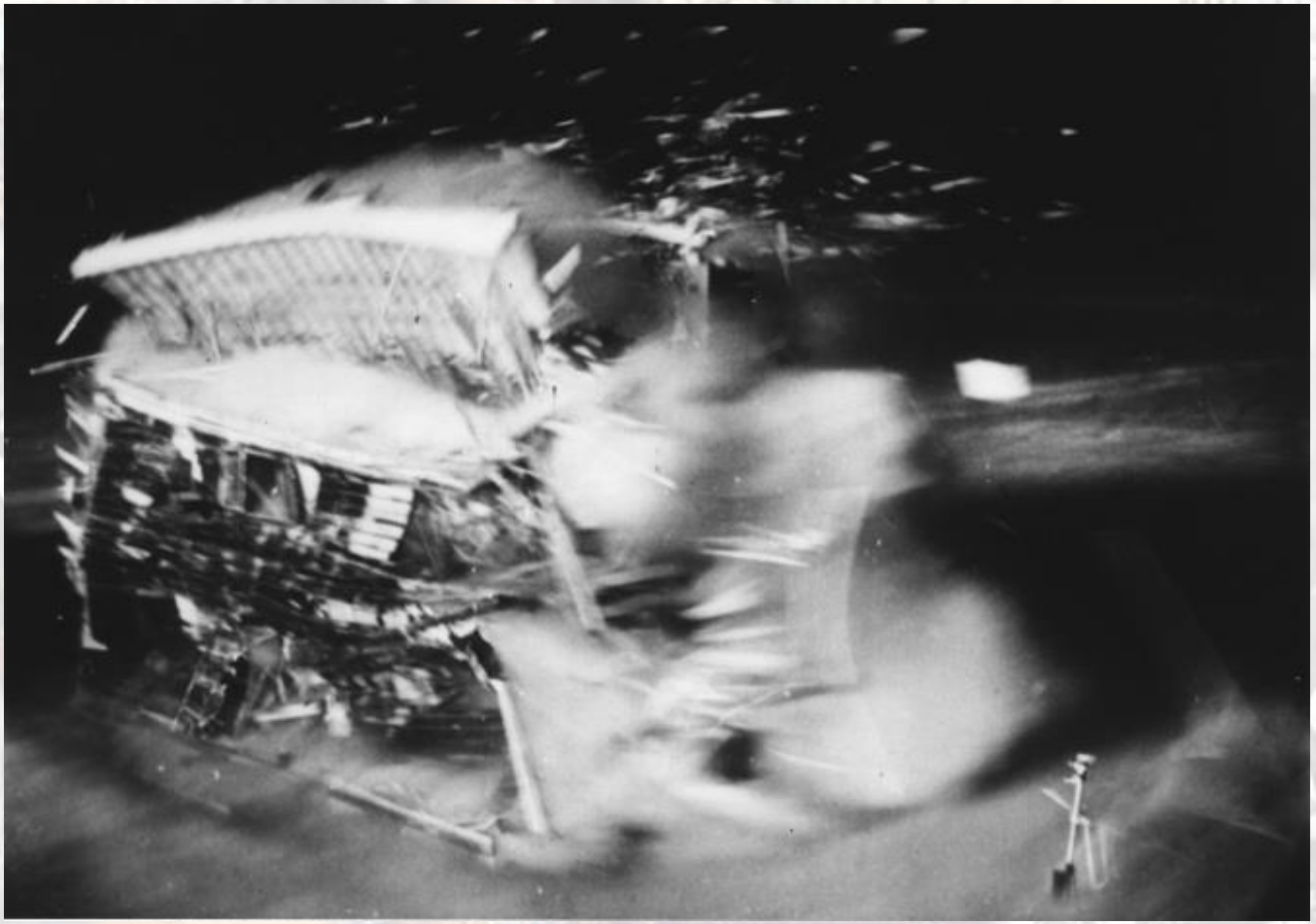

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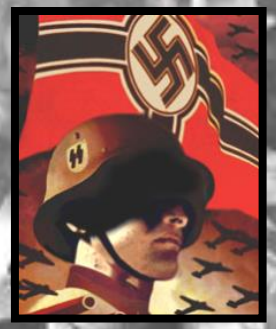
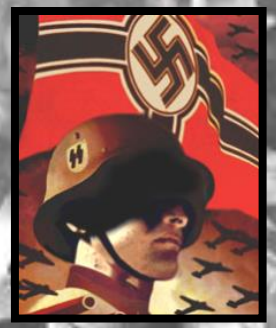
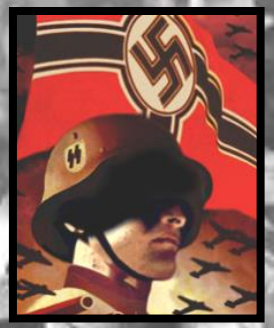


We Can Do It!





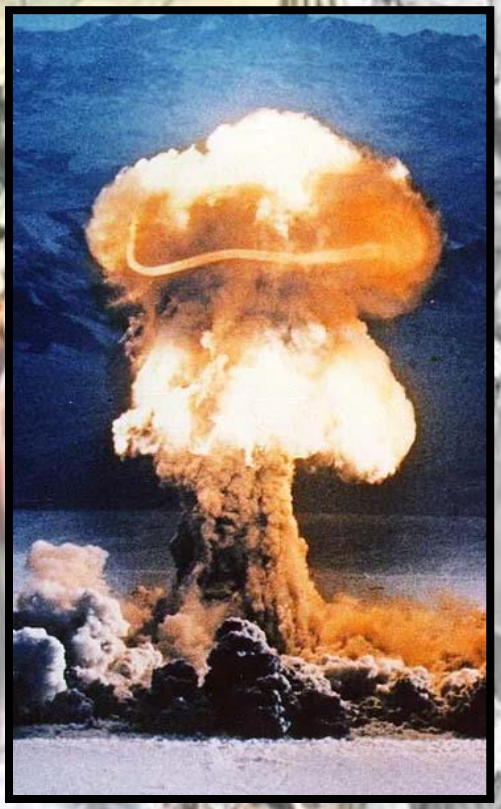
1945

HOW IT WORKS

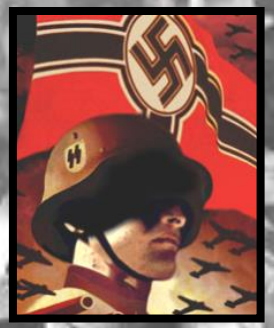
Dropping of the Bombs

Radioactive fallout is impacted drastically by wind direction.

When radioactive particles enter the water supply and are inhaled or ingested by people, the bomb's effects are long-lasting.



Dr. Hartnell's 135 LIVE!



