The background features a repeating pattern of Egyptian hieroglyphs in blue and gold along the top and bottom edges. The central area is a light tan color with faint, stylized window and door outlines. A large, light brown scroll with rounded corners is positioned in the center, containing the main text.

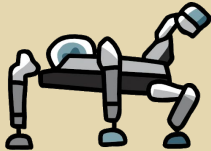
# **Pharaoh's Curse**

**Poly Rabbotics 7042**

## Backstory



In “Pharaoh’s Curse”, robots rescue archaeologists from a cursed pyramid by returning trapped treasure. Gems and coins are collected from human player stations in order to further advance. Robots must race to gather coins and gems to rescue the archaeologists from the dangers of the desert before it is too late!



# Field Layout & Elements



# Field



Human Player Station

Pyramid

Gems

Tomb

Driver Station

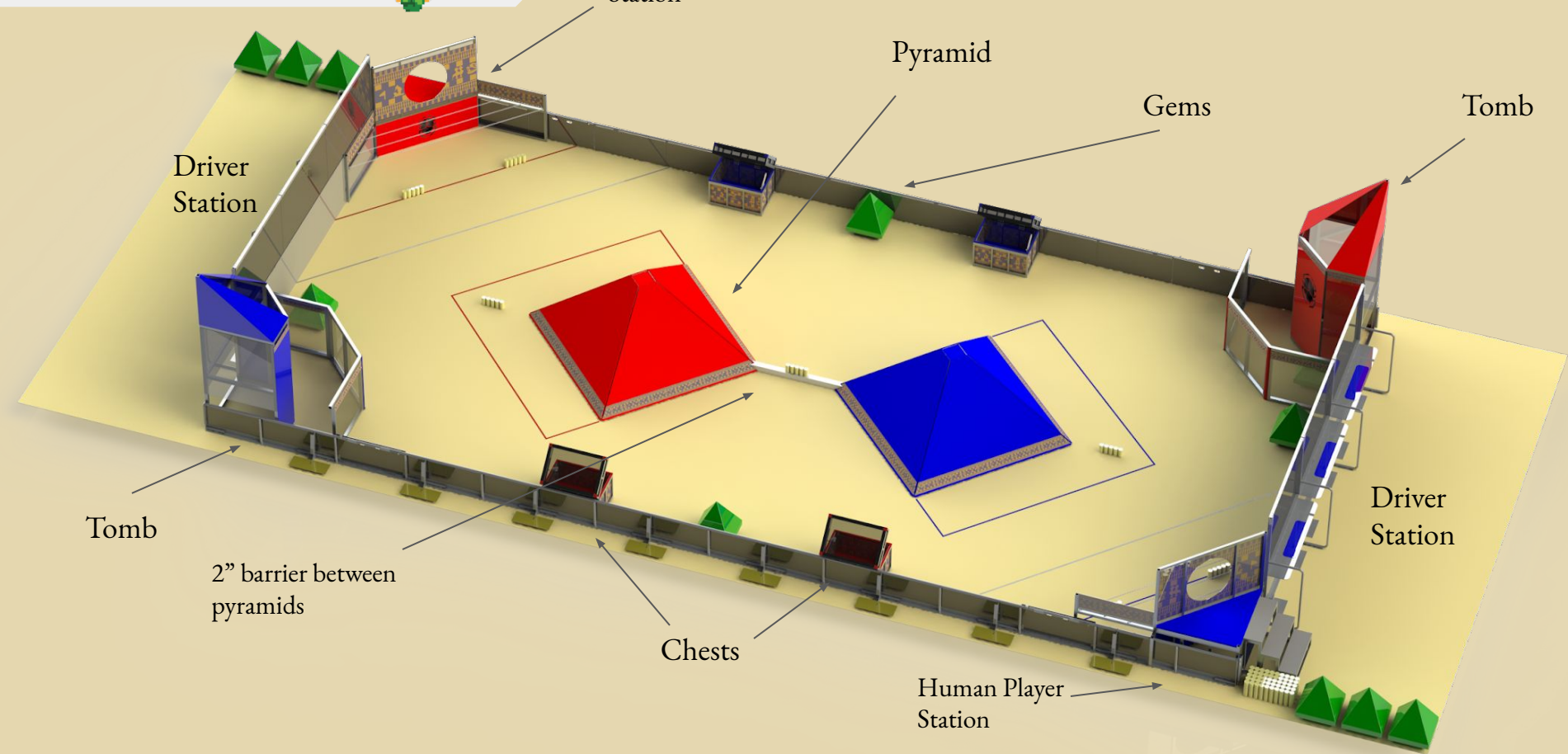
Driver Station

Tomb

2" barrier between pyramids

Chests

Human Player Station



# Coins



Hockey pucks 1 in. thick by a 3 in. diameter



Loaded into field 25 coins at a time



Scoring Location: Chests



# Chests



Located in the center of field's sides



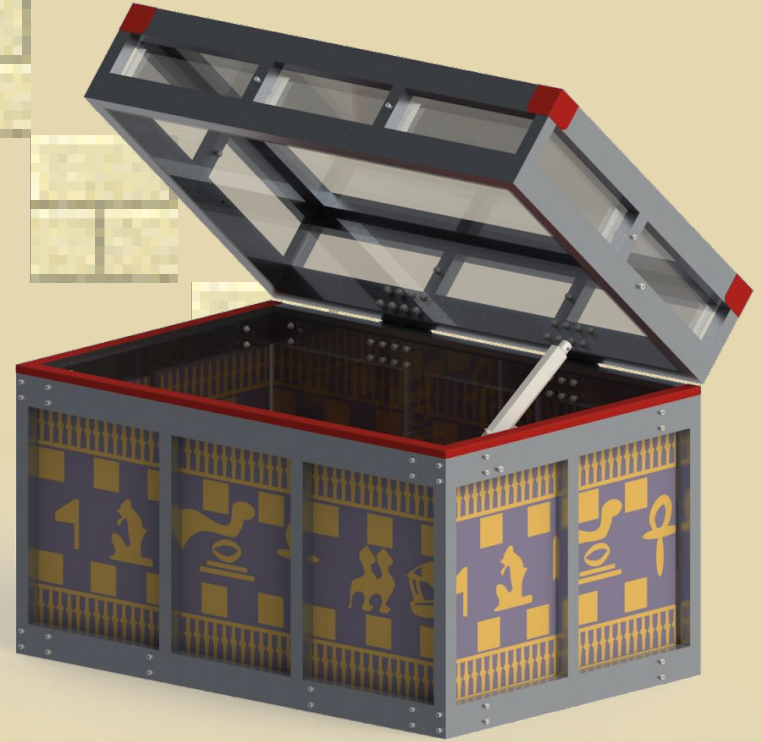
Two chests per team



9 gems scored in the tomb to unlock the second chest during the tele-op period



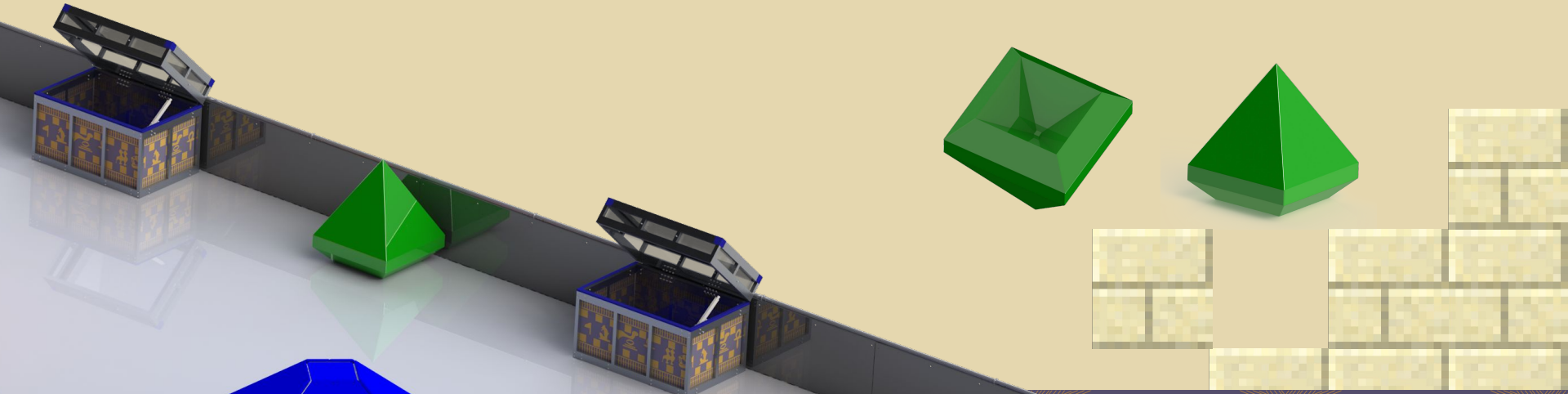
Motorized lid will open/close, controlled by the field



