## BROWNIE INVENTOR BADGE - MEETING 1

Badge Purpose: When girls have earned this badge, they'll know how to think like an inventor.
Activity Plan Length: 1.5 hours

| Time | Activity | Materials Needed |
| :---: | :---: | :---: |
| 15 minutes | Getting Started <br> - Girls recite the Girl Scout Promise + Law and sing the Brownie Smile song. | (Optional) Girl Scout Promise and Law poster (Optional) Brownie Smile song lyrics poster |
| 10 minutes | Ministry of Silly Walks <br> - Girls will test their creativity by inventing silly walks. | None |
| 15 minutes | All This Needs Is a Little... <br> - Girls brainstorm ways to improve everyday activities. | Large sheets of paper Markers Tape Scrap paper |
| 15 minutes | Creative Chef's Veggie Dip <br> - Girls experiment with different ingredients to make their own dip. | Washed and cut fresh fruits and/or vegetables Plates Napkins Small cups or bowls Spoons - standard size and small teaspoons for flavor items Dip bases (mayonnaise, oil, sour cream, or plain yogurt) Dip flavors (vinegar, mustard, salsa, ranch dressing mix, paprika, cinnamon sugar, honey, salt, pepper, spices, herbs, or sauces) |
| 15 minutes | Snack Chat <br> - Girls enjoy their dips and chat about the experiment process. | $\square$ Snack from Activity \#3 |
| 10 minutes | Look What I Have! <br> - Girls brainstorm new ways to use everyday objects. | Paper, tennis ball, Nerf ball, and/or other props |
| 15 minutes | Wrapping Up | $\square$ (Optional) Make New Friends song lyrics poster |

Badge Connection: Step 1 - Warm up your inventor's mind
Materials Needed: None

1. Have girls line up along one side of the room. Tell them that on the count of three, everyone is going to walk across the room together, walking normally.
2. After a few steps, stop the group to try something more interesting. Can there be more than one way to walk across the room? Start with the girl next to you and ask how she would change what her feet are doing. If she gets stuck, offer a few choices, and then have the group pick a new way to walk (e.g. maybe everyone points their toes as they bring their feet up, turns to their left and shuffles sideways, or walks just on tiptoes).
3. Move on to the next girl and have her add something to the way their knees move. Then ask if both legs have to do the same thing, and have the next person choose something new for the right leg only.
4. Add movements for arms, shoulders, and head.
5. If you have a large group and want to give everyone a chance, start over partway through with plain walking and build a new silly walk from scratch. Or, divide into teams of 8-10 and talk each group through adding one variant at a time.

Activity \#2: All This Needs Is a Little...
Time: 15 minutes

Badge Connection: Step 3 - Make a needs list
Materials Needed: Large sheets of paper; markers; tape; scrap paper

1. Ask the girls to close their eyes and think about what they've done today, even the ordinary things. Start with getting up in the morning.

- What happens in your home each morning?
- Was there anything different about today?
- What did you do to get ready? Get dressed, eat breakfast, etc.?
- Did you go to school today? How did you get there?
- Continue throughout the day, up to and including the Girl Scout meeting right now.

2. Ask girls to share some examples of what they did and take notes on scratch paper as you collect ideas. Be ready with some prompts if girls get stuck, such as: dressing for school, taking care of someone else (younger siblings, a neighbor, pets), connecting with a friend, cleaning your room, and preparing for a meal.
3. Collect examples until you have at least five tasks that are common enough for everyone to understand, and general enough that they could be done in different ways. If you have a large group, make sure you have at least one task for every three girls.
4. Have volunteers write out the actions on large sheets of paper, one per sheet, in big letters. Tape them up around the room.
5. Divide the girls equally among the action papers and have them think of anything about this task that could be an issue.

- If the task is "setting the table for supper," issues could include arguments about whose turn it is, not being able to reach items on a top shelf, carrying items that are easy to drop, or a younger sibling who gets in the way.
- For "brushing your teeth," issues could include getting all the toothpaste out of the tube, dental floss that won't tear or that gets stuck, getting to the upper back teeth, or any of the mess left behind.

