



## Science of Style



## Badge Overview

Use the science of style to create and imagine your own products. When you've earned this badge, you'll know the science behind makeup, perfume, fashion fabrics, and skin care products.

## Materials

- 3 moisturizers e.g. Body lotion, Vaseline, etc.
- Coffee filters
- 4 small containers (Baby food jars would be perfect)
- Tablespoon and half teaspoon measures
- Weighing scales
- 30 drops of Essential oils
- 2 Tbsp Carrier oil (Almond, Jojoba, coconut, etc.)
- 6 Tbsp Alcohol
- 2.5 Tbsp Water
- Small dark glass container and lid

## Badge Components

### 1. Test skin care and makeup

Do an experiment to test how effective different moisturizers are. Part of how a moisturizer works is by trapping water inside your skin. You are going to do an experiment to test how well the moisturizers act as a barrier to trap water.

- Measure out 2 tablespoons of water into the 4 small containers.
- Cut 4 circles out of the coffee filters that are a little bigger than the opening of the containers.
- Spread half a teaspoon of each moisturizer onto the coffee filter circles and place them on the small containers as a sort of lid. Label the containers so you will remember which moisturizer you used.
- The experiment with a coffee filter circle that has no moisturizer on is your **control**. It will give you something to compare your results to, to see if the moisturizers had an effect at all.
- Weigh each of the water filled containers with their 'lids' on and record their weight into a table.
- Put all containers in the same place for 12 hours.
- After the 12 hour reweigh all the containers and record your results.
- Which moisturizer is the best at trapping water in?



### 2. Examine the science behind fabrics and accessories

Watch this [video](#) to learn more about the properties of natural and synthetic fibers.

### 3. Explore the science behind hair products and perfume

Make your very own perfume.

- Go to this [website](#) to learn about the 'notes' of a perfume and decide what you are going to include in yours.
- Pour all the ingredients (Essential oils, Carrier oil (Almond, Jojoba, coconut, etc.), Alcohol and Water) into the dark glass container and shake well and then try out your beautifully smelling perfume.

### 4. Investigate the sociology of style

Watch this [video](#) to learn a little bit more about this.

### 5. Formulate future style

- Watch this [video](#) to see some interesting new materials that are being used to make clothes.
- Design some items of clothing for you in the future and think about the interesting materials you could use. Design a whole outfit including accessories and shoes.

## 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.

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