# Gems




- ◆ Robot may hold one gem (2ft x 2ft) at a time
- ◆ Gems collected from human player station or field
- ◆ Scoring location: Tomb Enclosure and Tomb High Goal



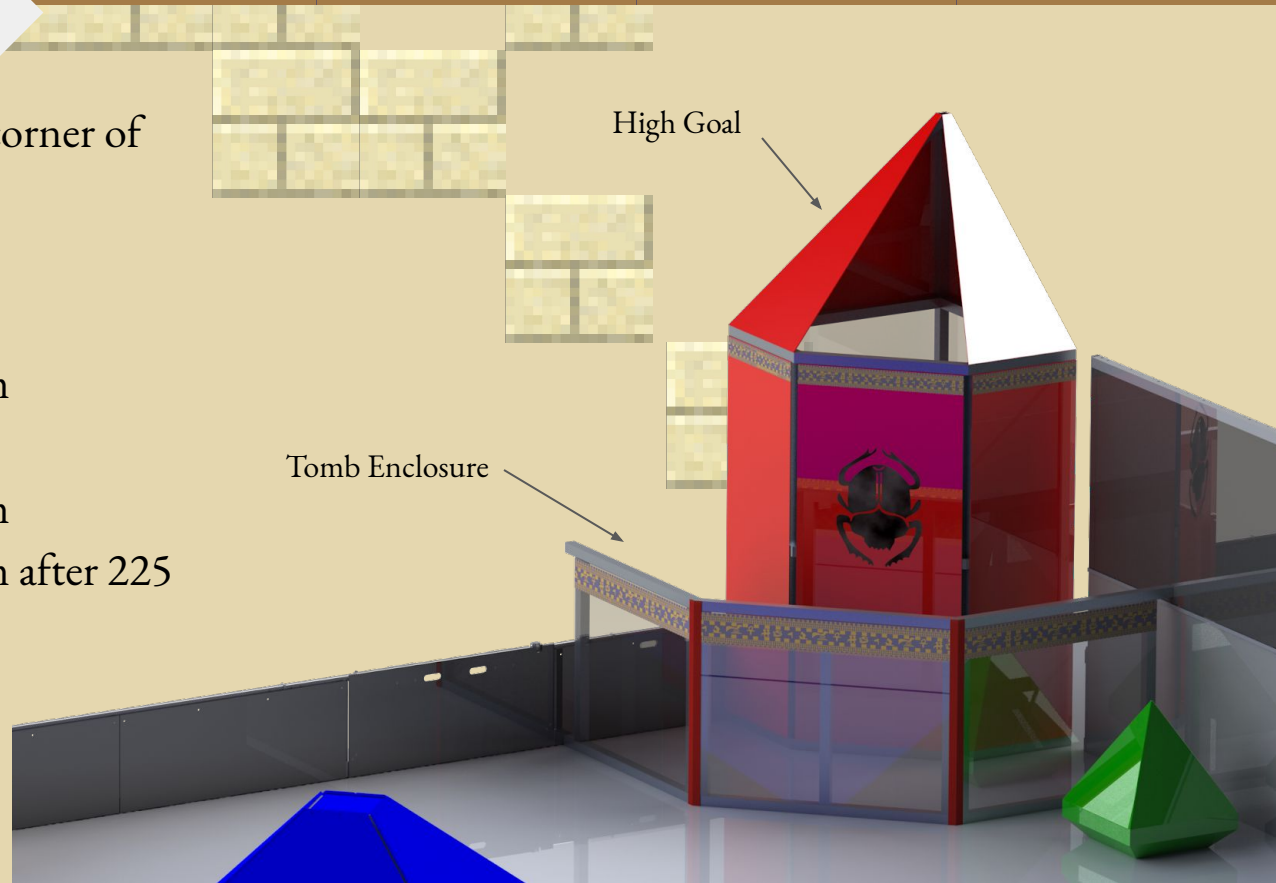
# Tombs



 Two tombs in opposite left corner of alliance's driver station.