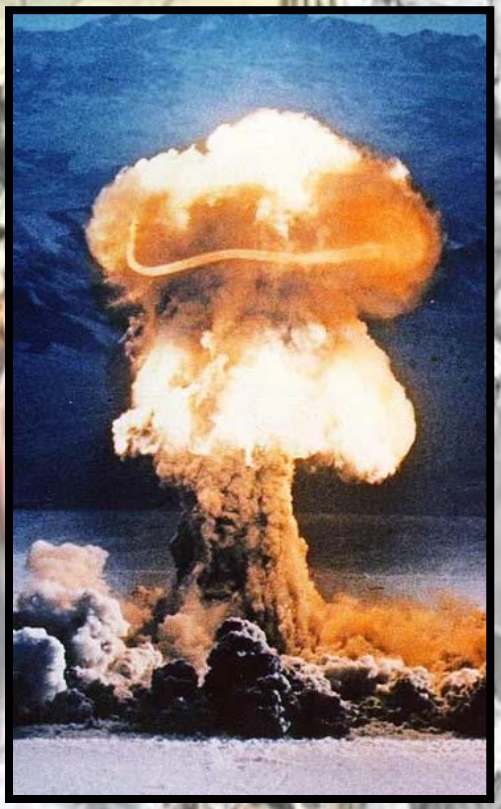
1945

HOW IT WORKS

Dropping of the Bombs

If dust and debris ends up in the atmosphere, the end result could be a nuclear winter, which blocks out the sun and shuts down photosynthesis.

That killed the dinosaurs.



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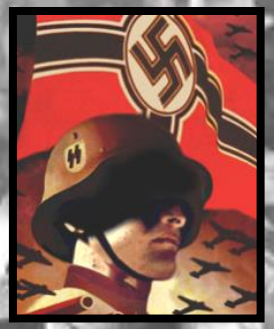
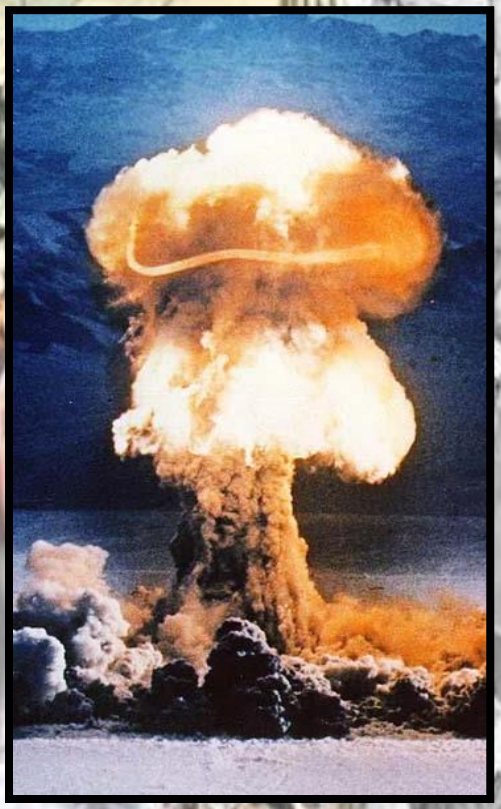


1945

HOW IT WORKS

Dropping of the Bombs

What's the difference between an atomic bomb and a hydrogen bomb?



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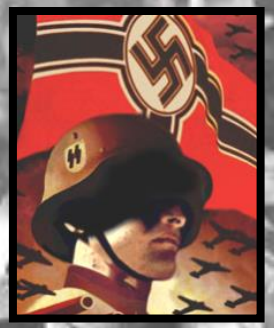
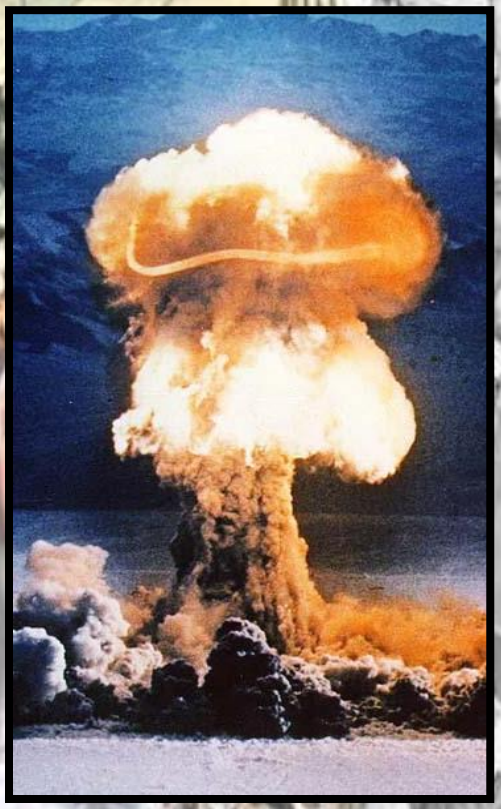


1945

HOW IT WORKS

Dropping of the Bombs

Both use radioactive material (uranium or plutonium) for the explosive material.



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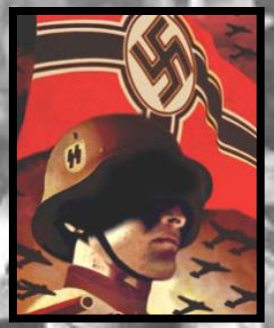


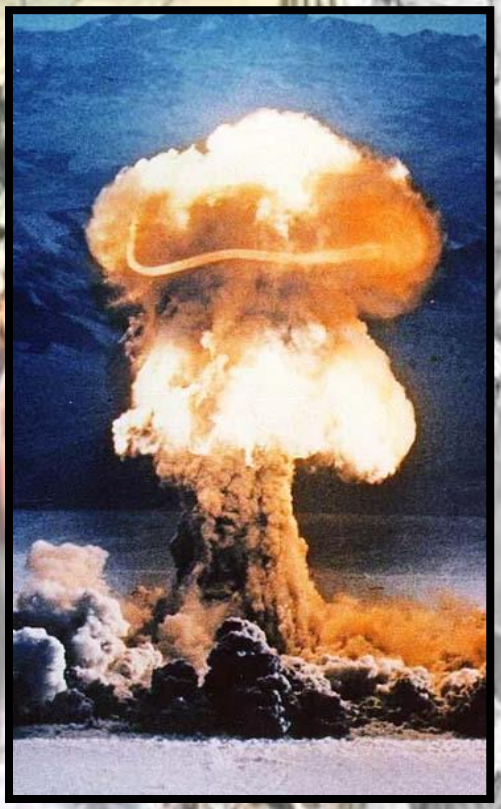
1945

HOW IT WORKS

Dropping of the Bombs

However, **H-bombs are more explosive** (1,000x or more) than A-bombs.

H-bombs are more compact. They **can be made small enough to fit on** a **head of** a **missile**.



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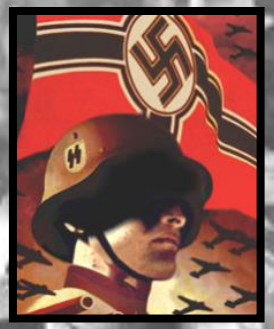

1945

HOW IT WORKS

Dropping of the Bombs

What's the largest nuclear bomb ever made?

