



# **SATURDAY** February 3, 2018

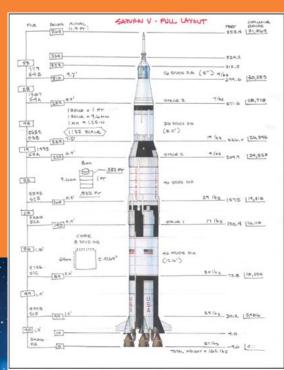
9am-4pm

**BOISE STATE UNIVERSITY** 

STEM Moon Shot is set to be an engaging and creative event designed for kids of all ages to become excited about Science Technology Engineering and Math (STEM) using a central theme of LEGO and space exploration.

# Help build an 11.5 FOOT TALL model of the Saturn V Moon Rocket!





Actual sketch as concept before design

Thank you to our sponsors











# PART OF THE BSU ENGINEERING AND SCIENCE FESTIVAL

FREE parking available at the Lincoln Parking Garage, on the corner of University and Lincoln.

Pre-register online, and plan your day in advance by visiting http://coen.boisestate.edu/STEMExploration or

Contact Leandra Aburusa-Lete at (208) 426-4432, laburusa@boisestate.edu

See the event page STEM Moon Shot on Facebook.

# at the end of the day. What will it be? Art is central to creativity, and creativity is key to finding solutions.

# STEM MOONSHOT PROGRAM

STUDENT UNION BUILDING (SUB), Simplot Ballroom Idaho LEGO Users Group and IDEABRICKWORKS

STEM Moon Shot is a celebration of the science and engineering that landed humans on the Moon. Get a Flight Plan and complete your journey of exploration. Learn about space flight and STEM professionals who make it happen. When your flight is done, build a 14" Saturn V rocket to take home to commemorate the day!

Design within Constraints using LEGO - All Ages (D) -

Engineers and scientists solve problems every day within constraints of technology, time, funding, knowledge, and more. Build a tower with LEGO (in 10 minutes) and see how you do under the constraints of time and material. There will be seven rounds of competition during the day with awards posted after each round. The prizes are...LEGO! Your towers will be judged on height, number of bricks used, and stability. The secret is balancing the constraints to form YOUR winning solution! Kids ages 7 to 14 will be eligible for each round of the competition. Those 15 and older (adults welcome) are entered in a Master Class with a prize awarded at the end of the day. Young kids are encouraged to participate, and while they won't be scored in the rounds, there will be a surprise for them!



NEW Saturn V Moon Rocket - Age 7 to 14 (S) - Help build a replica of the 1969 Apollo Saturn V Moon Rocket out of LEGO! Work in a team with a BSU Student Mentor to build a segment of the rocket. Completed, this model is 11.5 feet tall, weighs roughly 300 pounds, and includes over 32,000 bricks. This project shows many of the tools and skills that engineers and scientists use to plan, design, experiment, and build...and it will be super fun! This is a scheduled activity and pre-registration is strongly encouraged. There will be 30-minute shifts all day to complete this project by 4:00pm. The designer, Scott Bowman of IDEABRICKWORKS (a mechanical

engineer) will share how he designed the Model and what he learned in the process.

NEW Mosaic Building - Age 7 to 14 (D) - Every monitor, tablet, or smart phone has a screen that uses pixels to make incredible graphics and interfaces to our favorite software. You can "build" a picture (creating a mosaic) using LEGO as the pixels! Come and make one section of a large mosaic that will only be revealed when all the pieces are assembled

NEW Spaceflight MOC Display - The Idaho LEGO User Group will be displaying MOCs (My Own Creations) that are entirely made of LEGO! You can see how these builders create fantastic builds celebrating the past, present, and future of spaceflight (and other things too). There will be Star Wars universe creations and more realistic models of actual spaceships.

NEW Great Ball Contraption - LEGO has a line of bricks with gears, motors, levers, sensors, controllers, and other mechanical devices! Come and see how members of the IdahoLUG pass small LEGO balls from one machine to another in an endless loop. Pilot the ball dozer and guess the number of balls in action. Each guess includes an entry into a raffle for a LEGO prize. Come take a look at these crazy machines!

**NEW LEGO Free Build – All Ages (D)** – What would you do with 20,000 LEGO? What could you build? Join us and use brick to make a spaceship, an astronaut, a planet, or something no one has imagined. You can't take your build, you can display your creation at the Best of Free Build table. Entrants will be included in another raffle!

NEW Micro Saturn V - All Ages (D) - Once you complete your Flight Plan, after seeing and doing everything the festival has to offer, come back to the STEM Moon Shot area and make your own 14" Saturn V Moon Rocket, no charge, with a commemorative launch pad. You'll apply custom stickers to your rocket, and will be a wonderful reminder of the fun day.