 Design Features:

- An outer, lower ring
  - 25 points per gem
- A high goal tower
  - 25 points per gem
  - 50 points per gem after 225 coins scored





# Chain Element

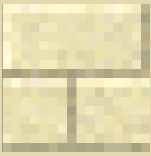
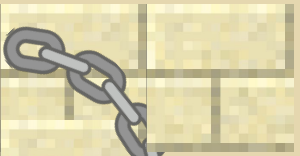
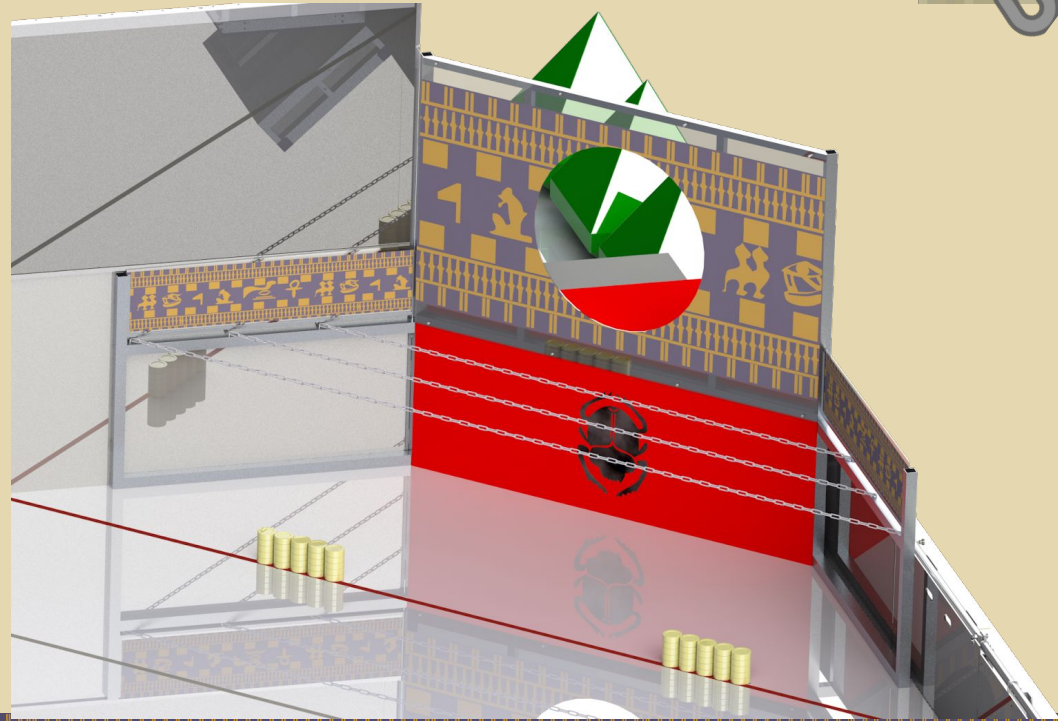


