



004

SEASON 4

SPHERO GOES
INCOGNITO

SPHERO GLOBAL CHALLENGE

EVALUATION
RUBRICS

2023-2024



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BOLT: Spies Like Bolt Evaluation Rubric

	Developing	Improving	Accomplished	Exemplary
Mission Objective #1: Spy Gates	<p>Five Points will be deducted if BOLT 1 and BOLT 2 bump into each other in any location on the <i>Competition Field</i>, except in the <i>Rendezvous Area</i>. Five points will be deducted if a BOLT robot crosses the <i>Competition Field Boundary Lines</i>.</p>			
	<p>0-20 <i>Mission Objective</i> not attempted or mostly incomplete.</p>	<p>21-50 <i>Mission Objective</i> mostly complete. <i>Competition Field</i> not set up accurately; and/or BOLTs don't start in <i>Starting Area</i>; and/or BOLTs don't end in <i>Rendezvous Area</i>; and/or all <i>Gates</i> are not passed under.</p>	<p>51-80 <i>Mission Objective</i> is complete.</p>	<p>81-100 <i>Mission Objective</i> is complete. Lights and sounds are programmed creatively; and/or team clearly went above and beyond.</p>
Mission Objective #2: Spy Messages	<p>0-20 <i>Mission Objective</i> not attempted or mostly incomplete.</p>	<p>21-50 <i>Mission Objective</i> mostly complete. <i>Turnstile</i> or <i>Slider</i> constructed incorrectly; and/or no evidence that secret message is decrypted; and/or BOLT 2 does not interact with <i>Turnstile</i> or <i>Slider</i> as outlined in secret message; and/or BOLT 2 does not send message on correct channel at end of <i>Mission Objective</i>.</p>	<p>51-80 <i>Mission Objective</i> is complete.</p>	<p>81-100 <i>Mission Objective</i> is complete. Program for BOLT 2 shows creativity with lights and sounds; and/or team clearly went above and beyond.</p>
Mission Objective #3: Spy Rescue	<p>Five points will be deducted from the overall score each time contact is made with an <i>Obstacle</i>. Five points will be deducted if a BOLT robot crosses the <i>Competition Field Boundary Lines</i>. Ten bonus points will be awarded if the door to the <i>Locked Room</i> is closed after BOLT 2's escape.</p>			
	<p>0-20 <i>Mission Objective</i> not attempted or mostly incomplete.</p>	<p>21-50 <i>Mission Objective</i> mostly complete. <i>Locked Room</i> does not have four sides or a door to open it from the outside; and/or program for BOLT 1 does not use a conditional statement to check light levels; and/or BOLT 1 does not open door to <i>Locked Room</i>; and/or BOLT 1 and BOLT 2 do not end the <i>Mission Objective</i> in the <i>Starting Area</i>.</p>	<p>51-80 <i>Mission Objective</i> is complete.</p>	<p>81-100 <i>Mission Objective</i> is complete. <i>Locked Room</i> is uniquely designed and engineered; and/or lights and sounds are programmed creatively; and/or team clearly went above and beyond.</p>

