

Where
the past
is present

DETROIT HISTORICAL SOCIETY

TEACHER RESOURCE LESSON PLAN

FORD MOTOR COMPANY AND THE ARSENAL OF DEMOCRACY



CREATED BY

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INTRODUCTION

This lesson helps High School United States History students, over two class periods, understand the important role the Ford Motor Company played in the development of war products during World War II.

LEARNING OBJECTIVES

Students will:

- Conduct an investigation that consists of exploration, research and showing their thinking
- Glean and apply vocabulary words from investigation

ERA

USHG Era 7- The Great Depression and World War II (1920-1945)

MI GLCES

United States History 7.2.2: U.S. and the Course of WWII - Evaluate the role of the U.S. in fighting the war militarily, diplomatically and technologically

across the world (e.g., Germany First strategy, Big Three Alliance and the development of atomic weapons)

United States History 7.2.3: Impact of WWII on American Life - Analyze the changes in American life brought about by U.S. participation in World War II including

- Mobilization of economic, military, and social resources
- Role of women and minorities in the war effort
- Role of the home front in supporting the war effort (e.g., rationing, work hours, taxes)
- Internment of Japanese-Americans (National Geographic Standard 10, p. 203)

BACKGROUND INFORMATION

From 1942 to 1945, Ford Motor Company completely shut down civilian vehicle production to dedicate all its resources to the Allied war efforts as a leader in the “arsenal of democracy.” The U.S. Air Force invested \$2 million in facilities and equipment in return for the company’s promise to build the Consolidated B-24 Liberator bomber. By the war’s end, Ford Motor Company had built more than 8,600 B-24s.

B-24s were built near Ypsilanti, Michigan, at a large tract of land called Willow Run. Henry Ford owned the land and ordered the construction of a mile-long, L-shaped plant to produce the B-24 Liberator bombers for the military. Henry’s son, Edsel Ford, and Charles Sorensen, head of production for Ford Motor Company, headed the project. At its peak, the Willow Run facility was staffed by nearly 50,000 workers.

By 1944, the company was making 48.5

LESSON PLAN: FORD MOTOR CO. & THE ARSENAL OF DEMOCRACY

percent of all B-24s produced. In 1945, the figure had increased to 80 percent. Mass production on this scale—assembly of more than a million plane parts held together by hundreds of thousands of rivets done at stations extending 3,000 feet—had never been attempted. By the end of the war, the plant was turning out 540 of the four-engine planes a month, meaning that a plane was assembled every 59.34 minutes. In addition to manufacturing B-24 bombers at plants around the world, Ford autoworkers devoted their skills to building aircraft engines, jeeps, M-4 tanks, parts, engines and more.

Source:

- “We Played a Major Role in the “Arsenal of Democracy” During World War II.” Company Milestones. Ford Motor Company, n.d. Web. 23 Dec. 2013. <<http://corporate.ford.com/our-company/heritage/company-milestones-news-detail/680-willow-run>>.

MATERIALS USED

- Investigation packet, use of a computer lab or having students use smart phones or iPads is optional as well.
- Teachers will also need a means of playing a YouTube video (source 9)

LESSON SEQUENCE

1. This investigation can be done individually, in pairs, or in larger groups.
2. Read part 1 of the investigation as a class and discuss. This gauges prior knowledge and prompts student’s thinking. When completed with your discussion, have students write down their conjectures. These should be brief in nature and serves as a hypothesis of sorts.
3. Have students research the primary sources provided. Their paradigm should be like a detective searching for clues. Each source provides a component of the story. Emphasize this with the students.
4. Students will conclude their research by writing a summative essay that shows their thinking. In addition to this essay, students will complete

a vocabulary assignment of the terms and concepts encountered in their investigation.

5. Details will be provided below in the investigation packet.

EVALUATION

Students will be assessed with a paper that contains:

1. Their conjectures
2. A completed primary source table
3. Essay that shows their thinking
4. Vocabulary assignment

EXTENSION ACTIVITIES

- Arrange a field trip or offer extra credit to visit the Detroit Historical Museum. Have them visit the Arsenal of Democracy exhibit to learn more about this. Information about the museum and how to get there can be found at: <http://detroithistorical.org>.
- Have students visit the Henry Ford Museum and Greenfield Village to see the artifacts of this endeavor. Information for this trip can be found at: <http://www.thehenryford.org/>.

**For more information about the
Detroit Historical Society,
or to schedule a field trip to the
Detroit Historical Museum or
Dossin Great Lakes Museum,
visit detroithistorical.org**

PRIMARY SOURCE LIST



DESCRIPTION: This is a song about Henry Ford's overseas peace mission. It serves as a contrast of his pacifistic stance from World War I to his economic support he gave in World War II

SOURCE: Sherwood, Ray, and Fred'k Coots. *Mr. Ford You've Got the Right Idea*. 1916. Johns Hopkins University, Levy Sheet Music Collection, Box 060, Item 118, Baltimore. Web. 23 Dec. 2013. <<https://scholarship.library.jhu.edu/handle/1774.2/31915>>.

URL: <http://tinyurl.com/mrc6nj7>



DESCRIPTION: This is a political cartoon of OSCAR II (carrying Henry Ford's Peace Party) with huge snowball "Peace" on its' deck, approaching fire inferno "Europe." This is used in conjunction with an excerpt on primary source #2 in the investigation.

SOURCE: Carter, Robert. "The Snow-ball approaches Hell." 1915 [Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA]. Web. 25 Dec. 2013. <<http://www.loc.gov/pictures/collection/cph/item/2003663578/>>.

URL: <http://www.loc.gov/pictures/item/2003663578/>



DESCRIPTION: This is a photo of the Ford Brothers. Above them hang the portraits of their father and grandfather.

SOURCE: Cohen, Irwin. *Echoes of Detroit: A 300-Year History*. 2000. Photograph. Michigan Views, Detroit.

URL: <http://afox11.dyndns-pics.com/Jen/I/jal121.jpg>

Month	Year of Month	Month's Production	Grand Total
1944			
Jan	1	2	2
Feb	2	2	4
Mar	3	2	6
Apr	4	2	8
May	5	2	10
June	6	2	12
July	7	2	14
Aug	8	2	16
Sept	9	2	18
Oct	10	2	20
Nov	11	2	22
Dec	12	2	24
1945			
Jan	1	12	36
Feb	2	12	48
Mar	3	12	60
Apr	4	12	72
May	5	12	84
June	6	12	96
July	7	12	108
Aug	8	12	120
Sept	9	12	132
Oct	10	12	144
Nov	11	12	156
Dec	12	12	168
Total	1944	24	24
Total	1945	144	168
Total		168	192

DESCRIPTION: This is a record of the Monthly Unit Production of B-24 Bombers from January 1945-June 1945 with grand totals.

SOURCE: O'Callaghan, Timothy J. *Ford in the Service of America*. Jefferson, North Carolina: McFarland & Company, Inc., 2009. 184. Print.

URL: <http://tinyurl.com/mbuocqn>

PRIMARY SOURCE LIST



DESCRIPTION: This is one of the first war-time ads illustrating Ford's major war products to counter adverse press about the perceived slow start in building B-24 bombers.

SOURCE: Ford Motor Company. Advertisement. *Detroit News* 28 Feb. 1943. Print.

URL: Not online

Product Name	Year	Production
Model A Sedan	1939	1,000,000
Model A Sedan	1940	1,000,000
Model A Sedan	1941	1,000,000
Model A Sedan	1942	1,000,000
Model A Sedan	1943	1,000,000
Model A Sedan	1944	1,000,000
Model A Sedan	1945	1,000,000
Model A Sedan	1946	1,000,000
Model A Sedan	1947	1,000,000
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Model A Sedan	2022	1,000,000
Model A Sedan	2023	1,000,000
Model A Sedan	2024	1,000,000
Model A Sedan	2025	1,000,000
Model A Sedan	2026	1,000,000
Model A Sedan	2027	1,000,000
Model A Sedan	2028	1,000,000
Model A Sedan	2029	1,000,000
Model A Sedan	2030	1,000,000

DESCRIPTION: Half of the World War II Production Summary for Ford Motor Company

SOURCE: O'Callaghan, Timothy J. *Ford in the Service of America*. Jefferson, North Carolina: McFarland & Company, Inc., 2009. 180. Print.

