

Read each statement and determine if it is true or false. If it is true, write “T” in the blank. If it is false, write “F” in the blank. (1pt each)

1. _____ DRIVE TEAMS may pre-load one (1) BOULDER in or on their ROBOT such that the BOULDER is fully supported by their ROBOT.
2. _____ BOULDERS that exit the FIELD over a GUARDRAIL during a MATCH are returned to the COURTYARD at the corner of the GUARDRAIL and CASTLE by FIELD STEWARDS.
3. _____ A BOULDER is scored in a GOAL if it passes through the opening of a GOAL and exits into the CORRAL.
4. _____ A ROBOT has CHALLENGED the TOWER if, at the conclusion of the MATCH, the ROBOT is fully supported by the TOWER, but hasn't met the criteria for SCALING the TOWER.
5. _____ ROBOTS and anything they control, e.g. a BOULDER, may not contact anything outside the FIELD with the exception of brief incursions into the EMBRASURE.
6. _____ DRIVE TEAMS may only enter or exit the FIELD through open gates.
7. _____ Strategies aimed solely at forcing the opposing ALLIANCE to violate a rule are allowed.
8. _____ Any devices worn by the DRIVERS and/or HUMAN PLAYERS must be disconnected from the OPERATOR CONSOLE.
9. _____ A ROBOT may not transfer BOULDERS from the NEUTRAL ZONE to the opponent's COURTYARD.
10. _____ An ALLIANCE may not POSSESS their opponent's BOULDERS.
11. _____ ROBOTS must have passed Inspection to play in a scheduled Practice MATCH.
12. _____ There are no TIMEOUTS in the Qualification MATCHES.
13. _____ An ALLIANCE may request a TIMEOUT after a Playoff MATCH is stopped due to an ARENA FAULT.
14. _____ If an ALLIANCE does not communicate its DEFENSE selection to the DC within the required time period, the DEFENSES are randomly selected by the FMS.
15. _____ There are no TIMEOUTS in the Playoff MATCHES at the FIRST Championship.

Fill in the blanks with the appropriate missing word(s). (1pt each unless otherwise stated)

1. The _____ is the hole in the HUMAN PLAYER STATION plastic and its protective aluminum cage.
2. Each TOWER has _____ low GOALS and _____ high GOALS.

3. The LED light string in the PLAYER STATIONS is yellow a MATCH is in _____.
4. Before each MATCH begins, _____ BOULDER(S) are staged in each CASTLE.
5. When a DEFENSE'S STRENGTH reaches zero (0), the DEFENSE is _____.
6. A DEFENSE is CROSSED by a ROBOT when that ROBOT starts free of contact with the DEFENSE and completely in the _____.
7. A TOWER is _____ if the TOWER'S STRENGTH is at or below zero (0).
8. During AUTO, DRIVE TEAM members in the CASTLE may not contact anything in front of the _____, unless for personal or equipment safety.
9. ROBOTS may only enter or exit their opponent's SECRET PASSAGE from/to the opponent's _____.
10. ROBOTS may not pin an opponent's ROBOT for more than _____ second(s). A ROBOT will be considered pinned until the ROBOTS have separated by at least _____ feet. The pinning ROBOT(s) must then wait for at least _____ second(s) before attempting to pin the same ROBOT again. **(3 pts)**
11. During the final _____ seconds of TELEOP, ROBOTS in their COURTYARD may not contact an opponent ROBOT, regardless of who initiates the contact.
12. ROBOTS may not control more than _____ BOULDER(S) at any time.
13. A SURROGATE receives _____ MATCH Point(s) at the completion of a Qualification MATCH.
14. The _____ has the ultimate authority in the ARENA during the event, but may receive input from additional sources, e.g. Game Designers, FIRST personnel, FTA, and technical staff.
15. If an ALLIANCE wishes to call a TIMEOUT, they must submit their TIMEOUT coupon to the Head REFEREE within _____ minutes of the ARENA reset signal preceding their MATCH.
16. If there is a disagreement amongst the Teams on an ALLIANCE regarding the specific DEFENSES or their locations on the FIELD, the ALLIANCE CAPTAIN or Team assigned to PLAYER STATION # _____ has the final decision authority.

