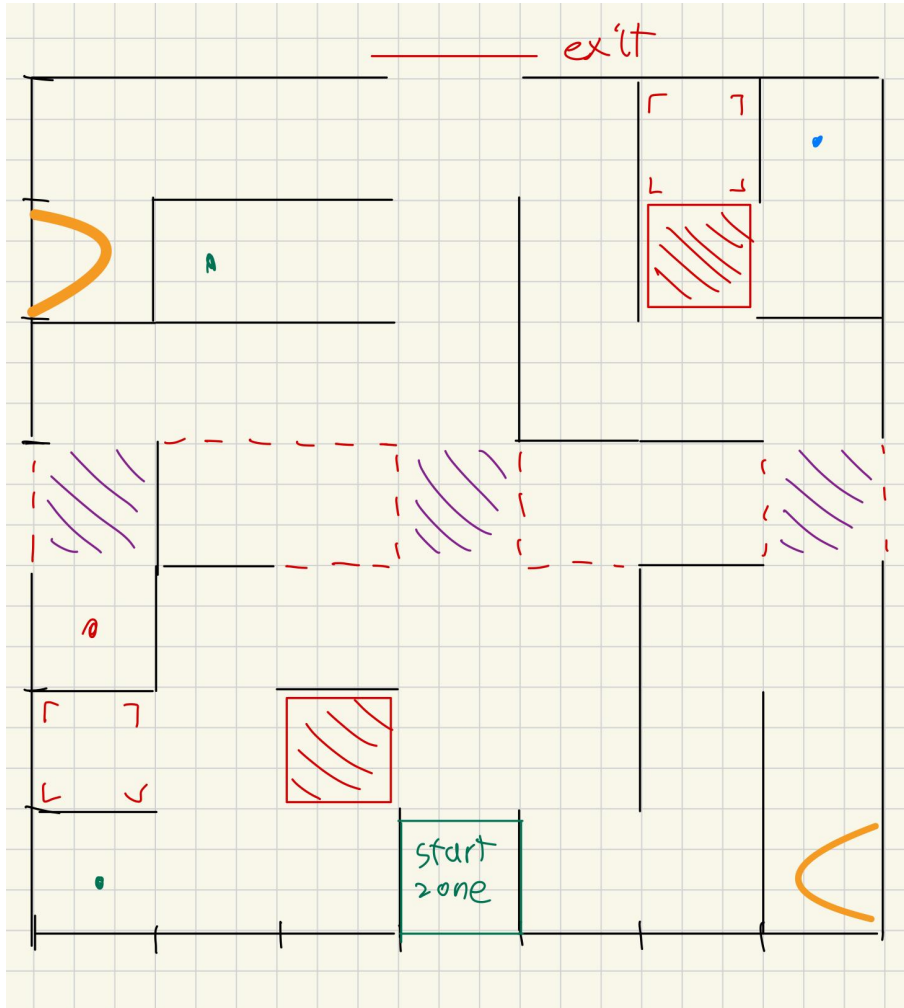


Into the Forest: Maze Runner - Official Rules & Guidelines

Hosted at ISP, 27. May 2025



The Mission: [Title of Mission]

Mission description

A group of biologists is in the forest, and all they have with them are their robotic partners. There is only a limited amount of time, and many obstacles and challenges are coming up, but their robots need to venture out to collect data and help balance the environment.

Their robots are accomplishing different challenges that help the researchers find new data or help the equilibrium of the forest. They move throughout this maze of a forest, venturing out into the unknown to assist the team of researchers.

