

Referee: Table: Team #: Round:

(2)

(please circle all selections or fill in the blanks)

S M01 Shark Shipment -- Nothing can touch the Shark except the tank (Yes) (Yes NONE -T1 Nothing touched the Shark except the tank* Shark touching only tank floor (NOT wall) Shark and tank are completely in Target

M02 Service Dog Action

-- Robot must cross fence from West, between barriers

Warning Fence is down

Xes No 2 4 Pairs of Identical Animals completely on same side 10 1 2 M03 Animal Conservation -- Pairs made by rotation of Model Robot completely crossed fence*

45678 က 7 6 Pieces of food completely in Animal Areas M04 Feeding -- (only one color per Area)

Yes No Wall supports complete weight of White Gecko Wall supports complete weight of Robot M05 Biomimicry

Yes M06 Milking Automation -- Movement made by red lever All Manure has rolled out* All Milk has rolled out*

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Slider appears fully opened clockwise M07 Panda Release

2

Yes

2

Yes

Camera is completely in Base M08 Camera Recovery

Team Initials:

Yes (%) -- Manure samples must be moved one at a time Yes NONE Dog, Trainer completely in Training/Research Area Zoologist completely in Training/Research Area Manure completely in Training/Research Area* (M09 Training and Research 6

(1-7)

Bee is on Beehive and Honey is completely in Base Bee is on Beehive with NO Honey in Beehive M10 Bee Keeping

Yes No

2 Yes (Yes es

Prosthesis fitted to Pet, NOT held by Ref

M11 Prosthesis

Prosthesis fitted to Pet and completely in Farm Seal is completely in Base, NOT broken

M12 Seal in Base

Yes No

S

Yes

M13 Milk in Base

All three Milk are completely in Base

NONE M14 Milk on Ramp (Select option that best fits) A) All three milk supported by Ramp

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B) (A) + only things supported by & touching Ramp C) (A) + (B) + standing

M15 All Samples

All seven Manure Samples completely in Training/Research Arga.

Number of Manure Samples in the white triangle, area Penalties

1xShark&Tank, 1xProsthesis, 12xManureSamples, 3xManure, 1xGorilla, 1xBat, 1xFlamingo, 1xFrog, 1xWhiteGecko, Return Loose Items

3xMilk, 8xFood, 1xPet, 1xBee, 1xHoney, 1xSeal, 1xCamera

2

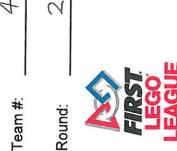
Yes No

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Kereree Table: N

X





please circle all selections or fill in the blanks)

22 M01 Shark Shipment -- Nothing can touch the Shark except the tank Yes NON Nothing touched the Shark except the tank* Shark touching only tank floor (NOT wall) Shark and tank are completely in Target

M02 Service Dog Action

ž -- Robot must cross fence from West, between barriers (sa)

Warning Fence is down

M03 Animal Conservation -- Pairs made by rotation of Model Robot completely crossed fence*

5678 234 5 Pieces of food completely in Animal Areas M04 Feeding -- (only one color per Area)

M05 Biomimicry

3/2 Yes Wall supports complete weight of White Gecko

Yes (Yes M06 Milking Automation -- Movement made by red lever Wall supports complete weight of Robot All Milk has rolled out*

Yes/ All Manure has rolled out* M07 Panda Release

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Yes/

Yes (No

Slider appears fully opened clockwise M08 Camera Recovery

Camera is completely in Base

Team Initials:

M09 Training and Research 6

€**}** 5 -- Manure samples must be moved one at a time Yes NONE Dog, Trainer completely in Training/Research Area Zoologist completely in Training/Research Area Manure completely in Training/Research Area* |

Bee is on Beehive and Honey is completely in Base Bee is on Beehive with NO Honey in Beehive M10 Bee Keeping

26 Kes Kes

\$ B

Yes Yes

> Prosthesis fitted to Pet and completely in Farm Seal is completely in Base, NOT broken M12 Seal in Base

Prosthesis fitted to Pet, NOT held by Ref

M11 Prosthesis

Yes (No

All three Milk are completely in Base M13 Milk in Base

2

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6

Pairs of Identical Animals completely on same side*

O m NONE

Yes (No)

