

Things have  
come a long  
way since  
the abacus!



# Computer Expert

**C**omputers help you do so much. You can make amazing art, find incredible facts on the Internet, and send fun cards to friends and family. Earn this badge and you'll be a safe, secure computer expert!

## Steps

1. Paint or draw with an art program
2. Find some cool facts
3. Take a trip online
4. Make a connection
5. Have more computer fun

## Purpose

When I've earned this badge, I'll know how to do many useful things on a computer.

Every step has three choices. Do ONE choice to complete each step. Inspired? Do more!



## Tips Before Takeoff

- ▶ Do all the steps with an adult helper!
- ▶ Be sure to sign your Girl Scout Internet Safety Pledge before you begin.

### STEP

# 1 Paint or draw with an art program

Just like a paintbrush, a computer can be a tool to make art. Movie animators, game makers, and people who design ads and take professional photos all use programs to make their art even better. Now it's your turn!

### CHOICES – DO ONE:

- Paint a picture.** Use a computer art program to make a picture of your favorite person or place. Use bright colors, shapes, and fun drawing tools. Then print it and share! If your computer doesn't have an art program, ask an adult to help you find a website that lets you paint or draw.

**OR**

- Create a cool card.** Create a thank-you card with pictures on the front and a nice message inside. Give it to someone who's helped you.

**FOR MORE FUN:** Make a birthday card, too.

**OR**

- Build a bookmark.** First, make an outline of the size you want (one inch wide and six inches long is a good place to start). Decorate it using an art program, then print it. Cover the bookmark in thick, clear tape to make it rip-proof and use it in your favorite book.

**FOR MORE FUN:** Make special bookmarks for all your Brownie friends.





STEP

## 2 Find some cool facts

The Internet is like an encyclopedia that constantly changes and gets bigger. Use search engines to learn about a fun subject. (Search engines like Google and Bing use special math to quickly search the Web. They bring back links to articles, images, and videos related to what you typed.)



### CHOICES – DO ONE:

**All about animals.** Surfing the Internet is like visiting a digital zoo! Pick an animal you're interested in but don't know a lot about and use search engines to study it. Take notes as you read to create a Top 5 list of favorite facts to share.

**OR**

**Hometown history.** How much do you know about where you live? Use search engines to find out more about your hometown or the closest big city. Learn five fun facts to share with your Brownie friends.

**OR**

**Online art walk.** If you like art and visiting museums, then you've got a whole world to explore online. Search for a famous art museum and then take their online tour. Once you know your way around, host an online tour for a friend or family member.

**FOR MORE FUN:** Find an old doll or toy collection to see what your grandparents might have played with.

### More to Explore

**Different types of paper** can help you print everything from iron-on T-shirt patterns to your own stickers. Visit a store with an adult to find special printer paper. Use it to create a one-of-a-kind gift.



## Bookmarking

Sometimes surfing the Web feels like a big game of telephone tag. You start on one site and before you know it, you're someplace new.

**Bookmarks** can help you find sites you've visited before. When you find a site you like, bookmark it. That way, just one click will take you back whenever you want.

### BOOKMARKS

- World News
- Girl Scouts
- My School
- Games
- Movies
- New Music
- Favorite Animals

## STEP 3 Take a trip online

**Just like a good book, the Internet can take you across your town or across the world—without getting in the car or on a plane! Learn something new from a trip on the Web.**

### CHOICES – DO ONE:

- Road trip.** Visit a mapping site on the Web. Find where you live on the map and zoom in to see how close you can get. Try the same thing with your school, a friend's house, and somewhere far away, like a relative's house in another state.

**FOR MORE FUN:** Find directions from your house to a place you want to visit. How long would it take to drive there?

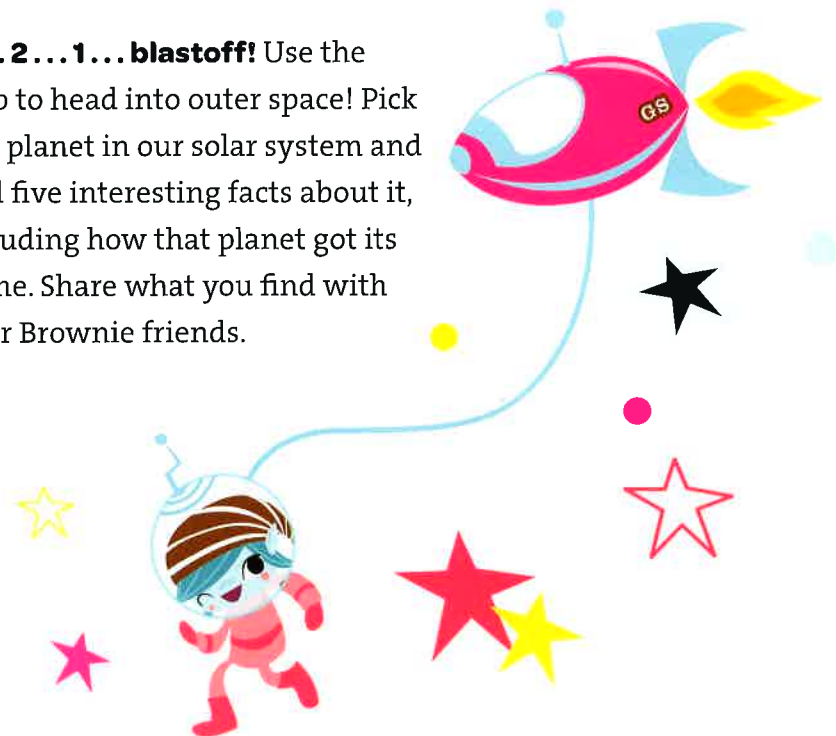
**OR**

- World adventure.** Pick another country you want to visit one day. Find information to make a short travel guide. Include facts on language, money, and major holidays.

