



2027 世界機關王大賽積木創客盃 教師培訓



【科學小創客-生態守護戰】

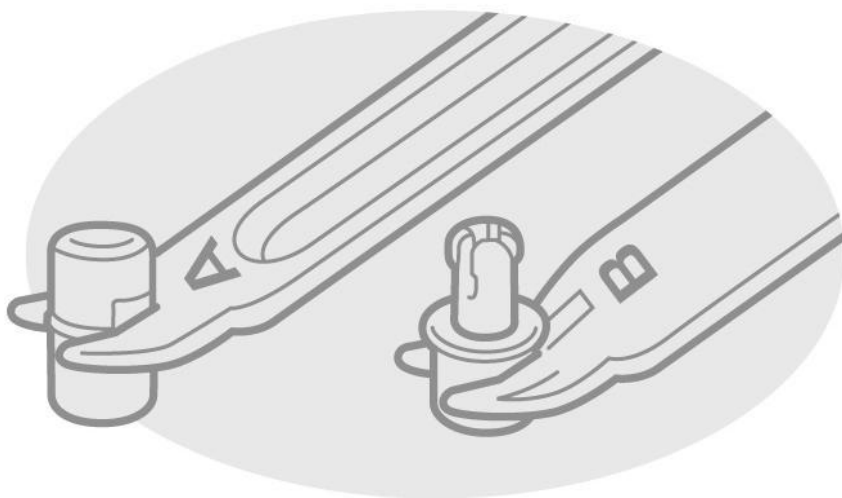
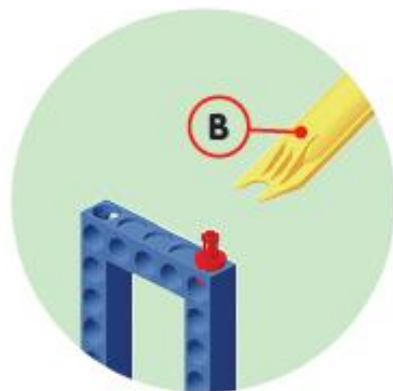
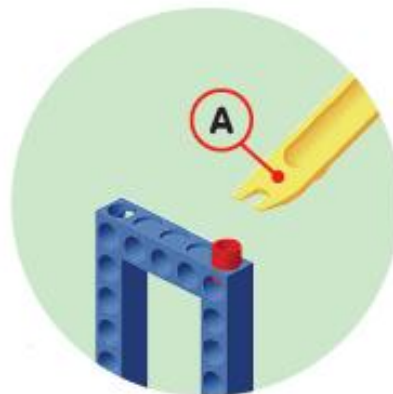
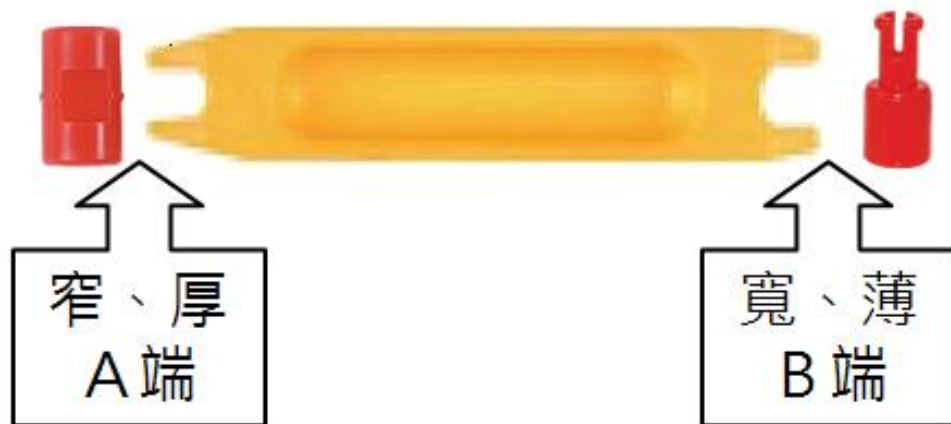


本賽事分為兩個競賽項目：

【競賽一：後勤補給】

【競賽二：打擊外來入侵種】

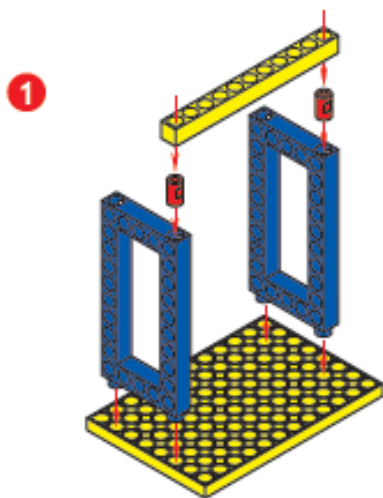
【基本工具應用】



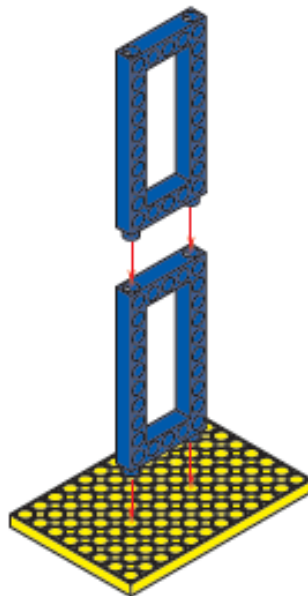
【組裝注意事項】

組裝方式

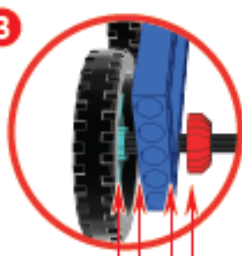
連接底盤、框架及長條



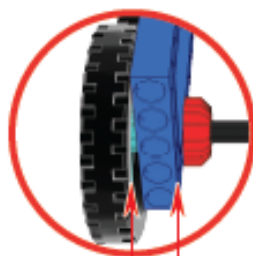
2



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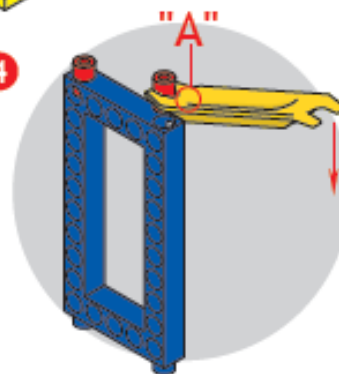