	Developing	Improving	Accomplished	Exemplary
Mission Objective #4: Spy Tower	<p>0-20</p> <p><i>Mission Objective</i> not attempted or mostly incomplete.</p>	<p>21-50</p> <p><i>Mission Objective</i> mostly complete. <i>Tower</i> is unstable or does not have three points of entry for BOLT 2 to roll under the base; and/or BOLT 2 does not start in <i>Starting Area</i>, roll all the way around the tower, or park underneath the <i>Tower</i>; and/or programs do not use IR communications for to control BOLT 2's movement; and/or program for BOLT 1 does not announce the total time it took to complete the <i>Mission Objective</i>.</p>	<p>51-80</p> <p><i>Mission Objective</i> is complete. <i>Tower</i> is taller than 35 Blueprint pitches, yet stable; and/or program for BOLT 1 announces that it took less than 30 seconds to drive BOLT 2 around the <i>Tower</i> and then park underneath the <i>Tower</i>.</p>	<p>81-100</p> <p><i>Mission Objective</i> is complete. <i>Tower</i> is taller than 50 pitches, yet stable; and/or program for BOLT 1 announces that it took less than 20 seconds to drive BOLT 2 around the <i>Tower</i> and then park underneath the <i>Tower</i>; and/or team clearly went above and beyond.</p>
Mission Objective #5: Spy Sweeper	<p>0-20</p> <p><i>Mission Objective</i> not attempted or mostly incomplete.</p>	<p>21-50</p> <p><i>Mission Objective</i> mostly complete. <i>Sweeper</i> and BOLT robots do not start entirely within the <i>Starting Area</i>; and/or <i>Sweeper</i> does not finish outside the <i>Competition Field Boundary Lines</i>; and/or programs for BOLT robots move <i>Sweeper</i> and clear one <i>Bug</i> from <i>Competition Field</i>.</p>	<p>51-80</p> <p><i>Mission Objective</i> is complete. Programs for BOLT robots move <i>Sweeper</i> and clear two to three <i>Bugs</i> from <i>Competition Field</i>.</p>	<p>81-100</p> <p><i>Mission Objective</i> is complete. Programs for BOLT robots move <i>Sweeper</i> and clear all four <i>Bugs</i> from <i>Competition Field</i>; and/or team clearly went above and beyond.</p>
Slide Presentation	Video Submitted in proper format: Y or N			
	<p>0-20</p> <p>Slide presentation not submitted or largely incomplete.</p>	<p>21-50</p> <p>Deliverables for each <i>Mission Objective</i> are mostly complete. Up to one deliverable per <i>Mission Objective</i> may be missing; and/or some deliverables are unclear.</p>	<p>51-80</p> <p>All deliverables are included and clearly articulated for each <i>Mission Objective</i>.</p>	<p>81-100</p> <p>All deliverables included for each <i>Mission Objective</i>. Clearly articulated reflection on Sphero Global Challenge is included; and/or presentation includes creative elements beyond the original template.</p>

TOTAL SCORE:

(OUT OF 600)



RVR+ Spies on the Move Evaluation Rubric

	Developing	Improving	Accomplished	Exemplary
Mission Objective #1: Clear the Buildings	Five points will be deducted if a RVR+ robot crosses the <i>Competition Field Boundary Lines</i> .			
	0-20 <i>Mission Objective</i> not attempted or mostly incomplete	21-50 <i>Mission Objective</i> mostly complete. <i>Competition Field</i> not set up accurately; and/or RVR+s don't start in <i>RVR+ Base</i> ; and/or RVR+s don't end in <i>RVR+ Cave</i> ; and/or all Buildings are not considered Clear under the <i>Competition Rules</i> .	51-80 <i>Mission Objective</i> is complete.	81-100 <i>Mission Objective</i> is complete. Lights and sounds are programmed creatively; and/or team clearly went above and beyond.
Mission Objective #2: Spy Gear Collection	Five points will be deducted if a RVR+ robot crosses the <i>Competition Field Boundary Lines</i> . Five points will be deducted if a RVR+ robot crosses into a <i>Trap</i> .			
	0-20 <i>Mission Objective</i> not attempted or mostly incomplete.	21-50 <i>Mission Objective</i> mostly complete. <i>Competition Field</i> not set up accurately; and/or RVR+s don't start in <i>RVR+ Base</i> ; and/or RVR+s don't end in <i>RVR+ Cave</i> ; and/or all <i>Spy Gear</i> are not collected.	51-80 <i>Mission Objective</i> is complete.	81-100 <i>Mission Objective</i> is complete. Lights and sounds are programmed creatively; and/or Blueprint <i>Spy Gear</i> collector has creative elements in its design; and/or team clearly went above and beyond.
Mission Objective #3: RVR+ Navigation	Five points will be deducted if a RVR+ robot crosses the <i>Competition Field Boundary Lines</i> . Five points will be deducted if a RVR+ robot crosses into a <i>Trap</i> .			
	0-20 <i>Mission Objective</i> not attempted or mostly incomplete.	21-50 <i>Mission Objective</i> mostly complete. <i>Competition Field</i> not set up accurately; and/or RVR+s don't start in <i>RVR+ Base</i> ; and/or RVR+s don't end in <i>RVR+ Cave</i> ; and/or drive or roll blocks used in program; and/or not all blocks in RVR+-M3-5 are used in the program.	51-80 <i>Mission Objective</i> is complete.	81-100 <i>Mission Objective</i> is complete. Lights and sounds are programmed creatively; and/or team clearly went above and beyond.

