



Essential Notes for Adult Leaders

1. Q: What badges will Brownies be able to earn with the GoldieBlox kit?

Brownies can earn the 3 mechanical engineering badges kit. The badges are Fling Flyer Design, Leap Bot Design, and Race Car Design.

It is likely that you can earn one badge in a meeting.

You do not have to do all three badges, nor do you have to do them in a particular order.

In order to see all of the steps for each badge, take a look at the VTK or at the url: www.gswestok.org/content/dam/gswestok/stemcurriculum/GoldieBlox-Kits/Brownie-GoldieBlox-STEMkit.pdf

It is recommended to read this in advance.

2. Q: How many girls can use the kit?

There are four sets in each box. So if the girls work in pairs, then eight girls can use one kit. More than two girls usually means that one girl ends up being a wall flower and is not recommended.

3. Q: There are A LOT of pieces in these kits. How do I deal with this?

It is good to have a tray or a cookie sheet with edges for each pair of girls in order to keep all the pieces in one place as the girls are working.

Depending on your meeting place, the girls may be best sitting on the floor. Then the pieces cannot bounce as far away!

4. Q: What is in the kit:

4 sets of materials for the girls, including

- A container of all the parts to build a Fling Flyer, a Leap Bot, or a Spring Car. The girls will need to disassemble one in order to have enough parts to create the next item.
- A laminated card with the parts list and picture for Fling Flyer, a Leap Bot, or a Spring Car.
- A big poster with all the parts included (on one side) and the items that can be built (on the other side).
- A laminated card of all the parts included.

For the adults:

- Leader guide
- List of definitions

5. Q: Are all of the material needed to earn these badges included in the kit?

The Fling Flyer Design badge starts with an activity of making paper airplanes. You will need to provide paper, and possibly the girls will want scissors, tape and markers. Perhaps some paper clips to act as weights.



The girls will fly their airplanes, and you may want a tape measure or ruler to determine distances. You may want masking tape to indicate a starting line or to create a target.

You will want to make copies of worksheets that can be used to record the results of the flights of their paper airplanes, and/or the fling flyer that they make. There is a master copy in the kit.

The girls will record their plane's accomplishments or performance, and so they will need pencils.

The Leap Bot Design badge asks the girls to try to leap as high as possible. If you want to see how high each girl jumps using the different suggested options, you might put up a big piece of poster paper and have the girls leap and put a post-it note or a piece of masking tape with their initials as high as possible on the poster paper when they leap. You will need to bring poster paper, post-it notes or masking tape for this.

The girls will need to design a way to determine how their leap-bot performs. You may want some more poster paper, yardsticks or rulers, and tape for them to use as they design their testing station.

You will want to make copies of worksheets that can be used to record the results of the leaps of the leapbots that they make. There is a master copy in the kit.

The girls will record their leapbot's performance, and so they will need pencils.

The Race Car Design badge asks the girls to explore friction and force by rolling a ball back and forth. So you will need to bring some balls. (They don't have to be the same. They could be a marble, tennis ball, golf ball, soccer ball, ping pong ball, basketball, baseball, etc.)

You might also bring a beach towel or a carpet square or large paper/cardboard or tablecloth so that the girls can roll the balls on different surfaces.

You also will need to create a ramp for the cars. So you will need something to create the ramp (a cookie sheet, a stiff piece of cardboard, a sheet of wood, some folders, a big cutting board). You will need something to vary the height of the ramp, such as books, boxes or a table.

The girls will need to design the testing criteria for the performance of their cars. So you might need yardsticks or measuring tape to measure distance. You might want to use your phone as a timer if the girls decide to measure speed instead of distance. You may need masking tape to create a starting line.

The girls will need a way to record the performance of their card. You can use a big piece of paper with markers that is shared, or the girls can create individual worksheets. So you will possibly need poster paper, plain paper, markers and/or pencils.



6. Q: How do I take care of the GoldieBlox pieces?

Take the pieces apart completely before returning the kits. Sometimes the pieces won't come apart easily, especially those little blue connectors. Try some WD-40 in a pinch (or when you run out of patience!)

If you are missing pieces in a kit, please fill out the feedback form and provide to the Badgerland staff member so that they can be replaced, if possible.

By making sure that each kit is complete when it is returned, and all pieces disassembled, will make it easy for the next troop to have a good experience when they use this kit. Please be a sister to other Girl Scouts!

7. Q: My girls LOVE this! Can we do more?

The poster has other suggestions for things that can be created.

If the girls decide to do the Pom-Pom-apult activity, they can use the little pom-poms. If no pom-poms are available, use the tissue paper provided to tear off little pieces and roll them into little balls as an alternative.