DISCOVERY LAB OFFERINGS

Experiment, investigate & explore STEM topics in depth in a Discovery Lab of your choice. Workshops are led by Orlando Science Center Educators. All labs have been carefully designed to meet all applicable Florida State Standards.

The experience offers students an opportunity to implement skills being taught in the classroom through inquiry-based hands-on 60-minute workshops. Field Trip groups will be divided to fit into Discovery Lab spaces.

Please contact Reservations for further details at 407.514.2112 or at classes@osc.org.

PRE-K / VPK

Moving Machines
Children will investigate the six different types of simple machines that make work easier: lever, inclined plane, wheel and axle, screw, wedge, and pulley. They will also use teamwork to build a compound machine to meet a goal.

_Amber Early Learning & Development Standards for Four-Year-Olds:_

Little Engineers: Can We Fix It? Yes We Can!
Children will learn about Engineers and the Engineering Design Process through exploring the story ‘Anything Is Possible’ by Giulia Belloni and creating a solution to the storybook problem on their own in small teams.

_Amber Early Learning & Development Standards for Four-Year-Olds:_
I.B.c.2, II.B.1, II.C.1, II.D.1, III.C.2, IV.A.1.a, VI.A.3, VI.C.1.a, VI.C.1.b

KINDERGARTEN

Little Engineers: Can We Fix It? Yes We Can!
Children will learn about Engineers and the Engineering Design Process through exploring the story ‘Anything Is Possible’ by Giulia Belloni and creating a solution to the storybook problem on their own in small teams.

SC.K.N.1.1; SC.K2.CS-CC.1.3; SC.K2.CS-CC.1.4; SC.K2.P.8.1; SC.K2.P.9.1; SC.K2.P.12.1; MAK. K.1.1; MAK.K.1.2; MAK. K12. MTR. 1.1; MAK. K12. MTR. 6.1; LAFS. K.RI.1.2; LAFS. K.RI.1.3; LAFS. K.RI.1.3; LAFS. K.RL.1.3.7; LAFS. K.RL.1.4.10; LAFS. K.RF.1.1; LAFS. K.RL.2.5; LAFS. K.RL.1.3; LAFS. K.RL.1.3

Bee Robotics
Children will be introduced to the basics of computer science and programming with our robot friend, BlueBot. They will explore how robots use algorithms as a series of steps to reach a goal.

SC.K2.CS-CC.2.2; SC.K2.CS-CC.2.4; SC.K2.CS-CC.2.5; SC.K2.CS-CP.1.1; SC.K2.CS-CP.2.2; SC.K2.CS-CP.1.3; SC.K2.CS-CP.2.1; SC.K2.CS-CP.2.2; SC.K2.CS-CP.2.3; SC.K.N.1.5; SC.K.P.12; MAK.K12. MTR. 1.1, MAK.K12. MTR. 6.1; LAFS. K.SL.1.3; LAFS. K.SL.1.1
SCHOOL FIELD TRIPS
2022 – 2023

GRADES 1 – 2

Forces of Nature
Our planet Earth is constantly changing as a result of the many forces of nature. You will discover how the Sun affects these forces. Delve into a vicious volcano, explore erosion and engineer wind-powered objects.

GRADES 3 – 5

STEM-tastic
Shipwreck! Embark on an Engineering Design Challenge journey through engineering! Solve real-world problems by creating structures with Civil Engineering and experience Electrical Engineering by designing circuits.

Exploring Mars
Become aerospace engineers as you design and create satellites that will orbit the planet Mars. Analyze simulated Mars soil samples as astrobiologists to determine which plants could grow on the Red Planet. Let’s explore Mars together!
Vex Robotics: Detour Ahead
ROADS CLOSED! How do we navigate our way through a new route? Students will learn the basics of programming and apply their knowledge of maps and measurement while they explore alternate paths with a VEX Robot. Is your team up to this robot challenge?

