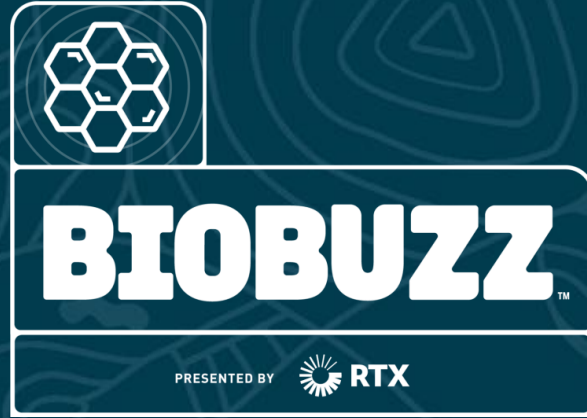




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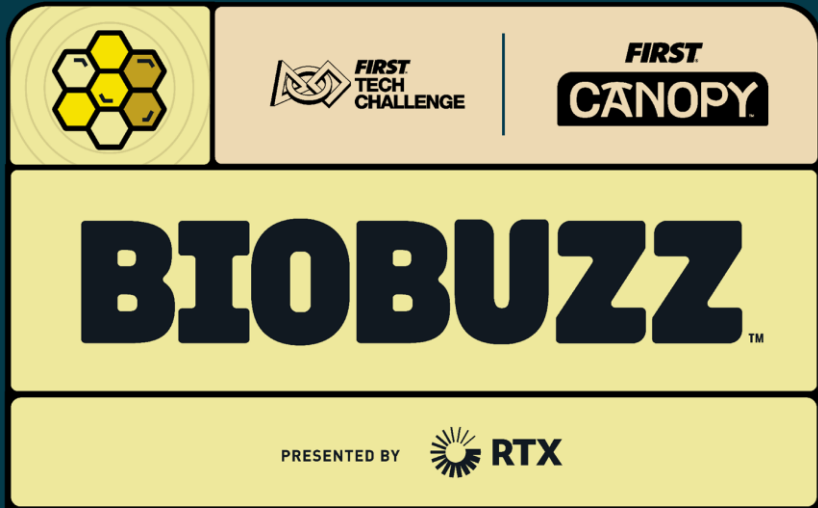
BIOBUZZ - BEE in the KNOW!
FTC 2026-2027 Season Guidance
Thanks to the FTC Global Leadership Team

Bee in the Know!



Reminder:

- These are thoughts to get you started!
- Review the Competition Manual!
- Keep an eye out for Team Updates!



Good luck and hive fun!

Key Season Dates

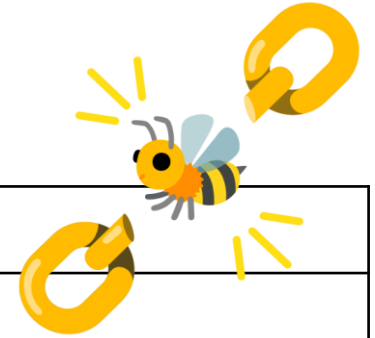


- **September 28:** Team Q&A Opens
- **October 19:** Earliest date for official events (League Meets, League Tournaments, or Qualifying Tournaments)
 - Your local season timeline may start later
- **November 16:** Total of registered teams per region helps set *FIRST* Championship Allocations
- **March 21:** Last date for Regional Championship Events to advance to the *FIRST* Championship
 - Your local season timeline may end earlier
- **April 9:** Last day to complete payment and housing registration for the *FIRST* Championship
 - Payment and housing is a 2-week rolling deadline from when the team is first invited to attend
- **April 28 - May 1:** *FIRST* Championship



Key Season Dates Blog

Season Resources – Quick links



ftc.game	Game and Season Page
ftc.game/manual	Competition Manual PDF
ftc.game/cm-html	Competition Manual HTML
ftc.game/cm-html#R104	Direct Rule Linking (Example Rule R104)
ftc.game/field	Playing Field Resources, Field CAD
ftc.game/team	Team Resources, StarterBot Links
ftc.game/volunteer	Volunteer Resources (coming soon)
ftc.game/event	Event Resources (coming soon)
ftc.events	FTC Event Listing and Results
ftc-scoring.firstinspires.org/	Avatars, Hybrid Judging, Premier Event Preferencing
ftc.game/calculator	Practice Scoring Calculator

Competition Manual Structure

- The Competition Manual is broken down into sections which are mostly self-contained.
- **Bold Green** rules with a leading asterisk (*) are “evergreen” rules – meaning they are largely the same from year to year with only the game specific details changing.
- **Bold Orange** rules are season specific and vary significantly from year to year.
- Sections with a letter in parentheses “(A)” have specific rules, sections without the letter, are overview or process sections.
- Words in ALL CAPITAL LETTERS are terms with specific meanings, check [Section 16: Glossary](#) for details.



Competition Manual Sections

Links live after Kickoff!



<u>Section 1: Introduction</u>	- About <i>FIRST</i> and <i>FIRST</i> Culture - Spirit of FTC Competition - Competition Integrity Contract - How the manual is set-up and how to interpret it
<u>Section 2: <i>FIRST</i> Season Overview</u>	Short description of the season theme and other <i>FIRST</i> Programs
<u>Section 3: Competition Eligibility and Inspection (I)</u>	- What teams need to do before competing to be eligible “I Rules” - Includes ROBOT Inspection
<u>Section 4: Advancement</u>	How do teams earn advancement
<u>Section 5: Event Rules (E)</u>	Overall event rules (not game specific) “E Rules”
<u>Section 6: Awards (A)</u>	- Describes the Awards Process - Provides specific rules about Awards and Judging “A Rules”
<u>Section 7: Game Sponsor Recognition</u>	Thank you to RTX for being our presenting sponsor for DECODE
<u>Section 8: Game Overview</u>	High level “story of the game”

