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My Award and Badge Explorer

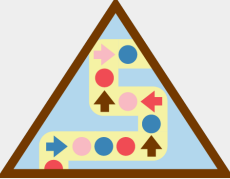| AWARD/BADGE	DESCRIPTION
Automotive 1: Design Brownie (Grades 2-3) STEM	Find out how automotive designers come up with ideas for new vehicles. Then, take the wheel and design your own! 1. Explore how people move from place to place 2. Discover design criteria 3. Choose your vehicle's design criteria 4. Sketch a vehicle to meet your criteria 5. Sculpt and share your vehicle When you've earned this badge, you'll know how to design, sketch, and sculpt a vehicle. **GET THIS BADGE**
Automotive 2: Engineering Brownie (Grades 2-3) STEM	Get in gear and explore how automotive engineers build vehicles. Then, engineer your own model of a vehicle to help people during an emergency! 1. Learn about simple machines in vehicles 2. Engineer a vehicle for safety based on criteria 3. Build a vehicle prototype 4. Test and revise your vehicle prototype 5. Share your vehicle prototype and testing results When you've earned this badge, you'll know how automotive engineers plan, build, test, and improve vehicles. **GET THIS BADGE**
Automotive 3: Manufacturing Brownie (Grades 2-3) STEM	Experience the importance of having a plan and discover how manufacturers build lots of vehicles that are safe and well made! 1. Experience the manufacturing process 2. Learn about the automotive manufacturing process 3. Plan your own automotive manufacturing process 4. Manufacture a set of vehicles 5. Share your automotive manufacturing process When you've earned this badge, you'll know how vehicles are manufactured in a factory. You'll also know how to make and test products for people to buy. **GET THIS BADGE**

AWARD/BADGE	DESCRIPTION

Brownie STEM Career Exploration

Brownie (Grades 2-3)
STEM

Find out how all the things you love-like camping, baking, and walking your dog-can become a job that changes the world.
Then, create a plan to turn your dreams into a reality!

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

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

GET THIS BADGE

Bugs

Brownie (Grades 2-3)
Outdoors
STEM

Explore the world of bugs and learn more about these little creatures that do so much.

1. Draw a bug poster
2. Try a bug craft
3. See bugs in action
4. Explore bug homes
5. Take a bug field trip

When you've earned this badge, you'll know all about bugs.

GET THIS BADGE

Coding for Good 1: Coding Basics

Brownie (Grades 2-3)
STEM

Find out how computer scientists write programs for computers to solve problems.

1. Create algorithms for a computer that follow a sequence
2. Use loops to improve your algorithm
3. Use events to make things happen
4. Learn about women in computer science
5. Create your own set of commands that use events

When you've earned this badge, you'll know how programmers write programs that make computers work and how people can use computers to help others.
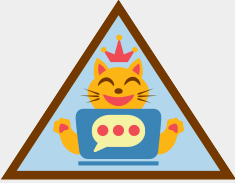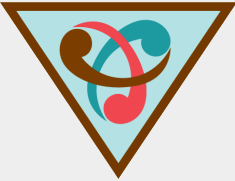
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Coding for Good 2: Digital Game Design Brownie (Grades 2-3) STEM	Explore how video games can help people to learn new skills and experience new things. 1. Discover how game design can be used "for good" 2. Explore tools used to develop digital games 3. Plan a maze game 4. Build, test, and improve your maze game using iteration 5. Share your game with others When you've earned this badge, you'll know how to think like a game maker and use iteration to plan, build, and test a game. **GET THIS BADGE**
Coding for Good 3: App Development Brownie (Grades 2-3) STEM	Design your own idea for an app that solves a problem for someone else. 1. Discover how apps can be used for good 2. Decompose the needs of your app user 3. Design your app screens 4. Create algorithms for your app that include events 5. Share and improve your app with user feedback When you've earned this badge, you'll know about user-centered design and how computer scientists develop apps. **GET THIS BADGE**
Computer Expert Brownie (Grades 2-3) Life Skills STEM	Find out what computers can help you do and learn to be a safe, secure computer expert. 1. Paint or draw with an art program 2. Find some cool facts 3. Take a trip online 4. Make a connection 5. Have some computer fun When you've earned this badge, you'll know how to do many useful things on a computer. This badge comes in a packet that includes the Computer Expert, My Best Self, Dancer, Home Scientist, and My Family Story badges. **GET THIS BADGE**

