## Brownie Bugs Badge - Meeting 2

**Badge Purpose:** When girls have earned this badge, they'll know all about bugs.

**Activity Plan Length:** 1.5 hours

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Materials Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 minutes</td>
<td>Getting Started</td>
<td>- Girls recite the Girl Scout Promise + Law and sing the Brownie Smile song.</td>
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<td></td>
<td></td>
<td>□ (Optional) Girl Scout Promise and Law poster</td>
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<td>□ (Optional) Brownie Smile song lyrics poster</td>
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<tr>
<td>15 minutes</td>
<td>Make a Butterfly Chrysalis</td>
<td>- Girls create butterfly chrysalis.</td>
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<tr>
<td></td>
<td></td>
<td>□ One small (4-6 inches) balloon (1 per girl)</td>
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<td></td>
<td></td>
<td>□ Paint brushes</td>
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<td></td>
<td></td>
<td>□ Glue or Mod Podge</td>
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<tr>
<td></td>
<td></td>
<td>□ Multicolored tissue paper</td>
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<tr>
<td></td>
<td></td>
<td>□ Wax paper for drying</td>
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<td></td>
<td></td>
<td>□ (Optional) Pictures of chrysalis and/or cocoon</td>
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<tr>
<td>15 minutes</td>
<td>Spider Web Game</td>
<td>- Girls weave and untangle a spider web.</td>
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<td></td>
<td></td>
<td>□ Small ball of yarn (1 per girl)</td>
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<td></td>
<td></td>
<td>□ Scissors</td>
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<tr>
<td>15 minutes</td>
<td>Snack Chat</td>
<td>- Girls enjoy a healthy snack and discuss bug habitats.</td>
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<td></td>
<td></td>
<td>□ Healthy snack</td>
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<tr>
<td>15 minutes</td>
<td>Plan a Bug Field Trip</td>
<td>- Girls go on a scavenger hunt for bugs.</td>
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<tr>
<td></td>
<td></td>
<td>□ Paper</td>
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<td></td>
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<td>□ Writing utensils</td>
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<tr>
<td></td>
<td></td>
<td>□ Magnifying glass</td>
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<td>□ (Optional) Pictures of bugs</td>
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<tr>
<td>15 minutes</td>
<td>Wrapping Up</td>
<td>- (Optional) Make New Friends song lyrics poster</td>
</tr>
</tbody>
</table>

### Getting Started

**Time:** 15 minutes

**Materials Needed:** (Optional) Girl Scout Promise and Law poster and (optional) Brownie Smile song lyrics poster

Welcome everyone to the meeting, recite the Girl Scout Promise and Law.
Activity #1: Make a Butterfly Chrysalis

Time: 20 minutes

Badge Connection: Step 4 – Explore bug homes

Materials Needed: Small (4-6 inches) balloons; paint brushes; glue or Mod Podge; multicolored tissue paper; wax paper for drying; (optional) pictures of chrysalis and/or cocoon

Prep Needed:
- (Optional) If you'd prefer, you can cut the tissue paper into 2” x 2” squares prior to the meeting.

1. Explain to girls that butterflies start out as caterpillars. Caterpillars find a twig or leaf on which to form a chrysalis, which is like a cocoon. After the caterpillars form the chrysalis, they turn into butterflies and emerge from the chrysalis.

2. Have girls make a model of a butterfly chrysalis. First, girls should rip the tissue paper into small pieces (about 2” x 2” squares).

3. Next, blow up and tie off the balloons; ask the girls if they need any assistance.

4. Use the paintbrush to apply a thin layer of glue onto the tissue paper and then paste it onto the blown-up balloon. Continue until the entire balloon is covered with one layer of tissue paper. Let the layer dry completely and then apply another layer, continuing until you have at least three layers. When the entire balloon is covered with three layers of tissue paper, paint another coat of glue over the balloon.

5. Place balloons on wax paper to dry. When the meeting concludes, send balloons home with girls. Instruct them to leave the balloons on the wax paper at home until the balloons are completely dry (at least 24 hours). The girls might have to rotate the balloon occasionally to allow it to dry evenly.