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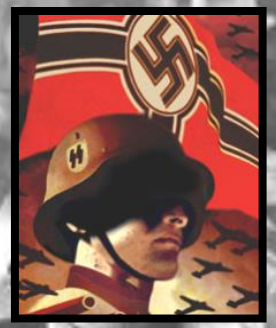

1945

HOW IT WORKS

Dropping of the Bombs

The Tsar Bomba (H-bomb) was developed by the Soviet Union in 1961. It remains the largest bomb ever created (cost $80B; $9.3T now) and was originally designed with a 100 megaton blast yield.

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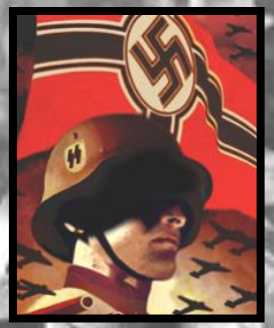

1945

HOW IT WORKS

Dropping of the Bombs

However, the calculated fallout from an explosion that big was deemed “unacceptable” for an initial test, so it was scaled back to being “only” 50 megatons (or 50 million tons of TNT).

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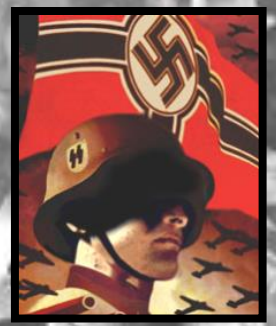
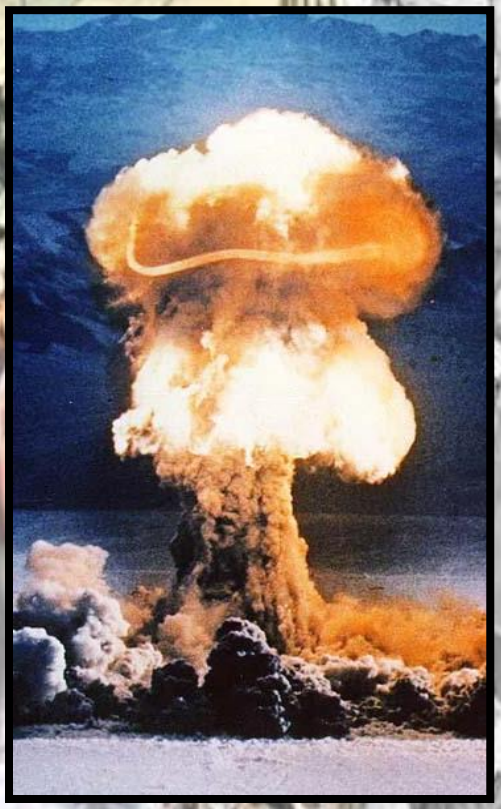


1945

HOW IT WORKS

Dropping of the Bombs

To understand the size, remember that 1 megaton is equal to 1 million tons. This means a 50 megaton bomb would have the power of 50,000,000 tons of TNT (or 110,231,131,092 lbs. of TNT).



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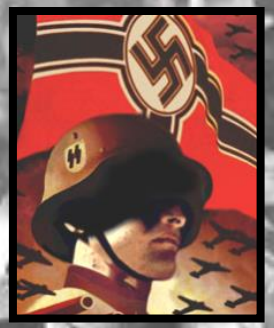
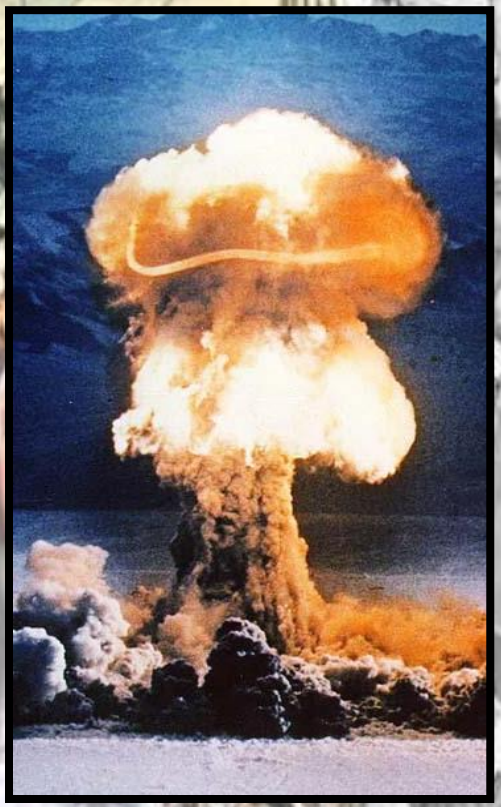


1945

HOW IT WORKS

Dropping of the Bombs

So if they successfully tested a **100 megaton bomb**, it **would have the power of 100,000,000 tons of TNT** (**or 220,462,262,184 lbs. of TNT**).



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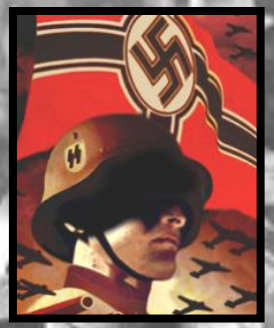

1945

HOW IT WORKS

Dropping of the Bombs

The 50 megaton Tsar Bomba is 3,300 Hiroshimas (or 6,600 if the 100 megaton was used).

If it was dropped on New York City, it would kill… everyone (8+ million).

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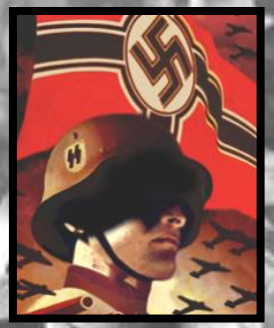
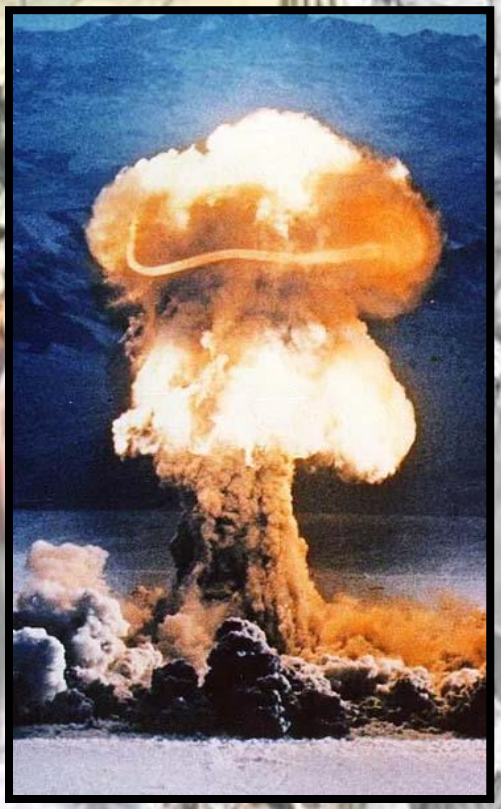


1945

HOW IT WORKS

Dropping of the Bombs

The Tsar Bomba is 26' long, 7' wide, weighs 27 tons. This means the bomb weighs as much as 10 SUVs. It is too big to be equipped to a ballistic missile and would have to be dropped from a plane.



