

# Girl Scout Brownies

## **STEM Career Exploration**

		_			-		_	
Ston	4. Ev	INIOKO	VOLLE	interests	e in	tho	$\Lambda \nu +$	Studio
JLED	1.5/	(DIOLE	voui	IIII CI CSI	3 III	uie	AIL	Studio

Create a collage/drawing all about you! What do you like to do? What are you good at doing? Use the materials in the Art Studio to create your drawing. Think about words and pictures you can include to show others who you are! This Interest Drawing will help you in deciding what you want to be when you grow up.

## Step 2: Discover the possibilities in the STEM Pathway

All kinds of jobs, from coding video games to baking cakes to planting forests, use STEM! With your Interest Drawing in hand, visit the STEM Pathway to find some career possibilities. Using the screen titled "What does your future look like?" answer a few simple questions about yourself to discover your dream job.

## **Robotics: Programming Robots (Badge 1)**

## Step 2: Test your robot senses in the Sensory Room on the second floor

Robots, just like us, have to use their senses to understand their surroundings. Explore how robots use sensors to collect information about the world around them. In the Sensory Room, test your "robot" senses to determine what game balls are hidden in each of the boxes of the Sports Ball Challenge.

## **Step 5: Code a robot in the Make-It Workshop**

☐ Engineers program their robots to move, act, and understand. Now is your chance to code on a device. In the 'Connect-it' section of the Make-It Workshop, choose from Ozobot or Botly to learn simple coding on a device. Need Help? Ask a STEAM team member for help!

## **Robotics: Designing Robots (Badge 2)**

### Step 4: Create a prototype in the Make It Workshop

Engineers create prototypes, a quick way to show an idea to others or to test it out. Prototypes can be as simple as a drawing or created with common materials, such as cardboard, paper and string. Visit the STEAM Center and utilize the materials available to create a prototype of the robot you have planned.

## **Painting**

### Step 2: Paint the real world in the Art Studio

Paint a portrait of a friend, family member, pet or yourself! Use the tempera paints in the Art Studio to create a portrait of your choice.

## Step 3: Paint a mood in the Art Studio

Some painters create "abstract" art. They do not paint objects or people. They use shapes, lines, and colors to paint a feeling or mood. Pretend you are an artist trying to paint an emotion. Pick an emotion, then use the paints in the Art Studio to try to make a work of art that makes the viewer feel that emotion.



# Girl Scout Brownies

continued...

Democracy	
Step 4: Find o	ut about our country's executive branch

Step 4: Find out about our country's executive branch in the Star-Spangled Center

Hold a pretend presidential election. With a group of friends or family, visit the Star-Spangled Center to create your own campaign posters and speeches. Later, vote by secret ballot to choose a winner.

## **Celebrating Community**

**Step 1: Explore community symbols in the Star-Spangled Center** 

Go on a flag hunt! Many homes and businesses share their national pride by flying the flag- or showing a picture of it. Team up with your Brownie friends and search for all the American flags you can find in the Star-Spangled Center. Bonus, find some fun flag facts in the Legislative Branch!

#### **Eco Friend**

Step 2: Observe outdoor spaces in either Mary Ann's Garden, Nature Play or Sunshine Classroom

☐ Tell a nature story. With some friends or an adult, visit one of The Magic House's outdoor exhibit spaces to look at different objects in nature. Find something you like, and instead of disturbing nature by taking it home, tell a story about it. Be creative! How did it get there? Does it have a name? A family?

## **Outdoor Art Creator**

Step 1: Find art ideas outdoors in either Mary Ann's Garden, Nature Play or Sunshine Classroom

Go on a nature detective walk. Visit one or all of The Magic House's outdoor exhibit spaces and see what natural objects you can find – don't collect anything, simply circle what you observe:

An animal, a plant not colored green, a tree with flowers, a tree with leaves, a tree with needles, an insect, a bird, a fallen leaf, a rock with an unusual shape, a pinecone or acorn, moss, a flower or bush

## **Bugs**

Step 2: Try a bug craft in the Art Studio

Make a spider! Visit the STEAM Center to decorate a paper plate, craft paper or cardboard with marker or paint sticks to look like the body of a spider. Add eyes and eight legs to your body. How can you make your spider stand? Could you find a way to make a web for your spider?

## **Step 4: Explore bug homes in the Science Lab**

Some bugs, like caterpillars, sleep in a cocoon. Inside they transform into a moth or butterfly. Visit the Science Lab to inspect the butterfly habitat. Draw what you think it looks like inside of a cocoon.