	Developing	Improving	Accomplished	Exemplary
Mission Objective #4: Deactivate the Alarms	<p>0-20</p> <p><i>Mission Objective</i> not attempted or mostly incomplete</p>	<p>21-50</p> <p><i>Mission Objective</i> mostly complete. <i>Competition Field</i> not set up accurately; and/or RVR+s don't start in <i>RVR+ Cave</i>; and/or RVR+s don't end in <i>RVR+ Base</i>; and/or not all <i>Alarms</i> are deactivated.</p>	<p>51-80</p> <p><i>Mission Objective</i> is complete.</p>	<p>81-100</p> <p><i>Mission Objective</i> is complete. Lights and sounds are programmed creatively; and/or Blueprint <i>Alarm</i> deactivator has creative elements in its design; and/or team clearly went above and beyond.</p>
Mission Objective #5: Artifact Retrieval	<p>0-20</p> <p><i>Mission Objective</i> not attempted or mostly incomplete.</p>	<p>21-50</p> <p><i>Mission Objective</i> mostly complete. <i>Competition Field</i> not set up accurately and/or RVR+s don't start in <i>RVR+ Cave</i>; and/or RVR+s don't end in <i>RVR+ Base</i>; and/or not all <i>Artifacts</i> are collected.</p>	<p>51-80</p> <p><i>Mission Objective</i> is complete.</p>	<p>81-100</p> <p><i>Mission Objective</i> is complete. Lights and sounds are programmed creatively; and/or Blueprint <i>Artifact</i> collector has creative elements in its design; and/or team clearly went above and beyond.</p>
Slide Presentation	Video Submitted in proper format: Y or N			
	<p>0-20</p> <p>Slide presentation not submitted or largely incomplete.</p>	<p>21-50</p> <p>Deliverables for each <i>Mission Objective</i> are mostly complete. Up to one deliverable per <i>Mission Objective</i> may be missing; and/or some deliverables are unclear.</p>	<p>51-80</p> <p>All deliverables are included and clearly articulated for each <i>Mission Objective</i>.</p>	<p>81-100</p> <p>All deliverables included for each <i>Mission Objective</i>. Clearly articulated reflection on Sphero Global Challenge is included; and/or presentation includes creative elements beyond the original template.</p>

TOTAL SCORE:

(OUT OF 600)



indi: Undercover indi Evaluation Rubric

	Developing	Improving	Accomplished	Exemplary
Mission Objective #1: indi's Sneaky Path	<p>0-20</p> <p><i>Mission Objective</i> not attempted or incomplete.</p>	<p>21-50</p> <p><i>Mission Objective</i> mostly complete. Path does not include 8 tiles; and/or there is not a clear starting point; and/or path doesn't include a tunnel; and/or path doesn't include a hidden location for indi.</p>	<p>51-80</p> <p><i>Mission Objective</i> is complete.</p>	<p>81-100</p> <p><i>Mission Objective</i> is complete. Path includes more than 8 tiles; and/or path includes more than one tunnel; and/or team clearly went above and beyond.</p>
Mission Objective #2: Secrets and Disguises	<p>0-20</p> <p><i>Mission Objective</i> not attempted or mostly incomplete.</p>	<p>21-50</p> <p><i>Mission Objective</i> mostly complete. Secret code is missing; and/or indi doesn't have a disguise.</p>	<p>51-80</p> <p><i>Mission Objective</i> is complete.</p>	<p>81-100</p> <p><i>Mission Objective</i> is complete. Secret code includes more than the team name; and/or indi's disguise is elaborate and clever; and/or team clearly went above and beyond.</p>
Slide Presentation	Video Submitted in proper format: Y or N			
	<p>0-20</p> <p>Slide presentation not submitted or largely incomplete.</p>	<p>21-50</p> <p>Deliverables for each <i>Mission Objective</i> are mostly complete. Some deliverables are unclear or incomplete.</p>	<p>51-80</p> <p>All deliverables are included and clearly articulated for each <i>Mission Objective</i>.</p>	<p>81-100</p> <p>All deliverables included for each <i>Mission Objective</i>; and/or a clearly articulated reflection on each <i>Mission Objective</i> is included; and/or presentation includes creative elements beyond the original template.</p>

TOTAL SCORE:

(OUT OF 300)