

JUNIOR Cybersecurity Badges

BADGE SERIES OVERVIEW:

In the Cybersecurity badge series, Juniors gain skills to become safe online. They find out what computer languages, networking and protocols mean for security. They explore malware and cyber crimes. They do activities to show how information online can last forever. They discover ways to protect their identities and private information. And they explore ways to spot what's real or fake online.

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NOTES TO VOLUNTEERS:

Follow the Budge Progression:

The Cybersecurity badges were designed to be earned in a specific order. The badge progression is:

- **1** Cybersecurity Basics
- **2** Cybersecurity Safeguards
- 3 Cybersecurity Investigator

Enhance the Experience: The Cybersecurity badges were designed to be "unplugged," so you don't need to have computers for girls to earn them. However, if you have access to computers, tablets, smartphones, and the internet, feel free to have girls use them to complete the badge steps where appropriate.

Use the Talking Points (But Make Them Your Own): In each session, you'll find suggested talking points under the heading "SAY." Some volunteers, especially new ones, find it helpful to follow the script. Others use the talking points as a guide and deliver the information in their own words. Either way is just fine.

Be Prepared (It's What Girl Scouts Do!): Each meeting includes a "Prepare Ahead" section that includes a materials list and what kind of set-up is required. Read it in advance so you have enough time to gather supplies and enlist help, if needed.

Use Girl Scouts' Three Processes: Girl-led, learning by doing, cooperative learning: These three processes are the key to making sure Juniors have fun in Girl Scouts and keep coming back.

"Learning by doing" and "cooperative learning" are built into this badge, thanks to the hands-on activities and tips. Remember to keep the meetings girl-led so you can help create an experience where Juniors know they can make choices and have their voices heard.



2

Leave Time for the Closing Ceremony: If Juniors are having fun with an activity, you may be tempted to skip the Closing Ceremony so they can keep going, but the Closing Ceremony is absolutely key to their learning. Here's why:

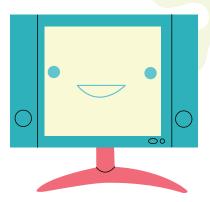
When Juniors leave a meeting, they'll remember how much fun it was to do an activity, but they may not realize what its relationship to cybersecurity was, unless you tell them.

That's why the Closing Ceremony is so important. It's where you can connect the dots for Juniors by:

- Pointing out how real-world safety rules are just as important to practice when they use computers and other devices.
- Letting them know that they have what it takes to continue exploring ways to keep safe in the cyber world.

Tell Your Troop Story: As a Girl Scout leader, you're designing experiences that Juniors will remember their whole lives. Try to capture those memories with photos or videos. Juniors love remembering all they did, and it's a great way for parents to see how Girl Scouting helps their Juniors!

And please do share your photos and videos with GSUSA by emailing them to STEM@girlscouts.org (with photo releases if at all possible!).



To Prepare for the Meetings:

Before each meeting, you'll find an Overview, notes to Prepare Ahead, and a Materials List, all specific to that meeting.

Go over words Juniors can learn. In the Prepare Ahead section for each meeting, you'll see a list of words Juniors may or may not know and how to define them. You can find a full list of vocabulary for the badges in the **Junior – Cybersecurity Glossary.**

Before each meeting, read through the meeting plan and any meeting aids. This will help you get familiar with the flow before each meeting.

Handouts specific to the meetings are listed in the Prepare Ahead section of each meeting under Meeting Aids. In addition, the following handouts are available in the Meeting Aids for every meeting:

- Junior Cybersecurity Materials List: Each meeting has its own materials list. However, if you like to do all your supply shopping at one time, use this handout. It includes all materials needed for all of the Junior Cybersecurity badges.
- Junior Cybersecurity Glossary: This is a list of words introduced in these badges with definitions.

Gather materials. Prior to each meeting, gather materials for the meeting's activities. Review the materials list to see what you already have. See if there are items you can ask girls to bring to the meetings.

