Program: Fossett Engineers
Grade Level: K to 1
Group Size: Max. 20
Length: 60 minutes
Location: The Museum of Flight

OVERVIEW

In this interactive program, students discover how airplane parts work together, experience imagination-fueled flights in one of the Flight Zone’s many real aircraft and build and test a contraption of their own design in a wind tunnel.

BIG IDEAS

• The names of the major parts of the airplane
• How the moving control surfaces of the airplane allow a pilot to control the airplane’s motions
• Pitch, roll and yaw
• Different shaped wings do different things

OUTCOMES – What will the students know or be able to do at the end of the lesson?

• Identify and demonstrate pitch, yaw, and roll
• Name the parts of an airplane and explain what they do

Vocabulary

- Pitch
- Roll
- Yaw
- Fuselage
- Aileron
- Rudder
- Elevator

Extended Learning

In your classroom:
- Smithsonian How Things Fly: pitch, yaw, and roll
- Smithsonian How Things Fly: learn about the mechanics of aircraft flight

At the Museum:
- The Tower at Boeing Field: watch planes fly in and out of Boeing Field and listen live to air traffic controllers
- The Cockpits exhibit in the Museum’s Great Gallery: climb into the cockpit of a real SR-71A Blackbird or a full-scale mock-up of an F/A-18L Hornet fighter
- Aviation Pavilion: walk aboard America’s first jet Air Force One, the sleek Concorde, and the Boeing 787 Dreamliner
Standards Supported – NGSS/CCSS/21st Century Skills

Next Generation Science Standards (NGSS)

- Engineering Design: K-2-ETS1-3

Common Core State Standards (CCSS)

- ELA: Writing: CCSS.ELA-Literacy.W.K.8

21st Century Skills

- Creativity and Innovation
- Critical Thinking and Problem Solving
- Communication and Collaboration
- Flexibility and Adaptability
- Social and Cross-cultural Skills
- Productivity and Accountability

Reservations

For reservations, please call 206-768-7175 or email: outreach@museumofflight.org.
For grant assistance, please visit www.museumofflight.org/education/grant-assistance.