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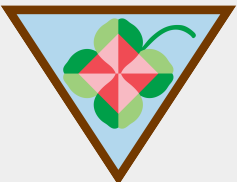| AWARD/BADGE	DESCRIPTION
Cybersecurity 1: Basics Brownie (Grades 2-3) STEM	Find out how you use technology and how you can keep your technology safe. 1. Find out how you use technology 2. Discover what your technology can do 3. Find out how to create layers of security 4. Find out how to use real-life safety rules when you go online 5. Find out how messages travel on the internet When you've earned this badge, you'll know cybersecurity basics and understand the role technology plays in your life. **GET THIS BADGE**
Cybersecurity 2: Safeguards Brownie (Grades 2-3) STEM	Find out how to be safe when you go online. 1. Create your identity 2. Find out what information to keep private when you go online 3. Find out how to share information safely online 4. Find out why you have to be careful about who you trust online 5. Test your knowledge of online safety rules When you've earned this badge, you'll know what information is private and how to share information safely. **GET THIS BADGE**
Cybersecurity 3: Investigator Brownie (Grades 2-3) STEM	Put on your detective hat and solve cyber crimes. 1. Crack a code to solve a problem 2. Investigate what's real and fake in photos 3. Find out about digital footprints 4. Investigate how a computer virus can spread 5. Explore a cyber attack When you've earned this badge, you'll know how to use investigative skills to spot problems in the cyber world. **GET THIS BADGE**

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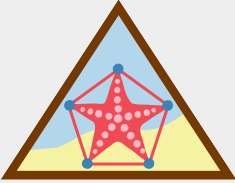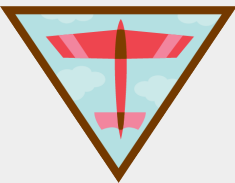| AWARD/BADGE	DESCRIPTION
Digital Leadership Brownie (Grades 2-3) STEM	Find out how technology can help you to be a leader who teaches, inspires, and makes the real and digital worlds a better place. 1. Explore your communities 2. Discover your digital footprint 3. Examine what's true and not 4. Design a digital commmunity 5. Create content for change When you've earned this badge, you will know how to lead in the digital world. You'll know how to use technology to make the internet and world a better place. **GET THIS BADGE**
Home Scientist Brownie (Grades 2-3) STEM	Find out where science has been hiding in your home. 1. Be a kitchen chemist 2. Create static electricity 3. Dive into density 4. Make something bubble up 5. Play with science When you've earned this badge, you'll be able to see the science all around you. This badge comes in a packet that includes the Computer Expert, My Best Self, Dancer, Home Scientist, and My Family Story badges. **GET THIS BADGE**
Inventor Brownie (Grades 2-3) STEM Entrepreneurship	Find out how inventors make stuff-and become an inventor yourself! 1. Warm up your inventor's mind 2. Find lots of ways to solve the same problem 3. Make a needs list 4. Solve a problem 5. Share your invention When you've earned this badge, you'll know how to think like an inventor. **GET THIS BADGE**

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AWARD/BADGE	DESCRIPTION
Journey: Think Like a Citizen Scientist Brownie (Grades 2-3) STEM Journey	In this Journey, you will: 1. Find out how citizen scientists make observations, collect data, and work with scientists to receive feedback on research. 2. Do 3 citizen science activities: sharpen your observation skills through 2 observation games and a SciStarter project. 3. Plan a Take Action project that helps others. If you're a Girl Scout volunteer, go to Volunteer Toolkit for complete meeting plans and activity instructions. Learn more about how to earn your Take Action Award - and help your community - with the **Girl Scout Take Action Guide**. Get This Journey
Journey: Think Like a Programmer Brownie (Grades 2-3) STEM Journey	In this Journey, you will: 1. Find out how programmers use computational thinking to solve problems. 2. Do 3 computational thinking activities: find out about paper programming; create a functional suncatcher to explore algorithms, variables, and functions; and create a personal innovation to discover rapid prototyping. **More Details →** Learn more about how to earn your Take Action Award - and help your community - with the **Girl Scout Take Action Guide**.
Journey: Think Like an Engineer Brownie (Grades 2-3) STEM Journey	In this Journey, you will: 1. Find out how engineers use design thinking to solve problems. 2. Do 3 design thinking activities: design and build an assistive device, a water collection device, and a device that can launch a ball across a room. 3. Plan a Take Action project that helps others. If you're a Girl Scout volunteer, go to Volunteer Toolkit for complete meeting plans and activity instructions. Learn more about how to earn your Take Action Award - and help your community - with the **Girl Scout Take Action Guide**. Get This Journey

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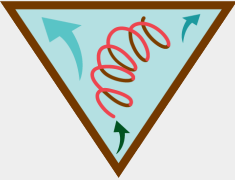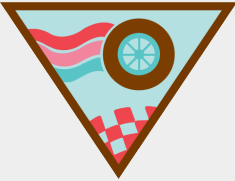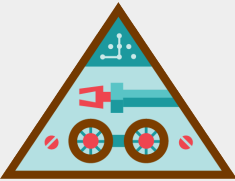| AWARD/BADGE	DESCRIPTION
Journey: WOW! Wonders of Water Brownie (Grades 2-3) STEM Journey	In this Journey, you will: 1. Explore the wonders of water by find out more about its importance and how it's used around the world. 2. Plan a Take Action project, such as making informative posters, promoting recycling at school, or planting low-water gardens. 3. Earn 4 leadership awards: The LOVE Water Award, the SAVE Water Award, the SHARE Water Award, and the WOW! Award. If you're a Girl Scout volunteer, go to Volunteer Toolkit for complete meeting plans and activity instructions. **Get This Journey**
Making Games Brownie (Grades 2-3) STEM Entrepreneurship	Use your imagination to make up new games. 1. Try a scavenger hunt 2. Make up a mystery game 3. Create a party game 4. Change the rules 5. Invent a whole new sport When you've earned this badge, you'll know how to create new games and share them with others. This badge comes in a packet that includes the Letterboxer, Pets, Making Games, Inventor, and Making Friends badges. **GET THIS BADGE**
Math in Nature 1: Shapes in Nature Brownie (Grades 2-3) STEM	Look carefully at nature, track what you see, and create art inspired by natural objects. 1. Track natural objects 2. Graph natural objects 3. Make a spiderweb with symmetry 4. Explore tessellations 5. Collect data about birds When you've earned this badge, you will know about counting, graphing, symmetry, and tessellations. You'll also know about spiders, birds, and other natural objects. **GET THIS BADGE**