Cybersecurity BADGE BREAKDOWN

CYBERSECURITY BASICS: MEETING 1

- 1. As Girls Arrive Binary Prep
- 2. Opening Ceremony
 Safe Start
- 3. IT Binary Bracelets
- 4. Networking
- 5. Roll With Protocols
- 6. Closing Ceremony Flash Chat

- Juniors make binary bracelets to help them understand computer language.
- They find out how computers pass messages by acting out what a network looks like.
- They find out what protocols are and create some when playing a game.

CYBERSECURITY BASICS: MEETING 2

- As Girls Arrive Malware Cards
- 2. Opening Ceremony
 Girl Scout Promise and
 Law Online
- 3. Three-Way Handshake
- 4. Cyber Crime Game
- 5. Closing Ceremony Badges

- Juniors find out about different types of malware.
- They learn what a three-way handshake is in the computer world to understand how computers have their own protocols.
- They uncover which types of malware are responsible for cyber crime cases.
- They earn their Cybersecurity Basics badge at the end of this meeting.

CYBERSECURITY SAFEGUARDS: MEETING 1

- As Girls Arrive
 Five Things About Me
- 2. Opening Ceremony Red Marker
- 3. Username Makeup
- 4. Password Sorting Game
- 5. Care to Share
- 6. Closing Ceremony
 Flash Chat

- Juniors find out how to protect their identity.
- They discover what usernames are and create one.
- They explore good and bad passwords.
- The find out what is OK and not OK to share online.

CYBERSECURITY SAFEGUARDS: MEETING 2

- 1. As Girls Arrive My Day
- 2. Opening Ceremony Leftover Letters
- 3. Toothpaste Trouble
- 4. Who's Who?
- 5. Closing Ceremony Badges

- Juniors find out how information they post online stays there forever.
- Juniors uncover an identity by finding clues and piecing them together.
- They earn their Cybersecurity Safeguards badge at the end of this meeting.

CYBERSECURITY INVESTIGATOR: MEETING 1

- 1. As Girls Arrive Coded Message
- 2. Opening Ceremony
 Welcome to Investigator
- 3. Shift Cipher
- 4. Emoji Update
- **5.** Identity Theft
- 6. Closing Ceremony
 Flash Chat

- Juniors use a shift cipher code to create messages.
- They find out how updates are important to security by doing an emoji activity.
- They explore identity theft by sharing their identities.

CYBERSECURITY INVESTIGATOR: MEETING 2

- 1. As Girls Arrive
 Palm Print
- **2. Opening Ceremony** Palm Scanning
- 3. Me Again
- 4. Something's Phishy
- 5. Closing Ceremony Badges

- Juniors find out how palm prints are another method of security check.
- They do a role-play game to explore what to do if their identity is stolen.
- They use a six-point checklist to find what's wrong with a fake message.
- They earn their Cybersecurity Investigator badge at the end of this meeting.

6 7

Badge Series and Meeting Length

- This series of badges has been designed to fit into six 70-85 minute troop meetings.
- There is no snack time scheduled in these meetings, but you can add 15 minutes of "wiggle room" for snacks or activities that run long.
- The times given for each activity may be different depending on how many girls are in your troop. Prior to each meeting, review the activities and time allotment to determine how much time your troop will need to complete the activities. You can adjust times for each activity as needed.
- Give Juniors 10- and 5-minute warnings before they need to wrap up the last activity so you'll have time for the Closing Ceremony.

Get Help from Your Family and Friends Network

Your Friends and Family Network can include:

- Juniors' parents, aunts, uncles, older siblings, cousins, friends, etc.
- Other volunteers who have offered to help with the meeting.

Ask your Network to help:

Bring supplies or other materials for the meetings.

Award Connection

Girls earn three badges:

- Cybersecurity Basics
- Cybersecurity Safeguards
- Cybersecurity Investigator

(**Note to Volunteers:** You can buy these awards from your council shop or on the Girl Scouts' website.)

