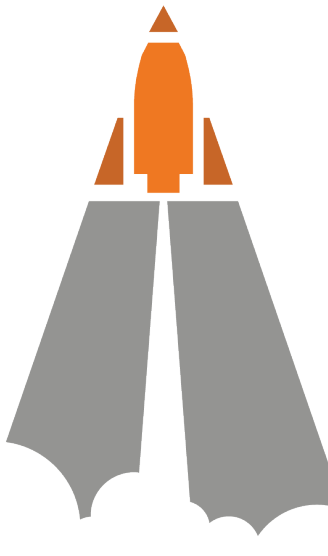


Scoring Guide

DESTINATION:

DEEP

SPACE



Presented By



The Basics

Destination: Deep Space is the 28th game of FIRST Robotics. FIRST was founded in 1989 by Segway™ inventor Dean Kamen and MIT professor Woodie Flowers. It has since grown to include more than 4,000 teams in more than thirty countries.

The FRC season starts in January when teams watch a livestream that explains the season's game. They are then given a base kit of parts and six weeks to build a robot. After the build season, teams then compete in either regional or district competitions, depending on their location. Michigan, having the most teams, was the first to become a district in 2009.

In Michigan's district system, teams compete at two events. The teams then receive District Points depending on how well they do at their events. At the end of a six week competition season, the top 160 teams are invited to compete at the Michigan State Championship in Saginaw. After earning more District Points there, the top 87 ranked teams will then compete at a FIRST Championship in Detroit with teams from regionals and other districts.

Qualification Matches

At a FIRST in Michigan Event, teams will load in and practice Thursday night. Then, on Friday, they will begin a series of ~80 Qualification Matches. During this phase, which continues through Saturday morning, teams are ranked by the amount of Ranking Points they earn. Ranking Points are earned by winning or tying a match. They can also be earned by filling a Rocket or having more than 15 Hab Climb points.

Rank	Team	Ranking Score	Cargo	Hatch Panel	HAB Climb	Sandstorm Bonus	Record (W-L-T)	DQ	Played
1	5460	3.25	333	214	177	156	12-0-0	0	12
2	2767	2.91	315	152	249	168	10-2-0	0	12
3	67	2.83	324	154	201	177	11-1-0	0	12
4	2054	2.83	312	160	210	168	11-1-0	0	12
5	4967	2.50	297	140	219	150	8-2-2	0	12
6	1918	2.41	348	178	189	162	8-4-0	0	12
7	4362	2.41	294	156	183	150	9-2-1	0	12
8	4855	2.33	291	106	225	171	8-4-0	0	12
9	27	2.25	291	138	201	147	7-4-1	0	12
10	2771	2.16	237	166	198	159	7-5-0	0	12
11	3546	2.00	222	114	216	171	5-6-1	0	12
12	5056	1.83	327	140	150	159	7-5-0	0	12
13	288	1.83	291	128	183	162	6-6-0	0	12
14	4956	1.75	333	126	189	132	6-5-1	0	12

Alliances

Alliance	Captain	Pick 1	Pick 2
Alliance 1	5460	2767	4482
Alliance 2	67	27	5675
Alliance 3	2054	1918	4956

Alliance Selection

After Qualification Matches end on Saturday, the top 8 teams will take part in a serpentine draft to pick two other alliance members to take into the Playoff Matches.

Playoff Matches

Saturday afternoon is filled with a series of matches as alliances from the Alliance Selection progress through a bracket to decide a winner. Playoff Matches are played best-two-of-three, meaning tiebreakers are common.

Playoff Bracket

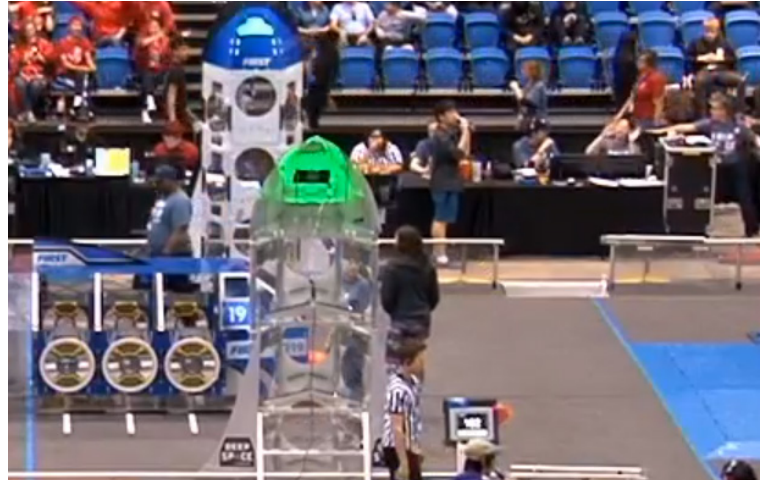
1. 5460 2767 4482	8. 288 216 858 7187	4. 4967 4362 3875	5. 4855 5056 3458	3. 2054 1918 4956	6. 2771 2405 6090	2. 67 27 5675	7. 3546 244 7225
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Scoring

Scoring in Destination: Deep Space revolves around three main elements: Hatch Panels, Cargo, and climbing the Habitat. Cargo can be scored in the Rockets and Cargo Ship, but require a Hatch Panel to stay in place.

Scoring Locations

Scoring of Hatch Panels and Cargo can be accomplished in three locations, known as the Rockets and Cargo Ship. The Rockets are two towers on the side of the field. Each Rocket has three levels that can house two Hatch Panels and Cargo. The Cargo Ships are located in the middle of the field, and have eight bays that house one of each game piece. Teams preload the side bays with a piece, but the two front bays always have Cargo. Preloaded Cargo stays in during the Sandstorm.