<u>Section 9: ARENA</u>	Overview of the playing field
<u>Section 10: Game Details</u>	- Overview of the game and match set-up and process - Scoring and Violations
<u>Section 11: Game Rules (G)</u>	Specific Game Rules “G Rules”
<u>Section 12: ROBOT Construction Rules (R)</u>	Rules about what is allowed when building the ROBOT “R Rules”
<u>Section 13: Tournament (T)</u>	- Qualification and Playoff Match process - Playoff brackets - Tournament Rules “T Rules”
<u>Section 14: League Play (L)</u>	Additional rules for League Play
<u>Section 15: <i>FIRST</i> Championship (C)</u>	- Processes specific to the <i>FIRST</i> Championship - Specific Championship rules “C Rules”
<u>Section 16: Glossary</u>	TERMS with specific definitions related to the BIOBUZZ rules.

Competition Manual Updates

Teams should make sure to read the updated Competition Manual in its entirety – and don't assume that just because something was true in previous seasons that it's true this season as well. The following sections have undergone significant changes worth highlighting:

- **Section 1 – The Spirit of the Competition:** Every student, mentor, coach, and volunteer must read this section, which outlines what it means to be a *FIRST* Team. This section includes the Competition Integrity Contract, which outlines principles to protect the integrity of the competition while providing a great experience for teams at all levels.
- **Section 3 – Inspection:** Additional information about what to expect during the inspection process
- **Section 6 – Awards:** Changes to the Initial Interview structure
- **Section 12 – Robot Construction Rules:**
 - Many robot rules have been reorganized to match the additions in section 1
 - Best practices were removed to focus on rules – best practices will be included in educational resources on our website
 - Several rules have been combined and/or simplified



AI Rules Assistant



AI Chatbot will return for BIOBUZZ to help find answers to rules questions!

- <https://ftc-cmchatbot.firstinspires.org/>
- The chatbot is trained specifically on the current version of the Competition Manual and will update throughout the season.
- The chatbot can help you find what you're looking for, but it's still **up to you to review and verify the answers.**

With grant support from Google.org

Team Updates and Team Q&A

- The Competition Manual is updated weekly throughout the season to improve the clarity and intent of rules, and to fix any errors found.
 - When the manual is updated a Team Update (TU) document is published which shows a summary of the changes.
 - Adults can sign up to get an email notification for all Team Updates.
 - ftc.game/tu-combined links to a PDF of all the team updates this season.
- Team Q&A is available for teams to ask questions about things they believe are not already clarified by the rules.
 - Answers may point teams to a specific rule or sometimes questions will result in a Competition Manual update.
 - At events, the Head Referee and Event Director make the final decision based on the Competition Manual Rules.
- Team Q&A opens on Sept 28th.
 - Instructions: ftc.game/q-a-help
 - Log in here: <https://ftc.game/qa>



Coaches: Sign up here to get Team Update emails

Team Update 00

- The first Team Update of the season is out now!
- TU 00 includes:
 - Major changes from last season's DECODE manual to this year's BIOBUZZ manual
 - Updates from the V0 Preview Release
- Find it at: ftc.game/tu-00



Team Calls

- These are for *YOU!*
- Register to join a call and get help from *FIRST* Tech Challenge experts



Topic	Date	Time
FIRST Leadership Award	Thursday, October 15, 2026	8-8:55 PM ET
	Thursday, December 3, 2026	8-8:55 PM ET
Judging, Gameplay, and General Support	Thursday, October 22, 2026	8-8:55 PM ET
	Thursday, November 12, 2026	8-8:55 PM ET
	Thursday, January 7, 2027	7-7:55 PM ET



Team Call Schedule

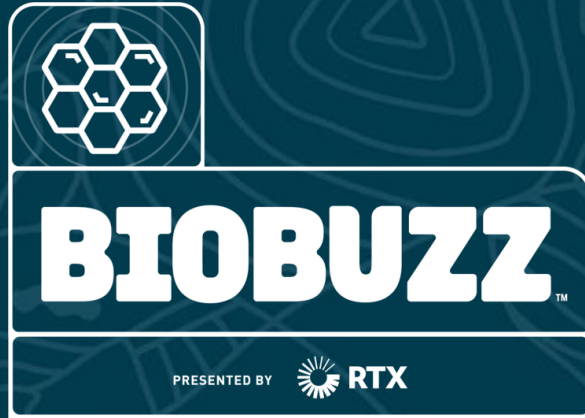
Team Avatars



- Avatars are small images teams can create and use to strengthen their brand or team identity and are shown in the scoring system and other official locations.
- If your team had an avatar last season, it will automatically roll over to this year.
- Lead Coach 1 & 2 can submit new or updated avatars by logging into <https://ftc-scoring.firstinspires.org/>
 - Avatar submission is only available for fully registered teams.



Image Credit Rhett Adam FRC 7525



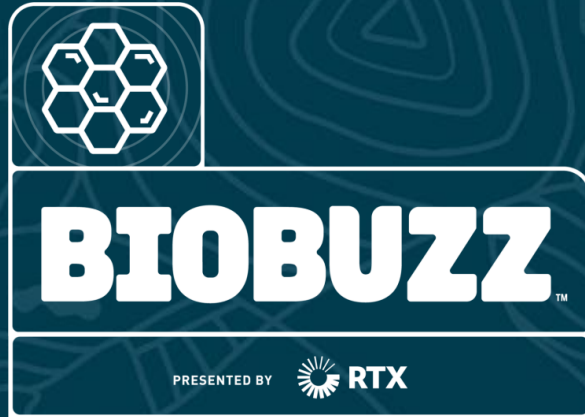
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***FIRST* Ethos & Competition Integrity**

Updates to Section 1 for BIOBUZZ

- The 2026-2027 Season includes a deliberate change in how we designed BIOBUZZ and wrote its Competition Manual.
- BIOBUZZ rules are written to emphasize "intended gameplay" and make it simpler for participants and volunteers to understand the spirit and intent of the rule.
- This change can only be possible if we all commit ourselves to the ethical standards described by the *FIRST* Ethos and *FIRST* Core Values.
- Through the Spirit of Competition and the Competition Integrity Contract, we ask that all students, volunteers, mentors, follow specific guidelines and exhibit certain behaviors while participating in *FIRST*.