Attached to adjacent arena walls in front of human player stations

Run horizontally parallel to one another

Gems will be suspended by chain

Coins fall below the chain








# Game Overview

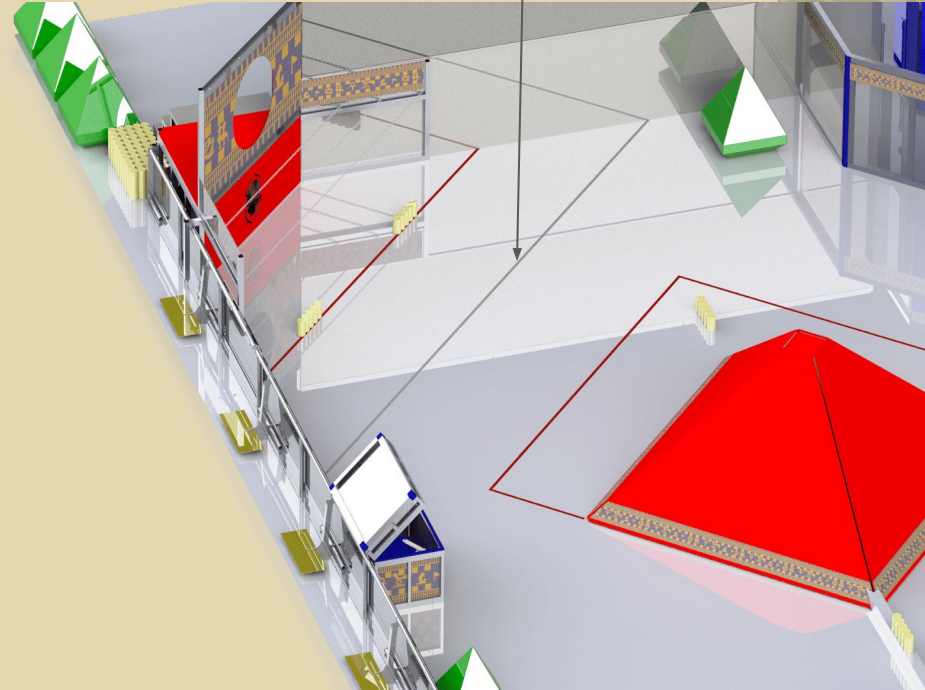


# Autonomous



-  Robots are preloaded with up to 40 coins and 1 gem
-  Robots start on their autonomous line
-  All chests unlocked during autonomous
-  Robots score coins in chests and gems in tombs
-  All points x2 during teleop during auto.

