

"Early Years" Scavenger

Hunt (Grades 3-5)

Name:__

Welcome to the National Museum of the United States Air Force!

This scavenger hunt will lead you through the "Early Years" gallery in building 1 of the NMUSAF. Your journey will take you from the first flight to the end of World War I. Follow the directions and look for the clues. Answer as many questions as you can. To begin, enter the museum and walk through to the end of the "Entrance Hall" and turn right. Follow the stanchions and start in front of the 1909 Flyer.

Begin the hunt in the Early Years Gallery. (The Wright 1909 Military Flyer).

- 1. In 1909 how much money did the Military Flyer cost the Signal Corps?
 - a) \$5000
 - b) \$25,000
 - c) \$30,000
- 2. Charles E. Taylor was a brilliant, self-taught mechanic who made a crucial contribution to the Wright brothers' invention of the airplane. He designed and built the first successful airplane ______ in only 6 weeks.
 - a) Wing
 - b) Engine
 - c) Sprocket
- 3. Look at the Wright 1916 Wind Tunnel, it was used to conduct ______ experiments during the Word War I period. This wind tunnel helped design aircraft to produce the final result of actual flying.
 - a) Aerodynamic
 - b) Aircraft Signaling
 - c) Jet engine thrust

Continue along the gallery. Look for the McCook Field Wind Tunnel

- 4. The McCook Wind Tunnel used a 24-blade fan of 60 inches diameter to create a maximum air speed of ______ miles per hour. The Wind Tunnel was used for calibrating airspeed instruments and testing airfoils.
 - a) 300
 - b) 445
 - c) 453

Walk straight and look for the plane with Ca. 11504 on the front

- 5. The Caproni CA. 36 designed by the Italian aeronautical engineer Gianni Caproni was a bomber aircraft with how many engines?
 - a) 4
 - b) 3
 - c) 2
- 6. The LUSAC 11 was the result of several design efforts to get American built fighter into combat as soon as possible. Read the results of these amazing efforts. One specific modified LUSAC 11 became famous by setting a number of what records at Wright Field in the 1920_____?
 - a) Speed
 - b) Distance
 - c) Altitude
- 7. As a famous military aviation executive, Captain Edward V. Rickenbacker was born right here in Columbus Ohio. Captain Rickenbacker was made an engineering officer because of his great knowledge of what type of engines?
 - a) Gasoline
 - b) Diesel
 - c) Turbocharged

As you continue through the Early Years Gallery, you will pass many fascinating aircraft that played a variety of important roles during World War I and the years immediately following the war. Notice the Design and Technology changes of each aircraft

- 8. As technology continued to change, the Martin MB-2 was the first US-designed ______ produced in large numbers.
 - a) Air to air fighter
 - b) Bomber aircraft
 - c) Observation aircraft
- 9. The Thomas-Morse S4C Scout was used for what main mission?
 - a) Training American fighter pilots
 - b) A recruiting tool to help get pilots
 - c) Built primarily for the movies
- 10. What makes the design and technology changes different on the Kellett K-2/K-3 Autogiro?
 - a) It used two engines for both propellers
 - b) It used a rotary wing to produce lift
 - c) It had two wings

- 11. The Martin B-10 was designed to carry how many people?
 - a) Four
 - b) Three
 - c) Two
- 12. Which technology design best describes the Martin B-10?
 - a) Biplane, open cockpit, fixed landing gear
 - b) One wing, open cockpit, fixed landing gear
 - c) One wing, closed cockpit, retractable landing gear (wheels go up inside the wing)
- 13. The B-10 was 50% faster than its contemporary biplane bombers and as fast as most of the fighters because?
 - a) It was smaller
 - b) It was larger
 - c) It was so advanced in design
- 14. What was the BT-14 airplane used for _____?
- 15. The performance design of the 82A Tiger Moth enabled it to travel at a range of how many miles_____?

CONGRATULATIONS! YOU HAVE FINISHED THIS EDUCATIONAL SCAVENGER HUNT. WE HOPE YOU ENJOYED LEARNING ABOUT MANY OF THE FASCINATING AIRCRAFT ON EXHIBIT AT THE NATIONAL MUSEUM OF THE UNITED STATES AIR FORCE.

THANK YOU FOR VISITING THE NMUSAF!



EARLY YEARS ANSWER KEY

- 1. с b
- 2. 3.
- а 4. с
- 5.
- 6. с а

b

- 7.
- 8. b 9.
- a 10. b
- 11.
- а 12. с
- 13.
- с 14. Trainer
- 15. 300

For Parents and Teachers

<u>The "Early Years through WWI" Scavenger Hunt meets these Learning Objectives and Ohio Learning</u> <u>Standards (OLS):</u>

- Learn about Financial Literacy OLS: Credit and debt – grade 3- 4 Code 6, 7.
- Technology, society and the individual impact of one another OLS: Society & Technology – grades 3 – 5 3-5, ST b - c.
- Technology, define and describe OLS: Design and Technology – grades 3 – 5 3-5, DT.1. a - d.
- Social Studies, Human Systems grade 4 OLS: Code 14, 21
- Social Studies, Economic Strand grade 5 OLS: Code 14, 15