6. For now, girls don't have to worry about any solutions. Before we can fix something, we have to know what the problem is! Give girls three minutes to discuss, brainstorm, and draw or write their "issue" ideas.
7. Now let the girls move to any paper that interests them. Have them look at some of the issues and see if they inspire any additional issues or solutions. They can add their ideas right to the paper.

Badge Connection: Step 2 - Find lots of ways to solve the same problem
Materials Needed: Washed and cut fresh fruits and/or vegetables; plates; napkins; small cups; spoons (standard size and small teaspoons for flavor items); dip bases (mayonnaise, oil, sour cream, or plain yogurt); dip flavors (vinegar, mustard, salsa, ranch dressing mix, paprika, cinnamon sugar, honey, salt, pepper, spices, herbs, or sauces) Prep Needed:

- Spread the snack items on a table to serve to girls.

1. Give each girl a small cup and have her choose one spoonful of a base ingredient to start her special recipe dip. She will keep the spoon to mix other ingredients in. Use other spoons to scoop out or measure the flavor ingredients. Make sure girls' personal mixing (and tasting) spoon does NOT go into any of the other containers.
2. Go over the flavor options available and tell each girl to pick one or two items to flavor her dressing (to make vinaigrette, a girl should choose both oil and vinegar to start and then add one or two additional flavor ingredients).
3. After stirring up her recipe, each girl can taste a little from her spoon and decide if she needs more of one of the ingredients.
4. Choose some fruits or veggies to try with your dip and enjoy!

## Activity \#4: Snack Chat

Time: 10 minutes

Badge Connection: Step 2 - Find lots of ways to solve the same problems
Materials Needed: Snack from Activity \#3

1. While enjoying snack, here are some things for girls to talk about.

- What is unique about your snack?
- What does it remind you of?
- If you could start over, what would you change?
- What else could be an option that we didn't use?

Activity \#4: Look What I Have!
Time: 10 minutes

Badge Connection: Step 3 - Make a needs list
Materials Needed: Paper, tennis ball, Nerf ball, and/or other props

1. Remind the girls of the brainstorming they did on daily tasks and problems associated with those tasks. Sometimes, something simple we already have around the house can make a perfect solution.
2. Have everyone gather in a circle. Hand the paper to the girl on your left and the ball to the girl on your right (or use whatever props you brought).
3. Tell them that they should think about how this item could be used in a new way. In the case of the paper and ball, it should be something other than writing or playing a game. It might not be easy or practical, and it might only remind you of the tool you really need.
4. When a girl is ready to share, she can start with "Look what I have!" and then name and/or act out her object and its purpose. For example:

- "Look what I have! I can make this paper into a drinking straw."


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- "Look what I have! I can make a fun painting with the ball by dipping it in paint and rolling it around the paper."

5. Girls can fold, bend, or squeeze the object, and they can describe damaging it by cutting, tearing, or pulling apart, but they can't actually do anything that would ruin it for the next person. They'll just have to pretend.
6. When someone else has something to suggest, they can raise their hand and ask for the object. Then, they should walk over and say, "Look what I have!" as they take the object back to their spot and describe its new purpose.

Materials Needed: (Optional) Make New Friends song lyrics poster.
Close the meeting by singing Make New Friends and doing a friendship circle.

## More to Explore

- Field Trip Ideas:
- Attend a regional engineering competition, such as FIRST Robotics or FIRST Lego League, or invite a local high school team to visit with your troop or service unit. Team members are usually expected to do outreach to participate on the team, so you would be helping them as well.
- Visit a hardware or home repair store and look at the tools. Find tools you haven't seen before and make some guesses before asking about their actual use.
- Speaker Ideas:
- Invite someone with a background in marketing or advertising to discuss how to promote a new product.
- Invite an engineer that works in product development to talk about their experiences.

