

Creating the Olympics - Navigation

DESCRIPTION: Team Driving involving a team of two or more members. The team will consist of two CEENBoTs on the field at the same time. The robots may work together or separately on the tasks. Size of the field will be approximately 20' X 15'. All Robots will need to fit inside a box 18" X 18" X 18" at the time the game begins.

Rules

1. Participants will have 5 minutes to score points. All team members may have hands on time in controlling the bots.
2. All team members may walk around most of the playing surface during the event. Off limit areas will be marked.
3. CeenBots must navigate to various location and complete designated tasks to score points.
4. Tasks are broken into three stages. At the beginning of the game, only tasks in Stage 1 may be attempted. Tasks in Stage 2 can only be attempted **after Stage 1 tasks have been completed**, or if 1.5 minutes have passed.
5. The Stage 3 task can only be attempted during the last 30 seconds of the match.

YOUR MISSION: Complete as many tasks as possible towards creating the Robot Winter games, to score as many points as possible.

Stage 1 Tasks:

Securing the bid – must deliver package to a mailbox. Package will be a catalog that is rolled up and tied with a rubber band. The mailbox will be a box with a slot, approximately 6" wide and 2" tall. The slot will be at floor level. 5 points.

Securing funding –Pressing a button on a device that looks like an ATM will score the points. Button placement to be announced later. 5 points.

Bots may not move on to Stage 2 until they have completed the Stage 1 tasks, or 1.5 minutes have passed in the game.

Stage 2 Tasks:

Tickets – One side of area will have a ticket booth with 1 ticket in front of it on the ground. The Box Office Zone around the ticket booth will be marked with tape. CeenBots must grab a ticket and deliver it through the turnstiles to the Arena. Once a Ticket is removed from the Box Office zone, a judge will place another one in its place. There can never be more than one ticket in the Box Office Zone at the same time.

Tickets will likely be made of sponge and be approximately 1"x1"x3". Tickets delivered to the venue will be scored as follows: Red = 5, White = 3, Yellow = 1. The order that tickets are presented from the ticket booth will be the same for every team and announced in a future update.

Assembling the Medals Platform – the Metals platform is made up of three pieces colored Bronze, Silver and Gold. The Bronze and Silver pieces will be approximately 2"x2"x3", and the Gold piece is 2"x2"x2". Initially they will be located in three different locations. CeenBots must move them up a ramp and onto the Metals Platform, and position them correctly to score points. Correct position is Silver on left, Bronze on right, and Gold on top.

- Bronze piece up ramp and on platform: 5 points
- Silver piece up ramp and on platform: 5 points
- Bronze and Silver pieces lined up and touching: 10 points
- Gold piece up ramp and on platform: 5 points
- Gold piece on top of both Bronze and Silver pieces: 25 points

Building Olympic Village – The Olympic Village consists of 6 buildings of different shapes and sizes. Tape on the floor will outline the placement of where each building goes. Points are scored for getting the building moved into their correct spot.

- Each building in general spot scores 5 points (at least half of building must be within correct tape zone).
- Each building positioned completely within the tape outline scores an additional 10 points.

Stage 3 Tasks:

Parade of Athletes – One elite athlete will be attached to a 3-wheeled caster. The athlete must be directed over the parade route during the last 30 seconds of the event. The athlete can NOT be moved before the last 30 seconds of the event; if it is moved before then this task cannot be completed.

Athlete completes parade route: 25 points

Points Summary

Stage 1:

5 points for each task, 10 points possible

Stage 2:

Building Olympic Village: 90 possible

Building Medals Stand: 50 possible

Delivering Tickets: unlimited

Stage 3:

Athlete Parade: 25 points possible

All points are award at the end of the time period based on the locations of objects at that point. IE, if a building is put in place during the event but then bumped out of place, scoring is done by where it is at the end.