正確（留有空隙）

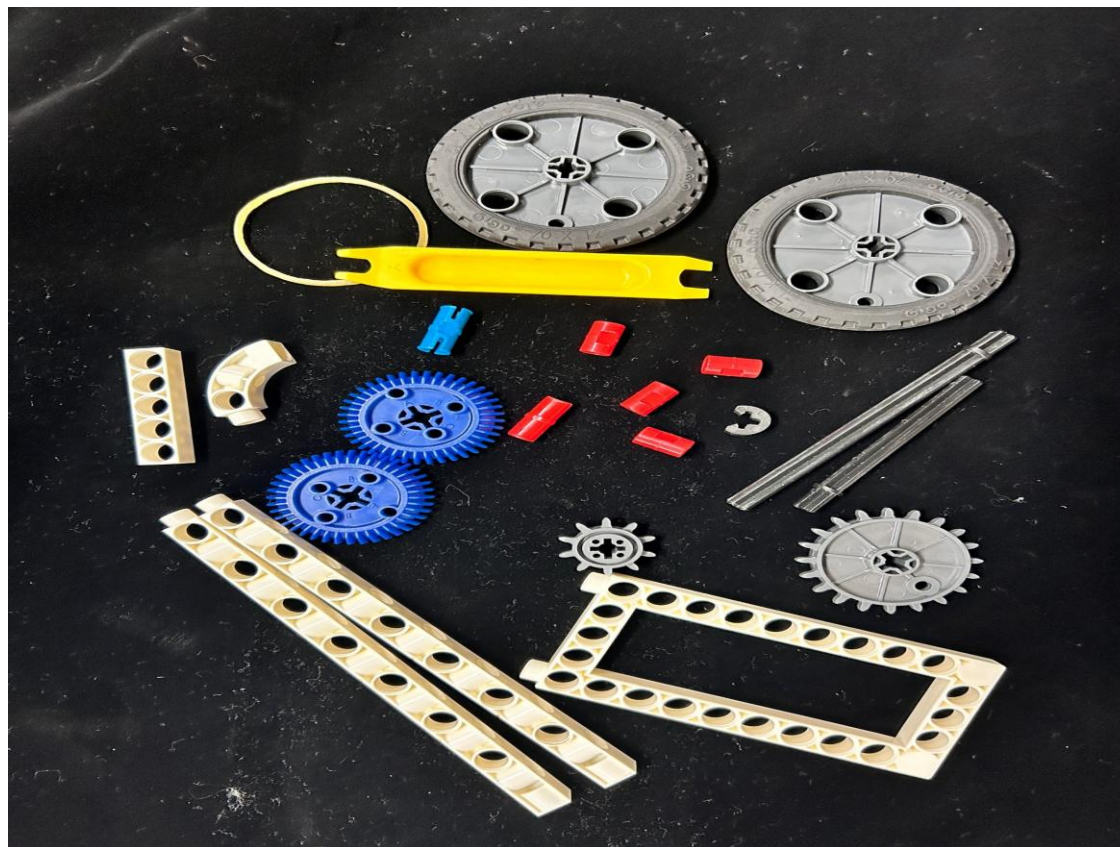


錯誤（沒有空隙）

4

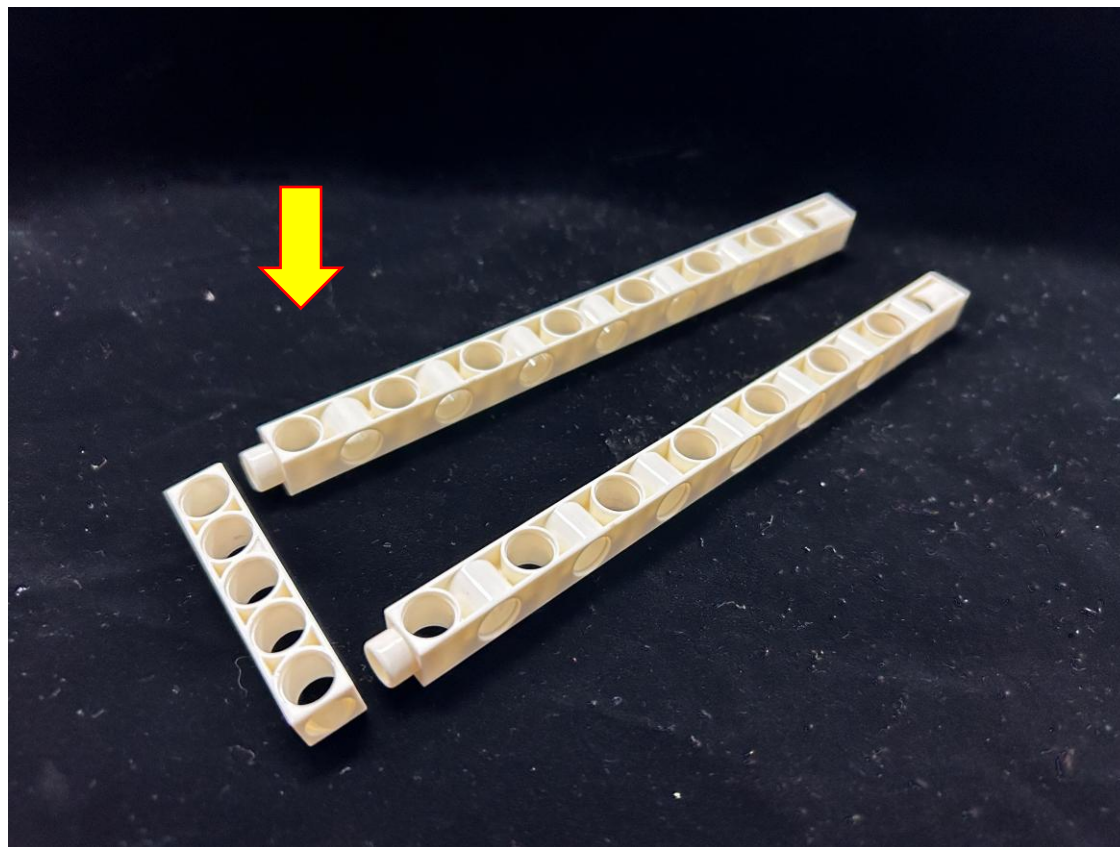


【競賽一：後勤補給】



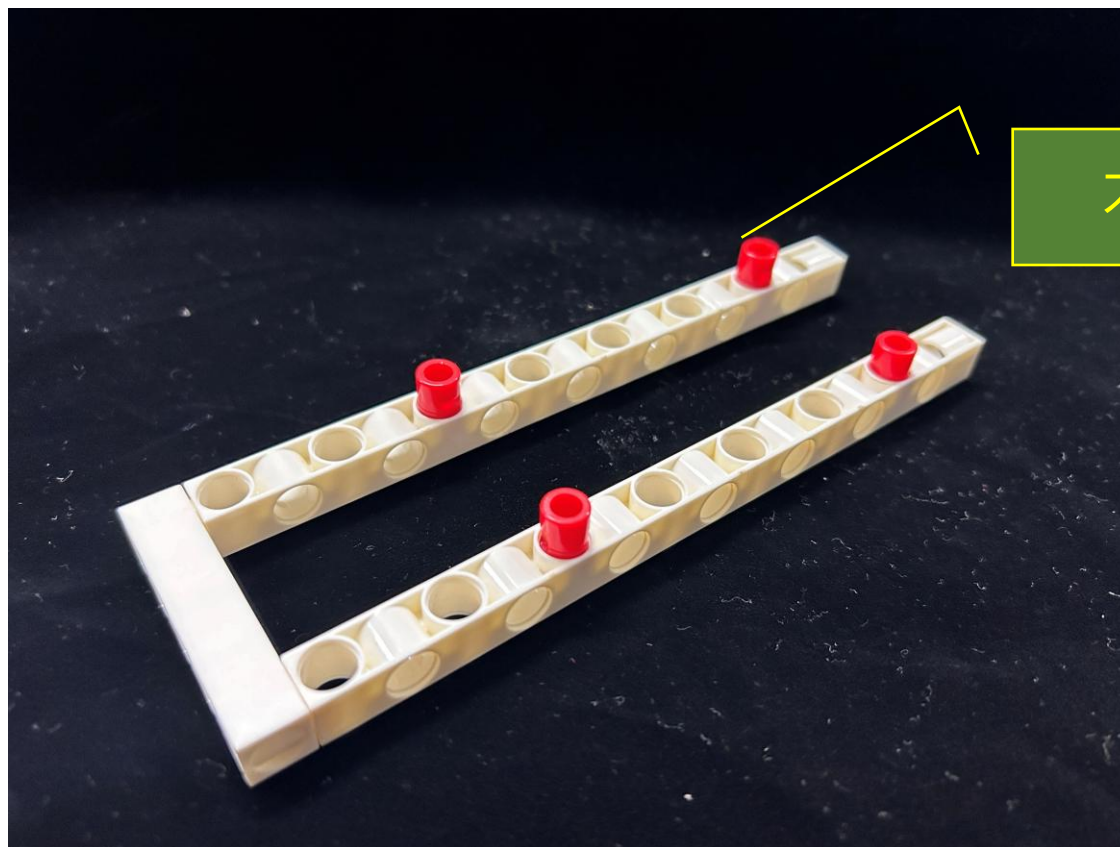
所需材料

【競賽一：後勤補給】



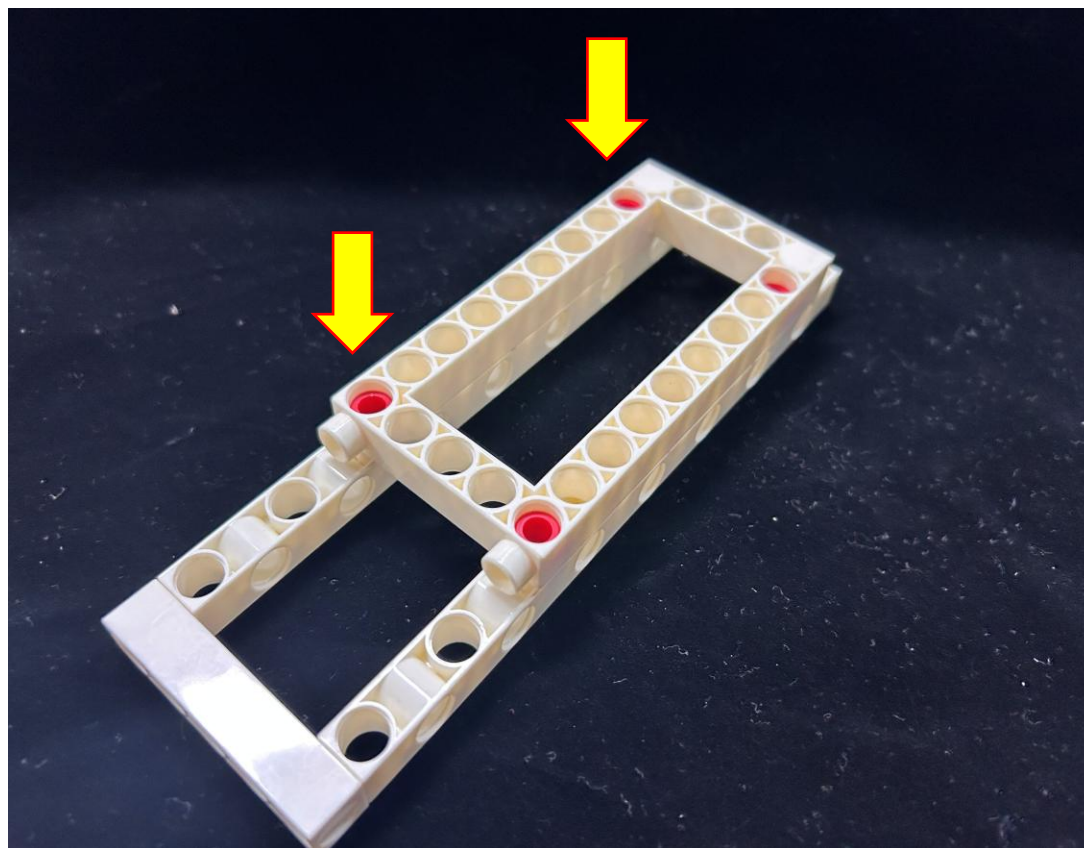
