









**Object:** Plastic Spray Bottle

**Approximate # of Parts:** 12

**Approximate Dimensions/Size (in MMGS):**

Part 1 (Bottle): 85mm wide at the bottom, 138.425mm tall, top opening is 28.5mm wide.

Part 2 (Trigger): 63.3mm long, 9.5mm wide from the end.

Part 3 (Cap): Bottom is 32mm wide, top opening is 19.5mm wide, 22mm tall overall.

Part 4 (Pump cup): 36.5mm tall, 13.5mm wide at top, 6.7mm wide at bottom.

Part 5 (Outer Nozzle): 17.8mm tall, 11.5mm back to front.

Part 6 (Cover): Top part is 62.273mm long, bottom opening is 21mm long, front opening is 16mm long, back slant is 27.876mm long.

Part 7 (Main body): 59.750mm wide, 38.7mm tall.

Part 8 (Mounting): 24.5mm wide all together, top opening is 7.3mm wide, piece is 12mm tall.

Part 9 (Spring): 13.4mm tall, spring thickness approximately 0.790mm wide.

Part 10 (Ball valve): 4mm in diameter.

Part 11 (Inner valve): 9.8mm long, 7.9mm tall.

Part 12 (Nozzle valve): 16.4mm long, 4mm tall.

**Materials:** Translucent/Frosted Plastic (for the bottle), Plastic (for every other part), Steel (for the spring).

**Potential Design Challenges:** Creating the parts of the spray mechanism as well as getting accurate dimensions for hard-to-reach parts within the spray mechanism, creating the housing/cover for the spray mechanism.

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