URL: <http://tinyurl.com/mcck7sy>

Product Name	Year	Production
Model A Sedan	1939	1,000,000
Model A Sedan	1940	1,000,000
Model A Sedan	1941	1,000,000
Model A Sedan	1942	1,000,000
Model A Sedan	1943	1,000,000
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Model A Sedan	1945	1,000,000
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Model A Sedan	2023	1,000,000
Model A Sedan	2024	1,000,000
Model A Sedan	2025	1,000,000
Model A Sedan	2026	1,000,000
Model A Sedan	2027	1,000,000
Model A Sedan	2028	1,000,000
Model A Sedan	2029	1,000,000
Model A Sedan	2030	1,000,000

DESCRIPTION: Second Half of the World War II Production Summary for Ford Motor Company

SOURCE: O'Callaghan, Timothy J. *Ford in the Service of America*. Jefferson, North Carolina: McFarland & Company, Inc., 2009. 181. Print.

URL: <http://tinyurl.com/mcck7sy>



DESCRIPTION: This is the manufacturing and construction production video for the Consolidated B-24 Liberator heavy bomber. This video is about the Ford Motor Company production plant at Willow Run for B-24's before and during World War II.

SOURCE: B-24 Liberator Willow Run Assembly Plant. You Tube. Web. 25 Dec. 2013. <<http://www.youtube.com/watch?v=iKlt6rNciTo#t=15>>.

URL: <http://www.youtube.com/watch?v=iKlt6rNciTo#t=15>

THE STEPS IN THIS INVESTIGATION

WHY LOOK AT HISTORY USING MULTIPLE SOURCES?

STEP 1: EXPLORE: When beginning an investigation it is good to start with your conjectures. A conjecture is a speculation or guess we make without having lots of evidence. So why do you think it is important to gauge what you already know, or think you know? Such a question is based on epistemology, the study of knowledge and belief. What are your thoughts about Ford Motor Company? How can corporations and businesses prove their patriotism? Should government and private enterprise mix? Express your conjectures related to these questions. You can't be wrong here; just express your opinions and gauge how much prior knowledge, if any, you have on this subject.

STEP 2: RESEARCH: Evaluate these primary sources related to Ford Motor Company's role in the Arsenal of Democracy. What do the pictures, texts, and charts teach us? Understanding that primary sources have no inherent meaning and biases, you must provide the meaning. Use the table on the next page to help capture your information and organize your thinking. This chart will be used for the culminating assessment.

STEP 3: SHOW YOUR THINKING: It is now time to show your thinking. Use what you have learned from researching the primary sources and create a cogent story on Ford Motor Company's role in the Arsenal of Democracy. Write a two- to three-paragraph essay explaining the following:

- Why did Ford contribute to the war effort?
- What did Ford contribute to the war effort?
- What transpired at Willow Run and what was its importance to the war effort?
- What was it like for the women and African Americans employed at Willow Run?
- Substantiate your claims based on the evidence provided to you in the primary sources.
- What ultimately was accomplished at Willow Run and how does it fit into the larger narrative of World War II?

Investigations do not end with your answer. Feel free to read or discuss your classmates' answers and compare their thinking to yours. Ask yourself whether their ideas support, extend, or challenge your thinking.

PRIMARY SOURCE RESOURCE TABLE

Evaluate these sources and jot down the main points. Think of these as parts of a story and how will you piece them together to form a *cogent narrative*?

PRIMARY SOURCE	MAIN POINTS/STORY SOURCE IS TELLING YOU/YOUR THOUGHTS
Source 1: “Mr. Ford You’ve Got the Right Idea” Song (What was Ford trying to accomplish?)	
Source 2: Political Cartoon and interview of Ford’s, “Peace Ship” (How successful was this trip?)	
Source 3: Photo of Edsel, Henry II, Benson, and William Clay Ford (How did Henry’s heirs view war differently?)	
Source 4: Table of B-24 Production (Using this data what can patterns do you notice and how do they correspond with what was happening in WWII?)	
Source 5: Ford advertisement (Why would Ford advertise when they were working on a government contract?)	

