

STEM is Fun FEST (virtual)

(FEST=Families Exploring STEM Together)

Children and their parents are partners in a day of discovery and hands on STEM experiences.

Hosted by Manoa Elementary School VEX IQ Robotics program

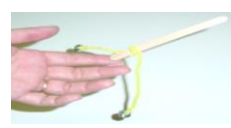
November 5, 2021, Friday, 6:00-7:15 pm (virtual)

Presented by: Art Kimura, Hawaii Space Grant Consortium, University of Hawaii

STEM really works! Curiosity + Joy + Dreams + Thrills + Wonder + Interest + Surprise + Creativity = Discovery...and it's Fun!!

You are welcome to join us in exploring the engineering design process and the scientific method...your STEM fun pack includes: 2 brushbot kits, a wind tube, a windmill kit, ultraviolet detecting beads, diffraction glasses, preform bottle, Cartesian diver, balancing stick, and other materials, all valued at over \$30. Join the live zoom with Art Kimura in the virtual STEM is Fun FEST.

- *design and build your brushbots and compete in sumo brushbot matches on a pizza pan
- *design and make a windmill using the provided kit and plastic soda or water bottles to try to light the LED
- *use the preform bottle to make a bubbling “lava lamp”
- *use a pipette to determine how many drops of water you can put on a penny...and learn how to make your own “magic” jar where water defies gravity to surprise your friends
- *observe dramatic size increase in polymer balls
- *use the Cartesian diver as a model to make your own divers
- *observe the “signatures” of lights using diffraction glasses
- *see how much air you can blow into the wind tube
- *make a musical instrument with a straw (provided)
- *learn about Center of Gravity with the balancing stick
- *test different windows and sun glasses to see whether they block ultraviolet radiation using the detecting beads



Cost: \$25 (make payment, check payable to: (Manoa Elementary))
 *100% of fees to benefit the Manoa Elementary School VEX IQ Robotics

Return the registration form along with payment to:
STEMFEST registration to your child’s teacher or to the office by October 1 (Limit of 40 kits)

Eligibility: children in grades 1-6 and their families

Yes, please register us (limited enrollment)

Student name	Rm #
Grade	Teacher
Email address of parent	
Parent name	Parent signature

A confirmation will be sent to those registered and paid.
 For further information, contact: Terry.Mitsuda@k12.hi.us
 STEM kit/supplies will be sent home with your child
 Zoom login for the STEMFEST will be emailed to the email above, please print.