



## **IN THE WORKSHOP**

Gather your crew of adult and child partners to build some seriously speedy “bots.” As an adult partner, you are charged with showing interest, asking good questions, joining in but not leading, and saying “I don’t know but let’s try it” a lot (even if you do know)! Here are some strategies to use throughout the workshop that you might find effective. But also feel free to ask Camp-In staff for assistance along the way!

**Be involved, but let children take the lead.**

**Ask questions and invite predictions. Your interest will keep your team both engaged and thinking!**

Legs

- How many legs will you add? Is it better to have more or less? Why do you think so?
- How long should the legs be?
- What will the feet look like?

Motor

- Where should you put the motor? Should you place the motor close to the edge or in the center?
- Which way should the motor point – to the front, to the back, or to the side?

Motion (For each change you make, observe the effect on your bot’s motion.)

- Does your bot move? How? Does this motion remind you of anything you’ve seen before?
- When you change the motor, does it affect how your legs are built?
- When you change the legs, does it affect where your motor must be placed?

**Promote the testing of those predictions and observe the results.**

- Encourage children to only change one thing at a time, test it, then observe the results and think about what else, if anything, could be changed.

**Emphasize that there is no right answer or one right way, push them to keep trying.**

- Use specific, positive feedback to encourage children along the way.
- Point out their effective strategies for solving the problem, like trying new techniques, having purposeful actions, or making clear observations.
- Compliment their behavior if they are not getting the results they want, but are being a diligent tester, are seeing the benefits of their failures, or are working well with others.

**Support collaboration and idea sharing.**

- Encourage them to listen to the ideas of everyone in your crew.
- Explore the designs and results of other crews at your table or in the room.

**Foster creativity and unusual ideas.**

- What about no legs?
- How about tails, kickstands, or pedestals?
- What about skis, wheels, or bulldozer treads instead of legs?