在五孔長條上裝上兩個超長條

【競賽一：後勤補給】



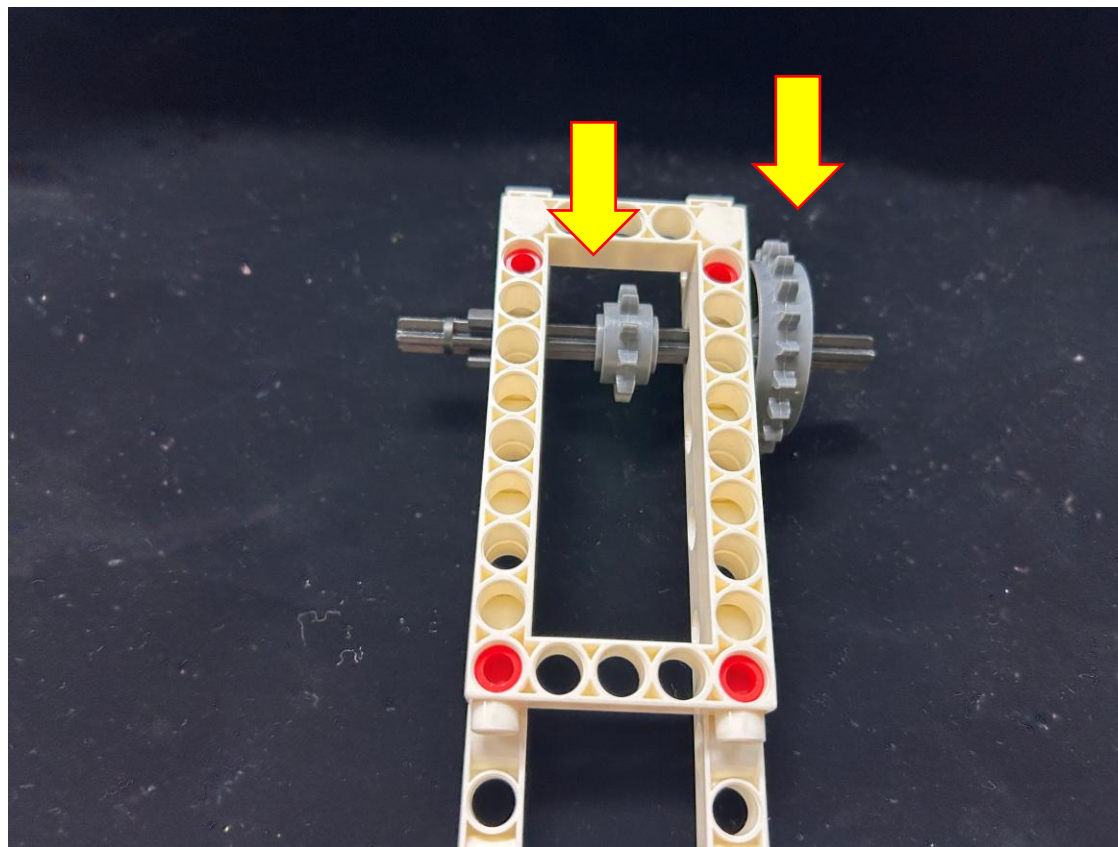
在超長條上裝上四個結合鍵

【競賽一：後勤補給】



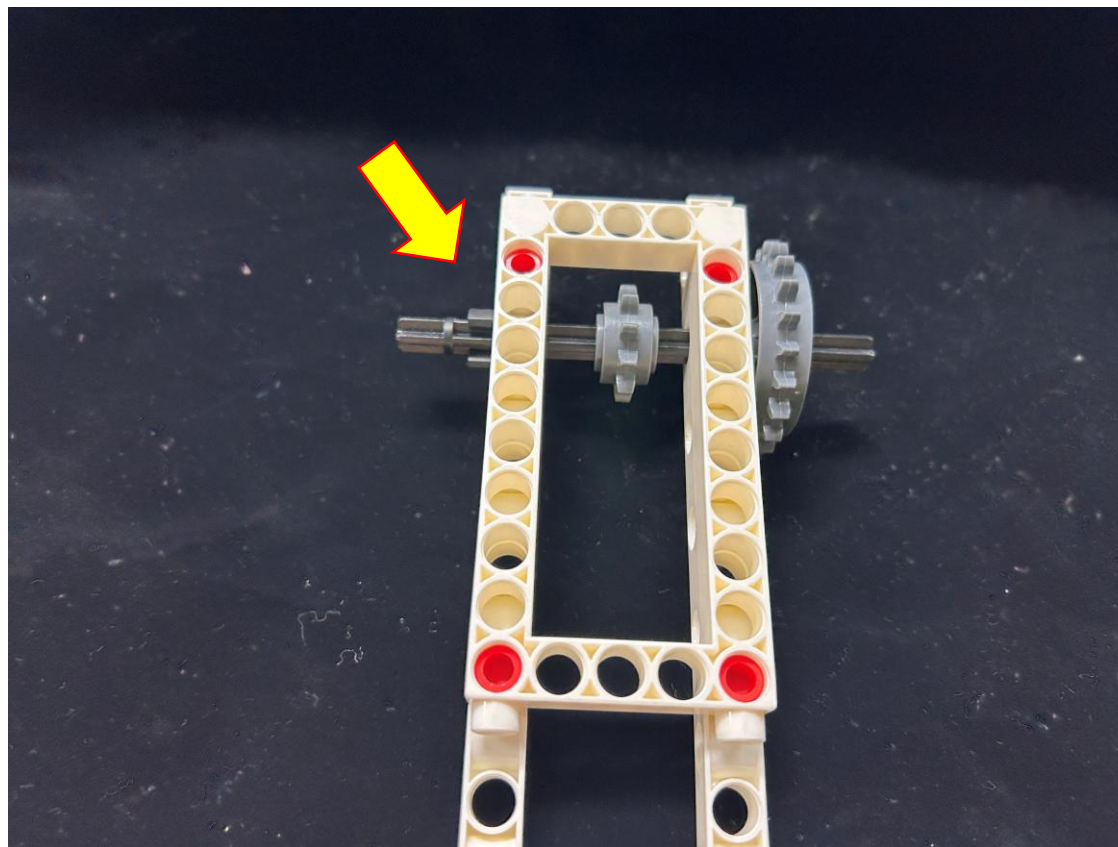
裝上一個長方架

【競賽一：後勤補給】



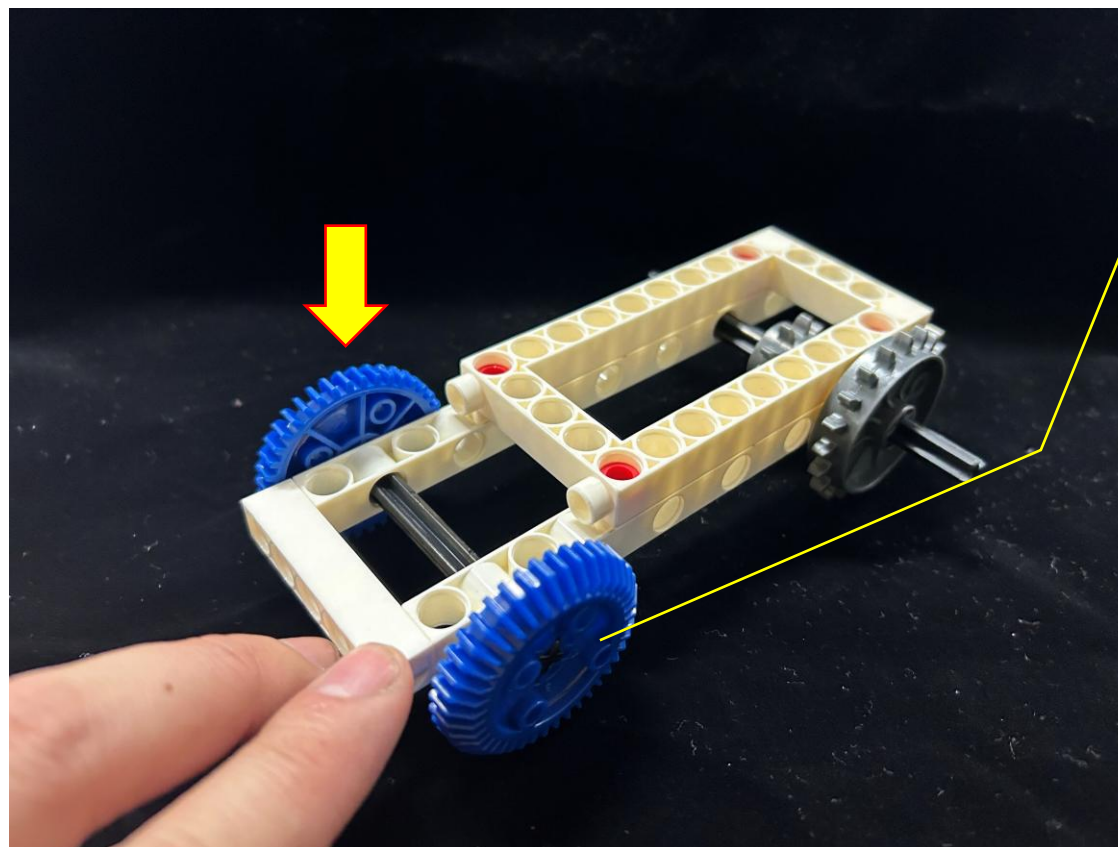