PRIMARY SOURCE	MAIN POINTS/STORY SOURCE IS TELLING YOU/YOUR THOUGHTS
<p><u>Source 6:</u> Detroit Free Press article (What was it like for the women working at Willow Run?)</p>	
<p><u>Source 7:</u> Report on Black workers during WWII (Did WWII improve conditions for African Americans?)</p>	
<p><u>Source 8:</u> Production Summary of Ford Motor Company during the war (What story does the data tell you?)</p>	
<p><u>Source 9:</u> YouTube video on what was accomplished at Willow Run (What was Willow Run's role in the larger story of WWII?)</p>	

SOURCE 1

“MR. FORD YOU’VE GOT THE RIGHT IDEA” SONG LYRICS

Words by Ray Sherwood

Music by J Fred’k Coots

Copyright 1916

The ship of peace has sailed away to seek a foreign shore
And many people laugh and say it’s queer
A million others kneel to pray. They’ve felt the sting of war
They’re praying for the ones they hold so dear
But when Columbus sailed they laughed and thought he was unsound
They never thought he’d prove to them this good old world was round.

Mister Ford you’ve got the right idea
You’re a champion of humanity
There’s millions of mothers whose hearts you’ll fill with joy
if Crown heads said “stop the war, we’ll save your darling boy”
they’ll soon learn that you’re sincere
And they’ll all cheer for the nation, that had taught them arbitration
Mister Ford you’ve got the right idea.

They don’t know what they’re fighting for but still they fight away
and no one knows when peace will ever reign
You’ll pin a sign up on the door: “Let’s arbitrate today.”
The mission you’re on is not in vain
And though you may not silence the guns, the spirit you lend
will be the stepping stone to bring this slaughter to an end.



SOURCE 2

POLITICAL CARTOON AND BOOK EXCERPT



Moving with a haste that startled and upset many of the activists, on November 24, Ford informed the press he had already chartered a Scandinavian American line, the Oscar II, for his mission. It was scheduled to leave New York in eleven days. He hoped to have aboard some of the country's biggest names and most influential citizens, including President Wilson. Exactly what the blue-ribbon delegation would do once the so-called Peace Ship steamed out to sea was still up in the air, reporters discovered.

(Henry Ford's words in boldfaced)

"We're going to stop the war", Henry said.

"Going to stop the war?" asked a reporter.

"Yes, we're going to get the boys out of the trenches by Christmas."

"But how are you going to do it?"

"Oh, you'll see," said Ford.

"Where are you going?"

"I don't know."

"But what makes you think you can put it over?"

"Oh", said Ford, **"we have had assurances."**

Source: Bak, Richard. *The Creation of the Ford Empire: Henry and Edsel*. Hoboken, New Jersey: John Wiley & Sons, Inc., 2003. 85-86. Print.

SOURCE 3

BOOK MANUSCRIPT

On December 7, 1941, Japanese warplanes attacked Pearl Harbor, transforming America's foot dragging on the issue of Japan's and Germany's bellicosity into instant resolve to smash the enemy on two fronts. One day a few months later, with U.S. industry frantically retooling for this monumental task, Edsel presided over a paratroop demonstration at Ford Airport. A reporter noticing Henry and Clara off on their own across the field, asked the aging automaker why he wasn't with the high-ranking company and military brass.

"Edsel is over there," said Henry, **"that's his job from now on. I'm getting too old. I'm relieving myself of all my responsibilities as fast as I can. I feel my years."**

"Any regrets?" Ford was asked.

"None!" exclaimed Henry. **"Everything is in good hands. Edsel has grown into a fine man and when my time comes I'll know everything will go on as I've planned it."**

Source: Bak, Richard. *The Creation of the Ford Empire: Henry and Edsel*. Hoboken, New Jersey: John Wiley & Sons, Inc., 2003. 250. Print.