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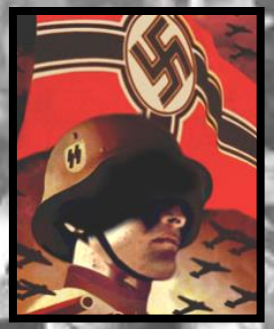


1945

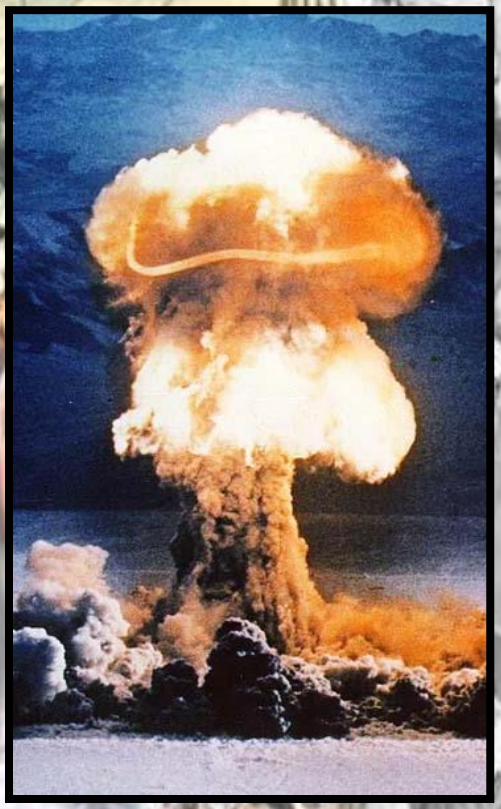
HOW IT WORKS

Dropping of the Bombs

Little Boy (15 kt):
10’ long, 2’4” wide, weighed 9,700 lbs; explosive power of 15,000 tons of TNT

Fat Man (21 kt):
10’8” long, 5’ wide; weighed 10,300 lbs.; explosive power of 21,000 tons of TNT

Tsar Bomba (100 Mt):
26’ long, 7’ wide; weighed 27 tons; explosive power of 100,000,000 tons of TNT



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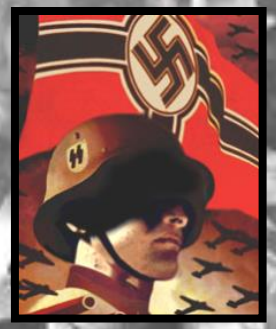
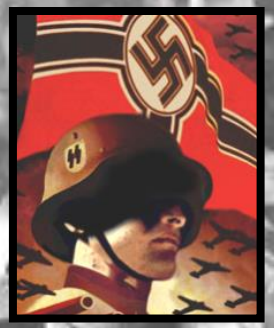
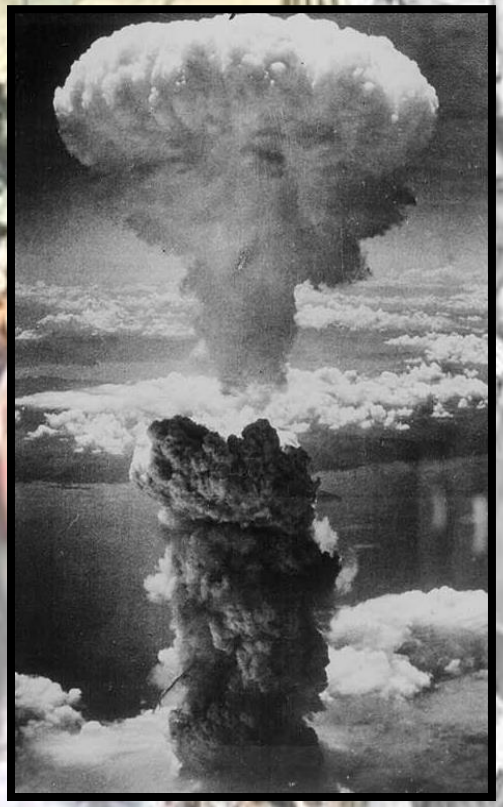


Tsar Bomba



1945

Tsar Bomba mushroom cloud



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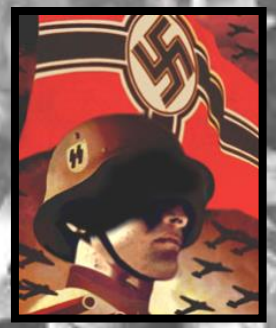

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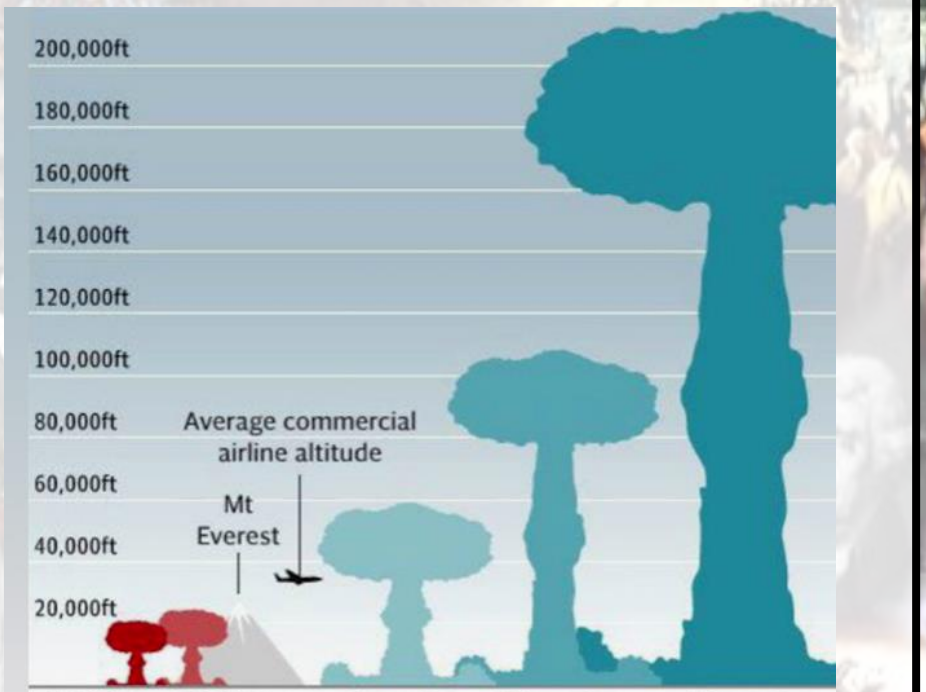

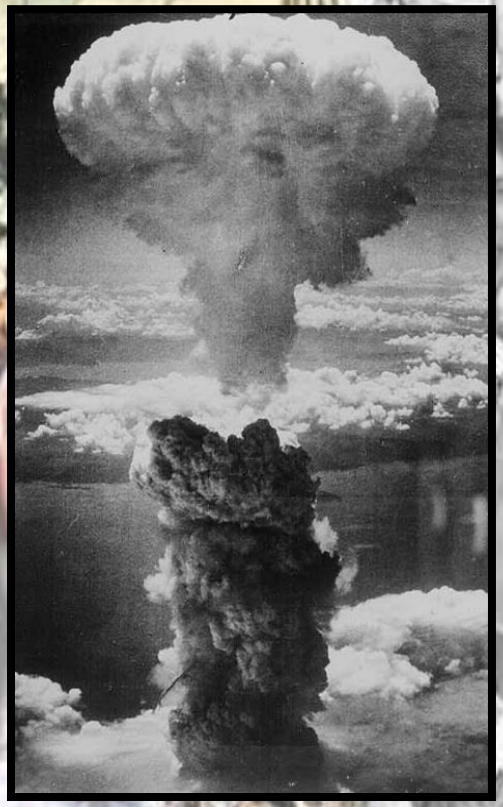

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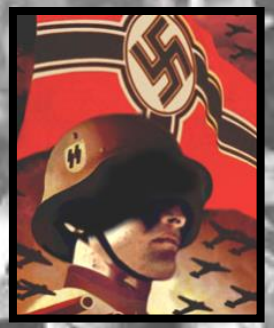

1945

HOW IT WORKS

Dropping of the Bombs

The largest bomb in the U.S. arsenal is a hydrogen bomb called the B83. It was created under President Ronald Reagan in 1983. It is 12’ long, 18” wide, and weighs 2,400 lbs.

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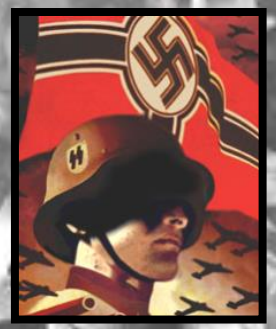
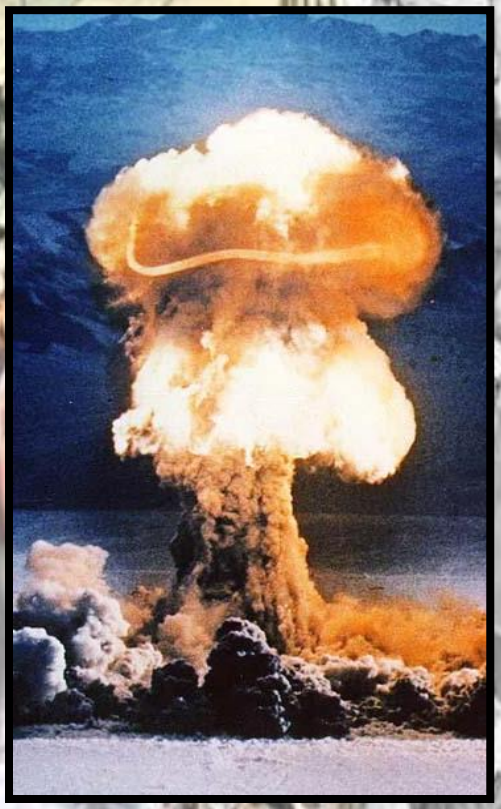


1945

HOW IT WORKS

Dropping of the Bombs

The B83 packs a blast of 1.2 megatons (or 1,200,000 tons or 2,645,547,146 lbs. of TNT). During the Cold War, the U.S. had 650 of them. In 2022, President Biden retired the B83 from military service/use.



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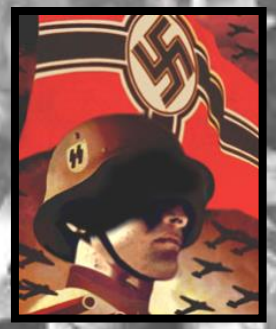
We Can Do It!



B83

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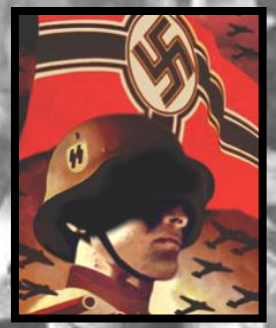
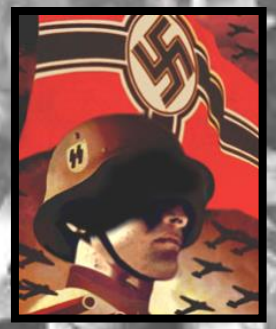
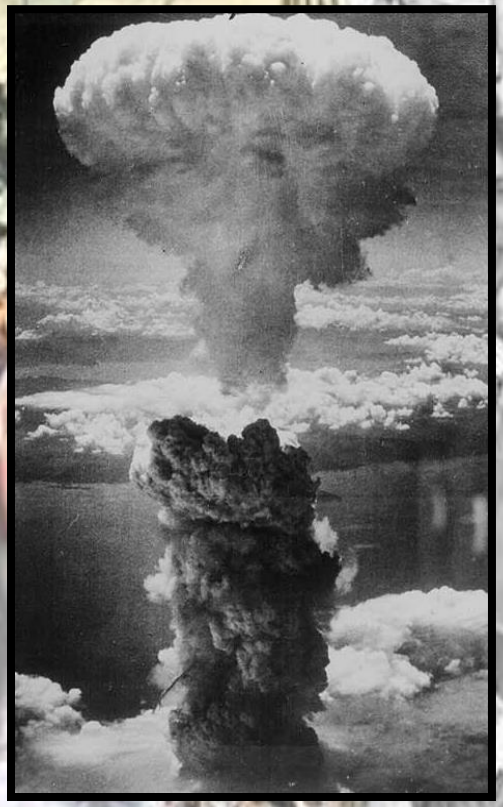


B83 casing
510

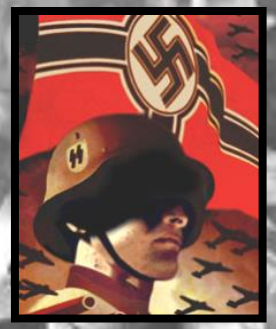


1945

B83 mushroom cloud



Dr. Hartnell's 135 LIVE!



What if "Little Boy", "Fat Man", "B83", and "Tsar Bomba" were dropped on Westerville or Columbus?