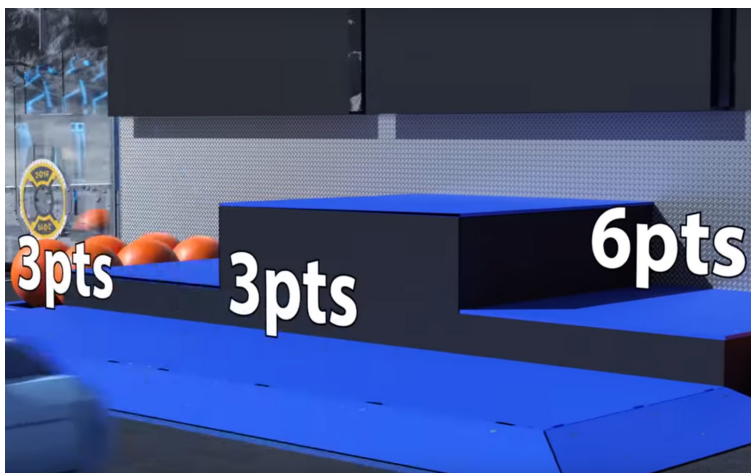
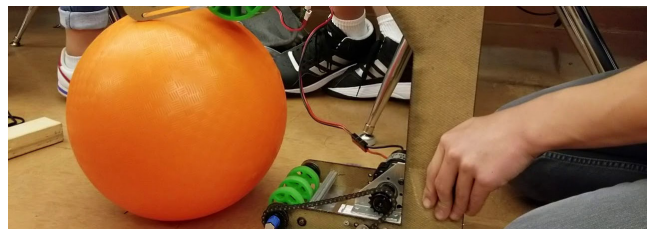


Cargo

Cargo are ~13" wide rubber playground balls. They are worth three points, and can be scored wherever there are Hatch Panels.

Hatch Panels

Hatch Panels are 19" wide, 3/16" thick plastic disks with a 6" hole in the middle. Their circumference is covered in Velcro. They are worth two points each, but are required in order to score Cargo.



Habitat

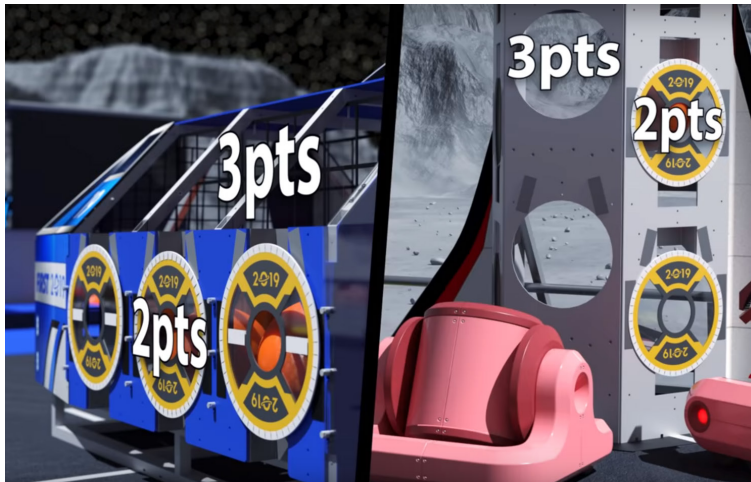
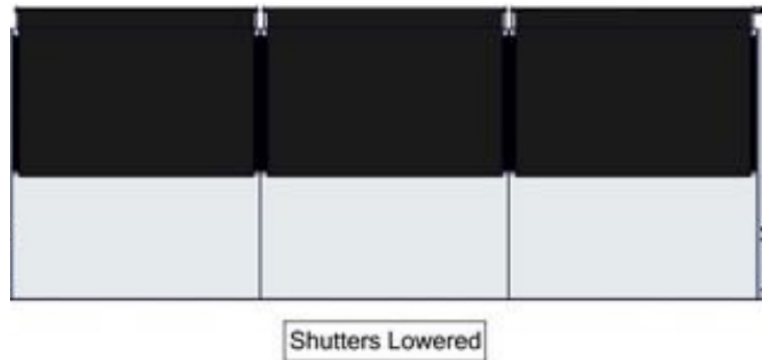
The Habitats are the elements resembling steps at each end of the field. They are comprised of three levels. Level 1 is the wide platform with a 15° incline. Level 2 is 6" above that, with two 40"x48" platforms. Level 3 is in the middle: a 4' square plateau 19" above Level 1. Teams can score 3 points for ending on Level 1, 6 points for Level 2, and 12 points for Level 3. Teams also start on Level 1 or 2, earning the equivalent climbing points for leaving the Habitat during the Sandstorm.

Gameplay

Like many FRC games, Destination: Deep Space has three distinct periods of gameplay, spread out over the two-and-a-half minutes of a match. Teams have to contend with everything from lack of vision to a crowded Habitat.

Sandstorm

The first fifteen seconds of a match are referred to as the Sandstorm. Teams will have their vision blocked by a black curtain, meaning their robots can only be reliably controlled with cameras or programmed instructions. Teams will also not have access to their Human Players (the team members who feed game pieces onto the field) during this period.



Tele-Operated

After the Sandstorm retracts, teams will have two minutes and fifteen seconds of clear vision to earn points. This is referred to as the Tele-Operated period, or Tele-Op for short. Tele-Op technically overlaps into the End Game. As this period begins, Cargo in the Cargo Ship falls out unless secured by a Hatch panel.

End Game

When the game clock reads 30, an electronic sound effect plays. This signals a time when some game rules change, as well as reminding teams to start climbing. When the clock now says 20, a train whistle plays, acting as a more intense version of the one at T-30, albeit with more rule changes and less time to react.