**FOR MORE FUN:** See if the country is home to Girl Scouts or your sister Girl Guides.

**OR**

- 3...2...1...blastoff!** Use the Web to head into outer space! Pick any planet in our solar system and find five interesting facts about it, including how that planet got its name. Share what you find with your Brownie friends.



STEP

# 4 Make a connection

**E-mails. E-cards. Instant messages. Wall posts. Video chats. These are just some of the ways to keep in touch with friends and family on the Web. Try one for yourself!**

**CHOICES – DO ONE:**

- Here is my card.** Search online for “e-cards” and you’ll find dozens of sites that let you send free greeting cards designed for birthdays, holidays, or to just say hello. Send an e-card to three friends or relatives and let them know why they are important to you.



**OR**

- You’ve got mail!** Send thank-you notes by e-mail when a friend or family member gives you a gift or does something nice. Use either your own e-mail address or an adult’s (with their permission).



**FOR MORE FUN:** Attach a picture of yourself in your Brownie vest or sash.

**OR**

- Dear President . . .** Did you know you can send the president a message online? Search for the White House page on the Web, then write the president a message about what’s important to you. (You could do this for a different elected official, too.)

## More to Explore

**Video chat with another Brownie group.** Team up with an adult to find other Brownies doing their Computer Expert badge, and come up with three questions you’d like to ask them. Ask your questions using video chat and answer theirs.



## Words

### Worth Knowing

To **DOWNLOAD** means to copy a file from another computer or someplace online to your own computer or memory stick.

To **UPLOAD** means to copy a file from your computer to somewhere else, usually a website.

A **FILE** is a collection of computer data with its own name—anything from a typed document to a song or picture.

**Team up with an adult anytime you upload or download a file!**



## STEP 5 Have more computer fun

**From downloading music and making art to playing silly games that take you on adventures or make learning math or typing a blast, there are many more ways to have computer fun.**

### CHOICES — DO ONE:

- Game on!** Visit at least three kid-friendly gaming sites and play the most popular games. Talk about your favorites with your Brownie friends. How would you make the games more fun or more challenging?



**OR**

- Dance on!** Create a five-song playlist that you can dance to at your next party or Brownie meeting.

**FOR MORE FUN:** With an adult's help, download your favorite new song to add to your mix.

**OR**

- Print on!** Use a computer to create your own stationery with your name on top and patterns around the edges. Print a small stack and use it to send thank-you notes to cookie customers, invitations, or notes just because!



# Innovative Women

These women have found new and exciting ways to use computers. Some of these ideas are saving lives, and some are just for fun!

**Yolián Amaro-Rivera** came up with a way to help keep firefighters safe from heart attacks. Her digital body sensors monitor heart rate and other vital signs. If these signs go into a dangerous range, the firefighter knows to leave the scene.

**Claudia Gold** developed software that designs shelters for victims of disasters. Her program quickly figures out the sizes of the wooden pieces needed to build a structure, and then sends the instructions to a laser cutter. The pieces can be snapped together for a quick shelter.

**MaCherie Edwards** created a smartphone application for art museum visitors. While walking through a museum, her app gives information about pieces of art. It even asks questions about how the art makes you feel!

**Anamary Leal** found a way to combine a love of fashion with computers. She came up with software that shows what a clothing design will look like on a person. It has a 3D model of a person so a piece of clothing can be seen from all angles.

## The Blissymbol Printer

**Rachel Zimmerman** came up with an amazing invention when she was just 12 years old. At the time—in the 1980s—computers were not very common. But Rachel had a talent for working with them. She created a software program that used pictures called Blissymbols. People who have problems speaking can point to these pictures to communicate. Rachel came up with a “Blissymbol printer” that would turn these pictures into words. Her invention meant that a person with a condition such as cerebral palsy could point to a series of pictures that would print out as a full sentence. Her project won a medal at the World Exhibition of Achievement of Young Inventors in her home city of Ontario, Canada—where she was a Girl Guide! Rachel went on to work for NASA.

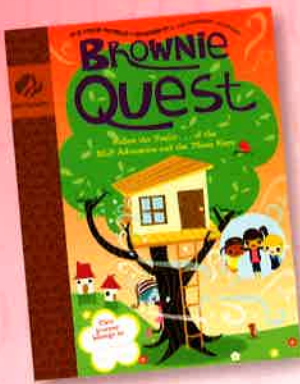


This photo shows Rachel with her Blissymbol printer.



Photo by John Tamblin; Blissymbols courtesy of Blissymbolics Communication Institute—Canada





## Add the Badge to Your Journey

For step 2, try choosing hometown history. Find out about places in your community that could use your help. Use these ideas on your Brownie Quest!

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

- Helping a friend send out e-card invitations for a party
- Connecting online with family who live far away
- Creating a beautiful digital painting to brighten up someone's day!



I'm inspired to: