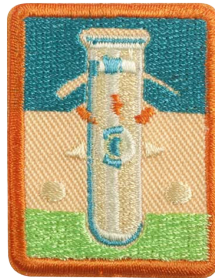


girl scouts
of greater chicago
and northwest
indiana



SENIOR SCIENCE OF STYLE BADGE

ACTIVITY BOOK
For Girls in Grades 9-10





BADGE REQUIREMENTS

Use the Science of Style to create and imagine your own products.

1. Test skin care and makeup
2. Examine the science behind fabric and accessories
3. Explore the science behind hair products and perfume
4. Investigate the sociology of style
5. Formulate your own future style

When you complete this packet, you'll earn your Science of Style badge and you'll know the science behind makeup, perfume, fashion fabrics, and skin care products!



ACTIVITY 1

Makeup Quiz

Quiz yourself and learn some awesome facts about makeup!

1. It's OK to sleep in eye makeup.
 - a. True
 - b. False
2. Which of the following may attract the sun's UV rays to your lips?
 - a. Lip Balm
 - b. Lip Liner
 - c. High-gloss sheer lipstick
 - d. Opaque cream lipstick
3. Nail polish may stain your nails.
 - a. True
 - b. False
4. Hypoallergenic cosmetic products don't cause allergic reactions.
 - a. True
 - b. False
5. According to some experts, which product should you replace every three months?
 - a. Powder eye shadow
 - b. Mascara
 - c. Lipstick
 - d. Foundation
6. Which of the following promotes bacterial growth in makeup?
 - a. Sharing makeup with friends
 - b. Exposing makeup to light or heat
 - c. Using makeup when you have an eye infection
 - d. All of the above
7. Some lipsticks made in the U.S. contain lead.
 - a. True
 - b. False



8. Some eye makeup made in other countries contains hazardous levels of lead.
 - a. True
 - b. False

9. The FDA approves all cosmetics before they are sold to the public.
 - a. True
 - b. False

10. A cosmetics maker is required to report injuries caused by its products.
 - a. True
 - b. False

11. Which of the following is the most common injury from cosmetics?
 - a. Allergic reactions to foundation
 - b. Damaged fingernails with acrylic tips
 - c. Scratching the eye with a mascara wand
 - d. Chemical burns

12. A manufacturer that claims a cosmetic has medicinal benefits may be breaking the law.
 - a. True
 - b. False

13. There is no hard evidence linking the use of cosmetics with cancer.
 - a. True
 - b. False



ACTIVITY 2

Makeup Facts

Read through the makeup quiz answer key to learn some new things about cosmetics. Grade your quiz to see how you did!

1. It's OK to sleep in eye makeup.

B (FALSE) - Mascara can flake into your eyes while you sleep. You might wake up with itchy, bloodshot eyes, scratched corneas, or even an infection. Make sure to remove all makeup before you go to bed.

2. Which of the following may attract the sun's UV rays to your lips?

C (High Gloss Sheer Lipstick) - Sheer, high-gloss lipsticks offer little protection and can attract damaging UV rays to your lips. If you want the wet look, apply an opaque lipstick first, then top with the gloss. Use a lip balm with at least SPF 30.

3. Nail polish may stain your nails.

A (True) - Nail polish, particularly darker colors, may stain your fingernails or toenails and leave them yellowed and discolored. The stained nails will grow out, but it may take several months.

4. Hypoallergenic cosmetic products don't cause allergic reactions.

B (False) - Just because a product says it's hypoallergenic doesn't mean you won't have a reaction to it. The FDA doesn't have standards for using the term "hypoallergenic," so cosmetic makers don't have to prove their claims. Any product can be labeled "hypoallergenic" no matter its ingredients, and any cosmetic product can't guarantee that it won't cause an allergic reaction.

5. According to some experts, which product should you replace every three months?

B (Mascara) - Because of the risk of eye infections, you may not be able to use eye makeup, including mascara, eyeliner, and/or eye shadow, as you would other products. Liquid or creamy makeup can harbor more bacteria, so some experts recommend replacing your mascara every three months.



6. Which of the following promotes bacterial growth in makeup?

D (All of the above) - Cosmetic brushes, sponges, and fingertips pick up bacteria and other germs from the skin, so sharing makeup can mean you're also sharing bacteria. Extended exposure to light or heat can break down the preservatives that fight bacteria, so don't leave your makeup in a hot car.

7. Some lipsticks made in the U.S. contain lead.

A (True) - While some lipsticks do contain small amounts of lead, lipstick is intended for external use only, and you probably swallow only very small amounts of it. The FDA has concluded that lead levels in lipsticks aren't a safety concern.