M14 Milk on Ramp (Select option that best fits)

4

(A) + only things supported by & touching Ramp A) All three milk supported by Ramp
B) (A) + only things supported by & tr
C) (A) + (B) + standing

All seven Manure Samples completely in Training/Research Are M15 All Samples

က 0 (1)2 Number of Manure Samples in the white triangle area $ilde{\sim}$ Penalties

2

4

Yes

Return Loose Items

1xShark&Tank, 1xProsthesis, 12xManureSamples, 3xManure, 3xMilk, 8xFood, 1xPet, 1xBee, 1xHoney, 1xSeal, 1xCamera 1xGorilla, 1xBat, 1xFlamingo, 1xFrog, 1xWhiteGecko,

38

MA ES	e at a time Yes (No) Yes (1-7)	Yes No	Yes No	Yes (No	Yes No	У В С	ch Area Yes (No	
	ea NONE	Base	-			(s) NONE Ramp	iing/Resear	

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Nothing touched the Shark except the tank*

M02 Service Dog Action

Shark touching only tank floor (NOT wall) Shark and tank are completely in Target

NONE T1

Referee:

Team #:

Round:

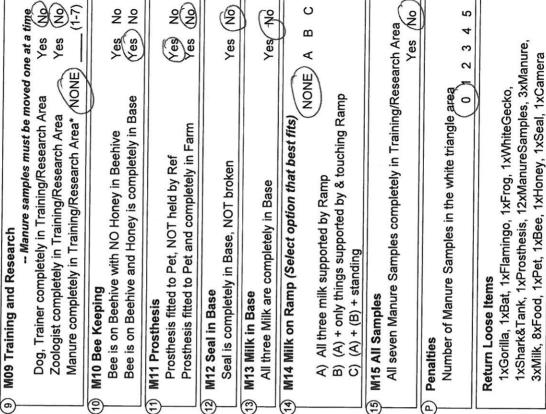
Table:

M01 Shark Shipment -- Nothing can touch the Shark except the tank

(please circle all selections or fill in the blanks)

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-- Robot must cross fence from West, between barriers



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Pairs of Identical Animals completely on same side (0)12

M03 Animal Conservation -- Pairs made by rotation of Model

Robot completely crossed fence*

Warning Fence is down

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Pieces of food completely in Animal Areas

M04 Feeding -- (only one color per Area)

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Yes

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Yes (

Slider appears fully opened clockwise

Camera is completely in Base

Team Initials:

M08 Camera Recovery

Yes (No

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Yes

M06 Milking Automation -- Movement made by red lever

All Manure has rolled out*

M07 Panda Release

All Milk has rolled out*

Wall supports complete weight of White Gecko

M05 Biomimicry

Wall supports complete weight of Robot



Core Values

Team Number	TEAM	EMLYN	
Judging Room			

Directions: For each skill area, clearly mark the box that best describes the team's accomplishments. If the team does not demonstrate skill in a particular area, then put an 'X' in the first box for Not Demonstrated (ND). Please provide as many written comments as you can to acknowledge each team's hard work and to help teams improve. When you have completed the evaluation, please circle the team's areas of strength.

