

## Home Scientist



## Badge Overview

Find out where science has been hiding in your home. When you've earned this badge, you'll be able to see the science all around you.

## Badge Components Part 1

### 1. Be a kitchen chemist

Choose 3 of these experiments to do in your kitchen.

☐ **Invisible Ink** – you will need: Lemon or lemon juice, water, spoon, bowl, cotton bud, lamp and paper.

**Quick Sand** – you will need: Corn flour, water, a large plastic container and a spoon.

**Fireworks in a glass** – you will need: Oil, food coloring, 2 glasses and a fork.

**Escaping Water** – you will need: 2 glasses, water and paper towels.

**Magic upside down water** – you will need: A glass and a piece of cardboard.

**Fireworks in a glass** – you will need: Egg shells, an egg box, salt or sugar and food coloring.

**Rock Candy** – you will need: A wooden skewer/chop stick, Clothespin, water, sugar and a tall narrow glass or jar.

### 2. Create static electricity

Choose 3 of these experiments to do in your kitchen.

☐ In this video there are 9 different experiments you can do to explore static electricity. At the beginning of each experiment it gives you a list of the materials you will need, but here is the complete list for all 9 experiments.

- ☐ You will need: Styrofoam cup and plates, cloth, PVC pipe, tape, empty soda can, thread, match, glass jar, straw, bubble solution, aluminum foil, polycarbonate sheet, Styrofoam balls, blocks, balloons, and steel wire.

### 3. Dive into density

Choose 1 of these experiments to do in your kitchen.

☐ **Rainbow in a Glass** – *Skittles* – you will need: Skittles, water, 5 glasses, mug, tablespoon, glass, dropper or pipette (or you can pour the liquid over a spoon touching the inside of the glass above the liquid level so it goes down the side of the inside of the glass).

**Rainbow in a Glass** – *Sugar water* – you will need: 5 glasses, sugar, water, food coloring, tablespoon, measuring cup, straw, sauce bottle, large glass or bottle.

**Layers of liquid** – you will need: A glass, spoon, water, oil, syrup, food coloring, and paper towels.

## Materials

• Please see each individual experiment you can choose from for specific materials required.

## Florida Educational Standards

The content of all Girl Scout national proficiency Badges and Journeys have been correlated by grade level to national and state learning objectives.

**Click here** for more information on how Girl Scout Badge-work supports Florida's educational standards.



We love to see Girl Scouts in action. Snap a photo and send it to [marcomm@gssef.org](mailto:marcomm@gssef.org).

Include her name, troop# and the name of the badge she's working on and we'll feature her.

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Questions? Contact [customercare@gssef.org](mailto:customercare@gssef.org)

## Badge Components Part 2

### 4. Make something bubble up

Download one of these augmented reality star gazing apps and go outside at night and see what you can see!

- ☐ Star Chart app (Android)
- ☐ SkyView app (iPhone)
- ☐ Alternatively you can explore the night sky during the day on this website.

### 5. Celebrate and share

Make an accordion booklet.

- ☐ Fold 2 pieces of paper Hot Dog style and then cut along the fold to make 4 strips.

## Home Scientist (continued)



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