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Advancement and Judging

Points-based Advancement Model



- *FIRST* Tech Challenge will continue with the points-based advancement model for the BIOBUZZ season with no changes.
- Everything a team does well at an event helps contribute to their advancement points.
- Teams will be ranked based on the points they earn at an individual event.
- This model rewards **well rounded teams** who excel in both Awards and Robot performance.
- No math required! The scoring system will do the math, but you can see how points are calculated in [Section 4: Advancement](#).

Category	Advancement Points Earned
Qualification Phase Performance	Normal distribution of points from 16 to 2 across the highest ranked team to the lowest based on the equation in Section 4.1.1 Qualification Phase Performance . (This will result in a minimum of 2 points and a maximum of 16 points being awarded for Qualification phase performance.)
ALLIANCE lead	Equal to 21 minus the ALLIANCE lead number (e.g., 18 points for ALLIANCE #3 lead)
Draft Order Acceptance	Equal to 21 minus the Draft Order Acceptance number (e.g., 18 points for the team which accepts the third draft position)
Playoff Advancement	40 points for 1 st Place (Winners) 20 points for 2 nd Place (Finalists) 10 points for 3 rd Place 5 points for 4 th Place (See Section 13.8 Dual Division Events for modifications to this section)
Team Judged Awards	60 points for Inspire Award 1 st Place 30 points for Inspire Award 2 nd Place 15 points for Inspire Award 3 rd Place 12 points for all other 1 st Place Awards 6 points for all other 2 nd Place Awards 3 points for all other 3 rd Place Awards (See A211 for a list of points-eligible awards)

FIRST Championship and Premier Event Opportunities

- *FIRST* Championship will continue to have 336 *FIRST* Tech Challenge teams this year.
- *FIRST* Tech Challenge Premier Events are back and bigger! We have several returning and new locations:



New England Premier Event

Mexico Premier Event

Michiana Premier Event Presented by GEARS

Run for the Robots Kentucky Premier Event

European Premier Event

Chicago Robotics Invitational Premier Event

Canadian Rockies Premier Event @ KDays

Canada Cup - Niagara Premier Event

China Premier Event

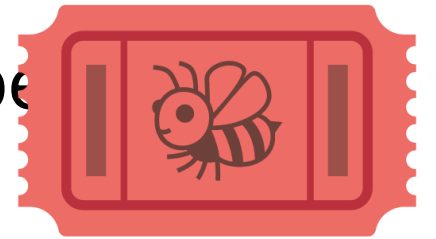
Almaty TechCup Kazakhstan Premier Event

Western Edge Premier Event

FIRST Tech Challenge Australia Premier Event

FIRST Championship and Premier Event Selection Process

- Specific details will be announced in a blog by November
- General Process Notes:
 - Teams will be able to submit a ranked choice event list for which events they would like to attend in [FTC Scoring](#).
 - Teams will be able to indicate if they have sibling teams for travel logistics.
 - If there are unfilled spots at an event, teams will be able to indicate if they would like to attend more than one event.



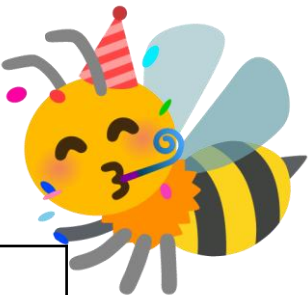
Section 6: Awards (A)



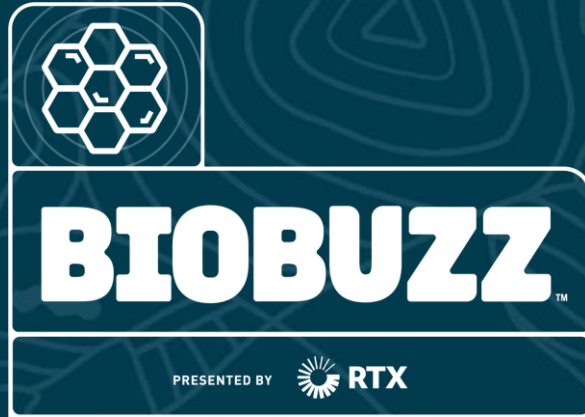
- Structured Interviews will now be referred to as “**Initial Interviews.**” Initial Interviews may be conducted in one of three formats:
 - **Scheduled in-person:** scheduled interview time with the Judges in a dedicated judging space
 - **Unscheduled in-person:** unscheduled interview time, interview takes place in the pit area or in a dedicated judging space
 - **Remote:** scheduled interview with Judges held online via a video conferencing platform
- PORTFOLIOS may only include content from January 1, 2026 or later. This universal date helps Judges and Teams understand what content can be included in the Portfolio.
 - Teams may include content from before January 1, 2026 to use as a reference point to show current seasons progress, however it will not be considered as an in-season accomplishment

FIRST Leadership Award Deadlines!

December 15, 2026 is the deadline for all *FIRST* Leadership Award nominations, for all regions.