Blue Alliance Autonomous Line



# Tele-op



## Human Player Station

- Pick up Gems
- Collect Coins

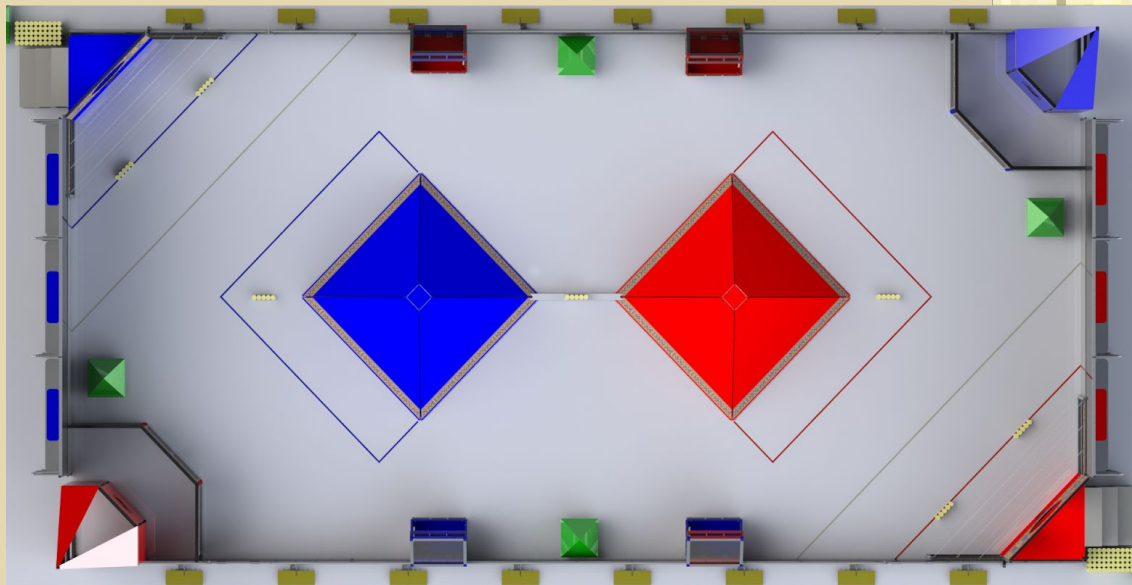


## Score Coins in Chests

- One chest will close at the beginning of tele-op



## Score Gems in Tomb



# Endgame



Final 30 seconds



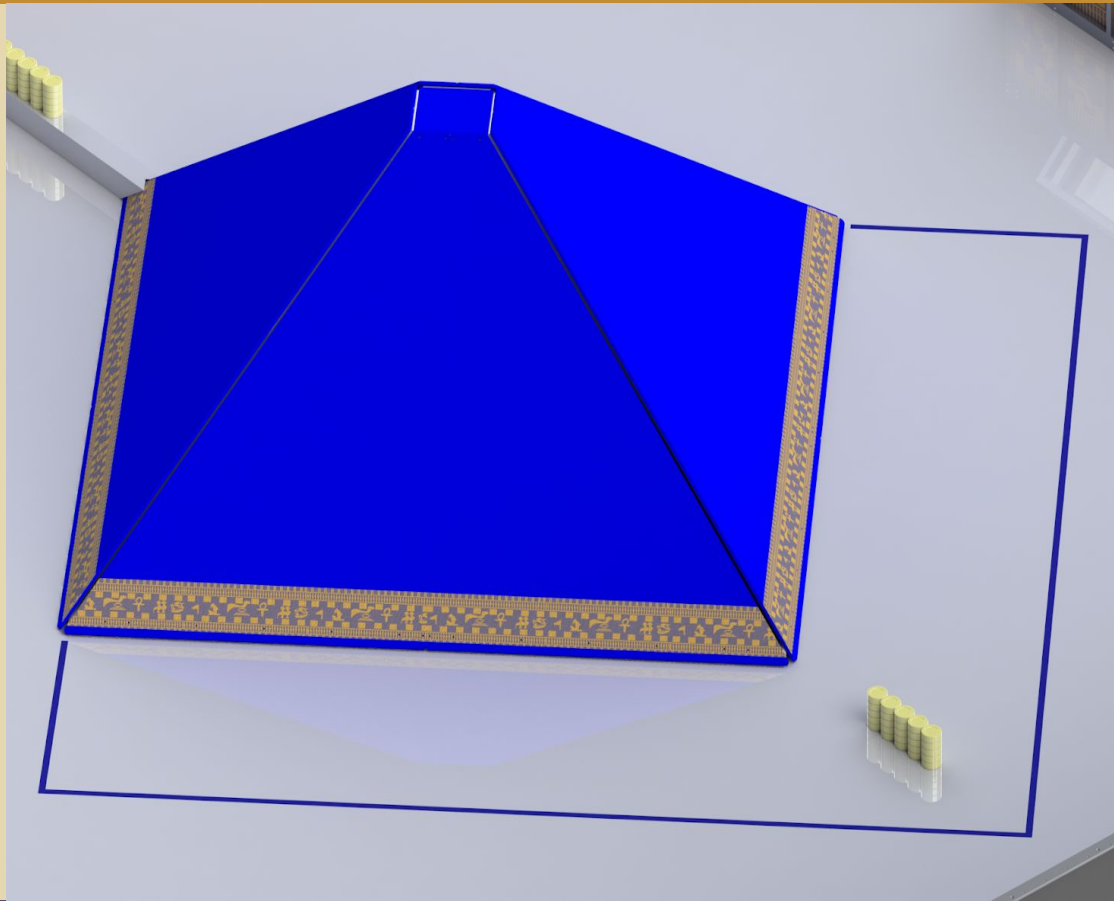
Pyramid

- Climb the pyramid slopes
- Assist others in climbing the pyramid



Pyramid Zone

- Parking in the zone can also score points



# Scoring System



# Point System Breakdown



## Coins

- Autonomous Period = 2 Points each
- Teleop = 1 Point each



## Gem

- Autonomous Period = 50 Points each
- Teleop = 25 Points each



## Climbing

- Robot in PYRAMID ZONE when match ends = 15 points
- Robot fully supported by PYRAMID when the match ends = 75 Points

Action	Point Value (tele-op period)	Point Value (auto period)
COIN Scored into CHEST	1 per COIN	2 per COIN
GEM Scored into TOMB	25 per GEM	50 per GEM
GEM scored inside HIGH GOAL	50 per GEM after 225 COINS have been scored	50 per GEM
Robot parked in the PYRAMID ZONE at T=0	15	-
Robot Climbed	75	-
Three Robots Climbed	1 Ranking Point	-
Second CHEST unlocked and HIGH GOAL double points enabled	1 Ranking Point	-
Match Won	2 Ranking Points	-
Match Tied	1 Ranking Point	-
Match Lost	-	-