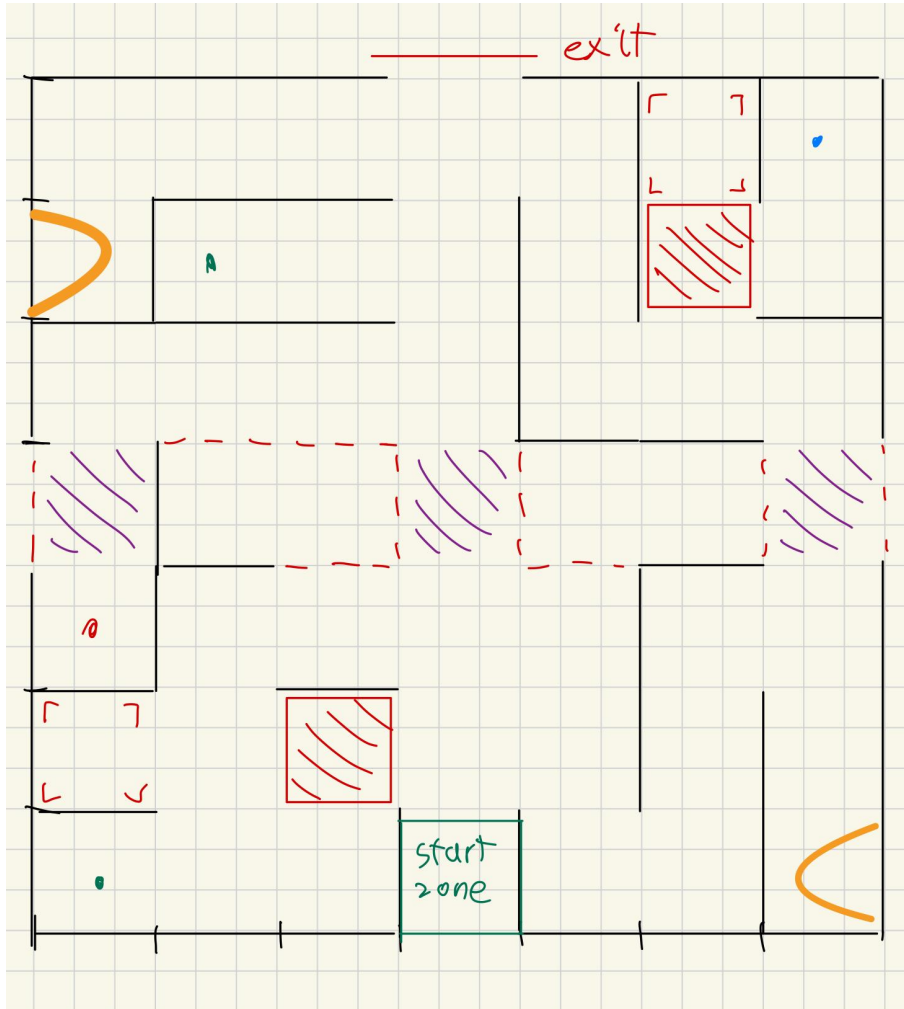
The Objective of the Game: to train middle schoolers for upper school competitions

Objective description

Into the Forest is a Maze Runner game where students build robots to go through maze. In this maze there are various objectives and challenge and to win teams must achieve the highest score. Each team gets a set amount of time allotted to them in which through a preset code can let their robot run independently.

1. Field Setup

- The competition field is a **2m x 2m** square.
- The width of each corridor is **25 - 30cm**.
- A 3x3 square in the field image above represents 1 tile.



2. Game Elements



Start Zone

The robot must stay motionless in the given start zone area before starting the round.



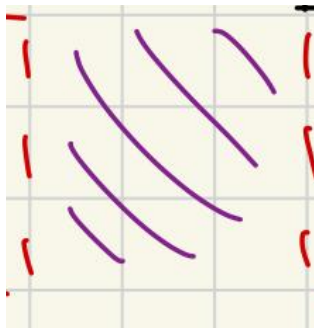
Exit Line

When the robot makes contact with the exit, the clock will stop and robot will be considered 'escaped'



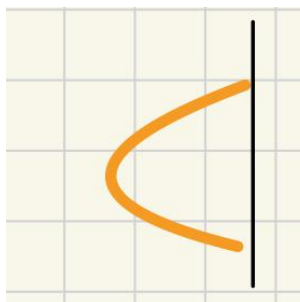
Colored Cube

Each small dot represents the cube used for cube delivery with its respective colors.