利用一個10cm軸穿過
小鍊條輪、中鍊條輪

【競賽一：後勤補給】



利用齒輪固定器控制軸不晃動

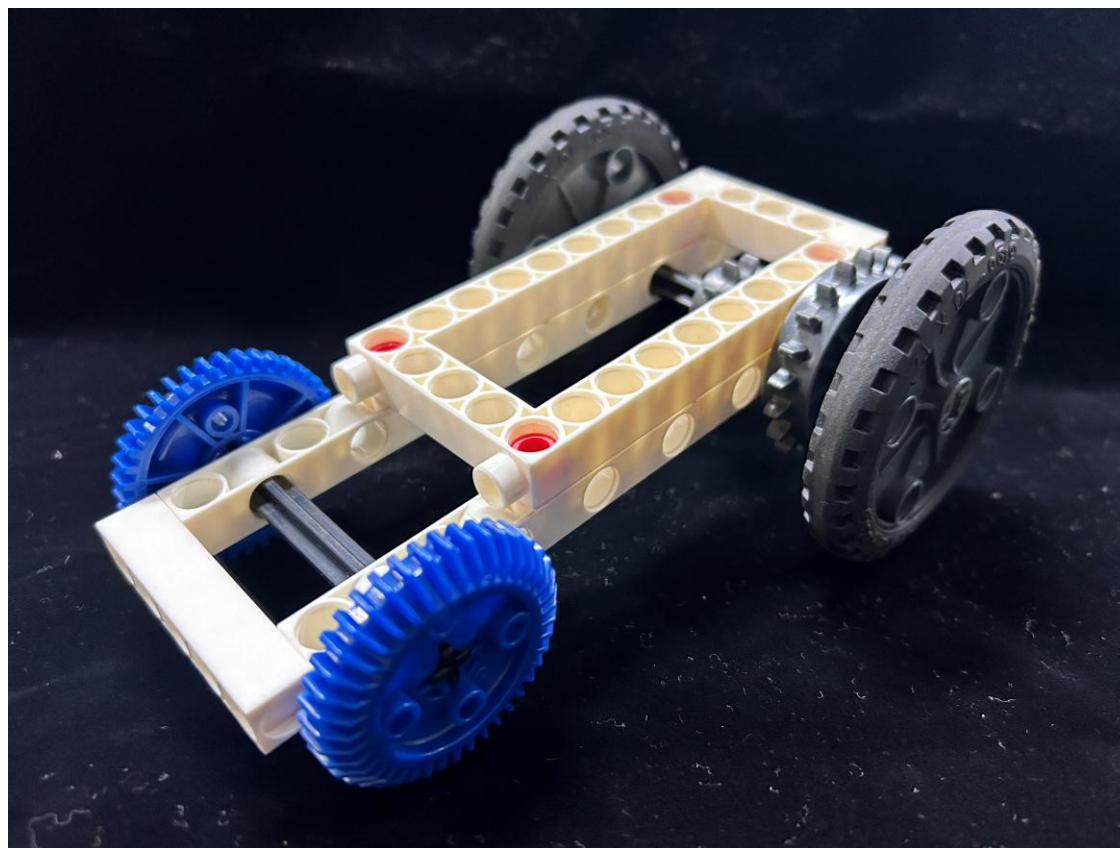
【競賽一：後勤補給】



左1

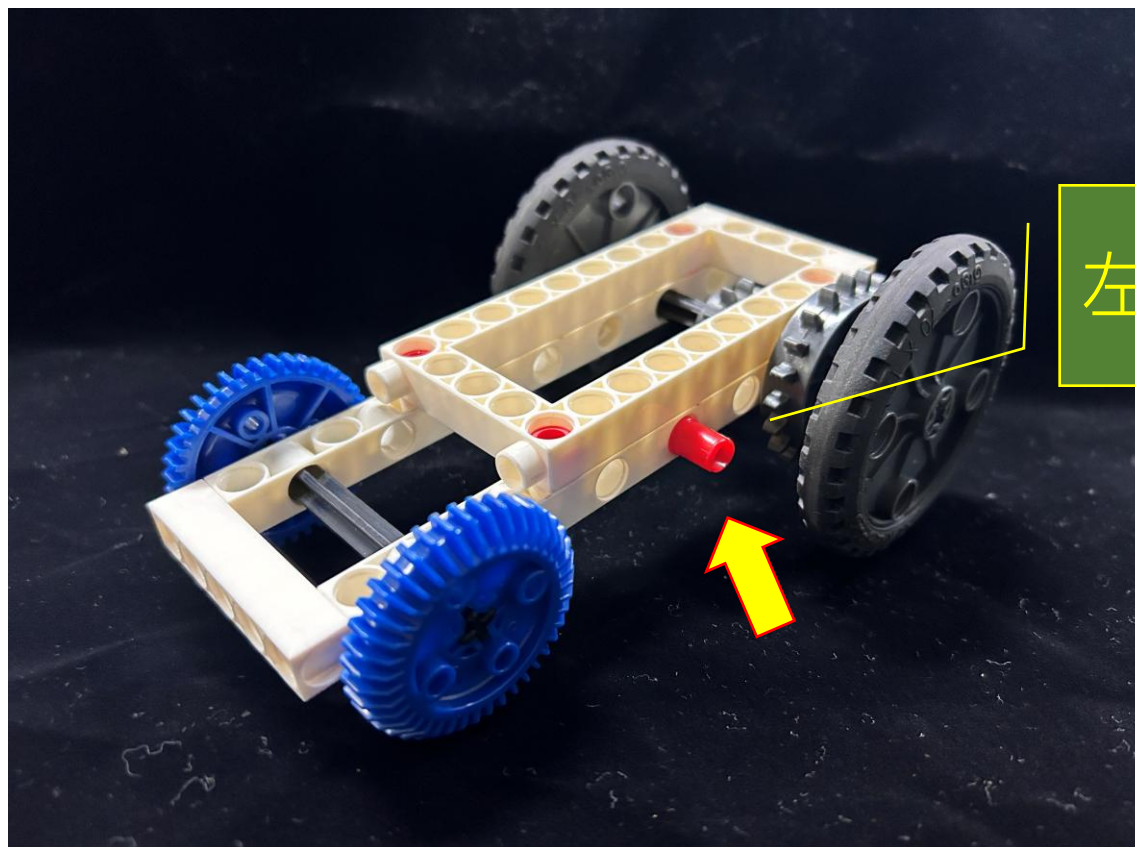
利用7cm軸和齒輪當成前輪

【競賽一：後勤補給】



裝上橡膠輪當成後輪

