

Cool Moves!

the artistry of motion



Sciencenter
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A traveling exhibition that includes fourteen fun, interactive stations that invite visitors to discover the beauty of motion all around us. Change the twist of a tornado, swirl water into amazing patterns, and much more! Explore the wonder of science as you create your own Cool Moves!

These exhibits were tested and developed to be welcoming and accessible to all visitors and encourage adult-child interactions.

Designed for 5-12 year olds and their families.

Partners: Rochester Museum & Science Center, TEAMS Collaborative; funded by NSF

www.sciencenterexhibits.org

Size: 1,800 sq.ft.

Shipping: fits in 1 semi-trailer
renter pays inbound shipping

Rental managed by Sciencenter



Turbulent Orbs

Watch the four globes as pearly fluids swirl. Light them up by stepping on the floor panels.



Dancing Wall

Dance around a giant kiosk to create your own light and sound show. Your movements trigger numerous motion detectors, which activate multiple lights and sounds.



Three-wheeled Racers

Zoom! Roll cars with interchangeable rear wheels down a long ramp with an adjustable incline. Which is wackiest? Fastest? Slowest? You'll see some surprising motion as you observe how different oddly-shaped wheels affect the overall motion of the car.



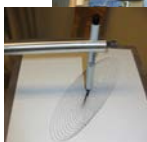
Giant Pendulum

Set the pendulum swinging, and watch it move around in a crazy, bouncy path. Start it again, and you'll get another unpredictable path. The pendulum has a magnet mounted to its bottom, and swings over a metal plate with magnets that you can move and flip. Change the pattern of the magnets and swing the pendulum again.



Swinging Art

Create a piece of art to take home by using two side-by-side pendulums. Like a snowflake, no two drawings are alike. One pendulum holds paper while the other holds a pen. Start the pendulums swinging; then lower the pen and watch your pattern develop on paper.



Cool Moves Exhibit Descriptions



Crazy Pendulums

Explore motion with two different types of pendulums. Start these pendulums gently, and they rock back and forth. Give them a bigger twist, and you'll see all kinds of unpredictable motion.



Visible Sound Strings

Feel the vibrations and hear the tones produced on a four-string bass. You can also "see" the vibrations of the strings using an adjustable strobe light.



Touchable Tornado

Put your hand into the middle of a mini-tornado made of swirling, misty water. Then change the wind speed and see what happens to the motion of the tornado.



Artistry of Motion Video

Watch as clouds move across the sky, the waterwheel spins around and around, the kangaroo leaps and moves forward, or the waterfall tumbles in a chaotic manner. Accompanying narration describes the different types of motion you are viewing in this beautiful 4-minute video.



Wind Over Water

Make waves and fluid patterns by using air blowers over a tub full of shimmering fluid. The pearly liquid lets you see currents that arise from blowing on the water or moving different objects like toy boats through it. Change the angle of the blower and see what happens.



Windy Wonders

Suspend a beach ball in mid-air, or try other experiments at "Windy Wonders" by using interchangeable fittings and fabric wind catchers to make different kinds of fluttering, wiggling motion. Try all six combinations!



Animals in Motion

See animals swim, fly, jump, and crawl in the most bizarre and breathtaking ways. A computer kiosk allows you to control the speed of videos of a cheetah, dolphins, owls and other animals in high speed, or slow motion, and even backwards. This exhibit features video donated by the National Geographic Channel.



Air Instrument

Make music out of thin air! Move your hands closer and further away from the "Air Instrument" to control the volume and pitch of these eerie sounds. This unique electronic instrument is called a Theremin.



Ripple Tank

Experiment with changing the speed of the ripple in a shallow pool. Put different shapes in the tank to explore the resulting wave patterns that can be seen as shadows underneath the tank.



Demo and Activity Cart

Also included is an activity cart, educational materials for schools, materials for 12 public programs, and a staff training DVD. Activities include:

Spouting Bowl and Spin Art.

