

Name: _____

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

Your first stop will be the Space Gallery. Enter the 4th building and locate the large space shuttle directly ahead. This is the Crew Compartment Trainer (CCT) Shuttle Trainer.

1. The Space Shuttle Crew Compartment Trainer 1 (CCT-1) is one of three shuttle mockups used for what _____?

Turn to your right and walk past the Space/Research and Development STEM Learning Node and locate the Global Position System (GPS) on your right.

2. With advanced technology, the GPS is typically accurate to within about how many feet _____?

Locate the large booster rocket straight ahead. This is the Titan IVB.

3. First launched in 1959, the Titan family of boosters served for nearly 50 years putting _____ and _____ into orbit.

Ahead and to your right locate the Model A7LB Extravehicular Mobility Unit (EMU) - 1971

4. This EMU suit made by ILC Dover, and it's advanced design enabled it to be more flexible and let astronauts move around easier, touch the ground, and drive the _____?

Walk a few steps to the Saturn V Rocket and Launch Gantry model (In the glass case)

5. This model designed by 3D-printing technology, allowed two museum volunteers to show (1/60 scale) how large the whole Saturn V rocket was compared to just the Command _____? How many **total** hours did it take to print, paint, and assemble _____?

Turn around and look for the orange and white propellant tanks on this aircraft. Go toward the front of the plane. This is the X-15A-2.

6. The X-15 advanced aircraft allowed pilots to fly above 50 miles altitude, subject pilots to conditions that future astronauts would face, and reach _____ speeds.

Continue to follow the path under the large white aircraft tail. Look behind it at the Convair XF-92A.

7. The XF-92A was the world's first jet to fly with the radical delta-wing configuration. Where did it get the name of delta wing from _____?

*Turn left and continue through the Research and Development Gallery. The large white plane that extends from the end of the hangar is the **XB-70 Valkyrie**. Notice the words located on the plane itself.*

8. The XB-70A technology enabled it to fly at three times the speed of sound. Any potential enemy would have been _____ to defend against such a futuristic bomber.

*Locate the black plane under the nose of the XB-70. This is the **YF-12A***

9. Because air friction heated the skin of the YF-12 to more than 500 degrees fahrenheit, titanium alloys made up _____ percent of the YF-12's structural weight.

*Proceed right and locate the smooth gray plane on the left hand corner. This is the **Tacit Blue**.*

10. Because of the unusual design and shape of the Tacit Blue, it was nicknamed the _____?

*Next, locate the flying saucer look alike located on the right. This is the **VZ-9AV Avrocar**.*

11. The Avrocar was the result of a/an _____ effort to develop a supersonic vertical and landing (VTOL), later taken over by the United States Army and United States Air Force.

*Continue through the Research and Development Gallery and locate the **X-45A** on your left.*

12. The Nasa/Boeing X-36 technology was different in many ways. What was the main difference between it and most other fighter aircraft? _____

*Continue through the Research and Development Gallery until you enter the Global Reach Gallery. Turn right and locate the **Fairchild C-82A Packet**.*

13. The Fairchild C-82A Packet design allowed it to _____ paratroops or _____ stretchers, and it could tow _____?

*Turn around and walk around to the back of the **Lockheed C-130E**.*

14. List two missions the Lockheed C-130E was used for:

*Turn right and walk across the Global Reach Gallery to the open end of a large cargo plane. This is the **"Hanoi Taxi"**.*

15. The Starlifter design originated from a 1959 requirement for a fast, strategic transport aircraft that would serve as a “_____” for moving US Army troops rapidly anywhere in the world.

Turn around and enter the Presidential Gallery. To your left is the “Sacred Cow”. Enter the airplane and move towards the back.

16. What is located to your left when facing the exit stairs from inside the “Sacred Cow”?
Discuss with other classmates why it had this.

Exit the Sacred Cow and turn right towards the entrance of the “Independence”.

17. Which president named this plane the “Independence” _____ in recognition of his hometown, Independence, Missouri?”

Walk through the Independence and turn left. Approach the plane located directly ahead. This is the Lockheed VC- 140B Jetstar.

18. What did President Lyndon B. Johnson sometimes refer to the Jetstars as?

Locate the “Columbine III” on your right.

19. President Eisenhower named his third Constellation, “Columbine III”, after the state flower of _____ in honor of his wife Mamie.

Enter and explore the “Columbine III”. When you exit turn left and locate the entrance of the SAM 26000. Read the signs and discover all the significant history this plane has.

20. For a short period in history, SAM 26000 was renamed the _____ in honor of the nation’s bicentennial.

Answers

1. Train shuttle astronauts
2. 16
3. Astronauts; Satellites
4. Lunar rover
5. Module, 2,400
6. Hypersonic
7. The Greek letter delta
8. Unable
9. 93
10. Whale
11. Canadian
12. It was tailless
13. 41, 34, gliders
14. Answers may include: Aeromedical Evacuation; Reconnaissance; gunship; mid-air refueling of helicopters; mid-air space capsule recovery; search and rescue
15. Work Horse
16. Elevator
17. Harry Truman
18. Air Force One Half
19. Colorado
20. Spirit of 76

For Parents and Teachers

This Space, Research & Development, Global Reach, and Presidential Galleries Scavenger Hunt meets these Ohio Department of Education Learning Standards (OLS):

- 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.