6. When balloons are completely dry, girls should take a pin or needle and make a small hole near the knot at the top of the balloon. The idea is to slowly let the air out of the balloon—not just pop it. If the girls cut too large of a hole, the air will release too quickly and the chrysalis might break. As the air is released, the balloon should pull away from the edges to form a hollow globe (the tissue paper and dried glue).

NOTE: Check for latex allergies with the families prior to the meeting. If there are latex sensitivities, use two Styrofoam cups, plastic bowls, or other non-stick surfaces as the mold for the chrysalis. After the two halves have dried, the chrysalis parts can be gently removed from the mold and taped together with clear tape.

Example (source: www.classic-play.com)
Activity #2: Spider Web Game

Time: 10 minutes

Badge Connection: Step 4 – Explore bug homes
Materials Needed: Small (golf-ball sized) ball of yarn (1 per girl); scissors

1. Girls should stand in a circle and loosely tie the end of their ball of yarn around their waist.
2. Taking turns, girls throw their ball of yarn across the circle to another girl. That girl wraps the yarn around herself once and throws it to a different girl.
3. When all balls of yarn are gone, discuss with girls that interwoven yarn is similar to a spider’s web. Talk about how spiders spin webs in order to catch food.
4. Either allow girls to untangle themselves, or cut through the circle in several spots with a scissors. Save yarn pieces for other crafts or finger knitting.

Activity #3: Snack Chat

Time: 15 minutes

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

1. While enjoying a healthy snack, here are some things for girls to talk about:
   - What are examples of bugs’ homes? (cocoons, spider web, chrysalis, ant farm)
   - What would it be like to live in each of the types of bug homes?
   - Which bugs have you seen in your own home?
   - Which bugs have you seen in your own yard?
   - Learn some vocab words! **Entomology** means the study of bugs. **Entomologists** study bugs. **Lepidopterist** is an entomologist who studies butterflies. An **apiologist** studies honeybees and an **apiary** is a place where beehives of honey bees are kept.

Activity #4: Plan a Bug Field Trip

Time: 15 minutes

Badge Connection: Step 5 – Take a bug field trip
Materials Needed: Paper; writing utensils; (optional) magnifying lens; (optional) pictures of bugs

Prep Needed:
- If your troop has an indoor bug walk, set up the site as a bug treasure hunt. Cut out 6-10 pictures of bugs from magazines, internet printouts, etc. and write 2-3 facts about each bug on or near the picture. Hide the pictures for the girls to search for later. If possible, hide pictures in places consistent with the location you would find each bug. (For example, a picture of an ant could be located near a food source or garbage can. A picture of a spider could be located up in a corner of a room.)

1. Ask the girls to identify places in their community they have visited where bugs are displayed. (Examples could include: zoo, botanical gardens, farm, park, or wooded area.) Ask the girls to identify places they have not yet visited but where they think they would be able to see and study bugs.
2. Ask girls what things they would like to see on a bug field trip. Would they like to see bugs in action (such as an ant farm or a spider spinning its web), or would they like to see many examples of similar species (such as a butterfly cases at a museum)? Would they like an opportunity to hold or touch bugs (such as at a museum where staff will supervise children in holding or touching bugs)? Which bugs are they most interested in seeing on a field trip?
3. Ask girls to identify what they should bring on a bug field trip. Examples would include a magnifying glass and paper to record observations.
4. If weather permits, take a bug walk or hike outside in an area near the meeting location. Walk slowly and identify any bugs observed along the way.
5. If weather or facilities do not permit a bug walk or hike, lead the girls on a bug treasure hunt. Either in pairs or individually, instruct girls to look for the bug pictures you hid prior to the meeting. After each girl or pair of girls finds at least one picture and all pictures have been found, gather girls back in a circle. Ask girls to share the picture(s) and information they found with the group.

**Wrapping Up**

Time: 15 minutes

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:**
  - Visit a butterfly garden and learn what flowers are attractive to butterflies.
  - Visit a bee colony and learn how honey is made.
  - Visit a large living ant farm and observe ants at work.

- **Speaker Ideas:**
  - Invite a beekeeper to speak about bee colonies and honey productions.
  - Ask an entomologist to speak with the girls about bugs in their community.