# Ranking points



## 4 Possible Ranking Points in a match



Win Match = 2 Ranking Points



Tie match = 1 Ranking Point



Lose Match = 0 Ranking Points

## Bonus Ranking Points:



Second Chest Unlocked & High Goal  
Double Points activated = 1 Ranking  
Point








Three Robot Climbed = 1 Ranking Point

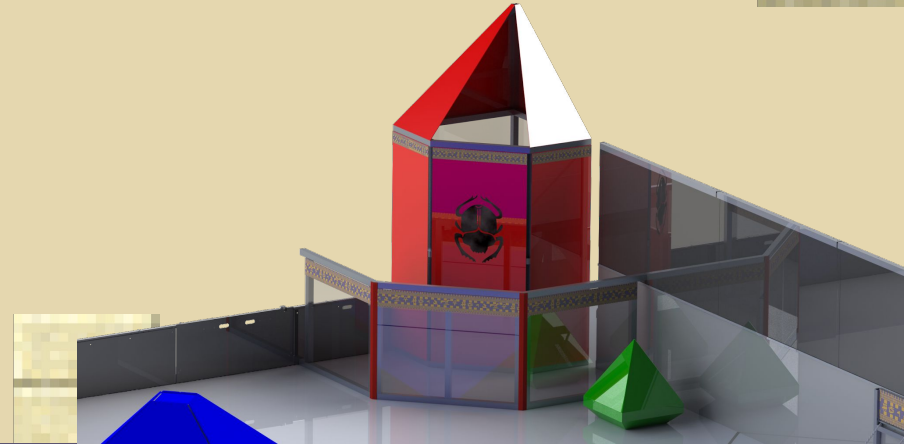
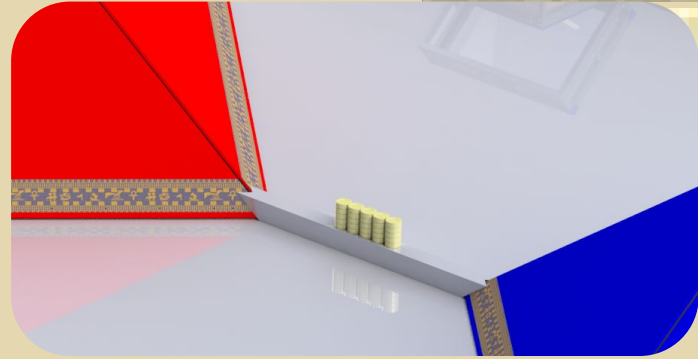
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# Design Diversity



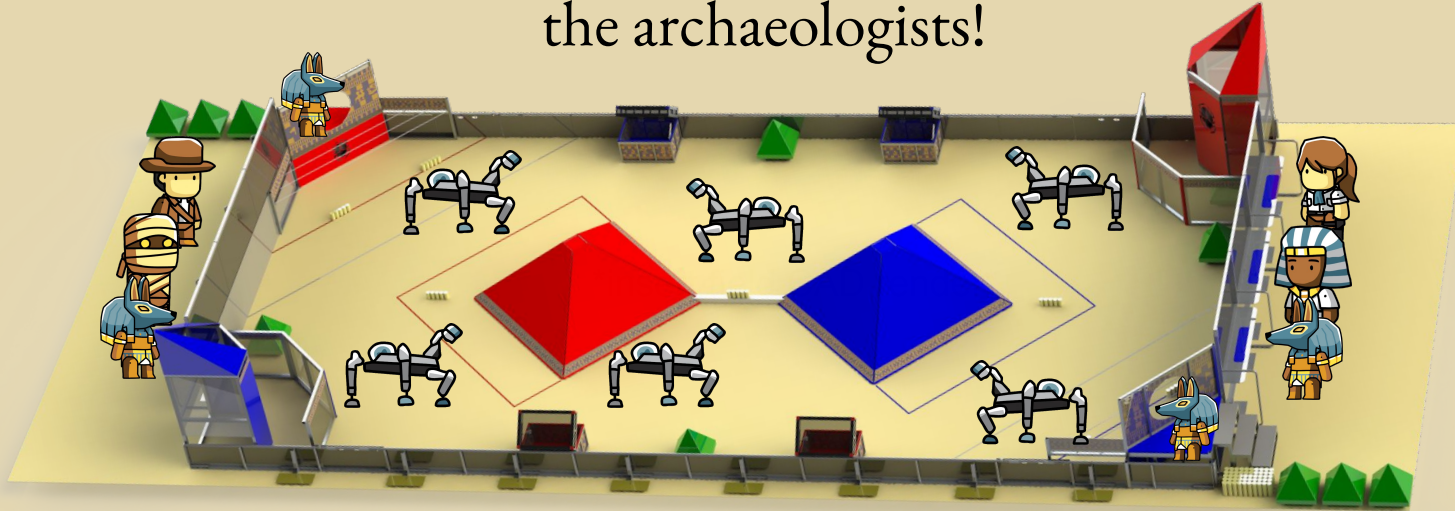
-  Low bar in between two pyramids
-  Influence of different ranking points: second chest, high goal, robot climb
-  Different scoring heights
-  Human player station chain height restriction
-  Scoring with coins and gems



# Summary



The alliance that scores the most points wins the match and rescues the archaeologists!





**Thank you for Listening!**

**Pharaoh's Curse  
Poly Rabbotics 7042**