

PIT SET-UP

The Pit is a representation of your team. The goal is to have a presentable area which is efficient to maneuver and work on the robot and this pit set-up plan will help serve as a guide to create such an organized environment. The standard pit size is 10'x10'x10' (3m x 3m x 3m) but some venues may have smaller pit sizes check your event information before heading to competition. [Find Local Support](#)

PIT SET-UP REQUIREMENTS

- ❑ Go through this workbook and its questions with your team.
- ❑ This worksheet includes the **following sections**:

01. Pit organization: functionality
02. Pit organization: display
03. Safety
04. Pit responsibilities

01

PIT ORGANIZATION:

FUNCTIONALITY

DISCUSSION

Think about how you will efficiently service your robot.

1. Which parts/mechanisms of your robot would you need to service during competitions? How often?

2. What features of robot set-up would help you access these parts/mechanisms? (e.g. propping the robot up, walking space around the bot, etc.)

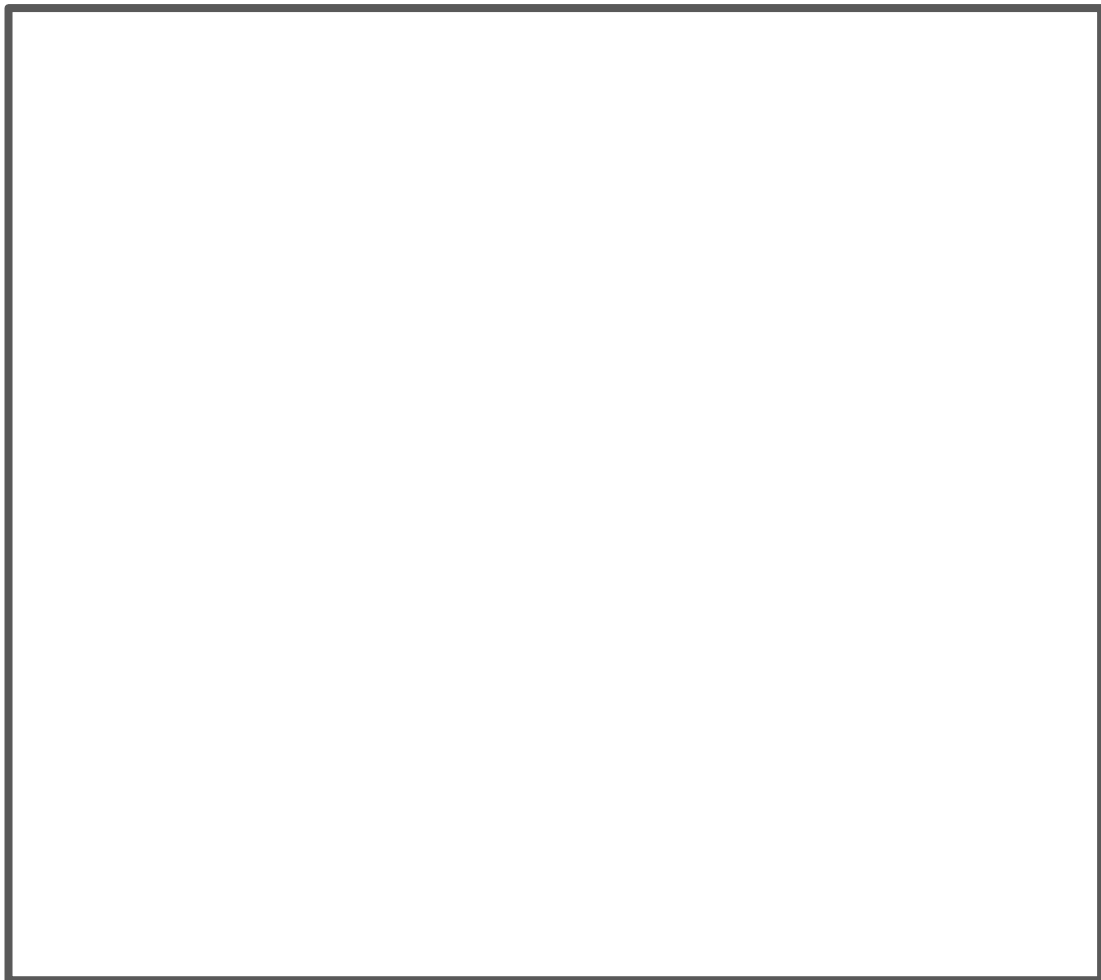
3. Which tools does your team use most often when servicing the robot? Which parts of the robot are replaced most often?

01

PIT ORGANIZATION: FUNCTIONALITY DISCUSSION

4. Sketch out your robot's set-up and placement in the pit.

(Think about space needed to work on and test your robot in your pit. Where do batteries get charged? Where are bumpers stored?)



01

PIT ORGANIZATION:

FUNCTIONALITY

DISCUSSION

5. Where can you place tools/replacement parts for easy access?
Do you have a toolbox or boxes to organize these items?
Sketch this below.

01

PIT ORGANIZATION: FUNCTIONALITY DISCUSSION

6. Who is in charge of packing up tools and materials to bring them into and out of competition?

Note that this crew may not be limited to four people, a rotation of people is also a possibility.

Person	Responsibility

02 PIT ORGANIZATION: DISPLAY



DISCUSSION

Think about how you want to showcase your team. The pit is a place where you have the opportunity to display your teams branding and share your team story with judges, sponsors and other teams alike.

1. Display

What messages/information do you want to convey through displays throughout your pit?	What visuals/pictures can you use to convey it?

02 PIT ORGANIZATION: DISPLAY



DISCUSSION

2. Are there any materials you want to distribute to other teams?
What other information or materials do you need to bring?

3. Who is in charge of packing up the display and other materials to bring them into and out of competition?

Person	Responsibility



DISCUSSION

Think about how you will ensure safety while operating efficiently. Check out the [FIRST® Safety Manual](#).

1. What are the most likely threats in regards to safety that your members could encounter in the pits?

2. What type of PPE and safety equipment would you need to have to address those threats?

3. Where can you put this equipment for easy access? Sketch below

03 SAFETY



DISCUSSION

4. What key knowledge/skills should members have to stay safe in the pit?

5. Who's responsible for teaching these skills and knowledge?

6. How will you make sure all members have this knowledge memorized during competition?

04 PIT RESPONSIBILITIES



DISCUSSION

Think about how you will present your team through effective distribution of labor.

1.

What different skills do you want those in the pit to have?	Who (all) would be able to fill that role? Make sure students are comfortable and able to speak to other teams and judges

04 PIT RESPONSIBILITIES



DISCUSSION

2. Based on the number of people in each row in the table above, how many rotations of members would you have? How long would each rotation be?

3. Keeping safety and efficiency in mind, what is the limit of the amount of members in the pit at a given time?
