

Preparing for Your VEX 123 Activity

What Do I Need to Set Up this Activity?

Materials needed for each group (recommended group size is two students):

- Student Handout
- [VEX 123 Robot](#)
- VEX 123 Art Ring
- [VEX 123 Field with walls](#) (two groups can share one Field if needed)
- Scissors and tape (to attach elements to the Field)
- Craft materials (optional – for decorating the Art Ring)
- Wet erase marker and wet wipes (optional – for drawing directly on the Field and cleaning it off)
- Certificates for each participant

See the Activity Notes for activity-specific preparation information.

Resources to Help You Get Started with VEX 123

If you are not already familiar with VEX AIM, use the following articles to help you get started:

- [Coding with the Touch Buttons on the 123 Robot](#)
- [Using the 123 Art Ring](#)
- [Using the VEX 123 Robot](#)
- [Identifying the 123 Robot's Features](#)

For additional support and using the Coder and Coder cards, use these articles:

- [Using the VEX Coder](#)
- [Stepping Through a Project with the Coder](#)

Leading Your VEX 123 Activity

All VEX 123 Girl Powered activities follow the same structure.

1. **Introduction** – Set the stage for the activity by reading the context in the Activity Notes.
2. **Hands-on Activity** – Follow the steps in the Activity Notes to facilitate the hands-on portion of the activity.
 - a. Project or give students the Student Handout to reference as they are practicing.
 - b. Students should work collaboratively throughout the activity.
 - c. Walk around the room to help students with activity tasks and to talk with them about what they are doing and learning.
 - d. The goal of Girl Powered activities is to get students excited about STEM and robotics – not mastery of a concept or task.
3. **Wrap-up** – Come back together as a whole group for a brief discussion and celebration of learning.

Wrapping Up Your VEX 123 Activity

After your students have completed the activity, wrap up the experience with a brief discussion.

- **For a coding-focused discussion**, compare projects to see how students approached the same challenge in different ways. Ask questions like:
 - How is this project similar or different to yours?
 - What is something that surprised you about this project?
 - What is another way this group could have moved to finish the challenge?
- **For a collaboration-focused discussion**, talk about how students worked together. Ask questions like:
 - What is one way you helped your partner?
 - What is something you learned from your partner today?
 - What was your favorite part of working with your partner?
- If you have a guest speaker, have them reflect on how this activity connects to their STEM experiences, and share that with the group.

Allow time for cleaning up.

- Have students clean off their Fields, and remove any decorations from their Art Rings.

Celebrate Success!

After the activity has ended, celebrate with your students!

- **Distribute certificates to all workshop participants.** Add their names and the date, and any other details you would like to celebrate.
- **Share photos or videos of students with their certificates or decorated 123 Robots!** Explain what makes that moment meaningful to you or the student(s). Tag your posts with **#GirlPowered** and **#WhyIAmGirlPowered** so others can celebrate with you!