New!

DESIGN ZONE

What does it take to create a videogame, line up rhythms like the best DJs, or design a roller coaster that produces the biggest thrills? Whether it is art, music, or engineering, it takes math and science to meet these design challenges. In ***Design Zone***, you can go behind the scenes and see how videogame developers, music producers, roller coaster designers and other creative problem solvers use math and science to do the amazing things they do.

Step into a DJ recording studio and discover how many beats per second it takes to get bodies moving on the dance floor. Go behind the scenes at a bike race where you can test gear combinations, then pedal to victory as you compete on three challenging courses. Enter the videogame design area, figure out the formulas you need to create an on-screen action, then leap through to the next level of your game challenge. Through it all, you'll solve real-world challenges and discover how math and science are essential to the creative process.

We know that our visitors come to have fun—and to learn. ***Design Zone*** focuses on creative problem solving using algebraic thinking in a context that is relevant, educational, and marketable. The exhibit is designed for families and school groups. ***Design Zone*** supports STEM education, offering mathematically rich experiences for students outside of the classroom environment.

Drawing in Motion

OMSI
Everyday Encounters with Science

EXHIBITION AREAS:

Design Zone is organized into three thematic areas, highlighting the relationship between mathematical thinking and the creative process in: art, music, and engineering.

MUSIC- Hear It!
Step into the DJ Recording Studio, On Stage, and Dance Party areas and hear the math in the music while you explore relationships between length and pitch in musical instruments, ratios and rhythms, and visual representations of sound.

Light Show DJ
You're in the control booth at a virtual concert. Your challenge: put together laser light patterns to match the music and get your friends dancing. Like a popular dance video game, challenge patterns appear on screen moving towards you. Create the right patterns at the right time and the virtual crowd goes wild.

ART- See It!
Enter the Videogame Design Lab, the Architecture Studio, and the Digital Design area to find out how visual designers use scale, pattern, coordinate grids, equality, and slope to turn ideas into reality. See the math behind visual creativity as you design your own 2D and 3D art!

Drawing in Motion
Choose a challenge image and trace a line art masterpiece on a giant screen. In this full body iconic experience, you and a partner become the designers as you move large sliders along number lines to manipulate a digital "pen" and draw on a monitor display. Create your own images as you discover the math behind the concept of slope.

ACTION- Move It!
Roll into the Theme Park and the Action Sports Arena where you will discover the math and physics behind anything that moves. Build a custom digital roller coaster, design your own skate park, and race your bike to the finish line!

Bike Race
Compete in a full-body bike race! Choose from three bike stations, including one of two recumbent bicycles or a hand crank. Once the race starts, watch your progress on a graph of distance over time. Who will cross the finish line first? The race continues until each player has finished. At the end of the race, you have the option to try another course!

503.797.4659
www.omsi.edu/travelingexhibits

DESIGN ZONE

COST:	**$100,000**
	3-month venue plus shipping
	6,000 sq. ft.
REQUIREMENTS:	Minimum doorway/hallway/elevator dimensions for carted exhibit: 4’2”W x 8’H x 8’L Minimum ceiling height 9’, preferred ceiling height 12’ 110 VAC 15 amp power Internet connection 10 days estimated for installation and take-down
COMPONENTS:	**26 exhibits + environmental walls and towers**
	Including hands-on interactives, full-body group activities, audio and video components, computer-based activities, graphic panels, and text
SHIPPING:	Carts and road box Shipped in (3) 53-ft. trailers
SUPPLEMENTAL MATERIALS:	Instruction Manual Marketing Kit Teacher’s Guide Floor Staff Training Guide
AVAILABILITY:	Beginning 2015 Contact OMSI’s Traveling Exhibits Service at **503.797.4659**

An Interactive Exhibit
Designed and Produced by:
Oregon Museum of Science and Industry
1945 S.E. Water Ave.
Portland, Oregon 97214
503.797.4659 • www.omsi.edu

Please note that this is a preliminary fact sheet. The completed exhibition is subject to change.

Bike Race