How Things Work

At the Children’s School, our year is separated into theme-related units. During each theme, the teachers change the classroom materials. Over the past few weeks, we planned various activities that allowed friends to explore and think about How Things Work!

We began our How Things Work Unit by talking about tools that the friends are familiar with. The friends have been visiting the woodworking center throughout the year and learned how to use a screw driver, saw, hand drill and hammer. These tools started the discussion about machines and how they make our work easier. Then, we used our circle times to learn about the six different simple machines that we see all around us each day: lever, pulley, inclined plane, wheel and axel, screw, and wedge. We used a variety of models to reinforce how these simple machines work. Next, we focussed on machines that we use everyday in our homes, kitchens, schools, and offices. Friends enjoyed trying or observing a variety of machines that they were and were not familiar with. During our final week of the How Things Work Unit, friends led discussions with their ideas and their questions. It was a week of exploring and inventing. Friends spent time in the creation station using a variety of tools to make anything that they could envision. This unit really had the friends thinking, exploring, questioning and inventing!
Tools and Simple Machines

Friends loved being hands on with their favorite tools. The dramatic play center was transformed into a tool shop and a mechanic shop. The science center was set with simple machine models for friends to interact with. Here are some of our favorite activities that helped build our knowledge about tools and simple machines.

Using Tools for Games and Art

A tool memory tray game was a great way to reinforce our tool vocabulary and have fun.

We painted with gears to make cool prints in the Discovery Area.

Airplanes

Friends used a hand drill to make a hole in two long pieces of wood. Then, friends used a screw and a nut to affix them together to make an airplane. Friends also decorated their planes with markers.

Simple Machines Exploration

Friends followed directions to put together different simple machines.

Friends loved using the pulleys to lift blocks and to send messages from one side of the classroom to the other!
Everyday Machines

The friends have learned that we use machines everyday, from the washer that keeps our clothes clean to the car or bus that gets us to school. During circle time, the friends shared machines that are used in their homes and also took notice of the machines we use in our school.

Vehicles and Construction Machines

When the dramatic play center was a Mechanic Shop, friends used tools to fix broken tricycles and toy vehicles.

The friends experimented with a wrecking ball and blocks.

Finding and Using Machines

Friends went on a machine scavenger hunt to find machines that we use in the school and in the office. We had an opportunity to use a variety of machines. Our favorite was the record player. We loved to listen, use it to make art and watch how it worked!

Let’s Make it!

Friends used measuring tools to make play dough in the kitchen.

We also used our muscles and force to turn heavy whipping cream into butter. We tried it for snack.
Explorations and Inventions

Friends shared so many great ideas during our final week of the How Things Work Unit. We used the knowledge we gained from our first few weeks of the How Things Work Unit and our imagination to create!

Creation Station

When the dramatic play center was the Creation Station, friends were eager to use their imaginations and make their ideas come to life.

Building Marble Runs and Snap Circuits

Friends worked together to make a path for marbles using a wooden marble run.

The snap circuit activity was a huge hit. Friends enjoyed exploring how they worked.

Our Inventions

During this unit, friends had an opportunity to build and invent with a variety of materials. The morning friends used the architecture blocks to make a house for babies. The afternoon friends worked together with no ends blocks to make Optimus Prime.
Daily Work

When the friends returned from Spring Break, they learned that there would be a new addition to their entry routine. Before making a free choice each day, friends must complete a daily work task. Here are some of examples of what we have been doing for our daily work.

Make Shop

The friends love visiting the make shop. During this unit, the make shop was a space for friends to build with their creativity and to experiment. We built with Robotix and used rubber ramp pieces to design different paths for the balls.
Mrs. Hraber sang songs with us about vehicles and showed us how a metronome works!

Miss Debbie shared books about how insects do work.

Nurse Ginny talked to the friends about the importance of hand washing.

Andrew’s parents helped him celebrate his birthday with a visit to the Green Room.

Isaac’s family shared a story to celebrate his birthday.
Izhak, Cash, and Robin are working in the creation station.

Ksenia is using the hand mixer to make bubbles in the water table.

Look what Owen created!

Friends are using office tools to make some artwork.

Betsy showed her friends how her microphone worked when she had the sharing bag.

Isaac is taking a closer look at the songs on the back of the album cover.

Benjamin is painting numbers with watercolor paint.

Max and Javi are experimenting with the balance scale.

Andrew, Morgan and Izhak are playing the Build a Robot game.