



# Funby Forces & Loco Motion Winter 2021

## FUN-damental Forces

Gravity... Inertia... Centripetal force... who could ever imagine that physics could be so much fun? Experience these awesome forces and build some cool devices to watch them at work!

## Super Structures

Learn how triangles, cylinders and arches make for sturdy homes and skyscrapers! Use teamwork to build your own super structures as well as an earthquake-proof building!

## Fantastic Fliers

The Wright Brothers would be proud as we follow in their footsteps and learn the fundamental principles of flight. Build a "football" glider, control surfaces, and a loop-flying stunt plane.

## Magnetic Magic

Children learn how/why magnets behave by testing basic principles of magnetism. They use a compass to help understand of how we benefit from the Earth's magnetic field. Hands-on experiments allow children to explore the role of magnetism in our everyday lives.

*Virtual Program for Winter 2021!  
Students get a cool takehome for every class!*

## Sparking Imaginative Learning

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## Under Pressure

Join Bernoulli and Newton as we take this exciting look at aerodynamics and the properties of air...under pressure. Use a vortex generator to create air pockets with a punch and levitate ping pong balls in defiance of gravity!

## Mix It Up

Shake, mix, stir and explore the physical aspects of chemistry. Learn all about solutions and suspensions by doing cool hands-on experiments and then continue the fun at home with your own mixture sorting kit!

## Science of Toys

Did you know that some of your favorite toys work using basic science principles? Discover the science of motion by bouncing balls, playing with yo-yos & with other classic toys.

## Moving Motion

From planes and trains to automobiles. Check out all the science behind movement, from the inner workings of engines to how your own muscles facilitate movement in your body.



**Celebrate with a virtual or in-person Mad Science party!**

[westnewengland.madscience.org](http://westnewengland.madscience.org)

AFTER-SCHOOL PROGRAMS

BIRTHDAY PARTIES

CAMPS

SPECIAL EVENTS

WORKSHOPS