【競賽一：後勤補給】

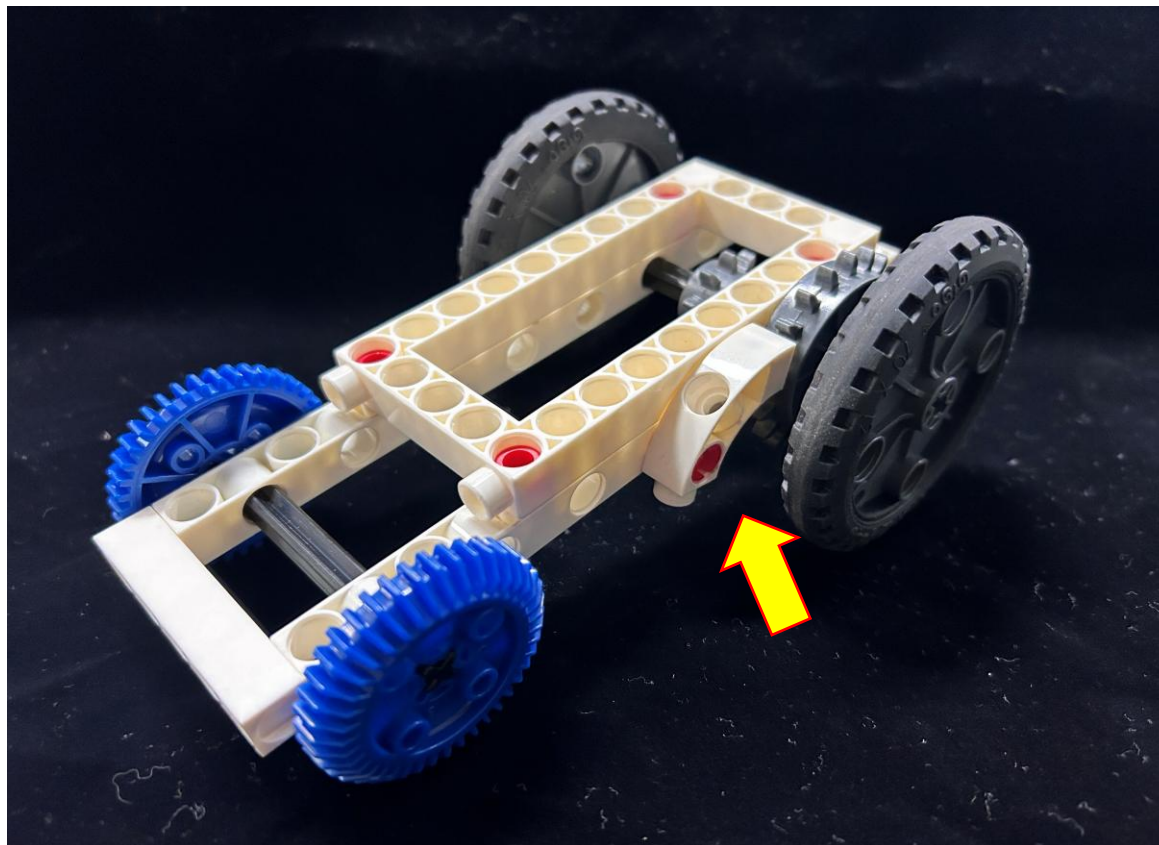


左4



裝上一個軸扣

【競賽一：後勤補給】



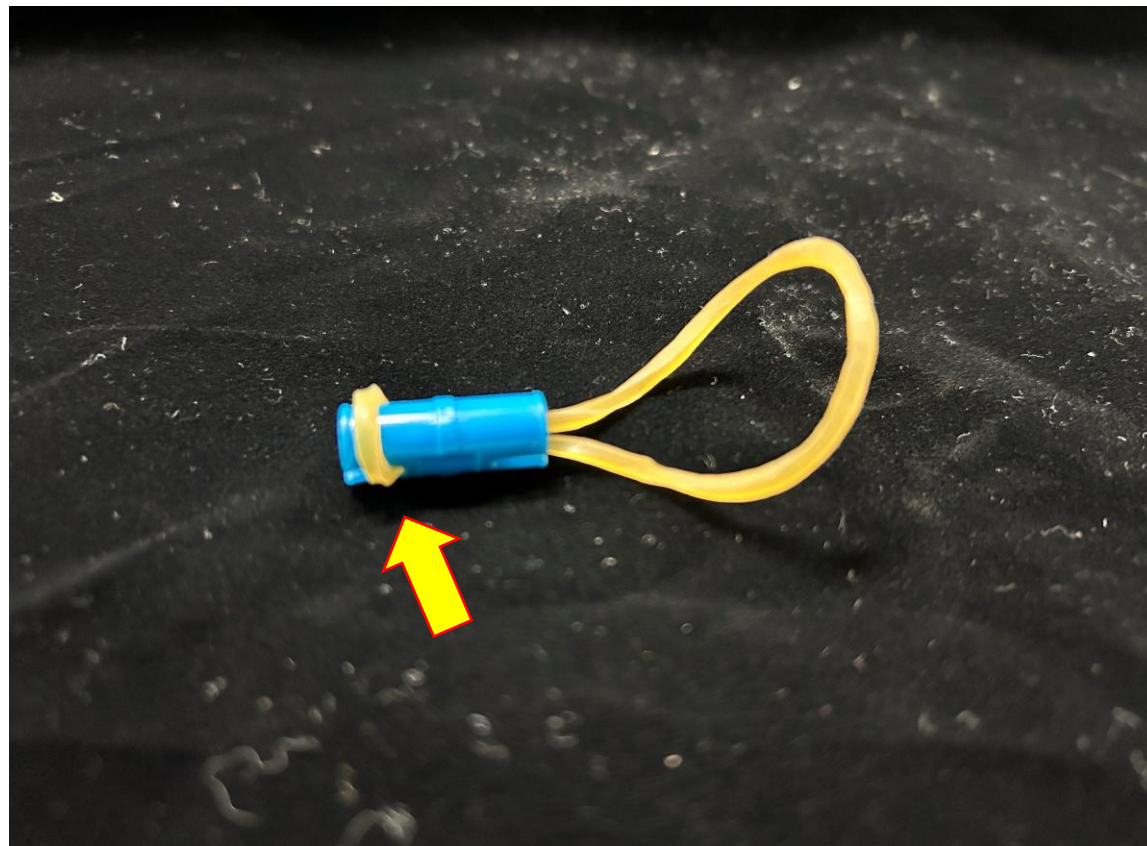
裝上一個1/4圓長條當成開關

【競賽一：後勤補給】



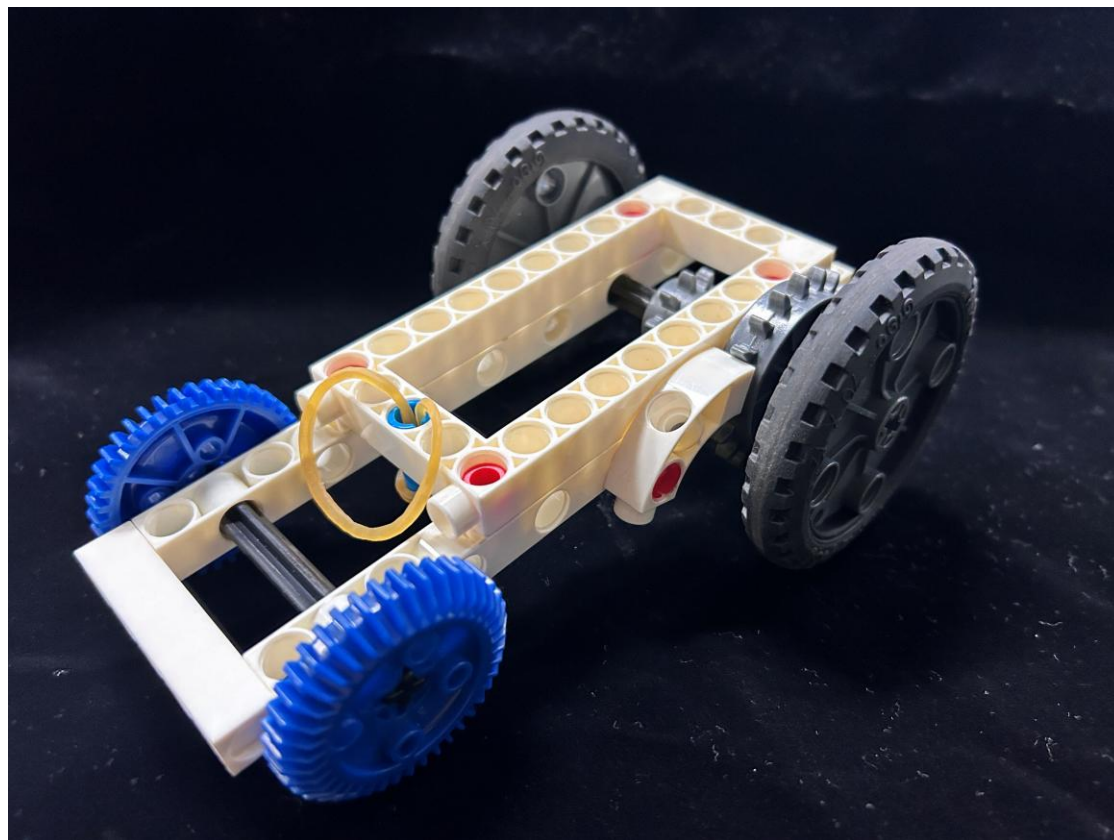
將橡皮筋穿過一個軸扣