8. Some eye makeup made in other countries contains hazardous levels of lead.

A (True) - Kohl is a traditional type of eye makeup that can contain significant amounts of lead. It's not permitted for use as an additive in any cosmetic or FDA-regulated product in the U.S., but it has been advertised for mail-order online.

9. The FDA approves all cosmetics before they are sold to the public.

B (False) - A cosmetics maker can sell products without FDA approval. The FDA does not review or approve cosmetic products or any cosmetic ingredients, except for color additives.

10. A cosmetics maker is required to report injuries caused by its products.

B (False) - The FDA doesn't require cosmetics makers to submit information about any injuries caused by their products and doesn't issue cosmetics recalls, though it can request recalls by the manufacturer. It also monitors ongoing recalls. A product can be taken off the market only if the FDA proves in court that it is dangerous or breaks the law.

11. Which of the following is the most common injury from cosmetics?

C (Scratching the eye with a mascara wand) - Scratching the eye with a mascara wand is the most common cosmetics-related injury. It can lead to an eye infection if the scratches go untreated, and infections can result in ulcers on the cornea, eyelash loss, or even blindness. To avoid this type of injury, don't try to apply mascara while driving or riding in a moving vehicle.

12. A manufacturer that claims a cosmetic has medicinal benefits may be breaking the law.

A (True) - "Cosmeceutical" is a popular term for a product that's meant to beautify but also treats a condition. However, the FDA classifies a product as either a



cosmetic or a drug based on its intended use; it doesn't recognize any category that's a combination of the two. A company that associates a drug claim with a product the FDA has classified as a cosmetic may be violating federal law.

13. There is no hard evidence linking the use of cosmetics with cancer.

A (True) - According to the American Cancer Society, based on available data, "there is little evidence to suggest that using cosmetics, or being exposed to the ingredients in cosmetics during normal use of these products, increases cancer risk." But certain products may have not been thoroughly tested, so more research is needed.

How did you do on the quiz? Did any of the facts surprise you? If so, explain why.



ACTIVITY 3

Beauty Myths

Learn about some beauty myths from a beauty expert at Lab Muffin Beauty Science.

1. Have you ever tried a beauty tip that you got from a friend or online? If so, did it work?

Watch the following video! You'll learn about some beauty "tips" that are in reality "myths".

Go to this link to view: youtu.be/qjIRcz8g2Pk

After you watch the video answer the questions below.

2. Did any of the myths come as a shock? Why?



3. What does Michelle mean when she says that “Correlation is NOT causation”?



Badge Requirement 1



ACTIVITY 4

Then and Now

Research trends in women's sportswear.

Can you imagine wearing a corset and petticoat to play tennis? Or swimming in a swimsuit made of wool? Women's sportswear has changed a lot over the years. Research the kinds of clothes women used to wear while playing sports.

Answer the questions below to help you take notes while researching sportswear trends.

1. What is considered sportswear?

2. What trends do you notice in earlier time periods that don't appear now?

3. What do you think sportswear throughout history emphasized: fashion or function? Why do you say that? Do you see a point in history where this started to change?



4. How did the time period influence what women were allowed and were not allowed to wear?

Jot down some sportswear trends you notice from the following decades:

1900's: _____

1920's: _____

1950's: _____



1960's: _____

1970's: _____

1980's: _____

1990's: _____

2000's: _____



2010's: _____



Badge Requirement 4



ACTIVITY 5

Poetry Word Scramble

Use your research to learn about trends in women's sportswear to create a fashion timeline.

Use the empty space below, cardstock or poster paper to make your timeline of trends in women's sportswear. Make sure to be creative: you can draw pictures, create poetry, cut out pictures from magazines etc. to show fashion trends over the years! Use any craft supplies you have on hand at home to help brighten up your creation.



ACTIVITY 6

Sportswear Showdown

Now that you've researched how sportswear has changed over the years, it's time to put your own clothes to the test.

Put together two workout outfits from your personal closet! Look for workout pants and tops like a T-shirt or tank top.

1. An outfit with natural fabric: i.e. wool, cotton or silk

Examples: T-shirts are often made from cotton.

2. An outfit with synthetic fibers: i.e. spandex or lycra

Examples: Workout leggings are often stretchy meaning they probably have spandex in them! Some shirts are sweat resistant so that fabric doesn't get wet during your workout.

Now let's get active! You are going to do a simple experiment and compare the performance of your two outfits.

Directions:

1. Put on your first outfit.
2. Find some space inside or outside to do some jumping jacks or go for a short run.
3. Finish up your exercise with some stretching.
2. Repeat with outfit number two.
3. Record results below.

