Program: Fossett Captains
Grade Level: 2 to 3
Group Size: Max. 30
Length: 60 minutes
Location: The Museum of Flight

OVERVIEW
Through hands on explorations, students investigate pushes and pulls, balance and its relation to the four forces of flight.

BIG IDEAS
• Four forces of flight
• Balance
• Pitch, roll and yaw

OUTCOMES – What will the students know or be able to do at the end of the lesson?
• Define a force
• Identify the four forces of flight and how they can be balanced and unbalanced to control aircraft flight

Vocabulary
• Force
• Interaction
• Balance
• Pitch
• Roll
• Yaw

Extended Learning
In your classroom:
• Smithsonian How Things Fly: explanation of the four forces
• PBS Kids Balancing Act: a fun, interactive balance and weight activity
• Science Net Links: creative balance activities

At the Museum:
• The Tower at Boeing Field: watch planes fly in and out of Boeing Field and listen live to air traffic controllers
• Helicopters: Bell UH-1H Iroquois (Huey), Sikorsky HH-52 Seaguard
Standards Supported – NGSS/CCSS/21st Century Skills

Next Generation Science Standards (NGSS)

- Engineering Design: K-2-ETS1-3, 3-5-ETS1-1, 3-5-ETS1-2
- Forces & Interactions: K-PS2-1
- Motion & Stability: 3-PS2-1

Common Core State Standards (CCSS)

- ELA: Speaking & Listening: CCSS.ELA-Literacy.SL.2.1(a, b), CCSS.ELA-Literacy.SL.2.3, CCSS.ELA-Literacy.SL.3.1(a – c), CCSS.ELA-Literacy.SL.3.3

21st Century Skills

- Creativity & Innovation
- Critical Thinking & Problem Solving
- Communication & Collaboration
- Flexibility & Adaptability
- Initiative & Self-Direction
- Social & Cross-cultural Skill
- Productivity & Accountability
- Leadership & Responsibility

Reservations

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