SC.3.N.1.3; SC.3.N.1.4; SC.3.N.1.5; SC.3.N.1.6; SC.4.N.1.5; SC.4.N.1.6; SC.5.N.1.3; SC.35.CS-CC.1.3; SC.35.CS-CC.1.4; SC.35.CS-CC.1.5; SC.35.CS-CS.1.2; SC.35.CS-CS.2.1; SC.35.CS-CS.2.4; SC.35.CS-CS.2.6; SC.35.CS-CS.2.7; SC.35.CS-CS.2.8; SC.35.CS-CS.2.9; SC.35.CS-CS.6.2; SC.35.CS-CS.6.3; SC.35.CS-CP.2.2; SC.35.CS-CP.2.3; SC.35.CS-CP.2.4; SC.35.CS-CP.2.5; MA.4.GR.1.1; MA.4.GR.1.2; MA.5.M.1.1; MA.K12.MTR.1.1; MA.K12.MTR.6.1; LAFS.3.SL.1.1; LAFS.3.SL.1.3; LAFS.3.SL.2.6; LAFS.4.SL.1.1; LAFS.5.SL.1.1

Roller Coaster Physics
Demonstrate how the forces of inertia, gravity, and friction affect motion while building a roller coaster model. Trace the flow of energy as it converts from potential to kinetic along the track.

SC.3.P.10.2; SC.3.P.11.2; SC.3.E.5.5; SC.3.N.1.2; SC.3.N.1.3; SC.3.N.1.4; SC.3.N.1.5; SC.3.N.1.6; SC.3.N.3.2; SC.3.N.3.3; SC.4.P.10.1; SC.4.P.10.2; SC.4.P.12.2; SC.4.N.1.2; SC.4.N.1.5; SC.4.N.1.6; SC.4.N.1.8; SC.5.P.10.2; SC.5.P.13.1; SC.5.N.1.3; MA.4.GR.1.1; MA.5.M.1.1; MA.K12.MTR.1.1; MA.K12.MTR.6.1; LAFS.3.SL.1.1; LAFS.3.SL.1.3; LAFS.3.SL.2.6; LAFS.4.SL.1.1; LAFS.5.SL.1.1

GRADES 6 – 12

Flight Lab
Take flight and embark on a virtual reality mission using Oculus headsets to follow a flight plan. Students will explore the forces of flight as they navigate an aircraft through a set of obstacles using advanced simulation technology.

*This is a 90-minute virtual reality experience for ages 13 and up. It is not recommended for those prone to motion sickness.

SC.6.P.13.1; SC.6.P.13.3; SC.68.CS-CS.1.2; SC.68.CS-CS.1.3; SC.68.CS-CS.2.2; SC.68.CS-CS.2.10; SC.912.P.12.2; SC.912.P.12.6; SC.912.CS-CS.1.5; MA.K12.MTR.1.1; MA.K12.MTR.6.1; LAFS.68.RST.1.3; LAFS.68.RST.2.4

OSCSI
Become a crime scene investigator and decipher the evidence to discover the truth! Match ink samples with chromatography, identify mystery unknowns by their physical and chemical properties, learn blood-typing techniques, and create sketches of a suspect using facial composite computer software.

SC.6.N.1.1; SC.6.N.1.4; SC.6.N.1.5; SC.7.N.1.1; SC.7.N.1.3; SC.7.N.1.5; SC.8.N.1.1; SC.8.N.1.3; SC.8.N.1.6; SC.8.N.4.1; SC.8.P.8.4; SC.8.P.8.8; MA.K12.MTR.1.1; MA.K12.MTR.6.1; LAFS.68.RST.1.3; LAFS.68.RST.2.4

Rise to the Challenge: Weather Balloon Engineering
Become an aerospace engineer by experiencing the battle between gravity and buoyancy! By collecting data and calculating the opposing forces, teams create a balanced attachment that will suspend a model weather balloon in the atmosphere. Can your team rise to the challenge?

SC.6.N.1.1; SC.6.N.1.4; SC.6.P.13.1; SC.6.P.13.2; SC.6.P.13.3; SC.7.N.1.1; SC.8.N.1.1; SC.8.P.8.2; SC.8.P.8.4; SC.8.N.1.5; SC.8.N.3.1; SC.68.CS-CC.1.2; SC.912.E.7.8; SC.912.E.6.6; SC.912.P.12.4; SC.912.N.1.7; SC.912.N.4.1; MA.6.AR.1.1; MA.6.AR.2.1; MA.6.AR.3.2; MA.6.AR.3.4; MA.7.AR.1.1; MA.7.AR.1.3; MA.8.AR.2.1; MA.912.AR.1.1; MA.912.AR.2.1; MA.912.AR.2.5; MA.K12.MTR.1.1; MA.K12.MTR.6.1; LACC.68.SL.1.3; LACC.68.SL.2.4; LACC.8.SL.2.4; LACC.68.RST.1.3

For Field Trip bookings, please fill out the reservation form at https://bit.ly/OSC_SFT_Reservations.