<i>FIRST</i> Leadership Award – Important Dates	
September 14, 2026	Nominations open
December 15, 2026	Deadline for all nominations
Dates Vary	Finalists announced at Regional Championship Tournaments
April 30, 2027	10 Winners announced at <i>FIRST</i> Championship



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ROBOT Rules and Inspection

Section 12: ROBOT Construction Rules (R)

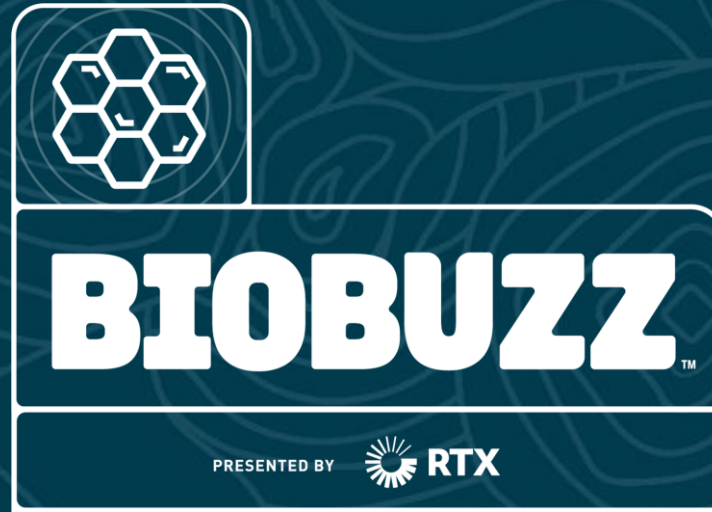
- Many “best practice” rules have been removed. Teams should read [Robot Best Practices](#) and seek the advice of mentors.
- Android device and gamepad restrictions have been lifted. Rules such as “no other wireless communication” still apply.
- The maximum number of allowed servos is reduced to 8.
- Expansion limits are back!
 - Expansion limit rules are: R105 and G415



Robot Inspection

- Inspectors **are not** expected to check every rule!
 - Teams **are** still expected to follow the rules. Sneaking an illegal part or configuration on the robot is against the Competition Integrity Contract.





Game Overview

Disclaimers

- This is based on limited time to review the game materials.
- Teams should review the Competition Manual.
- Teams are encouraged to ask Q&A online when it opens.
- Team Updates may change or modify the rules or their interpretation.
- This is the best information available as of Kickoff (September 12, 2026).



High Level Game Narrative



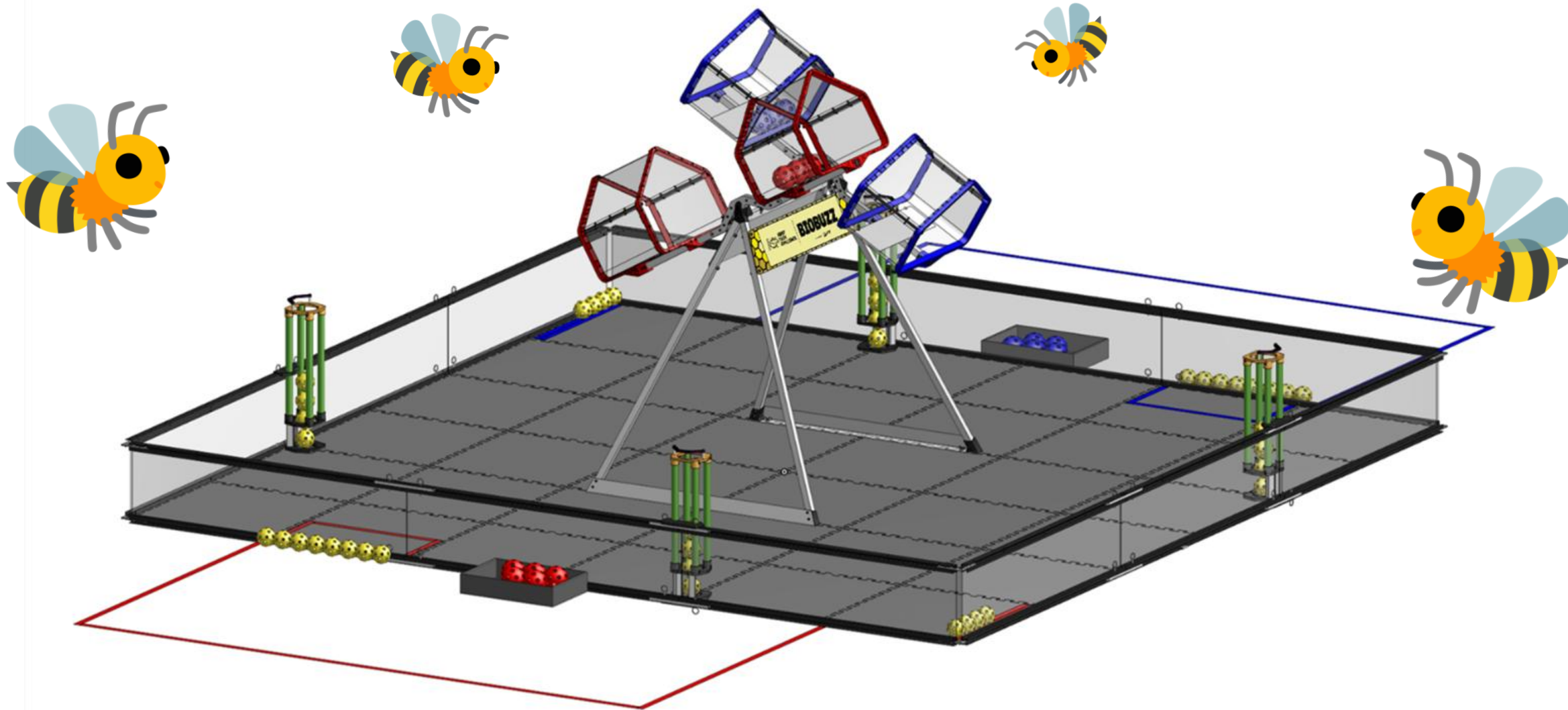
In BIOBUZZ™ presented by RTX, 2 competing ALLIANCES of 2 teams each collect POLLEN and NECTAR, launching them into their HIVE and placing them into FLOWERS.

