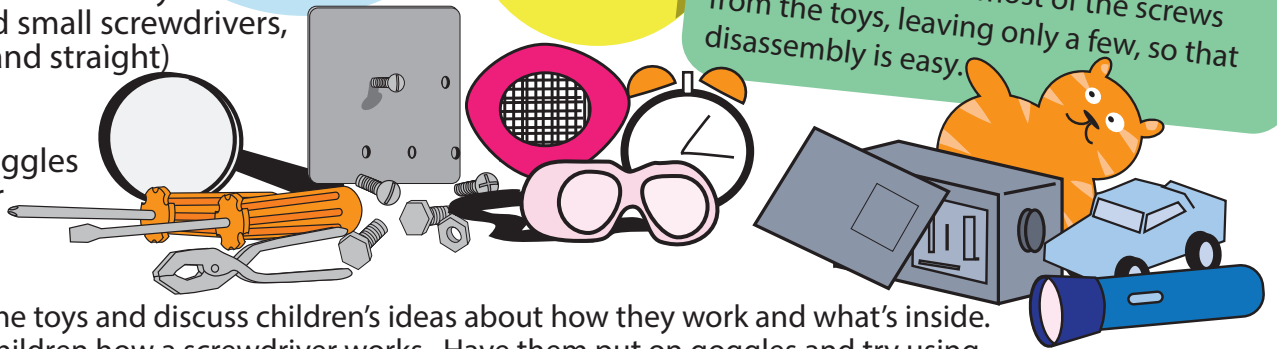


Age Group: 3-5 years

You will need:

- Reassembled children's toys
- Practice boards to try tools
- Large and small screwdrivers, (Phillips and straight)
- Pliers
- Screws
- Safety goggles
- Magnifier



**Experiment
of the Month:**

Take it Apart

Before the Activity: Gather toys with moving parts and simple electronics from thrift stores and yard sales. Examples might be a child's cash register, toys that light up or play music, remote controls, flashlights, or radios. Disassemble each toy and ensure that there are no sharp edges and points inside, or springs that may become projectiles. Remove plugs and cords. Remove most of the screws from the toys, leaving only a few, so that disassembly is easy.

1. Study the toys and discuss children's ideas about how they work and what's inside.
2. Show children how a screwdriver works. Have them put on goggles and try using screwdrivers on their practice boards.
3. Give each child a toy to take apart. Make sure they wear goggles when using the tools.
4. Study the inside of the toys with the magnifiers.

Ask Questions:

Do all toys need batteries to work?
What makes the toy's parts move?

What do you think the different parts of the toy do?
What do you think would happen if we pressed the "on" button now?

Read a Story:

If I Built a Car
by Chris Van Dusen.
Dutton, 2005.



Play At Home:

Wearing safety goggles, and with a grownup's help, preschoolers can learn to use hammers with large-headed nails on scrap pieces of soft wood.



Written by Wendy Brenneman and Jennifer Jovanovic
Illustrated by Dennis Smith
August 2014

You can download all of our Experiments of the Month at the Preschool Page at sciencebeyondtheboundaries.com.



The Marvelous Toy

by Tom Paxton

When I was just a wee little lad,
Full of health and joy,
My father homeward came
one night
And gave to me a toy.
A wonder to behold it was
With many colors bright
And the moment I laid
eyes on it,
It became my heart's delight.

Chorus:
It went "Zip" when it moved, and
"Bop" when it stopped,
And "Whirrr" when it stood still.
I never knew just what it was and I
guess I never will.



The first time that I picked it up
I had a big surprise
'Cause right on the bottom were
two big buttons
That looked like big green eyes
I first pushed one and then the
other,
Then I twisted its lid
And when I set it down again, here
is what it did:

(Repeat Chorus)

For the tune and other verses, search for "Marvelous Toy" on youtube.com.