

WELCOME TO BODY FORWARD!

WEEK 5 - If your team is on track:

Robot Game:

1. **Mechanical Design:** Your Robot Chassis should be complete, and your team should have at least one finalized attachment for your first venture from base. Your goal might be to complete one mission or you may be combining two or more missions together that are close together on the table and can utilize the same attachment. Once you have a successful first run, identify your second run from base and any attachments that need to be created to allow you to complete the next mission or missions.
 - a. **TIP:** *If you are using motors on more than one attachment, you might want to consider incorporating that third motor into your robot chassis as a power take-off (PTO). A PTO allows you to add your motorized attachments right to your motor on the robot, which will save you time at the table (your team will not have to hook the motor to the port and you won't have to separate that third motor from one attachment and add it to another)*
2. **Programming:** Remember to build your programs one action at a time, so that you can more easily debug your program when unexpected actions are encountered or you find that the robot performance is inconsistent.
 - a. **TIP:** *Although Bluetooth is not legal to use at a competition, it can be a very valuable programming building tool. Your team can become more efficient in building new programs if your team does not have to move the robot off the field as you add to your program. You can also quickly test isolated sections of your program more quickly and efficiently with Bluetooth. (Best practice of former FLL team, The Cougars, www.cougarrobot.com).*

Project:

1. **Research:** By this time, your research should be done and your solution should be identified and fleshed out.
2. **Sharing:** The audience you plan to share your research with should be identified by this time. Your team should be making contacts with the appropriate groups and preparing for that presentation, whether it is a proposal that you will give to a city council, an informational display at a medical center, or information you plan to post on a website.
3. **Presentation:** Now, your team needs to start planning for the project presentation for your judging session at your tournament. How will you deliver your information to your judges? Will you use a skit? A PowerPoint Presentation? Will you use a game show format? A newscast? Will you need props? Costumes? Try to create a format that is fun but informative.
 - a. **TIP:** *Although technology is great, it isn't always the best method to deliver your research presentation to judges at your tournament. Some events do not have presentation support equipment, and sometimes technology can fail. Make sure that your team has a contingency plan if whatever technology you plan to use in your judging session does not work.*

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Core Values:

1. **Inspiration:** Try to think of ways that your involvement with FLL has inspired your team. How can your team inspire others?
 - a. **TIP:** *Your team could invite some other teams from your area to a practice tournament. You could do a practice judging session, a practice robot competition, or both. You could invite just a couple of teams or six or more. If you would like to do an informal practice tournament and you would like help to get the information out or to invite a few FLL judges and referees to your event, contact Kathy Levine. Practice tournaments are not only fun and allow for you to share ideas and experiences with other FLL teams, it also inspires other FLL teams! You could also attend a practice tournament. Visit the "Local Competitions" page of the Ohio FLL website at http://edoutreach.wpafb.af.mil/Robotics/pages/competitions_loc.html. We will update the listings as more teams submit information to us.*

GOOD LUCK AS YOU MOVE FORWARD THROUGH WEEK 5...