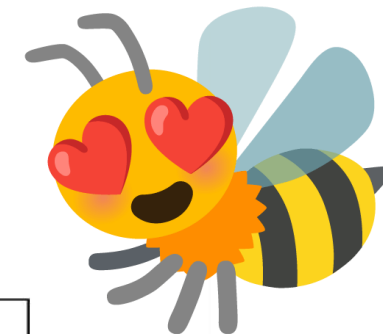
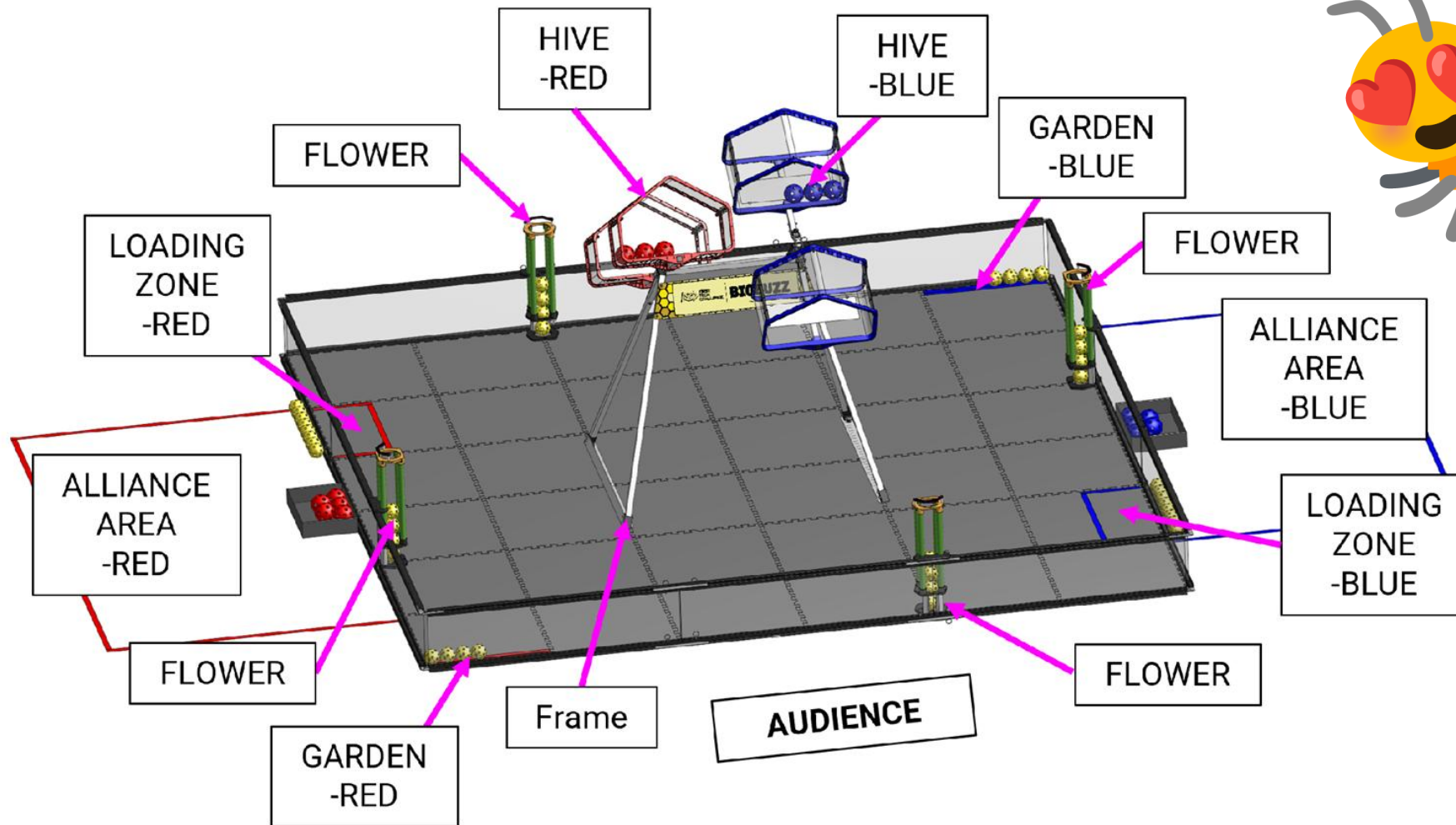
During the first 30 seconds of the MATCH, the ROBOTS operate autonomously. ROBOTS can use sensors to collect POLLEN from FLOWERS and navigate to LAUNCH into the CELLS of their HIVE. When enough SCORING ELEMENTS are LAUNCHED into the CELL, the HIVE will tip. Each time a HIVE is TIPPED, points are earned, and additional NECTAR is unlocked.

During the remaining 2 minutes of the MATCH, human DRIVERS take control of their ROBOTS. ROBOTS continue to collect and score POLLEN and NECTAR, tipping their HIVE to earn points and unlocking more NECTAR.

As time runs out, ALLIANCES work to fill FLOWERS with POLLEN and NECTAR. ALLIANCES earn points by placing their ALLIANCE'S NECTAR in each FLOWER before their opponent. ALLIANCES also earn points for owning a FLOWER if their NECTAR is the top-most placed in a FLOWER.

