# Crazy Cube The Game

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# Section 2 – The Game

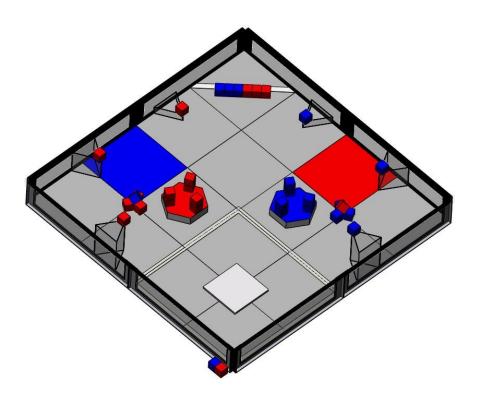
#### 2.1 – Overview

This section describes the CREATE Junior game, called *Crazy Cube*. It also lists the game definitions and game rules.

# 2.2 – Game Description and Field Drawings

Matches are played on a field initially set up as illustrated in the figures below. One team competes in each match. The object of the game is to attain a higher score than all the other teams in the competition by pushing cubes into the corner goals, placing them in the six (6) triangular goals, pushing the bonus platforms into the goals of its color or by being parked at on the starting pad when time has expired.

There are a total of thirty (34) *cubes* and two (2) bonus *platforms* available as scoring objects in the game. Thirty-two (32) *cubes* will be found on the field, while two (2) will be available to each team prior to the *match*. Two (2) *bonus platforms* one (1) red and one (1) blue will also be found on the field at the start of the *match*.



## 2.3 – Game Definitions

Bonus Platform – The red or blue hexagonal rolling objects. The bonus platforms are 3.5" high and 15" at the widest point.

Coach - A student or adult designated as the team advisor during the match.

Corner Goal – One triangular shaped *goal* directly opposite the starting *pad* into which teams can score *cubes*.

Cube – Any of the 34 red or blue foam cubes.. Cubes are 3" on each side.

Driver - A team member responsible for operating and controlling the Robot.

Driver Change – Changing from the first to the second driver in the middle of the match.

Goal – Either a corner goal or one of the six (6) triangular goals. The triangular goals vary in height from 3" to 15". Two goals are 3" high, two are 9" high and 2 are 15" high. Each side of the triangular goal is 8" long.

*Match* - A *match* consists of a one minute and thirty second *driver* controlled period. A *match* starts when the referee says "Go".

Pad – The 15"x15" 3/4" inch high square located on the playing field.

Parked – A robot is considered to be parked when it is in contact with the pad, and no part of the robot is in contact with the foam playing surface.

Robot – Anything (which has passed inspection) a team places on the field prior to the start of a *match*.

Scored – A cube is scored in a corner goal if some part of the cube is within the two-dimensional space defined by the edges of the goal, and not touching a robot. A cube is scored in a triangular goal when ALL of the cube is contained within the interior walls of the goal and not touching a robot. (The "walls" extend infinitely perpendicular to the playing field) A bonus platform is scored when ALL of the platform is contained within the boundaries of the tile of its same color and not touching a robot. Goals extends infinitely perpendicular to the playing field surface within the goal boundaries.

Team Station – The designated region where the drivers and coach stand during any match.

# 2.4 – Game Rules

## 2.4.1 – Scoring

- A *cube* that is *scored* in a *corner goal* counts one (1) point.
- A cube that is scored in the triangular goal counts three (3) points.
- A bonus platform that is scored in a goal of its own color counts five (5) points.
- A robot that is parked at the end of the match is worth five (5) points.

#### 2.4.2 - Safety Rules

<S1> If at any time the *robot* operation is deemed unsafe or has damaged the playing field, surface, barriers or wall, by the determination of the referees, the offending team may be disgualified. The *robot* will

require re-inspection before it may take the field again.

**<\$2>** If a *robot* goes completely out-of-bounds (outside the playing field), the *match* will be over and the score will be taken at that point regardless of time left in the *match*.

#### 2.4.3 - General Game Rules

- **<G1>** At the beginning of a *match*, each *robot* must not exceed a volume of 18 inches wide by 18 inches long by 18 inches tall. An offending *robot* will be removed from the *match* at the Head Referee's discretion.
  - a. Alignment devices (templates, tape measures, lasers, etc.) that are not part of the *robot* may NOT be used to assist with the positioning of the *robot*.
- <G2> Each team shall include two drivers and one coach.
- **<G3>** During a *match*, the *drivers* and *coach* must remain in their *team station*.
- **<G4>** Scoring objects that leave the playing field are considered out of play. They will not be returned to the field for that *match*.
- <G5> Drivers and coaches are prohibited from making intentional contact with any game or field object. The first instance of intentional contact will result in a warning, with any following instances resulting in a disqualification.
- **<G6>** During a *match*, *robots* may be remotely operated only by the *drivers*. If a *coach* touches his/her team's controls anytime during a *match*, the *team* will be disqualified for that *match*.
- <G7> Scores will be calculated for all *matches* immediately after the *match* when all objects on the field come to rest.
- **<G8>** Robots may not intentionally detach parts during any *match*, or leave mechanisms on the field. Multiple infractions may result in disqualification for the entire competition.
- **<G9>** Robots must be designed to permit easy removal of *cubes* from any grasping mechanism without requiring that the *robot* have power after the *match*.
- <G10> Field tolerances may vary by as much as +/-1". Teams must design their robots accordingly.

# 2.4.4 – Crazy Cube Specific Game Rules

- **<SG1>** At the beginning of each *match*, the *robot* must be placed such that they are on the starting *pad* and no part of the *robot* is in contact with the foam tiles.
- **<SG2>** Prior to the start of each *match*, each *team* will have two *cubes* available to pre-load into their *robots*. Pre-loading is optional. If pre-loading is not used the *cubes* are removed from the field of play and will not be used in that *match*.
  - a. A *cube* is considered to be legally preloaded if it is touching the *robot* and not touching any part of the playing field or game objects.
- **<SG3>** A *cube* is not considered *scored* if it is being touched by the *robot* at the conclusion of the *match*.
- **<SG4>** *Drivers* must change (*Driver change*) sometime between the 30<sup>th</sup> and 60<sup>th</sup> second of the *match*. *Driver* one may hand the remote to *driver* two anytime between 31 and 59 seconds on the clock. If a team exchanges the remote too early or too late in a *match* they will be disqualified for that *match* and receive a zero score for that *match*.

