

DIY Toy Car Wash

Use recycled materials to build a car wash!

Big Idea

Children will explore engineering and recycled materials to construct a car wash that can be used to clean their toys.

Standards

1.A.ECa: Follow simple one-, two- and three-step directions.	Children will follow directions to create the car wash base.
11.A.ECa: Express wonder and curiosity about their world by asking questions, solving problems, and designing things.	Children will design their own car wash!
12.C.ECb: Experiment with changes in matter when combined with other substances.	Children will explore what happens when they add the shaving cream and water to their toy cars.

Materials

- Clean plastic milk jug (or plastic juice jug)
- Scissors
- Duct tape
- Sponges
- Permanent markers (optional)
- Plastic toys (ones without batteries)
- Shaving Cream (optional)
- Toothbrushes
- Spray bottles with water (optional)
- Plastic bin (optional)
- Additional recycled materials as wanted (like plastic bottles)

Setup

Children will construct their own car wash using recycled materials found at home. To make a car wash that can be used on their toys, try to use more plastic materials that can withstand getting wet. Once the car wash is constructed, children will need access to water and shaving cream, which can get messy. Playing with the car wash in the bath tub, outside, or on a tarp is recommended. The above materials are a recommended starting point to construct the car wash; add any additional ones as desired.

Directions

1. Use the scissors to cut off the top of the cleaned out plastic milk jug. The lower 2/3 of the milk jug should be able to stand upside-down now.

2. Cut an arch way into the milk jug so the cars have an entry point to get inside, like a cave.
3. Use the duct tape to cover the cut edges so they aren't sharp.
4. Cut the sponges into strips with the scissors and tape them to the inside of the milk jug to create a tunnel with hanging sponge.
5. To decorate, use the permanent markers on the milk jug.
6. Add other recycled materials to your car wash as desired. Maybe tape sponges to the outside of a plastic bottle to make spinning brushes.
7. Once you are finished constructing your car wash, place it in a plastic bin (or any container that can get wet) and add your cars or other plastic toys.
8. Squirt in some shaving cream and drive your cars through the sponges! Spray the cars with the spray bottles of water to clean them off.

Investigation Questions:

- *What makes a good material to construct the car wash?*
- *What else could you add to your car wash? What can we try next?*
- *What would you change about your car wash?*
- *How could you make your car wash bigger for more toys?*
- *How could you get water inside your car wash?*