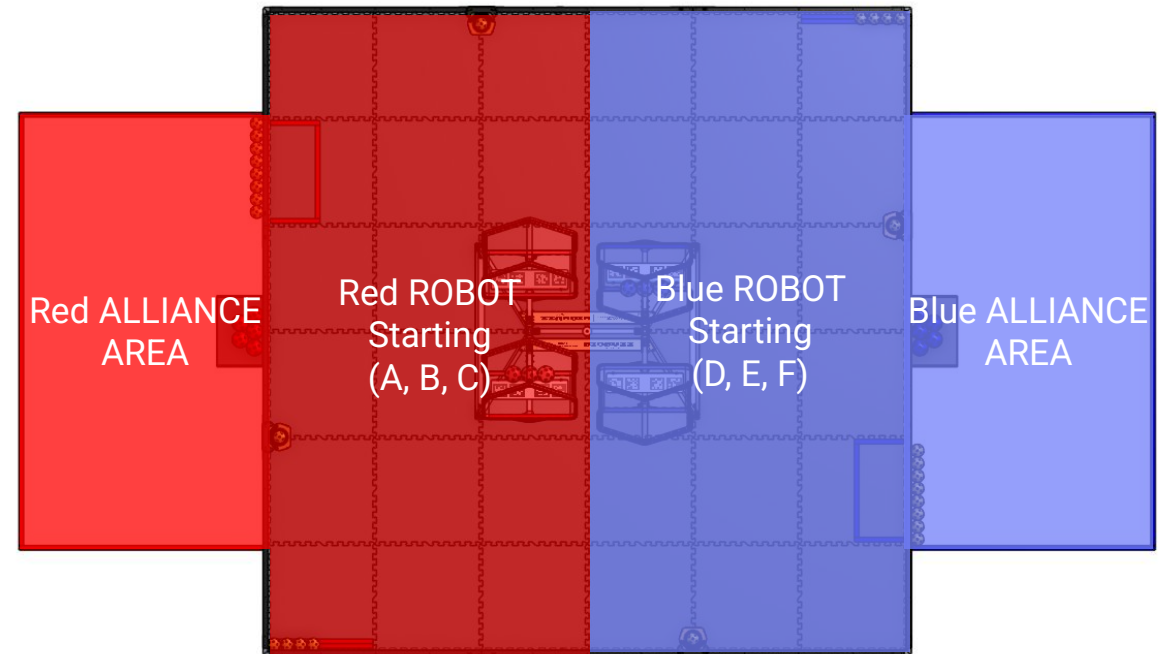
The ALLIANCE that earns the most points wins the MATCH and additional RANKING POINTS can be earned though completing other scoring achievements.





MATCH Set-up (G304)

- ROBOTS are set up on the same side of the FIELD as the ALLIANCE AREA.
 - Red sets up in columns A/B/C and stands on FIELD left.
 - Blue sets up in columns D/E/F and stands on FIELD right.
- Robots must start with 4 pre-loaded POLLEN that come from their own ALLIANCE AREA. (Section 10.3.4 SCORING ELEMENTS).
- ROBOT must start touching the FIELD perimeter wall.



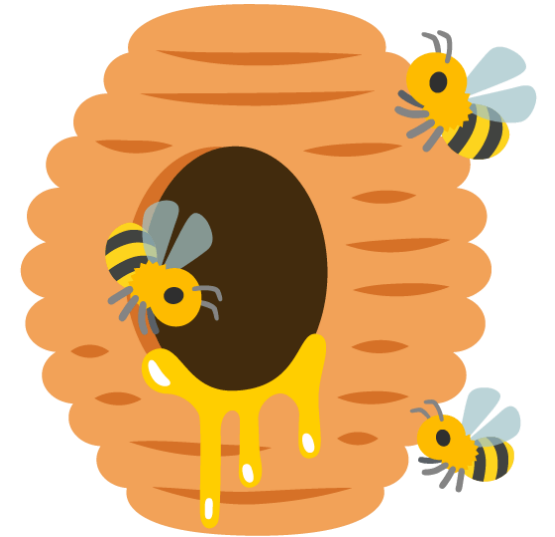
The HIVE tips back and forth

How many SCORING ELEMENTS can cause a HIVE TIP?

- It depends!
 - About 8 POLLEN, or
 - About 3 POLLEN and 3 NECTAR, or
 - Many other combinations!

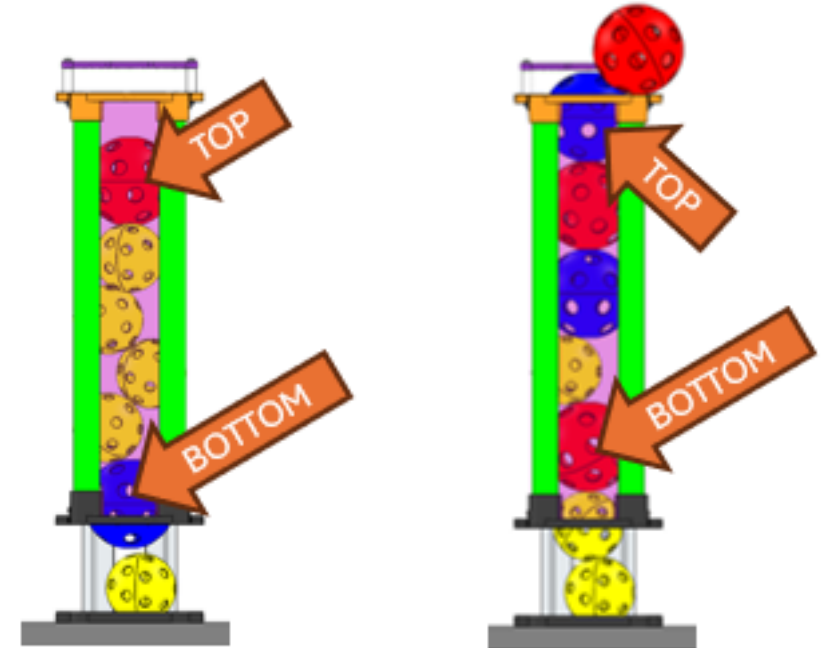
Note: Physics are at play! Location of where SCORING ELEMENTS land may affect the tipping dynamics.

At the end of the MATCH, any POLLEN + NECTAR remaining in the CELL will be scored.