		Beginning	Developing	Accomplished	m's areas of strength. Exemplary
	Dis	scovery Bal	anced emphasis on all three RST LEGO League; it's not ju	aspects (Robot, Project, Co	
Ē	N D	emphasis on only one aspect; others neglected	emphasis on two aspects; one aspect neglected	emphasis on all three aspects	balanced emphasis on all three aspects
ratio	Te		husiastic and fun expression	of the team identity	
Inspiration	N D	minimal enthusiasm AND minimal identity	minimal enthusiasm OR minimal identity	team is enthusiastic and fun; clear identity	team engages others in their enthusiasm & fun; clear identity
	Int	egration App (ab	olication of FIRST LEGO Lea ility to describe current and p	igue values and skills outsid ootential examples from daily	e FIRST LEGO League
	N D	team does not apply values and skills outside FIRST LEGO League	team able to describe at least one example	team able to describe multiple examples	team able to describe multiple examples, incl. individual stories
nts:	T	can g 3.		•	The state of the s
Comments:				hid soldier	
			blem solving and decision m		achieve their goals
	N D	team goals AND team processes unclear	team goals OR team processes unclear	clear team goals and processes	clear processes enable team to accomplish well defined goals
V Y	Effi	iciency Res and	ources used relative to what the responsibilities)	team accomplishes (time man	agement, distribution of roles
leamwork	N D	limited time management AND unclear roles	limited time management OR unclear roles	excellent time management and role definition allows team to accomplish most goals	excellent time management and role definition allows teams to accomplish all goals
	Kid	Is Do the Work App	ropriate balance between tea	am responsibility and coach	guidance
	N D	limited team responsibility AND excessive coach guidance	limited team responsibility OR excessive coach guidance	Good balance between team responsibility and coach guidance	team independence with minimal coach guidance
. Comments:	Incl	lusion Con			
0		mer	sideration and appreciation f	for the contributions (ideas a	nd skills) of all team
9	N	unbalanced team involvement	unbalanced team involvement	or the contributions (ideas a ment balanced team involvement AND	nd skills) of all team balanced team involvement AND
Juanonia	N D	mer	nbers, with balanced involved	ment	
	D	unbalanced team involvement AND lack of appreciation for contributions FPECT Tea	unbalanced team involvement OR lack of appreciation for contributions m members act and speak w	balanced team involvement AND appreciation for contributions of most team members rith integrity so others feel va	balanced team involvement AND appreciation for contributions of all team members
r r oressionalisme	Res	unbalanced team involvement AND lack of appreciation for contributions FPECT Tea	unbalanced involved unbalanced team involvement OR lack of appreciation for contributions	balanced team involvement AND appreciation for contributions of most team members rith integrity so others feel va	balanced team involvement AND appreciation for contributions of all team members
olacioas i rolessionalismo	Res N D	unbalanced team involvement AND lack of appreciation for contributions Spect Tea solv not evident with majority of team members	unbalanced team involvement OR lack of appreciation for contributions m members act and speak w ing problems or resolving con evident with majority of	balanced team involvement AND appreciation for contributions of most team members with integrity so others feel vanflicts almost always evident with all team members	balanced team involvement AND appreciation for contributions of all team members alued especially when always evident, even in the most difficult situations

Strengths:

Inspiration

Teamwork

Gracious Professionalism®

FIRST.
LEGO'
LEAGUE

Robot Design

Team Number	4
Judging Room	

Directions: For each skill area, clearly mark the box that best describes the team's accomplishments. If the team does not demonstrate skill in a particular area, then put an 'X' in the first box for Not Demonstrated (ND). Please provide as many written comments as you can to acknowledge each team's hard work and to help teams improve. When you have completed the evaluation, please circle the team's areas of strength.

	O'CO	Beginning	Developing	Accomplished	Exemplary	
	Du	rability Evi	dence of structural integrity;	ability to withstand rigors of	competition	
esign	N D	quite fragile; breaks a lot	frequent or significant faults/repairs	rare faults/repairs	sound construction; no repairs	
_	Mechanical Efficiency Economic use of parts and time; easy to repair and modify					
Janica	N D	excessive parts or time to repair/modify	inefficient parts or time to repair/modify	appropriate use of parts and time to repair/modify	streamlined use of parts and time to repair/modify	
Mechanization Ability of robot mechanisms to move or act with appropriate sp accuracy for intended tasks (propulsion and execution) imbalance of speed, imbalance of speed, appropriate balance of					speed, strength and	
Ž	N D	imbalance of speed, strength and accuracy on most tasks	imbalance of speed, strength and accuracy on some tasks	appropriate balance of speed, strength and accuracy on most tasks	appropriate balance of speed, strength and accuracy on every task	

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Programming Quality Programs are appropriate for the intended purpose and would achieve consistent results, assuming no mechanical faults						
N would not achieve purpose D AND would be inconsistent	would not achieve purpose OR would be inconsistent	should achieve purpose repeatedly	should achieve purpose every time			
Programming Efficiency Programs are modular, streamlined, and understandable						
N excessive code and difficult D to understand	inefficient code and challenge to understand	appropriate code and easy to understand	streamlined code and easy for anyone to understand			
Automation/Navigation Ability of the robot to move or act as intended using mechanical and/or sensor feedback (with minimal reliance on driver intervention and/or program timing)						
N frequent driver intervention to aim AND retrieve robot	frequent driver intervention to aim OR retrieve robot	robot moves/acts as intended repeatedly w/ occasional driver intervention	robot moves/acts as intended every time with no driver intervention			

