



Robot Rules:

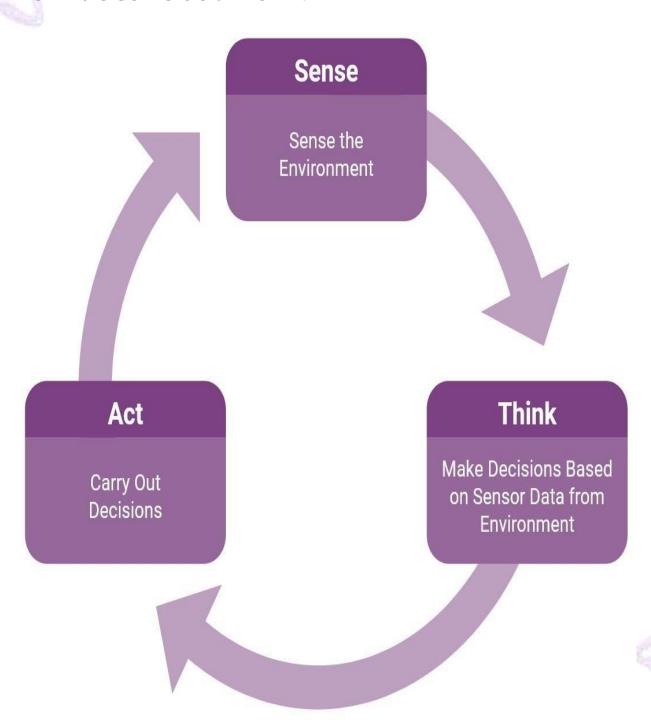
- 1. The Robot VEX 123 has built-in motors and sensors for movement in environment around it.
- 2.The Robot VEX 123 has built-in sensors for movement, light detection, and sound detection.
- 3.To turn on the 123 Robot by pushing the wheels along a surface to (wake) the 123 Robot, we will hear the start up sound with light.
- 4.To turn off the 123 Robot, press and hold the (start)





button for 3 seconds, the light show yellow and we will hear a click sound.

How does robot work?





Through this process, the child develops thinking skills, creativity, and problem-solving abilities to figure out how to accomplish the tasks successfully.

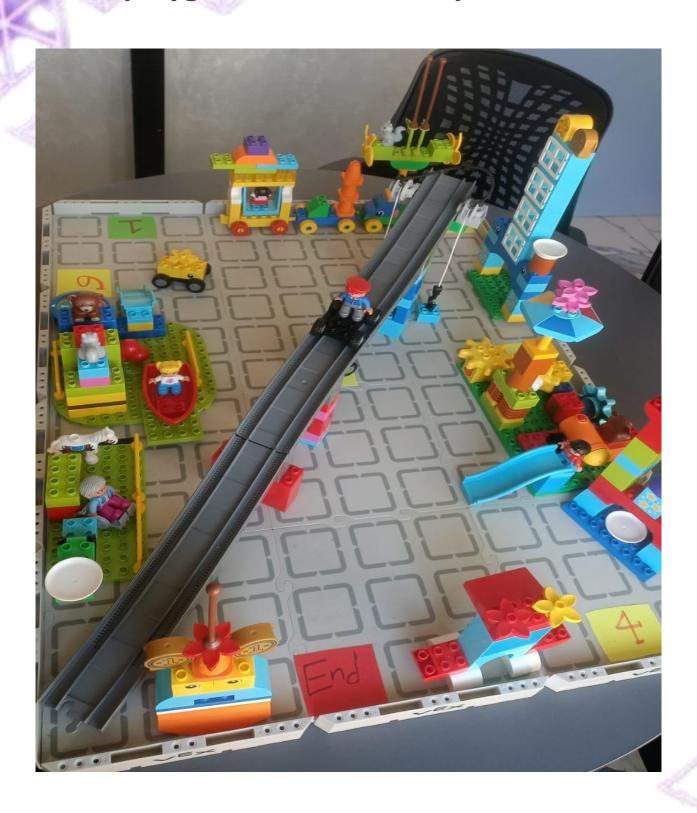


(Game Rules of Vex 123 competition for the smart city).

- The project consists of 6 tasks that the child must complete to make the robot perform its movement and accomplish the required mission.
- The competition is based on a Smart City project placed on a field that includes a house, a farm, a windmill, a bridge, a tower, a train, and a fishing house. The city has roads to allow the robot to move smoothly.
- The robot has 6 steps to move and complete the mission. It starts from Task 1 and continues until Task 6, successfully completing each task. After that, the robot reaches the finish line after completing its mission in the Smart City.
- Each team should have a poster that will put all the steps of the work how they take the training and they must understand what in it to answer in the interview part.



The playground of the Competition:



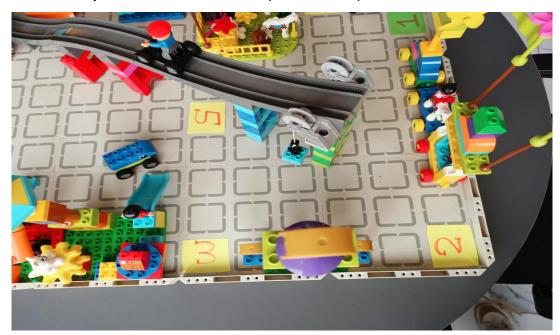


The steps the child needs to know in the competition:

First Step: From Point 1 to Point 2 (like letter U)



2. Second Step: From Point 2 to Point 3 (like letter U)





3. Third Step: From Point 3 to Point 4 (like letter U)



4. Fourth Step: From Point 4 to Point 5(like letter L)

Note: "The robot in this specific step 4 to 5 moves in an exceptional motion like the letter 'L,' and upon reaching the fifth step, it aligns with the parked car at the fifth lines to proceed to another step."





5. Fifth Step: From Point 5 to Point 6 (like letter L)



6.Sixth Step: From Point 6 to the End Line(like letter L)





The scoring is as follows:

★Step 1 Score: 5 points

★Step 2 Score: 5 points

★Step 3 Score: 5 points

★Step 4 Score: 10 points

★Step 5 Score: 5 points

★Step 6 Score: 10 points

Final Total Score: 40 points as the maximum score to complete the competition.

Each team must achieve the required points within the given time to win.

The winning team is the one that collects the highest score in the shortest time. The competition consists of 3 matches in a consecutive series of task executions.



★1. First Match (Touch Code) = 3 Steps:

From step 1 to 2 = 5 points

From step 2 to 3 = 5 points

From step 3 to 4 = 5 points

*2. Second Match (Coder Cards) = 2 Steps:

From step 4 to 5 = 10 points

From step 5 to 6 = 5 points

★3. Third Match (Coding) = 1 Step:

From step 6 to End = 10 points

★Each one of the three matches consists of 5 minutes:

- 1. Touch Code 5 minutes
- 2. Coder Cards 5 minutes
- 3. Coding 5 minutes

The Total Time of the three matches is 15 minutes.



Summary:

Matches	Time
First match (touch	5 min
code)	
Second match	5 min
(Coder cards)	
Third match	5 min
(coding)	