# MIX AND MATCH SIMPLIFIED GAME MANUAL

#### **-ROBOT RULES**

- The robot must never exceed 11" x 20" in size. <R5>
- At the start of a match, the robot must be no taller than 15". <R5><SG2><SG3>
- Each robot is allowed a maximum of six motors, one brain, and one battery. <R11><R8><R12>
- Robots must not intentionally detach any parts or leave pieces on the field during a match. <GG8>
- Each robot must have two visible license plates (one on each side), showing the team number. They must be official VEX IQ plates (PN: 228-7401) or a same-size paper version.
- Robots can only use VEX parts, except for decorations that serve no function.
  <R14><R15><R16><R17>
- If using pneumatics, the robot can have only one compressor and up to two air tanks.
  <R18>
- The robot brain must be accessible without lifting or flipping the robot. <R9>
- Robots must pass inspection before competing. All robot configurations must be inspected. <R3>

## -STACK BREAKDOWN

CRITERIA	POINT VALUE
EACH CONECTED PEG	1 PT
EACH CONNECTED BEAM	10 PTS
EACH TWO-COLOR STACK	5 PTS
EACH THREE COLOR STACK	15 PTS
EACH STACK PLACED IN A MATCHING GOAL <b>AND/OR</b> IS CONECTED TO A BEAM	10 PTS
EACH STACK PLACED ON THE STANDOFF GOAL	10 PTS
EACH CLEARED STARTING PIN	2PTS
THE ROBOT IS CONTACTING TWO OR MORE GAME OBJECTS	2PTS

#### **-SCORING RULES**

- A "stack" must have two or more game pieces fully nested, placed vertically, not touching a robot, and supported by the floor, beam, or standoff goal. <SC3>
- Each beam node is treated as a separate stack. <SC3>
- Stacks with more than one color (blue, red, orange, gray) get extra points for color variety. <SC4>
- A stack gets matching points if its bottom peg matches the goal color and if it's completely inside the goal walls or supported (directly or indirectly) by the standoff goal. or is connected to a beam. <SC6><SC5>
- A starting pin is "cleared" if no part of its support is within the pin's volume at match end. <SC7>
- A robot earns 2 points if it's touching two or more game objects (or one object nested with another) at the end of the match. <SC8>
- You can only score 1 stack in a square goal and three stacks in a triangle goal.<SC5>

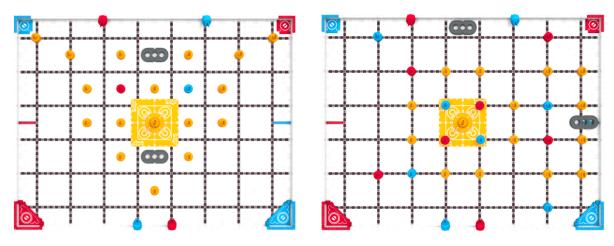
### **-HUMAN RULES**

- Drivers and loaders must stay in their designated driver station during teamwork and driving skills matches. <GG1>
- Drivers must switch control between 0:25 and 0:35 in teamwork and driving skills matches. <GG11>
- New pegs must be loaded by placing them in contact with the load zone beam. Pegs can't be loaded if another game piece is already in contact with the load zone, and the robot must wait until the loader releases the peg before contacting it. <SG6>

### -SETUP RULES

#### FEILD CONFIGURATION FOR TEAMWORK

#### **FEILD CONFIGURATION FOR SKILLS**



- At the start, robots must be touching their color-matching triangle goal. <SG1>
- Robots may not have any moving parts before the match begins. <SG1>
- Robots must start the match while touching a peg of their assigned color color. <SG5>

# -SKILLS RULES

- In skills matches, the robot is treated as the red robot. <RSC3>
- During skills, the second driver (not operating the robot) can act as a second loader.
  <RSC4>
- Each team is allowed up to three Driving Skills Matches and three Autonomous Skills Matches per tournament. <T15>