

# Makahiki ODE STEM Workshop Registration

## **Class Catalog**

### **Event Contacts**

Name Title Phone Email

Will Hartzell STEM Workshop Registration 808.728.2355 willhartzell2@gmail.com

Registration opens March 01, 2017
Visit www.scoutingevent.com/104-ODESTEM to register







Makahiki ODE STEM Workshop Registration at Blaisedell Center

### Makahiki ODE STEM Workshops (Scheduled Classes)

**ODE115** 12:15-1 PM



TBD-P **TBD** 

Maximum number of participants: 25

**ODE115** 1:15-2 PM



TBD-P TBD

Maximum number of participants: 25

**ODE111** 12:15-1 PM



### **ASITLHFCKOCTBCR**

Sponsored by Ace Hardware: Learn the secrets of thinking like a scientist from Jake, a Wizard IV (as bestowed by the Royal Institution of Great Britain). Jake is also a retired Chief Scientist for the Discovery Channel and has provided science content for over 20 televisions shows including MacGyver and MythBusters. You will learn how to use everyday items to sharpen your thinking skills... the same skills used by all scientists, technicians, engineers and mathematicians around the world. Recommended for students of all grades.

Maximum number of participants: 25

ODE111 1:15-2 PM



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Maximum number of participants: 25

**ODE120** 12:15-1 PM



### **Balloon Rockets**

Sponsored by Ho'okele Elementary School: Experience the engineering design process and apply the concepts of Newton's laws of motion. Design and build a simple rocket that transports cargo to the finish line. Recommended for students grades 3 through 6. Maximum number of participants: 25

**ODE120** 1:15-2 PM



#### **Balloon Rockets**

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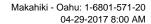
Maximum number of participants: 25

ODE119 12:15-1 PM



#### **Bristle Bot Racers**

Sponsored by Team Magma Robotics, Kalani High School: Construct a Bristlebot, a fun, exciting robot made of a vibrating cell phone motor and a toothbrush head. Design and construct a Bristlebot to go the fastest in a straight line. Compete with other Bristlebots for bragging rights. Recommended for students Grades 4 and older.





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**ODE119** 1:15-2 PM



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Maximum number of participants: 25

**ODE113** 12:15-1 PM



### Chain Reactions: Fun with Kinetic Energy

Sponsored by Elemental Minds STEM Enrichment Program: Use the engineering design process to explore and learn about kinetic energy. Use everyday materials including sticks and cups to create chain reactions that are sure to entertain and amaze. Recommended for students grades 3 and older.

Maximum number of participants: 25

**ODE113** 1:15-2 PM



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Maximum number of participants: 25

ODE109 10-10:45 AM



#### **Design Thinking - the New Superpower**

Sponsored by Oceanit: Maximize your creative superpowers in this fun, hands-on play session. Design Thinking is a human centered problem finding and solving process used by the world's most innovative companies like Apple, Google, and Facebook. Recommended for students grades 7 and older.

Maximum number of participants: 25

**ODE109** 11-11:45 AM



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Maximum number of participants: 25

ODE103 10-10:45 AM



### **Drinking Straw Rocket Science**

Sponsored by Hawaii Space Grant Consortium, University of Hawaii: Experience the basic physics of rocketry first hand using nothing more than drinking straws and air. A demonstration will also be given of the kind of rocket science that can be done with state of the art gaming software. Recommended for students grades 5 and older.

Maximum number of participants: 25

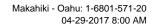
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ODE100 10-10:45 AM



#### Electrophoresis Lab

Sponsored by I am a Scientist, Chaminade University: Use laboratory techniques and equipment to separate molecules based on size and charge. Recommended for students grade 6 and older.

Maximum number of participants: 25

ODE100 11-11:45 AM



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**ODE101** 10-10:45 AM



### **Energy UNPLUGGED**

Sponsored by Hawaii Energy: Help Hawai'l lead the nation in Energy Efficiency! Learn how to make money by becoming an "Energy Entrepreneur" and help reap the benefits of making smart energy choices in your home. Recommend for students grade 5 and older.

Maximum number of participants: 25

**ODE101** 11-11:45 AM



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Maximum number of participants: 25

**ODE114** 12:15-1 PM



### **Feather Fall Parachute Deployment**

Sponsored by Iolani School: Design and build a parachute to safely and accurately land in a hostile environment to get much needed equipment to our stranded astronauts. "Bragging rights" for best aim and slowest descent. Learn about aerodynamics, free fall and air resistance forces. Recommended for students grades 4 and older.

Maximum number of participants: 25

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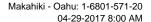
Maximum number of participants: 25

**ODE112** 12:15-1 PM



### Forensic Science Fingerprinting

Sponsored by Forensic Science Club, Chaminade University: Learn more about fingerprinting in the Forensic Science field. We will be going over history, different processing techniques, while also having the participants try out the process themselves. Recommended for students grades 6 and older.





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**ODE112** 1:15-2 PM



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Maximum number of participants: 25

**ODE107** 10-10:45 AM



#### Fossils: The Tales they Tell

Sponsored by Department of Mathematics and Science, Leeward Community College: What can a fossil tell us? Aside from the obvious clues to the physical attributes of the creature(s) that once roamed the Earth, fossils also contain valuable information regarding the behaviors of the creature(s) and the conditions of the environment that they lived in. Examine several fossils and try to piece together the clues that reveal some interesting stories behind each one. Recommended for students Grades 3 and older.

