Program: Yes, It is Rocket Science! (2)
Grade Level: 3 to 8
Group Size: Max. 30
Length: 50 minutes
Location: At your site

OVERVIEW

Students are introduced to the history and science of rocketry and apply their understanding by designing and testing their own water rockets.

BIG IDEAS

• Newton’s Third Law of Motion
• Engineering concepts and practices
• History of modern rocketry

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

• Explain how a force is an action and explain the resulting reaction
• Explain how a rocket works
• Identify basic parts of a rocket

Vocabulary

• Newton’s Third Law of Motion
• Force
• Action
• Reaction
• Thrust
• Drag
• Nose cone
• Fin
• Fuselage
• Nozzle

Extended Learning

At the Museum:
• Spaceflight Academy Exhibit: explore what it takes to leave the Earth and set out into the solar system
• Space: Exploring the New Frontier: learn about the early days of space exploration
Standards Supported – NGSS/CCSS/21st Century Skills

Next Generation Science Standards (NGSS)

- Engineering Design: 3-5-ETS1-1, 3-5-ETS1-2, 3-5-ETS1-3, MS-ETS1-1, MS-ETS1-2, MS-ETS1-3
- Forces and Interactions: 3-PS2-1, 3-PS2-2
- Space Systems: Stars and the Solar System: 5-PS2-1

Common Core State Standards (CCSS)

- ELA: Science & Technical Subjects: CCSS.ELA-Literacy.RST.6-8.3

21st Century Skills

- Creativity and Innovation
- Critical Thinking and Problem Solving
- Communication and Collaboration

Reservations

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