1. Which outfit was more comfortable to exercise in? Why? (For example: it was easier to stretch in, kept me dryer, feeling cooler etc.)



Badge Requirement 2



ACTIVITY 7

Haircare Science

Compare ingredients in three different shampoo products.

Some hair products claim to thicken hair, others promise smoother, shinier locks. What is the scientific truth behind these claims? You are going to find out!

Find 3 different brands of shampoo in your house. If you don't have 3 different types, look up the ingredients of some different brands online. You are going to compare the shampoos by looking at the ingredient lists of each product. Learn what the ingredients are for and look for their benefits along with any harmful reactions they may cause.

1. Complete the table using the EWG Skin-Deep Ingredients Search below and the ingredient list from the shampoos.

Search here: [ewg.org/skindeep](https://www.ewg.org/skindeep)

Shampoo Name	Ingredient List	Function	About Chemical	Risks/Concerns
#1				



Shampoo Name	Ingredient List	Function	About Chemical	Risks/ Concerns
#2				

Shampoo Name	Ingredient List	Function	About Chemical	Risks/ Concerns
#3				



Now that you completed your research and learned about the ingredients in your shampoo, answer the following questions.

2. Which brand of shampoo had the best overall ingredients? Explain why.

3. Has your research changed your mind about the brand of shampoo you use, based on the ingredients? Explain why.



Badge Requirement 3



ACTIVITY 8

Fashion Forecast

Use your creativity to formulate future style.

Where is style going to lead us? What will be some of the digital and electrical components in the future of style? Unleash your imagination and become a part of where we might be headed. Fashion forecasting is big business. Experts study manufacturers, color trends, fashion shows, global influences, and consumer appetites to predict tomorrow's looks.

Where do you think the future of athletic clothing is headed? Do you think it may include wearable technology or new fabrics? Explain.

Share what you think fashion will look like 10 years from now and 50 years from now, even 100 years from now.

Use the space below to help you brainstorm your ideas:



ACTIVITY 9

Fashion Creativity

Use your creativity to make a sketch, digital slideshow, or poster showing what you believe fashion will look like in the future.

Create your fashion forecast. Feel free to make a slideshow, poster or sketch. Be creative: the choice is yours!



Badge Requirement 5



BONUS ACTIVITY!

Create a Facemask

If you have the supplies on hand at home, create an oatmeal honey facemask using natural ingredients.

Supplies:

- Plain oats
- Honey
- Bowl
- Olive oil
- Water
- Microwave

Directions:

1. Cook 1 serving of plain oatmeal according to directions on package.
2. Add 2 tablespoons of honey to hot oatmeal and mix together.
3. Allow mixture to cool.
4. Add 1 tablespoon of olive oil and mix together.

Once your mask is mixed and cooled off apply it to your face! Leave on for about 10-15 minutes then rinse with lukewarm water.

The Science Behind It!

Oatmeal is full of antioxidant and anti-inflammatory compounds and is known for its skin-soothing properties including moisturizing dry skin and providing relief from itching, rashes and other minor skin irritations. Honey provides natural antibacterial and healing properties to soothe and clarify the skin.

How does the facemask feel?

How does the facemask compare to store bought masks? Write down one way it's similar and one way in which it differs.



BONUS ACTIVITY!

Recycled Fashion

If you have the supplies on hand at home, find an old T-shirt to upcycle.

T-shirts use tons of water and human labor; they have a big environmental impact which you can help reduce by being eco-friendly and repurposing old t-shirts.

Watch the following video to learn about the Life Cycle of a T-Shirt:

youtu.be/BiSYoeqb_VY

Write down 3 things you learned from the video.

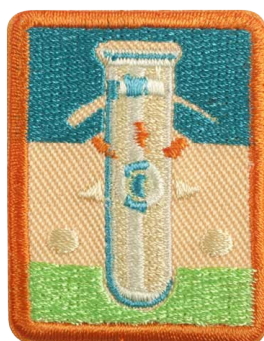
1. _____

2. _____

3. _____

Now is your turn to be creative and help the environment by upcycling your old T-shirt into a new look! Watch the video below for some ideas & remember to be creative.

youtu.be/vWLbp84Gn-k



CONGRATS!!!
YOU COMPLETED YOUR
SCIENCE OF STYLE BADGE!

Badges can be purchased at shopgirlscouts.com



NOT A GIRL SCOUT?
NOT A PROBLEM!
LEARN MORE ABOUT JOINING!
girlscoutsgcnwi.org/join