SOURCE 4

DATA ON B-24 PRODUCTION

Monthly Unit Production of B-24 Bombers				
<i>Month</i>	<i>Sets of Spares</i>	<i>Knock-downs</i>		<i>Complete Ford</i>
		<i>Douglas</i>	<i>Consolidated</i>	
1942				
July		2		
August		0		
September		2		4
October	1	7		2
November	1	0		7
December	1	0		10
TOTAL	3	11		23
1943				
January	4	11	10	17
February	4	30	10	35
March	3	30	15	59
April	8	27	23	100
May	14	21	38	115
June	8	28	48	106
July	9	45	40	125
August	26	40	65	125
September	31	52	85	125
October	33	52	100	150
November	26	64	100	165
December	26	72	100	190
TOTAL	192	472	634	1,312
1944				
January	36	78	100	210
February	35	97	75	238
March	27	78	62	324
April	14	64	50	325
May	10	72	18	350
June	13	66	finish	383
July	7	17		415
August	9	finish		432
September	11			375
October	20			348
November	18			318
December	14			296
TOTAL	214	472	305	4014

ALL OUR ABILITY, SKILL, EFFORT AND RESOURCES ARE PLEDGED TO VICTORY

SOURCE 6

DETROIT FREE PRESS ARTICLE: “ROSIES RETURN ONE LAST TIME TO FORMER BOMBER PLANT IN YPSILANTI, JUNE 17, 2013

Rosie the Riveter returned to her factory Saturday, just a few months before it's likely to be demolished. The former Willow Run bomber plant in Ypsilanti Township — built by Henry Ford to make planes for the U.S. military during World War II and later used as a powertrain plant by General Motors — is likely to be razed later this year to make way for new development. Three women who worked at the bomber factory came back for the first time since the war in a trip organized by the American Rosie the Riveter Association. Another 27 “Rosies” who worked in war production at other plants also attended.

With the sun splattering the industrial wreckage strewn about the gravel surface outside the abandoned factory, the Rosies peered up at the plant's 150-foot-wide, 36-foot-tall bay doors as they swung open. Those doors, an engineering marvel, opened 8,685 times to allow B24 bombers to roll out and onto the next-door Willow Run Airport for immediate test flights during the war. “I want to go to work!” said former Willow Run bomber plant worker Blanche Mericle, 95, of Belleville as the bay doors opened. The visit came as the nearby Yankee Air Museum is trying to raise \$5 million in two months through to acquire a 175,000-square-foot portion of the 5 million-square-foot factory to save it from demolition and convert into its future home.

“We’re going to do our best to preserve a little bit of your history,” Yankee Air Museum founder Dennis Norton told the Rosies gathered to visit the bomber plant.

The GM bankruptcy trust, which is soliciting demolition bids for the plant, has agreed to sell a sliver of the factory to the museum if it can reach its fund-raising goal. The rest will be torn down to make the property more marketable for future development.

The doors finished their climb, and Mericle's eyes opened wide as memories flooded back. “It was hot in here,” she said, strolling carefully into the plant with her nephew providing stability. “The afternoon shift was better because of the air.”

Before the war, women rarely worked in American factories. But by the time the plant shut down, women made up 40% of its workforce. They could make up to \$300 a month, just like men, and often earned promotions, said Yankee Air Museum treasurer Randy Hotton. Sporting red bandanas, blue shirts and white hats emblazoned with “Rosie” in red stitching, the women bore a resemblance to Rosie the Riveter, a fictional icon created by the

U.S. government to encourage women to enter the industrial workforce during the war.

But Rosie had real roots. One of the women credited with popularizing the image was Rose Will Monroe, a Kentucky native who moved to Ypsilanti to work at the Willow Run plant. None of the Willow Run Rosies who visited the plant Saturday had met Monroe — not surprising because she was just one of a staggering 42,000 employees at the plant's peak. The place was so big that it was common for employees to get lost. The community established temporary campsites for 5,000 workers because there wasn't enough housing for everyone who migrated to work there. The employees worked grueling shifts, but the Rosies said conditions were safe and they were treated equally by their male colleagues. “All I did was just get ready and go to work and get out there,” said Ruth Pierson-Webb, 93, of Wayne. “I had to go and look at the rivets to make sure they were all right.”

The plant was the picture of industrial efficiency, churning out one B24 bomber every 55 minutes at its peak. Today, the smell of industrial fluids still hangs in the air, a reminder that GM made 82 million transmissions at this plant from 1953 to 2010.

South Lyon resident Emma Rancour, who got a job at the Willow Run bomber plant at age 19 in 1943, was in awe of the plant's sheer size. “It was like a town of its own,” said Rancour, 88, who did not join the tour. “It was amazing how many hands made the airplane.” When Willow Run bomber plant worker Mae Perry, 88, of Taylor worked at the plant, it was “spotless,” she said, peering up at the factory's darkened ceiling. “It had to be.” Now, she said, “it's kind of dilapidated.”

The Rosies are aging, but their role in helping win the war can't be diminished.

“This is such an important part of American history,” Hotton said. “There are so many fantastic stories and this plant, if we can save it, is a place you can come and see these stories come alive.”

After their tour Saturday, the Rosies watched the bay doors close, creaking slowly as the warm air fluttered through their red bandanas. “It's a big old plant, isn't it?” said Pierson-Webb, peering up at the doors from her wheelchair.

Source: Bomey, Nathan. “Rosies return one last time to former bomber plant in Ypsilanti.” Detroit Free Press 17 June 2013. Web. 25 Dec. 2013. <<http://www.freep.com/article/20130617/BUSINESS/306170025/Rosie-the-riveter-willow-run-plant>>.

SOURCE 7

SUMMARY OF THE BLACK WORKER EXPERIENCE FROM THE NATIONAL PARK SERVICE

Overall, the proportion of blacks in war production work rose from 3 percent in 1942, to 6.4 percent in 1943, to 8.6 percent in 1945. Black employment in manufacturing increased 135 percent. African American membership in labor unions more than doubled, from 600,000 in 1940, to 1.25 million by the war's end, and the number of skilled and semiskilled black workers almost tripled.

Robert Weaver described the changes as “more industrial and occupational diversification for negroes than had occurred in the 75 preceding years.” The average wage for African Americans during the war increased from \$457 to \$1,976 a year, compared to a gain from \$1,064 to \$2,600 for white workers, considerably narrowing the racial gap in earnings. By 1950, annual wages for black males were 55 percent of those of white workers; in 1940 they had been just 42 percent. In addition, the percentage of black families living in poverty dropped from 75 to 57 percent during the war.²⁵

The war thus brought advancement for African Americans, but hardly racial equality. Thirteen national trade unions continued to exclude blacks totally; some admitted only a token number while continuing to practice racial discrimination; and many others segregated them. Most of the government and defense jobs opened to African Americans remained positions at entry levels, the “hard, hot, and heavy” tasks, and attempts to upgrade black employees frequently led to threats of strikes and walk-outs by white workers. With little power and a minuscule budget, the FEPC could only exhort and hope for compliance, or plead for an end to discrimination in employment. Which is what the president did in his 1942 State of the Union Address—“We must be particularly vigilant against racial discrimination in any of its ugly forms”—and then in a radio address in October 1942, referring to employers “reluctant to hire Negroes. We can no longer afford to indulge such prejudices or practices.” But they persisted. As late as 1944, little more than 40 percent of the whites polled professed to believe that “Negroes should have as good a chance as white people to get any kind of job.”

Source: Sitkoff, Harvard. “African Americans and Other Minorities on the Home Front .” *World War II and the American Home Front*. National Park Service, Oct. 2007. Web. 25 Dec. 2013. <<http://www.nps.gov/nhl/Themes/HomefrontStudy.pdf>>.

SOURCE 8

PRODUCTION SUMMARY OF FORD MOTOR COMPANY

World War II Production Summary

Major Products	Ford Code	Start	Finish	Quantity ¹	Fixed Price Cost Plus	Value	Quantity ²	Quantity ³
Pratt & Whitney Engine	GBG	Aug '41	May '45	57,851	CP/FP	\$962,358,000	57,851	57,851 *
Amphibian jeep	GPA	Sep '42	May '43	12,782	FP	\$38,986,000	7,603	12,778
Jeep ⁴	GP	Feb '41	Jan '42	4,458	FP	(below)	0	0
Jeep (Willys engine)	GPW	Jan '42	Jul '45	277,896	FP	\$366,407,000	277,896	277,896
Gun Director M-5	GAW	Oct '42	May '42	400	CP	\$60,170,000	1,202	1,202
Gun Director M7	GAH	Aug '42	Nov '43	802	CP	(above)	(above)	(above)
Armored Car T-17	GQ	Oct '42	Mar '43	250	CP	\$22,654,000	250	(below)
Armored Car M-8	GAK	Mar '43	Apr '45	8,410	CP	\$128,922,000	12,314	12,564
Armored Car M-20	GBK	May '43	Jun '45	3,791	CP	(above)	(above)	(above)
Liberator B-24	GK	Sep '42	Jun '45	6,790	CP	\$1,142,830,000	8,684	8,684
Liberator B-24 KD	—	Jul '42	Jul '44	1,894	CP	(above)	(above)	(above)
British Axel	GAE	Jun '43	Aug '44	19,520	CP	\$6,641,000	35,309	17,639
British Engine	GAE	Jun '43	Aug '44	26,086	CP	(above)	(above)	17,670
Generator P-1	GAL	Dec '42	Dec '44	75,166	CP	\$14,425,000	87,390	87,390
Generator R-1	GBN	Jan '45	Jul '45	11,224	CP	(above)	(above)	(above)
Glider CG-4A	GAG	Sep '42	Jul '45	4,314	CP	\$70,365,000	4,290	4,203
Glider I4A	GBG	Jan '44	Dec '44	87	CP	(above)	(above)	(above)
Jettison Fuel Tank	GPG	Jan '45	Jul '45	17,008	CP	\$6,921,000	17,007	17,008
Jet Pulse Engine	MX544	Dec '44	Aug '45	2,501	CP	\$4,725,000	2,401	2,411
Tank M4-A3	GAD	Jun '42	Aug '43	1,683	CP	\$405,631,000	2,718	1,690
Tank Destroyer M10-A1	GBA	Oct '42	Aug '43	1,035	CP	(above)	(above)	1,038
Tank Engine	GAA	May '42	Aug '45	20,999	CP	(above)	26,954	26,979
Tank Engine	GAF	Sep '43	Sep '45	3,688	CP	(above)	(above)	(above)

Tank Engine	GAN	Aug '43	Dec '45	366	CP	(above)	(above)	(above)
Tank Engine	GAY	Sep '43	Nov '43	26	CP	(above)	(above)	(above)
Tank Engine — Recon	—	Jan '43	Dec '44	1,648	not listed	not listed	not listed	not listed
Tank Gun Mounts	—	Feb '42	Aug '43	5,475	not listed	not listed	not listed	not listed
Turbo Supercharger	GE	Aug '42	Oct '44	52,276	CP	\$64,416,000	52,281	52,281
Universal Carrier	GAU	Feb '43	May '45	13,893	CP	\$101,946,000	13,893	13,893
Rate of Climb Indicators	GAV	May '43	Dec '43	5,475	CP	\$1,549,000	5,360	5,360
Squad Tents	—	Jan '45	Sep '45	—	FP	\$994,000	not listed	9,498
Bomb Service Truck	GTBC	May '44	Oct '45	7,053	FP	\$12,546,000	7,053	7,053
Cargo Trucks	G8T	Sep '42	May '45	77,915	FP	\$134,161	77,915	77,604
Cargo Trucks (Army/Navy)	GTB	Apr '42	Oct '44	8,218	not listed	not listed	not listed	not listed
Moto-Tug ⁵	—	not listed			not listed	not listed		3,025
Cargo Trucks (Army/Navy)	Jul '41	Aug '42	42,676	Probably standard Ford vehicles				
Pickup trucks 1½ ton	Feb '42	Mar '42	12,420	Probably standard Ford vehicles				
Automobiles	Nov '41	Mar '42	10,476	Probably standard Ford vehicles				

Other

Steel	FP	\$43,882,000
Coke, Charcoal, Oil, Tar & Ethel Acetate	FP	\$12,298,000
Marine Revenues	FP	\$2,199,000
Lumber	FP	\$980,000
TOTAL CONTRACTS		\$3,961,605,000

* Not itemized above are 4,889 tons of magnesium and unknown quantity of armor plate.

