

JUNIOR ENTERTAINMENT TECHNOLOGY BADGE - MEETING 1

Badge Purpose: When girls have earned this badge, they'll know the science behind the world of entertainment.

Activity Plan Length: 1.5 hours

Time	Activity	Materials Needed
15 minutes	Getting Started • Girls recite the Girl Scout Promise + Law	 (Optional) Girl Scout Promise and Law poster
15 minutes	ThaumatropesGirls animate their own artwork	 Index cards (one per girl) Writing utensils Tape
10 minutes	Night During the DayGirls create their own special effects	Blue cellophaneScissors
15 minutes	 Snack Chat Girls enjoy a healthy snack while discussing what they have learned. 	Healthy snack
20 minutes	Sound Effects Girls explore and create different sound effects 	 Various materials for sound effects (leather or plastic gloves, metal pot lids, wax paper, etc.)
15 minutes	Wrapping Up	 (Optional) Make New Friends lyrics poster

Getting Started

Time: 15 minutes

Time: 15 minutes

Materials Needed: Girl Scout Promise and Law poster (optional) and Brownie Smile Song Lyrics (optional)

Welcome everyone to the meeting, recite the Girl Scout Promise and Law.

Activity #1: Thaumatropes

Badge Connection: Step 1 – Animate your own artwork Materials Needed: Index cards (one per girl), writing utensils, tape

- 1. Give each girl an index card and a pencil. Have the girls fold the index card in half.
- 2. Girls should draw a picture on each outward-facing side of the card. The two pictures should have similar themes and be placed in the same location on each side of the card. For example, girls can draw a bird in the

middle of one side and a cage in the middle of the other, or a horse on one side and a rider on the other. The pictures should be oriented so the top of the image is at the fold.

- 3. Have each girl put her card on top of the end of a pencil, so the fold is resting on the pencil. Tape the card to the pencil.
- 4. Have each girl hold the pencil between her hands and rub her hands back and forth so the pencil spins back and forth repeatedly. If done quickly enough, the drawing should come together as one image. This is because our eyes have a "memory". Even after an object is no longer visible, our eyes still see that object for a very short time. Since you are spinning the images quickly, your eyes still see the first image when the second one appears, and vice versa.

Activity #2: Night During the Day

Time: 10 minutes

Badge Connection: Step 4 – Create your own special effects Materials Needed: Blue cellophane, scissors Prep Needed:

- Cut cellophane into multiple small pieces. They should be large enough to fit over the girl's eyes and cheeks. You can find blue cellophane at big box or craft stores. You can also make your own using clear cellophane and a blue permanent marker (if you're making your own, be sure to allow it to fully dry before giving it to the girls).
- 1. If available, go into the daylight or a room with white light.
- 2. Ask girls why a person can't see in the dark outside, but can see what's going on at "night" in the movies. Encourage them to take guesses.
- 3. Give each girl three pieces of blue cellophane. Remind the girls that they are just covering their eyes with the cellophane, not their mouths or noses.
- 4. Have the girls look at the area around them closely. Have them put a piece of cellophane over their eyes so it blocks the light and look again. Have them do this again, adding a piece of cellophane. With three pieces of cellophane (you may need more or less), it should look like night, but they should be able to see details. Moviemakers achieve the same effect by using blue filters on their camera lenses.

Activity #3: Snack Chat and Friendship Pledge

Time: 15 minutes

Badge Connection: Questions link to multiple badge steps Materials Needed: Healthy snack

- 1. While enjoying snack, here are some things for girls to talk about:
 - What movies have you seen with fun special effects? What about video games?
 - Has anyone seen other ways to animate pictures? What are they?
 - What piece of technology do you think you could never live without?
 - What's your favorite movie?
 - What's your favorite TV show?
 - What's your favorite cartoon?
 - Has anyone ever made a short movie on her phone or camera?

Badge Connection: Step 5 - Surf a sound wave

Materials Needed: Various materials to create sound effects (see resources) Prep Needed:

- To stay within time limits, choose three to four sound effects from the chart.
- 1. Have all the girls sit down and close their eyes. One at a time, using the directions in the sound effect chart, make the sound effects and ask the girls to guess the sound you are simulating. Remind the girls that they are trying to guess what the sound *could* be, not what the sound is.
- 2. After the girls have made a few guesses, have them to open their eyes. Reveal what you were doing and what the simulated sound was.
- 3. When you have gone through all your chosen sounds, have the girls take turns trying to make the sounds—or other sounds—with the materials.

Wrapping Up

Time: 15 minutes

Materials Needed: Make New Friends lyrics (optional)

Close the meeting by singing Make New Friends and doing a friendship circle.

More to Explore

- Field Trip Ideas:
 - Visit a local movie or IMAX theater.
 - Visit an amusement park.
- Speaker Ideas:
 - Invite someone who makes computer animation to your meeting to demonstrate what he or she does and speak with the girls about his or her career.
 - \circ $\;$ Have a makeup artist show girls some special effects that can be created with makeup.

Sound Effect Chart

Materials	What to do	Simulated sound
Leather or rubber gloves	Wave the gloves up and down	Bird's wings flapping
Metal pot lids, stick	Hold the lid by the handle and tap with the stick	Town bell
Wax paper, comb	Wrap wax paper around the comb. Hum lightly with your lips just barely on the wax paper	Buzzing insect
Cat litter	Walk or press shoes onto litter	Walking on gravel
Corn starch	Put corn starch on ground and walk or press shoes into it	Walking on snow
Cellophane or wax paper	Crumple the paper	Crackling Fire
Plastic sandwich bag	Fill the bag with air. Seal the bag except for a small hole. Lay the bag on the counter and push to remove excess air	Howling wind
Bowl or tray, toilet paper, water	Get toilet paper as wet as possible and put into the bowl. "Walk" on the toilet paper with your fingers	Walking in mud or swamp
Newspaper, plastic grocery bag	Put the newspaper in the grocery bag and softly tap the bag with your finger	Walking in grass
Plastic straw, plastic drink lid	Put the lid in the hole of the straw and slide it up and down	Monster sounds
Paper, envelope	Put a piece of paper in the envelope and slowly pull it out.	"Space doors" opening (from Star Wars)
Rice, metal pot	Slowly pour the rice into the metal pot	Rain
Sheet of Paper	Slide the sheet of paper in circles on a desk or table	Skiing sounds