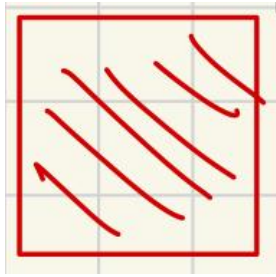
Rest Zone

The purple shaded area represents the rest zone. The entire robot must clearly be inside the rest zone to be accepted as "resting"



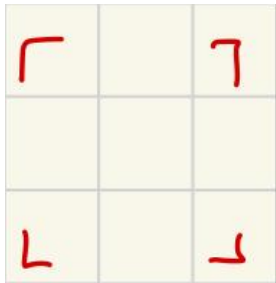
Basketball Hoop

Basketball hoop takes up half of the tile. The hoop is placed 25 cm above from the ground.



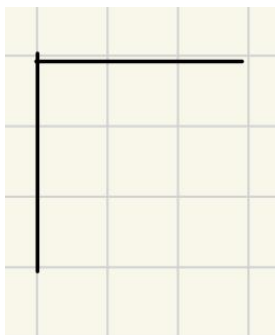
Wall Cube

Represents the wall cube



Wall Cube destination

Represents the point where the wall cube needs to be pushed to earn points. The wall cube destination takes up the whole tile. Most of the wall cube needs to be in the wall cube destination tile to earn points.



Maze Wall

A straight black line represents the maze wall. The height of the maze wall will be above 7cm. Robots can go over; however, breaking the wall will cause the penalty mentioned above.



No Wall

This represents that there is no wall, but the tile ends. This is on bridges with no walls are provided.

3. Game Rules & Mechanics

3.1 Scoring

Main objective:

Escape the maze in the given time

Escaping the maze will award **100 points** and an additional **1 point** for every second that's left on the clock.

Sub challenges:

1. Cube Delivery

Small-sized cubes will be placed around the maze. Exit the maze with the cubes in possession. Different colored cubes will be awarded different points. You can collect multiple cubes.

The green cube will award **30 points**

Blue cube will award **40 points**

The red cube will award **50 points**

Cube will be in the size of 3cm x 3cm x 3cm

2. Wall Push

Large-sized cubes will be blocking a few paths in the maze. Pushing them to the correct position will award points.

Pushing the wall to the correct position will award **30 points**

The wall cube is the size of 20cm x 20cm x 20cm

3. Balls for the hoop

A small basketball will be given to the robot at the start. Dropping the ball through the hoop will award points. (Basketball should free fall.) You can only do this mission once.

Succeeding this mission will award **70 points**

Basketball will be a sphere with a radius of 2cm

Hoops will be half in size of half of the tile

4. Rest zone

The robot should be fully inside the rest zone for 10 seconds. This mission can be done up to 3 times maximum.

Succeeding in this mission will earn **15 points**

The rest zone is the size of 0.5m x 0.5m

3.2 Fouls & Penalties

- Players may not touch the robot or the map when the match starts
 - When touched, **10 points** will be deducted from the final score
- When the robot malfunctions and not unable to move on the field, and is unable to go back up, the game is stopped, and time, escape points are not awarded.
- Intentional destruction of the maze is prohibited. When done intentionally to gain a greater benefit, the team will lose a total of **50 points** from their final result. However, when done unintentionally, no penalty will be given.

3.3 Causation

- Even an unintentional touch of the exit line will end the match and be considered an escape.
- Basketball and cubes are not returned once they exit outside of the maze.

4. Robot Specifications

- Maximum size of 25cm by 25cm
- Height limit 20cm
- Extension limit of 20cm both horizontally and vertically.
- Movement is only done by pre-coding (the robot cannot be controlled during the match)
- 2 hubs maximum per robot

5. Tournament Format

- Each team will have a set amount of time to complete the maze and its various challenges

- Each team will have 3 total tries at the maze
 - After each series of points is added up together and the leaderboard is created accordingly
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6. Winning & Prizes

- Hardware Challenge: Team that scored the most points in the tournament
 - Judges' Choice: Team with the most collaborating skills and team spirit & Team that did an exceptional job in presenting their robots to the judges with a high level of understanding of robotics and its mechanism.
 - Design Challenge: Team with the most unique and interesting design
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7. Judging process & Inspection Process

7.1 Judging Process

- Teams explain their journey and process of designing, creating and coding the robot.
- A team is given a maximum of 5 minutes for explanation.

7.2 Inspection Process

- Judges check if the created robot satisfies the robot limitations.
 - Any robot that does not pass the limitation is not allowed to compete.
 - Teams may do the inspection unlimitedly
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