【競賽一：後勤補給】



拉一端使另一端掛在凹槽中

【競賽一：後勤補給】



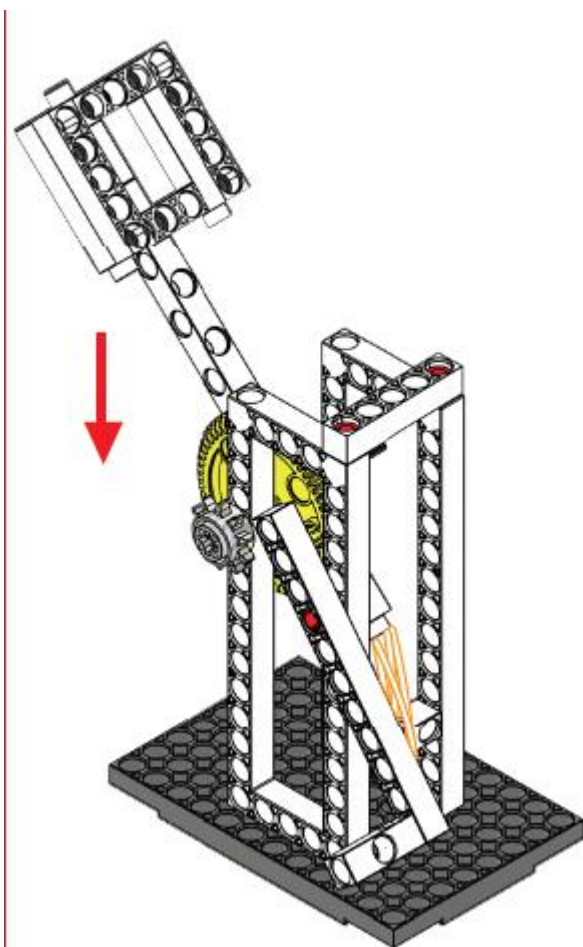
將軸扣由下往上裝就大功告成了！

【競賽一：後勤補給】

思考點

1. 子彈如何放？
2. 如何修改讓車子往返更順暢？
3. 彈力車型態非唯一解，還有其他方式嗎？

【競賽二：打擊入侵外來種】



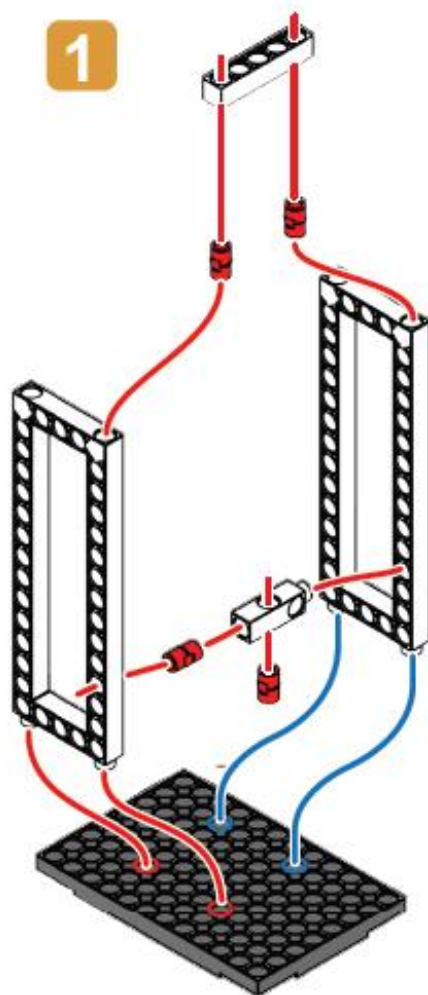