AWARD/BADGE	DESCRIPTION

Math in Nature 2: Numbers in Nature

Brownie (Grades 2-3)
STEM

<p>Use your senses and other tools to gather information and learn about the natural world.</p> <p>1. Explore temperature
 2. Measure the length of leaves
 3. Graph your leaf data
 4. Find space to grow
 5. Plot and plant a garden </p> <p>When you've earned this badge, you will know how to measure temperature and length.
 You'll also know about square feet, diagrams, and grids. You'll have explored leaves and gardening.</p>

GET THIS BADGE

Math in Nature 3: Design with Nature

Brownie (Grades 2-3)
STEM

Use math to do things in the natural world, like find the age of natural objects, build a honeycomb, design a bird feeder, and go bird-watching.

1. Calculate the age of a natural object
2. Explore the shape of beehives
3. Measure and build a bird feeder
4. Use ratios to make bird food
5. Graph data about birds

When you've earned this badge, you will know about natural objects.
You'll know how to measure, use scale and ratio, and make a graph.

GET THIS BADGE

Mechanical Engineering: Fling Flyer

Brownie (Grades 2-3)
STEM

Work like an engineer to create a Fling Flyer, an airplane you'll make, and explore what keeps it and other things, such as birds, planes, and space ships, in the air.

1. Learn about forces that affect flight
2. Design and build a Fling Flyer
3. Test your Fling Flyer
4. Analyze and share your results
5. Brainstorm ways to improve your design **More Details →**

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AWARD/BADGE	DESCRIPTION
Mechanical Engineering: Leap Bot Brownie (Grades 2-3) STEM	Design, build, and test things like an engineer as you create your own Leap Bot. 1. Learn about springs 2. Build your Leap Bot 3. Create a way to test how well your Leap Bot performs 4. Record the results of your test 5. Share your results When you've earned this badge, you'll have learned about engineering, gravity, and force by building and testing a Leap Bot. You will know how to build and test a new product. **GET THIS BADGE**
Mechanical Engineering: Race Car Brownie (Grades 2-3) STEM	Design, build, and test your own race car to explore how science can make a faster race car! 1. Learn how design can affect speed 2. Design and build your race car 3. Design your racetrack 4. Conduct a fair test and record results 5. Share what you learned When you've earned this badge, you'll have designed a race car and a race track and carried out "fair tests" to learn how design affects speed. **GET THIS BADGE**
Robotics 1: Designing Robots Brownie (Grades 2-3) STEM	Team up with your fellow Brownies to design a robot. Plan, build, and share your robot prototype. 1. Explore how robots imitate nature 2. Learn about the parts of a robot 3. Plan your robot 4. Create a prototype 5. Get feedback on your robot When you've earned this badge, you'll know how to plan, build, and share feedback like an engineer by creating a prototype of a robot that helps other people or animals. **GET THIS BADGE**

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AWARD/BADGE	DESCRIPTION
Robotics 2: Programming Robots Brownie (Grades 2-3) STEM	Learn about the robot brain by engineering a machine that helps a robot to land 1. Learn how robots work 2. Discover the robot brain 3. Learn about programming 4. Try simple programming 5. Code a robot When you've earned this badge, you'll know how to create a program that could be run by a robot. **GET THIS BADGE**
Robotics 3: Showcasing Robots Brownie (Grades 2-3) STEM	After engineers build their robots, they show them to others and enter them into challenges and competitions. 1. Create a presentation to share how you designed your robot 2. Tell others how you designed your robot 3. Learn about robotics competitions 4. Learn about robotics teams 5. See robots in action Note: Unlike the other Robotics badges, these steps include options. You may be able to complete multiple steps, particularly three through five, at once. When you've earned this badge, you'll know how to share your robot with others. **GET THIS BADGE**
Space Science Adventurer Brownie (Grades 2-3) STEM	Investigate the complexities of the sky as you learn to see things in a new way. 1. Meet the neighbors 2. See more than before 3. Investigate the Moon 4. Be a stargazer 5. Celebrate and share When you've earned this badge, you'll know how to investigate the Sun, Moon, planets, and stars. **GET THIS BADGE**