¹Recap — month by month war production record — Jan '41 through Aug '45

²Recap — Fixed and Cost Plus contract record — 1941–1945

³Recap — flyer published September 1, 1945

⁴Jeep — other month by month recap shows GP 5,163

⁵Moto-Tug — assembly subcontracted to vendor — other records indicate 10,877 units.

SOURCE 9

VIDEO ON THE B-24

Watch the video located at: <http://www.youtube.com/watch?v=iKlt6rNciTo#t=15>



VOCABULARY ASSIGNMENT

In your investigation you were presented with eight words or concepts for which you will prove your understanding. Bear in mind: ACT and SAT tests contains challenging vocabulary and practicing now will improve your scores!

1. Conjectures: An opinion or conclusion formed on the basis of incomplete information.

- *Use in a sentence*

2. Epistemology: The theory of knowledge, especially with regard to its methods, validity, and scope. Epistemology is the investigation of what distinguishes justified belief from opinion.

- *Answer what changes took place epistemologically from your conjectures to your final findings?*

3. Primary Sources: Source: Library of Congress

- *Identify all the types of primary sources you encountered in your investigation.*

4. Cogent: Meaning clear, logical, and convincing.

- *Use in a sentence*

5. Narrative: A spoken or written account of connected events; a story.

- *Answer how many “parts” of this narrative do you uncover in your research?*

6. Support, Extend, Challenge: These are the three roots of evaluating a claim or argument. You can agree with it by supporting it, add information and new perspectives by extending it, or question logic and validity by challenging.

- *Answer whether your final findings supported, extended, or challenged your conjectures. Explain.*

7. Arbitrate: To reach an authoritative judgment or settlement in a dispute.

- *Use in a sentence*

8. Bellicosity: A natural disposition to fight.

- *Use in a sentence*

GRADING RUBRIC FOR THE EVALUATION

	SUBPAR	PAR	SUPERIOR	POINTS
CONJECTURES (10 Points possible)	1) Lacks independent thought 2) Demonstrates minimal effort 3) Answers none or just one of the initial questions asked	1) Shows a degree of independent thought 2) Adequate effort given 3) Answers some of the initial questions	1) Clearly is making conjectures that are based on deep reflection 2) Answers all the questions in detail beyond what would be expected. 3) Answers all of the questions asked in the prompt.	/10
PRIMARY SOURCE TABLE (40 points possible)	1) Fails to answer main points of the source 2) Fails to include any personal thoughts	1) Correctly writes what main points of sources are, although minimally 2) Reveals thoughts at a surface level, but not with evidence of reflection and insight.	1) Gives insightful and correct synopsis of these 9 sources 2) Reveals deep understanding based upon clear descriptions and insightful reflections.	/40
ESSAY (40 points possible)	1) One paragraph or less in length 2) Lack of structure and effort 3) Several grammatical errors 4) Failure to answer questions in prompt	1) Two or three well-thought out paragraphs 2) Adequate effort and thought exhibited 3) Very few grammatical errors 4) Answers questions in prompt	1) Exceeds three paragraphs 2) Considerable effort is demonstrated from final paper 3) Zero grammatical errors 4) Answers questions in prompt with considerable reflection and insights	/40
VOCABULARY ACTIVITY (10 points possible)	1) Failure to complete the assignment 2) Failure to follow instructions 3) Incorrect usage of vocabulary word	1) Completion of all vocabulary word activities	1) Completion of all vocabulary words while demonstrating full effort and understanding.	/10
TOTAL POINTS				/100