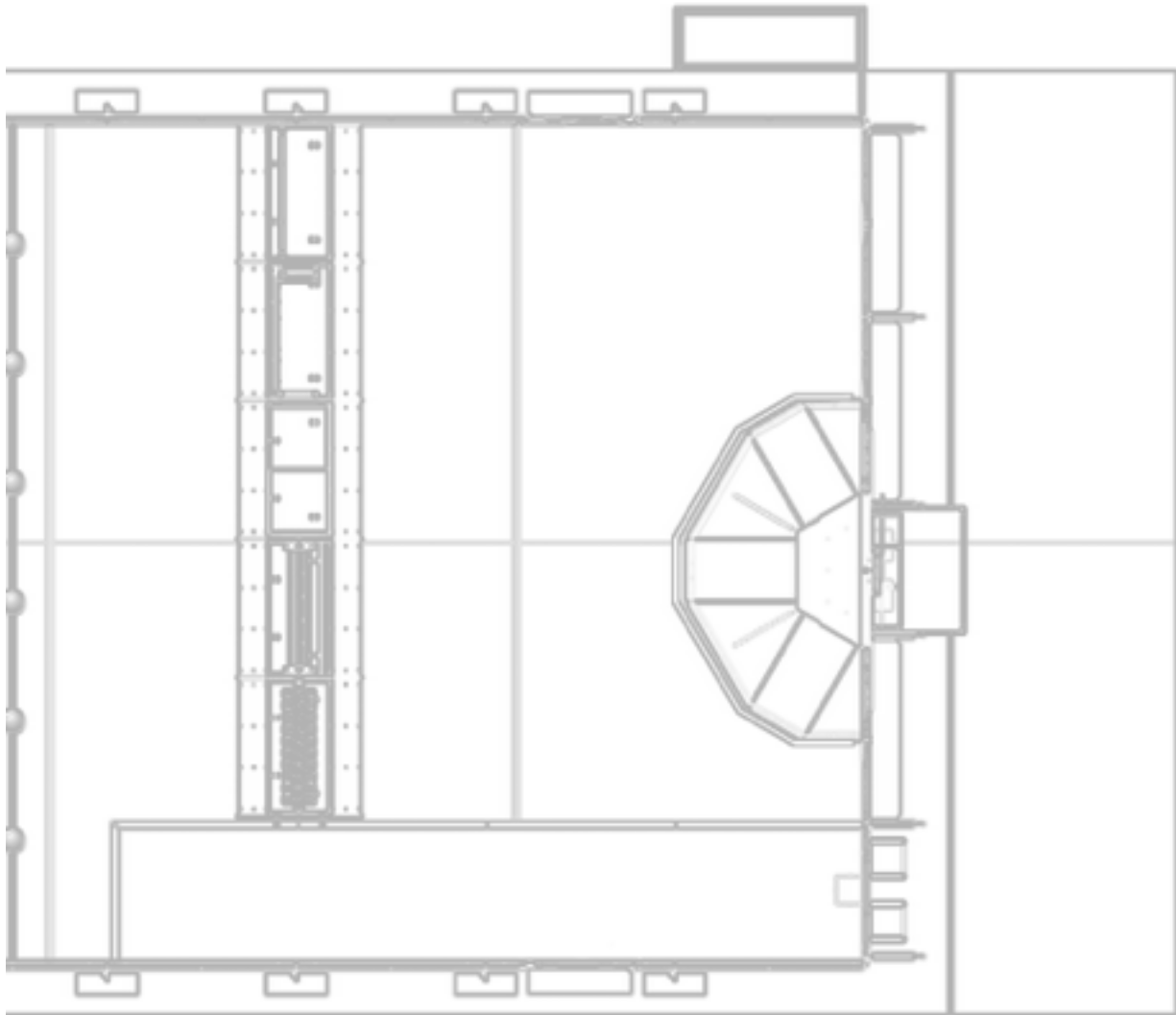
Draw and label the border of the listed zones and label the listed markings in the diagram of the field below. (1 pt each)

Zones

- COURTYARD
- NEUTRAL ZONE
- OUTER WORKS
- SECRET PASSAGE
- SPY BOX
- CASTLE

Markings

- MIDLINE
- AUTO LINE
- STARTING LINE
- ALIGNMENT LINE



List the DEFENSES in each category (5 pts)

Category A	Category B	Category C	Category D	non-selectable

Which of the following electronic components are in the PLAYER STATIONS? For each of the correct answer(s), write “X” in the blank. (3pts)

- _____ Ethernet Cable
- _____ Classmate Power Adapter
- _____ Emergency Stop (E-Stop) button
- _____ Flat panel display to show scoring
- _____ Team LED to indicate robot status
- _____ Power Outlet
- _____ LED light string

How long is AUTO? (1pt)

How long is TELEOP? (1pt)

Fill in the table below with the point values for the tasks in *FIRST STRONGHOLD*. (16 pts)

Action	AUTO	TELEOP	Qual	Playoff
REACHING a DEFENSE				
CROSSING an UNDAMAGED DEFENSE				
BOULDER in Low TOWER GOAL				
BOULDER in High TOWER GOAL				
CHALLENGE (per ROBOT)				
SCALE (per ROBOT)				
BREACH				
CAPTURE				

Which people are allowed to touch BOULDERS? For each of the correct answer(s), write "X" in the blank. (2pts)

- COACHES
- HUMAN PLAYERS
- DRIVERS
- FIELD STEWARDS

During Playoff MATCHES do RED CARDS apply to as single Team or the entire ALLIANCE? (1pt)

Which of the following may lead to a MATCH replay? For each of the correct answer(s), write "X" in the blank. (2pts)

- A tie
- Ripped or torn BOULDERS
- Broken FIELD elements
- Power failure to a portion of the FIELD
- tripping the circuit breaker in the PLAYER STATION
- Improper activation by the FMS
- Errors by FIELD STEWARDS
- a Team STANDARD falling into the FIELD
- A piece of FIELD plastic falls into the FIELD, but does not, in the judgment of the Head REFEREE, affect the outcome of the MATCH

Pick two of the following four questions. Answer them on a separate sheet of paper. Be thorough in your responses and give as many details as you can remember. (6pts each)

1. When a robot is placed on the FIELD for a MATCH, where can it be placed? How should it be configured?
2. All Teams participating in the Tournament are seeded during the Qualification MATCHES. Describe how the seeding order is determined.
3. What should a DRIVE TEAM do if they need clarification on a ruling or score?
4. Describe how DEFENSES are selected for QUALIFICATION MATCHES.