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De	narrowed	gevelop and explain improve , selections tested, designs al design)			
N D	organization AND explanation need improvement	organization OR explanation need improvement	systematic and well- explained	systematic, well-explained and well-documented	
Mi	ssion Strategy Abi	lity to clearly define and des	cribe the team's game strate	gy	
N D	no clear goals AND no clear strategy	no clear goals OR no clear strategy	clear strategy to accomplish the team's well defined goals	clear strategy to accomplish most/all game missions	
Innovation Creation of new, unique, or unexpected feature(s) (e.g. designs, programs, strategies or applications) that are beneficial in performing the specified tasks					
N D	original feature(s) with no added value or potential	original feature(s) with some added value or potential	original feature(s) with the potential to add significant value	original feature(s) that add significant value	

(b)

Strengths: Mechanical Design Programming Strategy & Innovation

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ments: Mec

Comments:

Programming

Strategy & Innovation

Comments:



Team Number ___

Directions: For each skill area, clearly mark the box that best describes the team's accomplishments. If the team does not demonstrate skill in a particular area, then put an 'X' in the first box for Not Demonstrated (ND). Please provide as many written comments as you can to acknowledge each team's hard work and to help teams improve. When you have completed the evaluation, please circle the team's areas of strength.

		Beginning	Developing	Accomplished	Exemplary
	Pr	roblem Identification * Cle	ear definition of the problem	being studied	
	N D	unclear; few details	partially clear; details missing	mostly clear; detailed	clear; very detailed
	Sc	ources of Information Tyl	pes (e.g. books, magazines, ality sources cited, including	websites, reports and other professionals in the field	resources) and number of
Research	N D	one type of information cited; minimal sources	two types of information cited; several sources	three types of information cited; many sources, including professionals	four(+) types of information cited; extensive sources, incl. professionals
Res	Pr	oblem Analysis De	pth to which the problem wa	s studied and analyzed by th	The state of the s
	N D	minimal study; no team analysis	minimal study; some team analysis	sufficient study and analysis by team	extensive study and analysis by team
	Re	eview Existing Solutions	Extent to which existing soluverify the originality of the te	utions were analyzed by the team's solution	team, Including an effort to
	N D	minimal review; no team analysis	minimal review; some team analysis	sufficient review and analysis by team	extensive review and analysis by team
ents:					, sample by tourn
Comments:					
<u>ပိ</u>					
=		am Solution* Cle	ar explanation of the propos	ed solution	
lutio	N D	difficult to understand	some parts confusing 🖈	understandable	easy to understand by all
Sol	Inr	novation Deg	ree to which the team's solution application of existing ideas, o	n makes life better by improving r solving the problem in a comp	existing options, developing a
Innovative Solution	N D	existing solution/application	solution/application contains some original element(s)	original solution/application	original solution/application with the potential to add significant value
nno	lm	plementation Cor	nsideration of factors for impl	lementation (cost, ease of m	anufacturing, etc.)
	N D	minimal factors considered	some factors considered	factors well considered; some question about proposed solution	factors well considered and feasible solution proposed
ents:					
Comments:					
8	Sh	aring* Dec	uroo to which the team share	d their Draiget before the to-	
			ht benefit from the team's eff	d their Project before the tou forts	irnament with others who
ڃ	N D	shared with one individual 🥆	shared with one group	shared with one individual or group who may benefit	shared with multiple individuals or groups who may benefit
tation	Cre	eativity Ima	gination used to develop and		
Presenta	N D	minimally engaging OR unimaginative	engaging OR imaginative	engaging AND imaginative	very engaging AND exceptionally imaginative
۵	Pre	esentation Effectiveness	Message delivery and org	anization of the presentation	
	N D	unclear OR disorganized	partially clear; minimal organization	mostly clear; mostly organized	clear AND well organized
Comments:				•	
mm					
8					
otre	engt	ns:	Research	Innovative Solution	Presentation

Innovative Solution

Presentation

Research

*Required for Award Consideration