Make Shop at Home
Tinkering/Take Apart

At the Children’s School, we see a lot of interest and excitement from children when the Make Shop features taking apart unused or outdated toys and kitchen equipment. It seems that children are often more interested in using tools to take old toys apart as they are in actually playing with them.

Steps for tinkering and taking apart at home:

1. **Make a space for tinkering.** An empty table or desk works near a window or lamp for the best lighting. Most children prefer to stand while working with tools.
2. **Gather real tools in your home.** Tools can include: screwdrivers, hammers, pliers, and wire cutters. Keep the tools together in a container or bin in your tinkering space for organization and safety. Choose tools that will work for your child at their level of independence. Always stay close and monitor your child when working with tools. At the Children’s School, the children are required to wear safety goggles before working with tools. Sunglasses can work as protective eyewear.
3. **Gather items to take apart.** Find outdated or unused mechanical or kitchen equipment or such as printers, keyboards, coffee makers, (Keurig coffee makers are particularly challenging to take apart!) blenders, etc. You can also work with your child to find old, broken, or unused toys for them to take apart.
4. **Take apart together!** Look at the item together and ask your child where they would like start taking the item apart, what tools they think they need for the job, and let them get to it! Feel free to work in steps or parts of the disassembly each time you tinker so you can break the project into smaller tasks/ time segments. At the Children’s School, the teachers keep containers ready for the small pieces that are generated as an item is worked on. This makes sure all the pieces are in a safe place. The small pieces can be glued together in a later collage or reused in another invention.

Related Links:

[STEM-Tinkering Activity: Taking Apart an Old Toy](#)
[Carnegie Science Center: Taking Things Apart](#)
[Pinterest Pins: Tinkering-Take apart and put together](#)