FLOWER Scoring Criteria

- The ALLIANCE that has the bottom-most NECTAR of its color that meets criteria for scoring earns points.
- The ALLIANCE that has the top-most NECTAR of its color that meets the criteria for scoring owns the FLOWER and earns points for every POLLEN and NECTAR within the FLOWER.

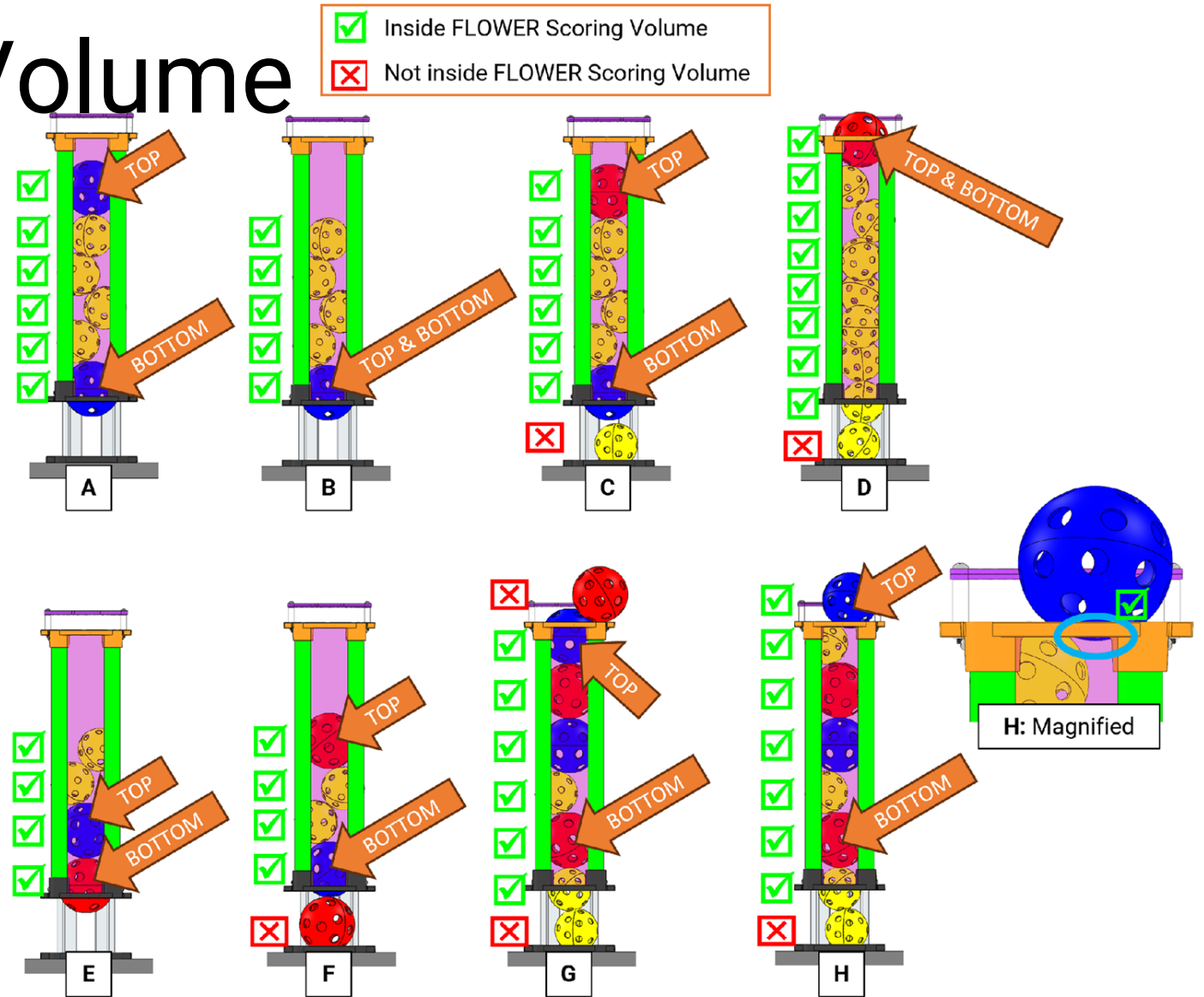


FLOWER Scoring Volume



NECTAR & POLLEN are scored through the top of the FLOWER.

POLLEN can leave through the bottom of the FLOWER, but NECTAR cannot.



You have to wait to score NECTAR in the FLOWERS

NECTAR cannot be scored in a FLOWER until 60 seconds are left in the MATCH. (G410)

POLLEN can be scored in a FLOWER at any time.

Do not meddle with FLOWERS or try to descore POLLEN or NECTAR from a FLOWER. (G418)



What are Ranking Points (RPs)?



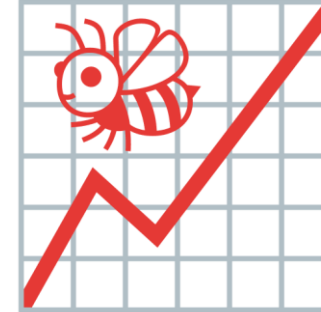
Ranking Points are a measure of a team's success in MATCH play and are used to rank teams within an event. There are two types of Ranking Points; MATCH results and MATCH objectives.

- Teams earn MATCH result Ranking Points based on the Win-Tie-Loss results of a MATCH.
- Teams earn MATCH objective Ranking Points by accomplishing specific in-game achievements.
- A team can lose a MATCH but still earn all the MATCH objective Ranking Points in a MATCH.
- Likewise, a team can win a MATCH and not earn ANY of the MATCH objective Ranking Points.

The goal of Qualification MATCHES is to earn as many Ranking Points as possible to climb to the top of the leaderboard!

