Bottle Opener
SUMMARY

Title
Bottle Opener

Subtitle
A tool to open screw on caps up to 50 mm in diameter.

Device Specifications
Stage: Recently Added

Designer: Makers Making Change

Material Cost: $0 - $10

Disability Type: Mobility / Physical

Capabilities Needed: 3D Printing

Usage:
- Aids for Daily Living (ADL)
- Mobility

Difficulty: Beginner

Time to Complete: 1-4hr

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Device Details

Overview
The Bottle Opener is a simple, low-cost, 3D-printable handheld tool to help those with arthritis, limited finger dexterity or other related disabilities open or close plastic screw-on caps on various beverage bottles, cleaning products, condiments. The bottle opener allows users to remove or replace the lids of these jugs with a small squeeze on a large, rounded gripping surface. The Bottle Opener has several modified versions to open different sizes of containers. The different sizes are named by the approximate diameter of the caps they can open in millimeters.

Usage
Slide the toothed gripping surface on top of the lid of the container, then while squeezing the handle to grip the lid, twist either the container or the device to remove or screw on the lid.

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Cost

The cost of this device includes only the filament used to 3D print the device/devices. Each device requires slightly over $1 CAD worth of PLA filament.

Build Instructions

This device consists of a single 3d printed part. The necessary files and 3D printing instructions are provided in the linked GitHub repository.

Skills Required

- **3D Printing**

Time Required

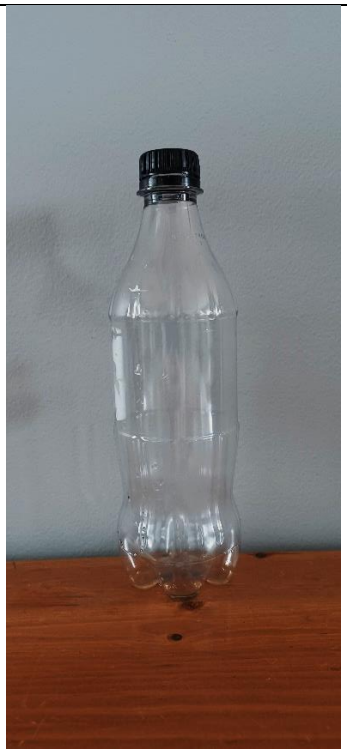
- **3D Printing:** ~3.5 hours

3D Printing

Refer to the Large Bottle Opener 3D Printing Guide.

Sizing

There are five different sizes of Bottle Openers to suit different size caps on bottles and containers.

Bottle Opener Version	Compatible Diameter of Caps	Examples of compatible Bottles and Containers (May vary between brands)	Image Example of compatible Bottles
Bottle Opener 30	28 – 30 mm	• Pop bottles of all sizes (355 mL to 2 L) • Bottled Water of all sizes (355 mL to 2 L) • Milk Carton 2 L • Juice Carton 2 L	

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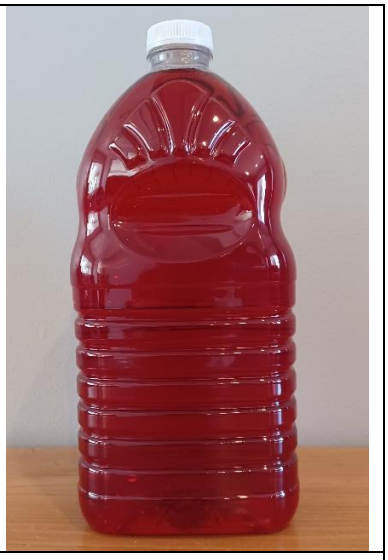
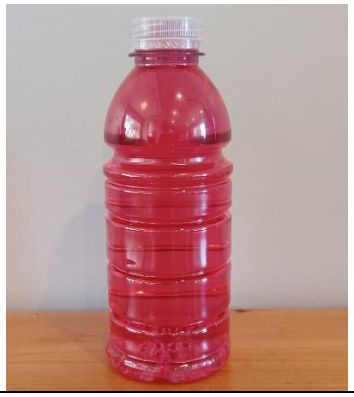
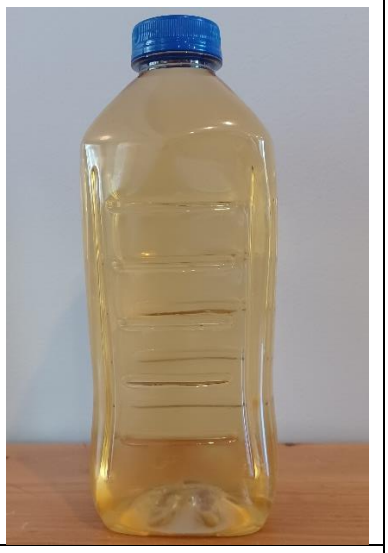
Bottle Opener 35	33 – 36 mm	• Juice Jug (Some brands) 1.89 L • Ketchup Bottle 1 L • Juice Carton 900 mL	
Bottle Opener 40	38 – 41 mm	• Sports Drink 591 mL • Sports Drink 950 mL • Juice Bottle 473 mL • Iced Tea Bottle 473 mL • Milk Bottle 473 mL • Milk Jug 2 L • Milk Jug 4 L • Kefir Bottle 1 L	
Bottle Opener 45	43 – 46 mm	• Juice Jug 1.46 L • Juice Jug (Some Brands) 1.89 L • Juice Jug 945 mL	
Bottle Opener 50	48 – 51 mm	• 3 L Juice Jug	

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			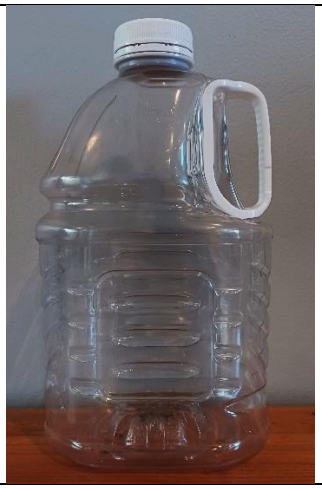

Sizing Helper Chart:

A printable to-scale document is included to match a specific cap size to the appropriate bottle opener. To successfully print, check “actual size” in the print settings. Once the document is printed, a scale check line has been included to test if the document correctly printed to scale.

Attribution

The original and modified version of this design, as well as the documentation, was created by Neil Squire / Makers Making Change.