HOW THINGS WORK

To see the way something works, you can take it apart and look inside. To understand how something works, you have to explore the principles that make it work. This unit dealt mostly with the mechanics of movement, and explored the following questions with the children:

- How do things work?
- What are machines?
- How do machines work?

Simple Machines

We began our study with an exploration of two categories of simple machines: Inclined Planes, which include ramps, wedges, screws, and zippers; and Levers, which include pulleys, wheels and axles, screwdrivers, hand drills, balances, dollies/handcarts, pliers, wheelbarrows, hammers, tweezers, and piano parts. We learned that machines make work easier; simple machines are often combined to make different machines; and machines need a force such as gravity, muscles or motors to work. We had lots of practice using various tools (basic hand tools in woodworking, locks, eating utensils, and writing /painting implements) to complete many productive learning activities. Some of our favorites were: making a paper circle without a tool (tearing) and with a lever or scissor tool (cutting). You know which was easier!; using a wedge or saw to cut cove molding to make ramps; and lifting each other on a giant lever – the seesaw!
Everyday Machines and Electronics
Machines are a part of everyone’s daily life. During this week we did a scavenger hunt of many familiar and not so familiar kitchen and office machines and discussed how each helps us make work easier. We built a laundromat in the Dramatic Play Center, prepared apples for making applesauce using a hand cranked apple peeling machine, and had bubble-making races using an electric mixer, an egg beater (wheel and axle) and a whisk. The whisk was the best bubble maker! We created pictures on the computer using the Kid Pix program, made flip videos of each other and viewed them on the laptop, played a Freeze Game using stop-and-go music on the CD player, sent Messages From Me on the iPad, and explored the insides of old electronics and toys after taking them apart using tools.

Inventions
The children used the parts from the the old electronics and toys that they took apart to create their own inventions. Some of the things they made were: A Robot Machine, The Cotton Candy Shop, The Hang Up Hairdo, The Wheels Toy, and The Electric Chip. The Creation Station in the Dramatic Play Center was a huge hit. New and interesting materials appeared daily for the children to make into fabulous creations! The children enjoyed learning to use a table-top pencil sharpener (with a see-through case to view the wheel and axle) to easily sharpen our classroom pencils. We made a pendulum from wood, a chain and a golf ball, and used the force of gravity to knock stuff over (kind of like a wrecking ball!) Everyone learned the basics of an electric circuit as we experimented with Squishy Circuits. We used conductive and non-conductive play dough, wires, and a battery to light up a small LED light.
Ramps, Musical Instruments, Building and Construction
Our last week of the How Things Work Unit was a wonderful conglomeration of favorite and new exploratory activities. We experimented with the force of gravity using different kinds of ramps (wood/plastic, flat/curved) and balls (wooden/rubber, large/small, tennis, marbles). We wrote stories about inventions and built robots out of tubes and foil. We discussed how sound is made, and explored musical instruments such as an electronic keyboard, button box, and xylophones. We constructed hand made tambourines by hammering bottle caps until they were flat and stringing them together. We built so many things with almost every kind of construction toy in the school including legos, very large Architecture Blocks, No Ends, wooden blocks, and Wedgits.
Birthday Celebrations and Special Visitors

We had some special visitors in the Green Room in April. Our thanks to: Corrine Guillou (Felix) for our Friday morning French lessons; and Chris Grill (Shaylee) for instruction on Squishy Circuits and for cutting the wood to make a bat house and a pendulum. Dr. Carver, Miss Hancock and Mrs. Rosenblum visited our circle times to read their favorite stories.

This month we celebrated Chase’s birthday.

Mae’s dad, Doug, visited the Peaceful Room class to demonstrate and discuss gears.
Activity Time

Take a look at some of our favorite activities that we enjoyed during the month of April!