

Materials included in the kit

Chemistry: Investigating Your World hands-on activity kit

One kit contains enough supplies for up to 32 students working in 8 groups of 4.

Chemicals

- Citric acid (100 g)
- Sodium carbonate (100 g)
- Sodium bicarbonate (250 g)
- Calcium chloride, anhydrous (250 g)
- Universal indicator (8–30 mL dropper bottles)

Equipment

- 32 portion cups
- 16 small clear plastic cups (3-oz size)
- 32 disposable droppers
- 16 small plastic spoons (about $\frac{1}{4}$ tsp)
- 16 small plastic scoops (about $\frac{1}{32}$ tsp)
- 8 clear plastic vials
- 8-spot plates each with 12 wells
- 8 small metric measuring cups (30 mL)
- 8 small student thermometers
- 1 box of flat toothpicks
- 8 universal indicator pH color charts

Labels

- 8 citric acid
- 8 sodium carbonate
- 8 sodium bicarbonate
- 8 calcium chloride
- 16 citric acid solution
- 16 sodium carbonate solution

Demonstration supplies

- Detergent solution (30 mL bottle)
- Bromthymol blue (30 mL dropper bottle)
- Small metric measuring cup (30 mL)
- Small plastic test tube with rubber stopper
- Dropper
- Balloon
- 5 Self-inflating balloons
- 2 Hand warmers
- 2 small plastic spoons
- 2 small plastic scoops
- 2 straws

Notes

- When reusing the small plastic cups, be sure to rinse and dry them thoroughly.
- Reuse the labeled portion cups from lesson to lesson.

Materials which need to be supplied by the teacher

- Goggles for the teacher and each student
- Water (tap water is fine)
- Vinegar
- 1 disposable water bottle (8-oz)
- 8 coffee filters
- 8 plastic cups to distribute water to each student group
- 8 tall clear plastic cups to use with a coffee filters to filter a precipitate
- Paper towels
- Waste container for each group