Maximum number of participants: 25

**ODE107** 11-11:45 AM



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Maximum number of participants: 25

**ODE102** 10-10:45 AM



### Gelatin Volcanoes, Dikes, Rift Zones

Sponsored by School of Ocean and Earth Science and Technology, University of Hawaii: Experience how magma migrates within a volcano and learn how it is related to the shape of a volcano and lava flow hazards. Inject magma into the gelatin volcano and see how it reaches the surface. Recommended for students grades 6 and older.

Maximum number of participants: 25

**ODE102** 11-11:45 AM



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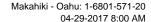
Maximum number of participants: 25

**ODE117** 10-10:45 AM



### Hardware Science - Rocket Launcher Kit

Sponsored by Ben Franklin Stores: Build you own hardware store rocket launcher. Learn about air pressure and angles with this DIY kit. No batteries needed, the rocket is powered by you! Recommended for students grades 2 and older.





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**ODE118** 11-11:45 AM



#### **Hardware Science - Street Science**

Sponsored by Ben Franklin Stores: Build a simple electric motor, gyroscope and test your critical thinking skills with mind-bending rope exercise in this hands-on workshop. Using everyday materials, we will demonstrate science concepts you can replicate at home. Recommended for students grades 2 and older.

Maximum number of participants: 25

**ODE110** 12:15-1 PM



#### **LittleBits Inchworm Mini-bot Racers**

Sponsored by Little Oha Bitty Bytes: Create and Design a littleBits Inchworm mini-bot and engineer your mini-bot to race with other teams in a final inchworm race. Learn about how you can build and invent anything you can imagine with littleBits -- easy to use, color-coded electronic modules that magically snap together with magnets! Recommended for students of all grades.

Maximum number of participants: 25

**ODE122** 1:15-2 PM



#### **LittleBits Throwing Arm Game**

Sponsored by Little Oha Bitty Bytes: Create and Design a littleBits Throwing Arm Game, and engineer your own electronic throwing arm target game and share your invention with other teams! Learn about how you can build and invent anything you can imagine with littleBits -- easy to use, color-coded electronic modules that magically snap together with magnets! Recommended for students of all ages.

Maximum number of participants: 25

**ODE106** 10-10:45 AM



#### Mystery & Intrigue: The Wide World of Electricity

Sponsored by Hawaiian Electric Company: Learn some exciting aspect of electricity. Build a battery storage experiment that should impress your friends, family and teachers. As always, no previous experience necessary; just bring your eagerness to participate and learn. In fact, you may be able to teach our engineers something new. Recommended for students grade 3 and older..

Maximum number of participants: 25

**ODE106** 11-11:45 AM



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Maximum number of participants: 25

**ODE108** 10-10:45 AM



### Pride, Service, Dedication: Exploring the Fire Service

Sponsored by the HFD Explorers Post: Learn about the duties of a Firefighter and what happens at and behind the scenes of the Honolulu Fire Department (HFD). The journey will take you from mountain peaks to ocean depths and everything in between. Discover how science and technology help the HFD improve public and Firefighter safety and respond to changing demands of the community. Recommended for students grades 9 and older.



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Maximum number of participants: 25

**ODE121** 12:15-1 PM



#### **Rockin' Robots**

Sponsored by the Department of Mathematics, University of Hawaii: Participants will have fun building and coding with different robots. They will be introduced to different parts of robotics using LEGO Robots, VEX IQ, and DASH & DOT from Wonder Workshops. Recommended for students Grades 4 through 7.

Maximum number of participants: 25

**ODE121** 1:15-2 PM



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Maximum number of participants: 25

ODE116 12:15-1 PM



### **Sheep Brain Dissection**

Sponsored by Michon Morita, MD: Sheep brains, although much smaller than human brains, have similar features and can be a valuable addition to anatomy studies. See for yourself what the cerebrum, cerebellum, spinal cord, gray and white matter, and other part of the brain look like. Recommended for students grades 8 and older.

Maximum number of participants: 25

**ODE116** 1:15-2 PM



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Maximum number of participants: 25

**ODE105** 10-11:45 AM



### The Pillowcase Project

Sponsored by the American Red Cross of Hawaii: Learn and practice emergency preparedness skills for local disasters like fires, and tsunamis with the Red Cross Pillowcase Project! Design your own Disney-sponsored pillowcase at the end of the class to share what you've learned and then build your own disaster kit by filling it with emergency supplies at home! For students grade 3 through 5.

Maximum number of participants: 25

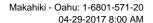
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emergency supplies at home! For students grade 3 through 5.

Maximum number of participants: 25

ODE123 12:15-1 PM



#### **TVEX IQ Robotics for Middle School**

Sponsored by Maryknoll School Robotics Team: Children can come and explore VEX IQ Robotics in an interactive demonstration. Maryknoll robotics team students will be on hand to demonstrate driving robots and share information about being on a robotics team. Children can also experience driving a working robot to complete a task. Recommended for students grades 5 through 8.

Maximum number of participants: 25

**ODE123** 1:15-2 PM



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Maximum number of participants: 25

ODE104 10-10:45 AM



#### **Workings of the Mammalian Heart**

Sponsored by Gehan Devendra, MD: Ever wonder what a heart looks like? It certainly doesn't look like the perfect valentine's day hearts. Come find out what it really looks like and even see what's inside and find out how it works as you dissect a sheep's heart. Recommended for students grades 8 and older

Maximum number of participants: 25

**ODE104** 11-11:45 AM



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