6328 2024 Kickoff Worksheet

Aim to answer the questions in order. This is done to gain a fuller understanding of the game and ensure that full team discussions are effective, and everyone can contribute. This worksheet took heavy inspiration from 2791's Kickoff Worksheet and 1678's Strategy Offseason Training.

Each section has a recommended amount of time to serve as a guideline (not rules) for when to move on so that each question can be addressed in approximately 1 hour and 30 minutes.

The Field (15 minutes)

• List all the zones of the field. What is special about this zone? How many of each are there? (ex: Tarmac, Hangar, Rendezvous Point)

7 Zones

2 Net -

Samples in Nets

High and Low zones and Base zone

2 Observation -

Parking and 3 points

Attach Clips to make specimen

2 Ascent Zones -

Climbing Zones 3 tiers

Submersible -

Holds the samples

• List all the major elements on the field. What is the purpose of this element? How many of each are there? (ex: Hub, Generator Switch)

Submersible -

Samples

Climbing Rungs

Specimen Rungs / Chambers

Baskets 2 tiers

Observation Zone

Spike Marks - Holds Samples on Field

Game Piece(s) (5 minutes)

• How many different game pieces are there? What are they? How many can a robot hold?

SAMPLE 20 red, 20 blue, 40 neutral Samples: 1.5" x 3.5"
20 Red 20 blue clips only one at a time

• Where can a robot score game pieces? Does this change throughout the match?

Net

Basket

Chambers

• Where do robots get game pieces from? Do Robots start with any? After being scored can the game pieces be reintroduced to the field? And if so, how?

Submersible - SAMPLE

Spike Mark - SAMPLE

Observation Zone - SPECIMEN CONVERSION

Points (15 minutes)

• List all possible ways to score points (besides foul points). Describe how this scoring method can potentially lead to Rank Points (RP). If a scoring method changes in value between Stages, list those in the same row.

Stage (auto, tele, endgame)	Action	Value (pts and RP)
Auto	Put a sample in the basket	2 netzone, 4 basket 1, 8 basket 2
	Put a specimen in chamber	6 low chamber, 10 high chamber
	Park Ascent or Observation	3 points
Teleop	Samples in Bucket	2 zone, 4 low bucket., 8 high bucket
	Specimen in Chamber	6 low chamber, 10 high chamber
Endgame	Climbing on rungs	3 for touching low bar, 15 Low, 30 High RUng
	Observation Zone Parking	3 points

•	Are there restrictions on where you can score game pieces from? (ex: No scoring power cells from your sector in 2020)
	No launching samples Can only score specific specimens on respective alliance chamber Yellow can be scored on buckets
•	Are there time restrictions on when certain tasks can physically be done by the robot? (Height restrictions for climbing being extended during endgame, Scoring hatches on preplaced cargo in 2019)
	No
•	List ways to prevent your opponent from scoring points. (ex: pushing opponents, blocking shots, picking up their game pieces)
	Block from scoring on neutral zones
•	Are there any actions that potentially get harder as the match progresses? (Less scoring locations in 2019, less room on scale/switch in 2018)
	Finite amount of samples Harder to grab ones in middle Chambers and baskets get crowded

Fouls (10 minutes)

• List what you believe are going to be the most common / influential penalties (fouls/tech fouls) in this game. Aim for 3-5 answers.

Foul # (ex: G20)	Description	Reason
G410	NO MORE THAN ONE SAMPLE OR SPECIMEN	
G425	NO CONTACT IN NET ZONE	
G407	ROBOT MUST NOT MISUSE A SCORING ELEMENT	
G404	NO INTERFERING WITH OPPONENT AUTONOMOUS	
G408	KEEP ELEMENTS IN BOUNDS	
G411	ONLY CONTROL YOU SAMPLE COLOR	
G412	YOU CANNOT DESCORE OPPOSING ALLIANCE PIECES PIECES	
G419	ROBOT MAY NOT BE IN OBSERVANCE ZONE AT SAME TIME AS HUMAN PLAYER	

G417	NO THROWING ELEMENTS AS A ROBOT	
G418	HORIZONTAL EXPANSION LIMIT	
G420	NO CLIMBING ON THE INSIDE OF SUBMERSIBLE BEFORE BEGINNING ASCENT	
G423	5 COUNT ON PINS, 2 FT AWAY FOR MORE THAN 5 SECONDS	
G425-427	PROTECTIONS ON NET ZONE, OBSERVATION ZONE, ASCENT	
G431	HUMAN PLAYERS MAY ONLY INTERACT WITH SCORING ELEMENTS IN ZONE	
G433	HUMAN PLAYERS MAY NOT YEET SCORING ELEMENTS	

Auto Strategy (10 minutes)

• Where do robots start on the field (Tarmac in 2022)?

START ON ALLIANCE SIDE WALL

 How can the actions in one Stage (auto, teleop, endgame) impact your alliance or the opposing alliance in another stage?
 (ex: scoring hatches on the rocket in 2019 in auto to open more cargo scoring locations, overflowing opponent's loading station in auto in 2020)

SCORING IN AUTO GIVES AN EDGE DURING TELEOP

GRABBING ELEMENT (YELLOW OR ALLIANCE) FROM THE SUBMERSIBLE, NEUTRAL ONES IN AUTO DEPRIVE IN AUTO

GRABBING NEUTRAL SAMPLES ON SPIKES

• How can multiple robots work together in auto?

ONE ROBOT CAN SCORE IN BASKET,
ONE CAN PUSH SAMPLES INTO ZONES
PUSH INTO OBSERVATION ZONE FOR SPECIMENS TO BE SCORED LATER IN TELEOP
PARKING IN DESIGNATED OR SEPARATE ZONES

Teleop Strategy (15 minutes)

 Are there ways for alliances to work together in a match, as opposed to each robot working independently? Do these seem viable?
 (ex: one robot scoring cargo, the other scoring hatches in 2019) ONE ROBOT CREATES SPECIMENS, THE OTHER SCORES THEM

ONE BASKET, ONE SUBMERSIBLE SCORER
SHUTTLE BOT, SCORING BOT (KEEP IN MIND ONE AT A TIME)
NEUTRAL FOCUS ON BASKET, ALLIANCE FOCUS ON ALLIANCE COLORED SAMPLES
BASKET AND DEFENSE COMBO

 Are there any places on the field that are particularly vulnerable to defense?

(ex: Hangar in 2022, Rendezvous point in 2020)

AREA NEXT TO NET ZONE
AREA NEXT TO OBSERVATION ZONE
AREA INBOUND TO ASCENT ZONE
CHAMBER AREAS (WHILE NOT ACTIVELY SCORING)

• Is it possible to score from any protected areas, where opponents are not allowed to touch you? (ex: Trench Run in 2020, LaunchPad in 2022)

Climbing Area

Net Zone

Observation

Match / Tournament Strategy (10 minutes)

• List at least one insight into this game that you think your peers may have glanced over. Describe in detail and be prepared to share.

Specimen Assembly Line Revisit this later.