Ranking Points (RPs)

- Average Ranking Points (Rank Score) are the 1st order sort for Qualification Ranking
- Teams earn RPs from a Win or a Tie.
- Teams can earn up to 6 RP during a MATCH:
 - Win is worth 3 RPs
 - Tie is worth 1 RP
 - Additional scoring achievements can also earn extra RPs (up to 3 RPs)
- Thresholds will vary for these achievements as event levels progress.



SWARM RP: Combined LEAVE + PARK points earned at or above threshold

POLLINATOR 1 RP: number of TIPS at or above threshold

POLLINATOR 2 RP: number of TIPS at or above threshold

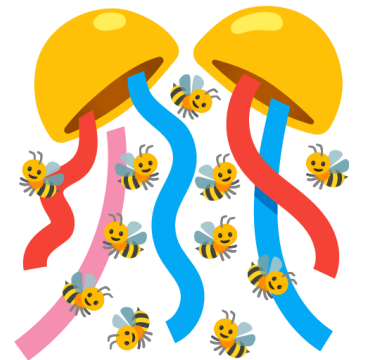
Table 10-3: BIOBUZZ RP thresholds

RP Type	FIRST Championship	Regional Championships	All Other Events*
SWARM RP	TBA	TBA	16 Points
POLLINATOR 1 RP	TBA	TBA	4 TIPS
POLLINATOR 2 RP	TBA	TBA	7 TIPS

SWARM RP

Combined LEAVE + PARK points earned at or above threshold = 16 for events under Regional Championship level

- Combination of LEAVE points earned in AUTO and PARK points earned at the end of **AUTO** and/or end of **TELEOP**.
- Multiple combinations of ROBOT accomplishments can earn this RP:
 - 2 LEAVE (3 pts each) + 2 PARK in AUTO (5 pts each) = 16
 - 2 LEAVE (3 pts each) + 2 PARK at end of TELEOP (5 pts each) = 16
 - 1 LEAVE (3 pts each) + 2 PARK in AUTO (5 pts each) + 1 PARK at end of TELEOP (5 pts each) = 18
 - 2 PARK in AUTO (5 pts each) + 2 PARK at end of TELEOP (5 pts each) = 20
 - And more!



POLLINATOR RPs

POLLINATOR 1 RP

Achieve at least 4 TIPS during a MATCH to earn POLLINATOR 1 RP for events under Regional Championship level.



POLLINATOR 2 RP

Achieve at least 7 TIPS during a MATCH to earn POLLINATOR 2 RP for events under Regional Championship level.



Important Rules

- CONTROL is limited to 4 NECTAR + POLLEN (G407)
- Don't CONTROL opponent NECTAR (G408)
- No catching SCORING ELEMENTS (G409)
- ROBOTS have expansion limits (G416)
 - 18 in. (45.70 cm) by 24 in. (61.0 cm) by 29 in. (73.65 cm) tall sizing volume
 - The top of the FLOWER upper ring is approximately 21.4 in. (62.0 cm) off the TILE



HUMAN PLAYER Rules in BIOBUZZ

Only **enter** NECTAR into the FIELD when allowed:

- 1 NECTAR can be entered the FIELD per each HIVE TIP by an ALLIANCE
 - In AUTO or TELEOP!
- All remaining NECTAR can be entered during the last 60 seconds in the MATCH!



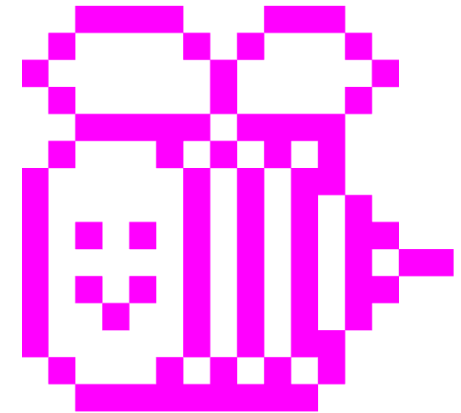
NECTAR must contact the TILE in the LOADING ZONE before contacting a ROBOT or FIELD Element.

- Cannot load ROBOTS directly – but can roll NECTAR to a ROBOT

Don't **remove** or **rearrange** any SCORING ELEMENTS!

Make sure to **review the Competition Manual**, specifically section 11.4.6 for complete HUMAN PLAYER rules.

Online Score Calculator



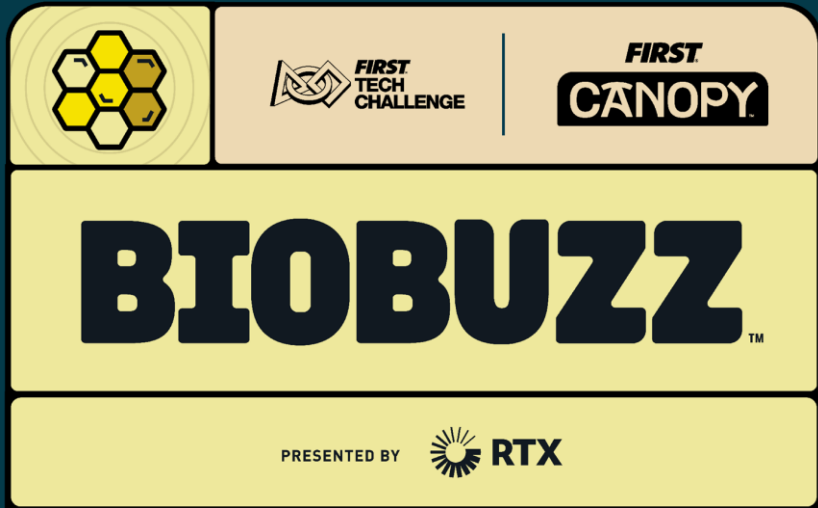
<https://ftc.game/calculator>

Bee in the Know!



Reminder:

- These are thoughts to get you started!
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- Keep an eye out for Team Updates!



Good luck and hive fun!