

WARNING — This set contains chemicals that may be harmful if misused. Read cautions on individual containers carefully. Not to be used by children except under adult supervision.

Name _____

Period _____ Date _____

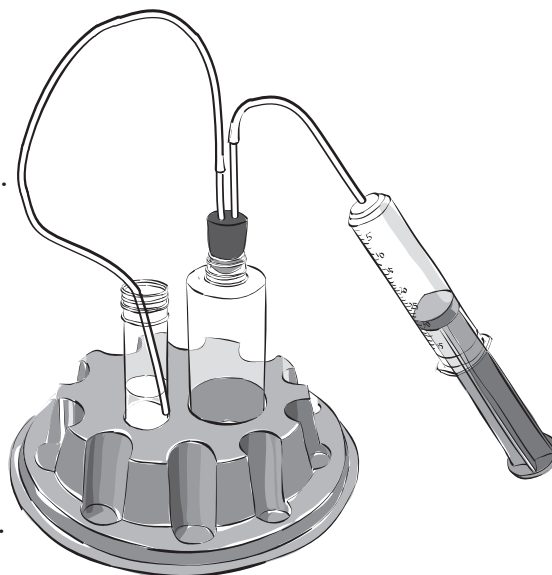
ACID/SODA REACTION PRODUCTS

Materials

- | | | |
|---------------------------|---------------|--|
| 1 Bottle, 120-mL | 1 Vial | • Hydrochloric acid (HCl) |
| 1 Syringe, 35-mL | 1 Vial holder | • Baking soda (NaHCO_3) |
| 1 Midispoon | 1 Well tray | • Limewater ($\text{Ca}(\text{OH})_2$) |
| 1 Stopper-and-tubes setup | 1 Pipette | • Protective eyewear |

Procedure

- Put on protective eyewear.
- Place 3 *level* midispoons of baking soda in the bottle.
- Place about 10 mL of limewater in the vial.
- Insert the bottle and the vial into the cavities in the center of the vial holder.
- Take up 5 mL of hydrochloric acid in the syringe.
- Draw 30 mL of air into the syringe.
- Slowly put the acid and air into the bottle. Observe.



Results

- What happened in the *bottle*? Use chemical equations to explain.
- What happened in the *vial*? Use chemical equations to explain.
- Were you able to confirm all the products that formed during the reaction between baking soda and hydrochloric acid? If not, what else will you do?