【競賽二：打擊入侵外來種】

投石車

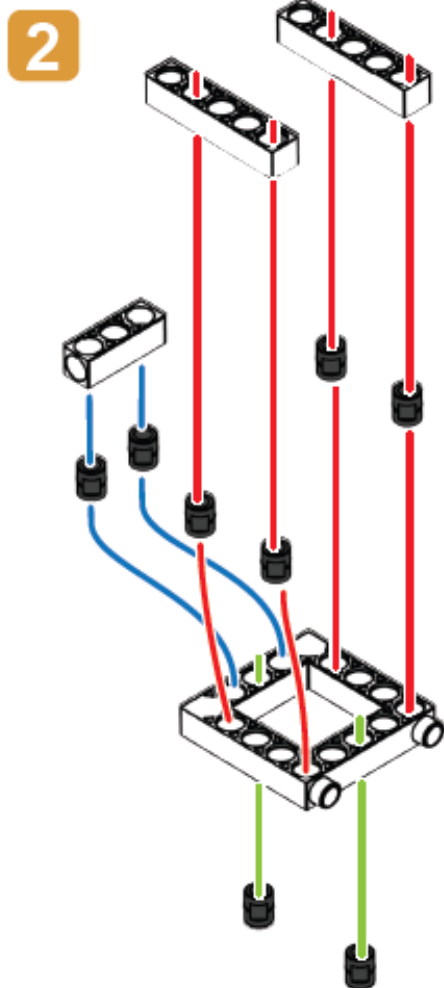
Catapult



【競賽二：打擊入侵外來種】



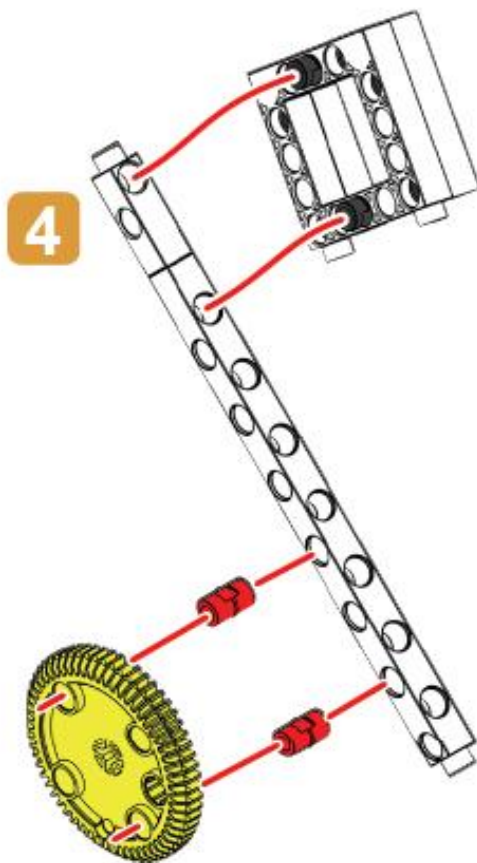
【競賽二：打擊入侵外來種】



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