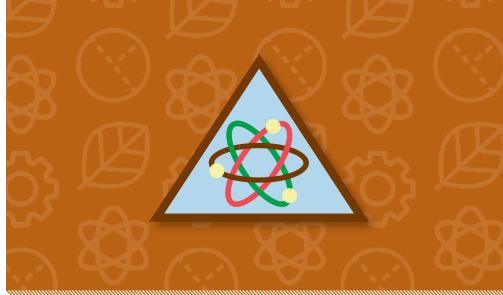


This booklet gives girls an overview of the badge requirements and badge steps for the Brownie STEM Career Exploration badge. It also includes interesting background information to spark girls' interest in STEM careers. Volunteers can access the Volunteer Toolkit (VTK) to find complete meeting plans, including detailed activity instructions and handouts.



### **Brownie**

## STEM Career Exploration

ave you ever wanted to invent something new? Create a video game? Help pets stay healthy? Engineers, programmers, and veterinarians get to do those things every day as their jobs.

Find out how all the things you love can become a job that helps you change the world! Then create a plan to turn your dreams into a reality.

### Steps

- 1. Explore your interests
- 2. Discover the possibilities
- 3. Learn about the day-to-day
- 4. Brainstorm your next steps
- 5. Share your goals

#### **Purpose**

When I've earned this badge, I'll know how I can use STEM to help others.

#### All About You

Ask yourself the questions below to brainstorm more about you!

- What kind of superhero would you like to be?
- How do you want to make the world a better place?
- What do you like to do at school? In your free time?
- What's something you'd want to do every day?
- What are you good at?
- What are your hobbies?
- What kind of books do you like to read?
- What kind of movies do you like?
- What sports do you play?
- What instruments do you play?

## **Explore your interests**

Imagine we lived in a world with superheroes and you could be one! Think about the story of your superhero-self: What are your skills? What are your powers? What's your backstory? How do you make the world a better place?

We may not be the superheroes we see in comics and movies, but we can be everyday superheroes who make a difference!

So, jump in and explore different kinds of jobs, or careers, you could have when you grow up.

Here's your first step: create a collage all about you! What do you like to do? What are you good at doing? Find words and pictures that show others who you are.

## Discover the possibilities

All kinds of jobs, from coding video games to baking cakes to planting forests, use STEM.

So, how will you change the world? Will you take care of endangered animals? Will you design a new kind of plane? Will you cure diseases?

Explore careers that focus on what you like to do—like making movies, dancing, and playing video games—and what you care about—like animals, other people, or nature.

By looking at jobs related to things you're already interested in, you're one step closer to finding your dream job!

## AWORLDOF STEMI

**STEM** stands for Science, Technology, Engineering, and Math. We use STEM to build bridges, create apps, grow our food, help people stay healthy, protect the planet, and so much more.

**Check out how these STEM careers help create our world!** 

A **baker** makes tasty food using algorithms (recipes!) and the science of mixing different ingredients together.



A **sound engineer** uses computers and other technology to create sounds for songs, movies, and TV shows.



A fashion designer uses math to design and make new clothing styles.



A tech entrepreneur codes apps that help people learn new things and have fun.



An archaeologist studies objects that people made in the past, like pottery, tools, and buildings.



A **chemist** explores matter-everything that makes up our universe—down to the tiniest particles.



### What Do You Want to Know?

One of the best ways to learn more about a career is to ask someone who has that job!

Here are some ideas for questions you might want to ask:

What's the most fun part of your job?

# **S**tep Learn about the day-to-day

Now that you have a few ideas about careers you might like, it's time to find out what they're really like!

You might find out that some careers sound great. Others might not sound as interesting as you thought. That's okay! It's important to dig deeper, figure out what interests you, and learn more.