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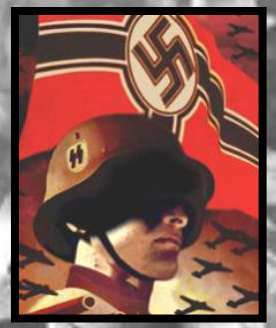


Go to https://nuclearsecrecy.com/nukemap/

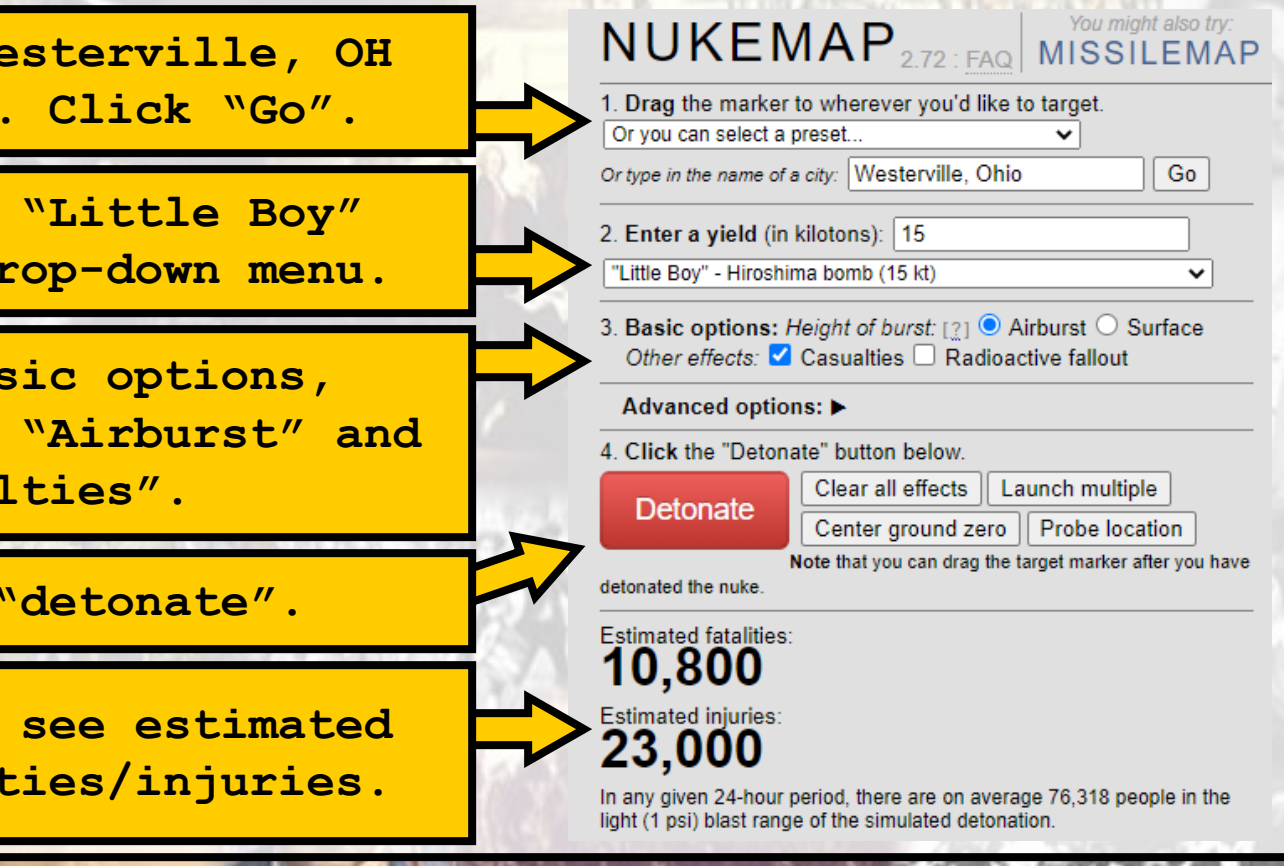
Type Westerville, OH in box. Click "Go".

Select "Little Boy" from drop-down menu.

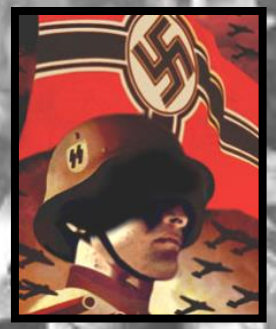
For basic options, select "Airburst" and "Casualties".

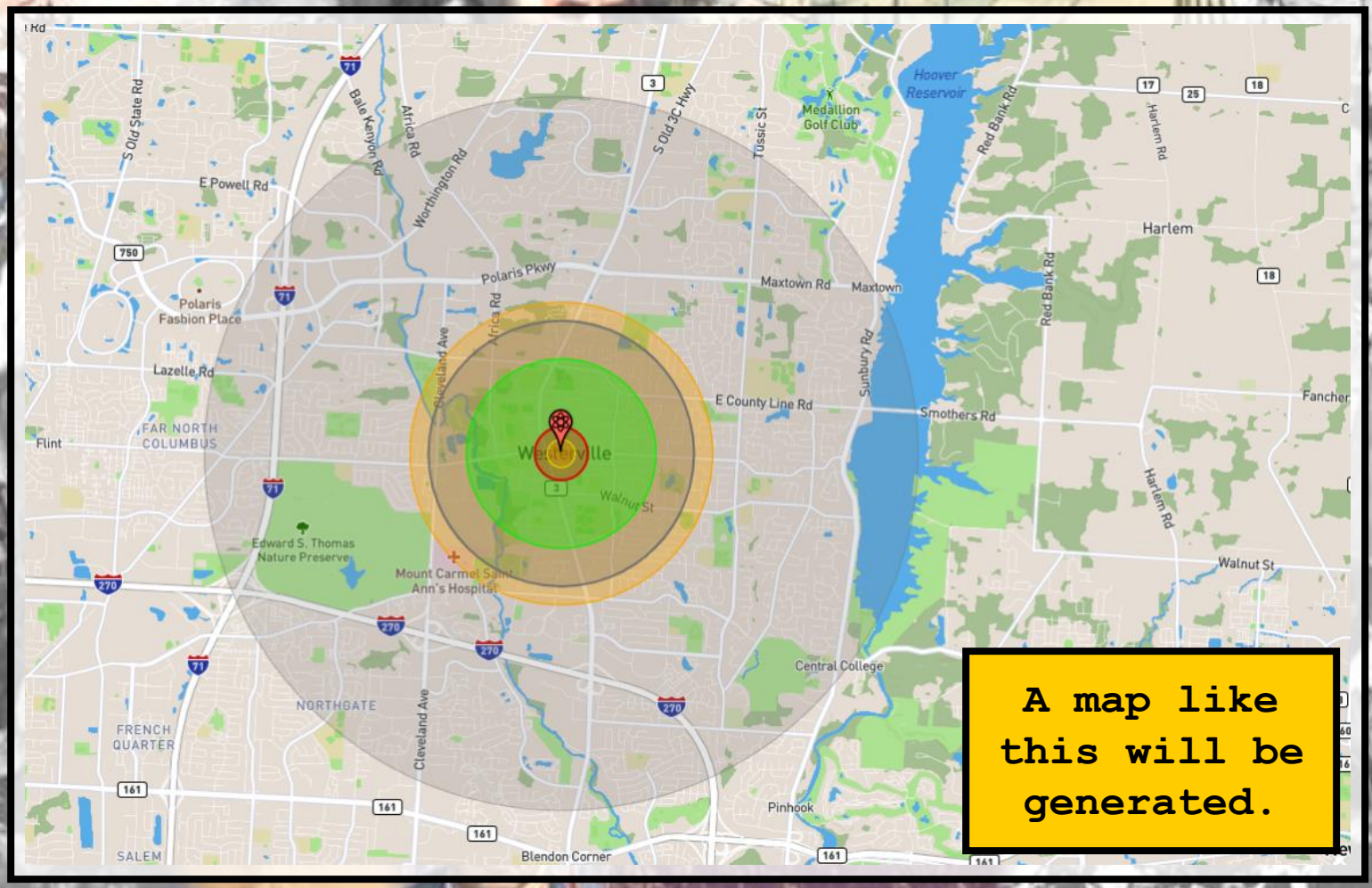
Click "detonate".

