



## Dynamic Demonstrations Spaces and Exciting Exhibits

The Michigan Science Center features hundreds of hands-on exhibits focusing on life, space and physical science. In addition, the Science Center offers themed learning environments for in-depth programs and demonstrations.

### Dynamic Demonstration Spaces

The **Cell Lab** is a versatile demonstration space located on the main level of the museum in the Health and Wellness Gallery. Here visitors can experience hands-on demonstrations and activities for all ages based on a variety of science topics.

The **Centennial Laboratory**, on the lower level, allows visitors to experience the role of an amateur scientist in a 19<sup>th</sup>-century era laboratory, combining classic laboratory equipment with current technology.

### Exciting Exhibits

The **Health and Wellness Gallery** takes visitors into the incredible world of the human body and medical science technology. Interactive exhibits on nutrition and exercise combine fun with solid science to encourage both children and adults to lead a healthy, active lifestyle. Exhibits include the *Junk Food Wall*, the *Great Weight Wheels* (What the Scale Doesn't Tell You), *Couch Potatoes*, *The Nutrimat* and *Snack Attack!*

The **DTE Energy Science Sizzle & Spark Gallery** provides insight into the fundamental properties of matter and energy. Explore the electromagnetic spectrum at interactive tabletop displays that investigate microwaves, radio waves, x-rays and visible light. Learn the difference between compression and transverse waves, experiment with the two-story "shive" wave device or adjust the speed of a spinning rope to create standing waves of different lengths. Discover the principles of motion including simple machines, rotation, mechanical advantage, aerodynamic forces, pendulums and gyroscopes.

**Kids Town** is a gallery where pint-size scientists, ages 5 and under, can become veterinarians, test the laws of physics in a field house, learn about mixtures and solutions in the kitchen of their very own diner, or just splash, crawl and play. Kids Town features engaging activity areas organized into a child-scaled "town" where little ones can develop their social and motor skills while exploring the basic science concepts we encounter every day. In keeping with the guidelines of the Michigan Board of Education Early Childhood Standards of Quality for Pre-kindergarten, our new gallery uses active, hands-on experiences to foster positive attitudes toward science and build a foundation for later and more sophisticated learning.



**Roads, Bridges and Tunnels** features exhibits related to transportation, fuels and infrastructure. Visitors can enter this gallery multiple ways: Walk the *Mini Mac Bridge*, an 80-foot-long pedestrian bridge modeled after the Mackinac Bridge, while learning about some of man's greatest engineering accomplishments, or stay on the main road to learn about industrial advancements, including the museum's own roundabout. A major component of the Gallery, the *United States Steel Fun Factory* with 39 hands-on exhibits spanning 2,800 square-feet, shows visitors how the manufacturing process turns ideas into reality with the aid of computer design, prototypes, simulations, conveyors, robots, statistics and more. Additional exhibits in this area depict how roads, tunnels and bridges are constructed with displays that explain how various materials used for road construction, such as aggregate, concrete and asphalt, are produced.

The **Space Gallery** takes visitors on an exploration of the universe and beyond. Marvel at four towering rockets in our *Rocket Laboratory* for a glimpse into space travel. The models, with cutaway sections showing how they work, are built to 10:1 scale, making them as large as 36 feet tall, stretching from the museum's Lower Level to the roof and beyond. Feel the rumble of a launch, see how Apollo astronauts traveled to the moon and enjoy hands-on activities explaining how rockets work, what makes up rocket fuel and even launch your own rocket to the planets. Three telescopes positioned at varying heights allow visitors to view a giant moon globe from across the Science Center and learn how astronomers use telescopes to study distant objects. Visitors can pedal a bicycle "at the speed of a space shuttle" to discover how long it will take to reach the moon, Mars and beyond, and position each planet the correct scale distance from the sun. Backlit images located on the exterior wall of the Dassault Systèmes Planetarium portray stunning pictures and the science of astronomical objects such as planets, nebula, galaxies and other objects.

The Science Center is the fifth location in the country and the only location in Michigan for **Spark!Lab**, an educational, interactive space, thanks to a partnership with the Smithsonian Institute and support from the Ford Motor Company. Developed in collaboration with the Smithsonian's Lemelson Center for the Study of Invention and Innovation, Spark!Lab provides visitors with the opportunity to become inventors as they explore and engage with hands-on activities, interact with facilitators, and learn from local innovators. The exhibit demonstrates the fundamental role invention plays in the world. It also supports the creative process, collaborative thinking, and problem solving, all important aspects that power innovation and entrepreneurship.

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