

Explore Virginia Air & Space Center

GUIDELINES: Complete the number of activities for your grade level according to the grid below.

	DISCOVER	CONNECT	TAKE ACTION	ANY ACTIVITY UNDER ANY KEY	TOTAL NUMBER OF ACTIVITIES
Girl Scout Daisy	1	1	1	0	3
Girl Scout Brownie	1	1	1	1	4
Girl Scout Junior	1	1	1	2	5
Girl Scout Cadette	1	1	1	3	6
Girl Scout Senior	1	1	1	4	7
Girl Scout Ambassador	1	1	1	5	8

DISCOVER

- “Operation Tidal Wave” - On August 1, 1943, 177 B-24’s attacked the German oil refinery in _____, Romania. This site supplied 1/3 of the German’s oil.
- Race to the Skies - In 1896, who tests a steam-powered, unpiloted plane?
- Hampton Roads - In what year did Eugene Ely make the first takeoff from the deck of a ship?
- Workhorse of the Air War - The _____ Liberator was one of the heavily used aircraft in World War II.
- Shape of Naval Aviation - Like most Navy planes, the Hellcat has _____ wings.
- Gemini Program Wall - The Gemini boilerplate drop test vehicle (in the museum) was used to develop the _____ system for the manned Gemini missions.
- Apollo XII Wall - The mission objective was to make a _____ on the Moon.
- Apollo XII Wall - During launch, _____ struck the rocket, killing the power. They had 90 seconds to fix it or _____ the mission.
- Apollo XII Wall - When Apollo XII landed on the Moon, how far away were they from the Surveyor III spacecraft?
- Apollo 1963-1972 Wall - How many Apollo flights landed on the Moon, and who was the last astronaut to be on the Moon?
- Like Langley Wall - Who developed the concept of Lunar Orbit Rendezvous?
- “Angle of Attack” - Stall is the point at which air flowing over the top of the wing becomes _____ and causes loss of lift.
- Two Steps to Flight - In order to fly, an airplane must produce enough _____ to overcome the force of _____.
- The Plane That Trained America’s Pilots - Navy men nicknamed the Stearman N2S the _____.
- A Floating City - A single carrier can be home to more than _____ sailors.
- Commercial Aviation 1903-1950 - The first scheduled airline started in _____. How many passengers were on the flights?
- Orion Capsule - What does MPCV stand for?
- Orion Capsule - True or False? The Orion spacecraft was designed to be used for a trip to the Skylab Space Station.
- Inflatable Habitats - An inflatable habitat provides a home for astronauts during long term _____ and _____.
- Solarium - The Solarium displays invisible _____ light by assigning each wavelength a unique color.
- The Moon Reveals Its’ Secrets - What spacecraft provided humankind the first view of the Moon’s far side?
- Anatomy of a Planet - In the summer of 1976, two _____ landers became the first vehicles to land successfully on Mars.

- Moon Rock - This rock was found at the Sea of Serenity by Apollo _____ astronauts. It is _____ billion years old.
- The First Space Stations - America's first space station was _____ and operated from 1973 to _____.
- Crash - What makes the Solar System a dangerous place to live?

CONNECT

- "Tuskegee Trailblazers" - Who scored 3 victories in a single day in 1944, while flying with the 99th Fighter Squadron?
- Wright Problem #2 - The brothers had designed the glider wings based on airfoil data from the German glider pilot _____.
- Wright Problem #3 - Like all modern aircraft propellers, this blade for the 1910 Wright Model A is a _____.
- "Airborne Art" - What famous dwarf is on the nose of the B-24 Liberator?
- Like Langley Wall - The first human to set foot on the Moon trained at Langley's Lunar Research Facility. Who was he?
- Wright Flyer - On what date was the Wright Brothers first attempt at powered flight? Who was the pilot?
- "Piper J-3 Cub Plane for the People" - What was the military version of the Piper J-3 Cub nicknamed?
- USS Yorktown - During the Battle of the _____, three Japanese fighter pilots become disoriented and almost landed on the deck of the Yorktown.
- Radio Station - What three modes of communication are used around the world?
- Radio Station - What is the "Call sign" of the Museum's station?
- Martian Attractions - In 1997, the first rover on Mars was called _____.
- Martian Attractions - In early 2004, two Mars Exploration Rovers (MER) set down on Mars. They were called _____ and _____.
- Behind the Scenes - The Lunar Excursion Module Simulator (LEMS) trained astronauts to land on the Moon. Where was it located?

TAKE ACTION

- Hampton Roads - The _____ rocket plane, piloted by Chuck _____ becomes the first aircraft to break the sound barrier.
- Golden Age of Aviation - In a 1921 demonstration, airpower advocate General Billy Mitchell proved that airplanes can sink _____.
- Crew of the Liberator - It took _____ men to carry out the missions of the B-24 Liberator.
- Project Mercury Wall - The Mercury 14 Spacecraft (in the museum) made _____ pilotless flights. The spacecraft was used to test a _____ system.
- Project Mercury Wall - One of the objectives of Mercury was to investigate man's ability to _____ in _____.
- Gemini Program Wall - One of the objectives of Gemini was to develop methods of _____ and _____ with other vehicles.
- Getting Ready for Adventure - Astronauts and ground crews worked on problems as a team, developing solutions and then rehearsing in _____ training and _____.
- A Presence in Space - Humans have lived and worked in Space since the _____.