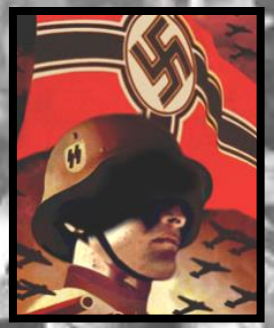
You'll see estimated fatalities/injuries.



We Can Do It!




E Powell Rd
Polaris Fashion Place
Lazelle Rd
Polaris Pkwy
Maxtown Rd
Maxtown
E County Line Rd
Smothers Rd
Flint
FAR NORTH COLUMBUS
Edward S. Thomas Nature Preserve
Mount Carmel St. Ann's Hospital
Walnut St
NORTHGATE
FRENCH QUARTER
SALEM
Blendon Corner
Pinhook
Central College
Harlem
Hoover Reservoir
Medallion Golf Club
Fancher
Bale Kenyon Rd
Worthington Rd
Africa Rd
S Old 3C Hwy
Tussic St
Red Bank Rd
Harlem Rd
Cleveland Ave
Sunbury Rd
A map like this will be generated.



Beneath the casualties section, the site will provide an explanation for the different color rings that appear on the map.

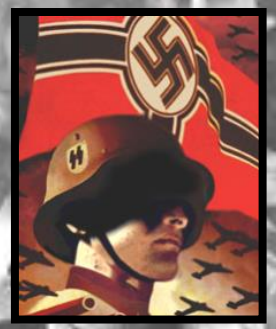
Effect distances for a 15 kiloton airburst*: ▼

Fireball radius: 180 m (0.1 km²)
Maximum size of the nuclear fireball; relevance to damage on the ground depends on the height of detonation. If it touches the ground, the amount of radioactive fallout is significantly increased. Anything inside the fireball is effectively vaporized. Minimum burst height for negligible fallout: 160 m.

Heavy blast damage radius (20 psi): 340 m (0.36 km²)
At 20 psi overpressure, heavily built concrete buildings are severely damaged or demolished; fatalities approach 100%. Often used as a benchmark for heavy damage in cities. Optimal height of burst to maximize this effect is 450 m.

Radiation radius (500 rem): 1.2 km (4.51 km²)
500 rem ionizing radiation dose; likely fatal, in about 1 month; 15% of survivors will eventually die of cancer as a result of exposure.

Moderate blast damage radius (5 psi): 1.67 km (8.78 km²)
At 5 psi overpressure, most residential buildings collapse, injuries are universal, fatalities are widespread. The chances of a fire starting in commercial and residential damage are high, and buildings so damaged are at high risk of spreading fire. Often used as a benchmark for moderate damage in cities.



With Westerville, conduct tests using "Fat Man", "B83", and "Tsar Bomba 100 Mt".

When done, try Columbus, OH. NOTE: When you type in a new city, you must hit the "Go" button first! This resets the map and numbers.

Finally, try any other cities in the U.S. and World.

NUKEMAP 2.72 : FAQ

You might also try: MISSILEMAP

1. **Drag** the marker to wherever you'd like to target.

Or you can select a preset...

Or type in the name of a city: Westerville, Ohio Go

2. **Enter a yield** (in kilotons): 15

"Little Boy" - Hiroshima bomb (15 kt)

3. **Basic options:** *Height of burst:* [?] (•) Airburst ( ) Surface

Other effects: [x] Casualties [ ] Radioactive fallout

Advanced options: ▶

4. **Click** the "Detonate" button below.

Detonate | Clear all effects | Launch multiple | Center ground zero | Probe location

Note that you can drag the target marker after you have detonated the nuke.

Estimated fatalities:
10,800

Estimated injuries:
23,000

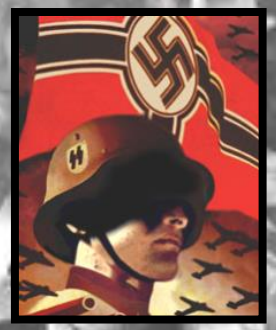
In any given 24-hour period, there are on average 76,318 people in the light (1 psi) blast range of the simulated detonation.

“Hartnell” BOMB:

Time for Dr. Hartnell to drop some information that will challenge your beliefs, debunk old teachings, mess with your mind, and maybe… just maybe… make your head explode.

Dr. Hartnell's 135 LIVE!

"Hartnell" BOMB:

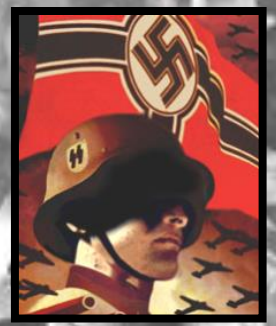


Topic:

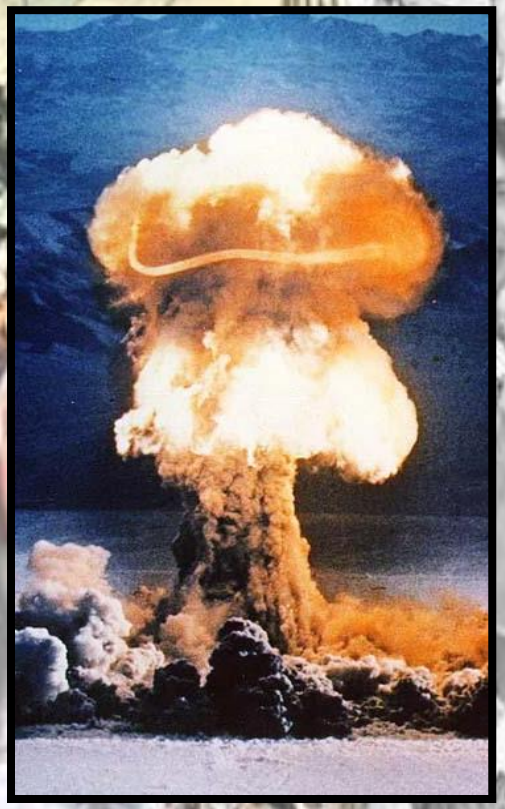
There were people present at BOTH atomic bombings… and they survived BOTH attacks.