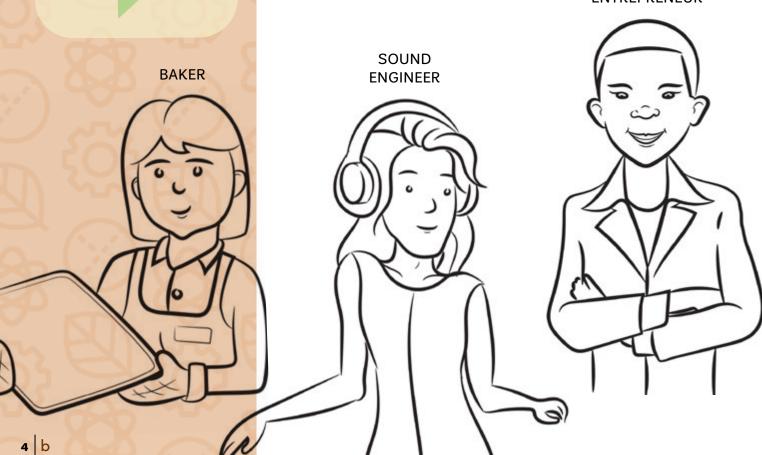
How did you get interested in this job?

What do you do every day?

How can I learn more about this job?

How does your job help others?

TECH ENTREPRENEUR



# 4 Brainstorm your next steps

**Imagine yourself in your dream career.** What could you do right now to get ready? What skills will you need to have? What next steps could help you reach your dream job?

When you're brainstorming things you can do, it might help to think of...

- Something you can do at school
- Something you can do at home
- Something you can do by yourself
- Something you can do with others
- A new skill you can learn
- A wild idea to help you on your career path



## KEEP EXPLORING

Here are
5 ways you can
explore jobs
that make
a difference!

- 1. Earn a Girl Scout STEM badge or STEM Journey award
- 2. Attend Girl Scout STEM events or camps
- 3. Visit a science museum, tech center, or maker space
- 4. Ask a librarian to help you find books about STEM or people in different careers
- 5. Ask your parents to help you search for videos

Already know what you're interested in? Get started with these badges and awards!

### COMPUTER • Expl

 Learn how programmers solve problems with the Think Like a Programmer Journey

SCIENCE

- Explore coding with the Coding for Good three-badge series
- Find out how to keep computers safe with the Cybersecurity three-badge series

#### CREATIVE TECHNOLOGY & DESIGN

- Explore digital products with the Think Like a Programmer Journey
- Practice art and design with the Painting badge
- Learn about design with the Coding for Good, Inventor, and Making Games badges

#### ENGINEERING

- Solve problems
   with the Think Like
   an Engineer and
   WOW! Wonders
   of Water Journeys
- Build model robots with the Robotics three-badge series
- Design cars and other vehicles with the Automotive Engineering three-badge series

### FOOD & AGRICULTURE

- Explore your sense of taste with the Senses badge
- Learn about healthy eating with the My Best Self badge
- Make your own recipe with the Snacks badge

# 5 Share your goals

You probably have lots of ideas now for what you'd like to do! So, draw a picture (or two or three!) of yourself in your future career. Make sure to include:

- What you're wearing—an apron? A lab coat? Jeans and a t-shirt?
- What tools you're using—a computer? A stethoscope? a 3D printer?
- Where you're working—in a lab? In a park? In a hospital?

Share your drawings with your family, friends, and teachers. They can help you follow your dreams.

Then, put your drawings up where you can see them whenever you want to imagine your future!

### HEALTH & WELLNESS

- Earn the Brownie
   First Aid badge
- Get moving outdoors with the Brownie
   Snow or Climbing
   Adventure badge
- Learn how to stay healthy with the My Best Self badge

### NATURE & THE ENVIRONMENT

- Get outdoors with the Think Like a Citizen Scientist and Brownie Outdoor Journeys
- Learn more about animals and insects with badges like Pets and Bugs
- Explore the earth and space with the Eco Friend, Hiker, and Space Science Adventurer badges

#### **ANY FIELD!**

- Explore how to help others with the Brownie Quest and A World of Girls Journeys
- Become a leader with badges like
   Fair Play, Give Back,
   Meet My Customers,
   Money Manager,
   and Philanthropist

Whatever you
want to do, take the
next step—if you
have a great
idea, get started
and go for it!

### Now that I've earned this badge, I can give service by:

- Helping Daisies to earn STEM Journey awards and badges.
- Sharing with friends how people use STEM to make a difference.
- Asking my library to create a display of books about STEM.

### I'm inspired to:

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