Dr. Hartnell's 135 LIVE!

“Hartnell” BOMB:

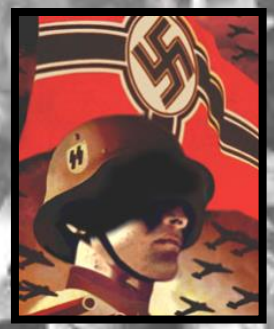


TRUE!



Dr. Hartnell's 135 LIVE!

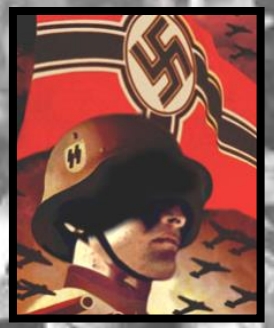
"Hartnell" BOMB:



As inconceivable as it seems, there were 165 people present in BOTH cities during the two atomic attacks… and all 165 survived BOTH bombs!

Dr. Hartnell's 135 LIVE!

“Hartnell” BOMB:



Tsutomu Yamaguchi was the only person officially recognized by Japan as having survived both.

Dr. Hartnell's 135 LIVE!

“Hartnell” BOMB:

Yamaguchi was in Hiroshima on business and was 1.9 miles from ground zero. His eardrums ruptured, he was temporarily blinded, and he was burned all over his left side.

Dr. Hartnell's 135 LIVE!

"Hartnell" BOMB:

He returned to his home in Nagasaki the next day and actually went to work (bandaged and all).

Dr. Hartnell's 135 LIVE!

"Hartnell" BOMB:

He was at work (again under 2 miles from ground zero) when Nagasaki was hit. He was unharmed.

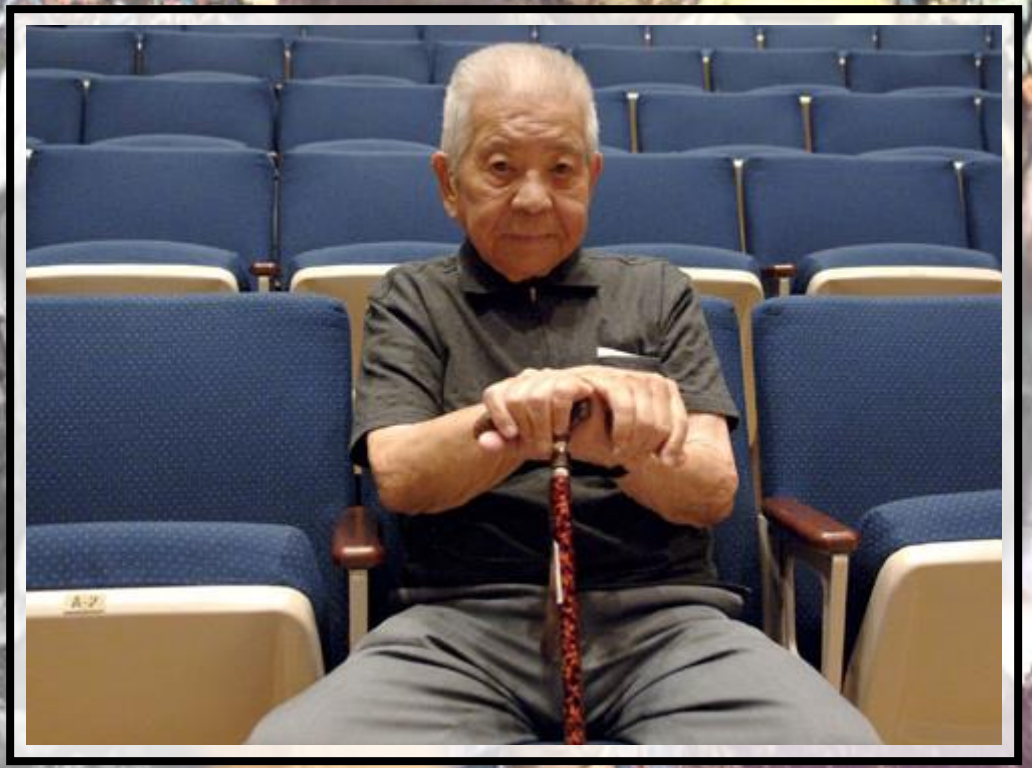
Dr. Hartnell's 135 LIVE!

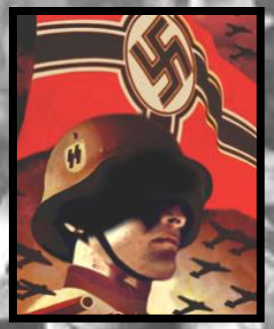
“Hartnell” BOMB:

All things considered, he lived a fairly healthy life and had a daughter. He died on January 4, 2010 at the age of 93 from stomach cancer.

Dr. Hartnell's 135 LIVE!

“Hartnell” BOMB:





Dr. Hartnell's 135 LIVE!

WHAT DID WE LEARN TODAY?

135 LIVE!

FAST 5: UNIT 4, LESSON 12 (AH 4.12)

QUESTION 1

1. What 3 decisions came out of the Potsdam Conference? How did each of these decisions impact future events?

Dr. Hartnell's 135 LIVE!

FAST 5: UNIT 4, LESSON 12 (AH 4.12)

QUESTION 2

2. What nicknames were given to the atomic bombs dropped on Hiroshima and Nagasaki? How many people died at each location? How many American and Japanese casualties were projected for an invasion of Japan?

Dr. Hartnell's 135 LIVE!

FAST 5: UNIT 4, LESSON 12 (AH 4.12)

QUESTION 3

3. Explain the two ways nuclear energy can be released from an atom. Which category do the following bombs fall under: Hiroshima bomb, Nagasaki bomb, hydrogen bomb?

Dr. Hartnell's 135 LIVE!

FAST 5: UNIT 4, LESSON 12 (AH 4.12)

QUESTION 4

4. What's the difference between an atomic bomb and a hydrogen bomb? What's the largest nuclear bomb ever made? How much more powerful is it than the one dropped on Hiroshima?

Dr. Hartnell's 135 LIVE!

FAST 5: UNIT 4, LESSON 12 (AH 4.12)

QUESTION 5

5. Using the "Nuke Map", how many fatalities and injuries would occur if "Fat Man" was dropped on Columbus, Ohio?

THINK
CHECK
SUBMIT

Dr. Hartnell's 135 LIVE!