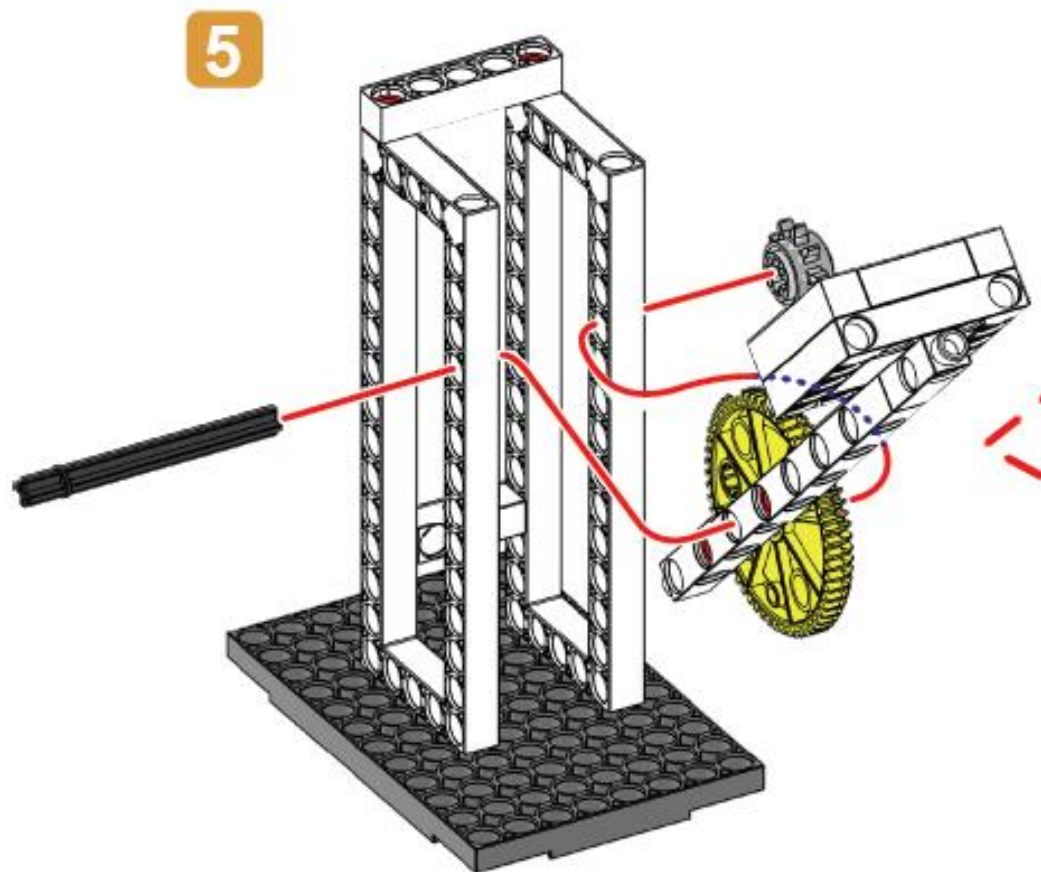


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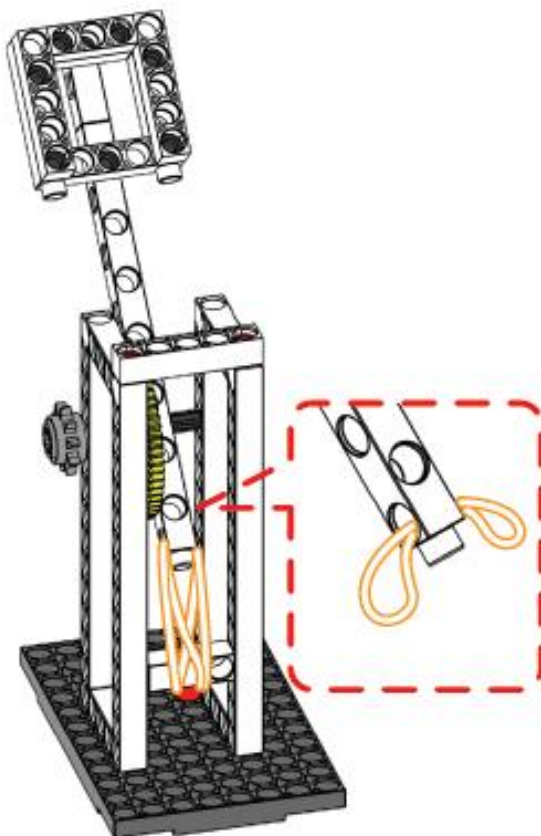
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【競賽二：打擊入侵外來種】

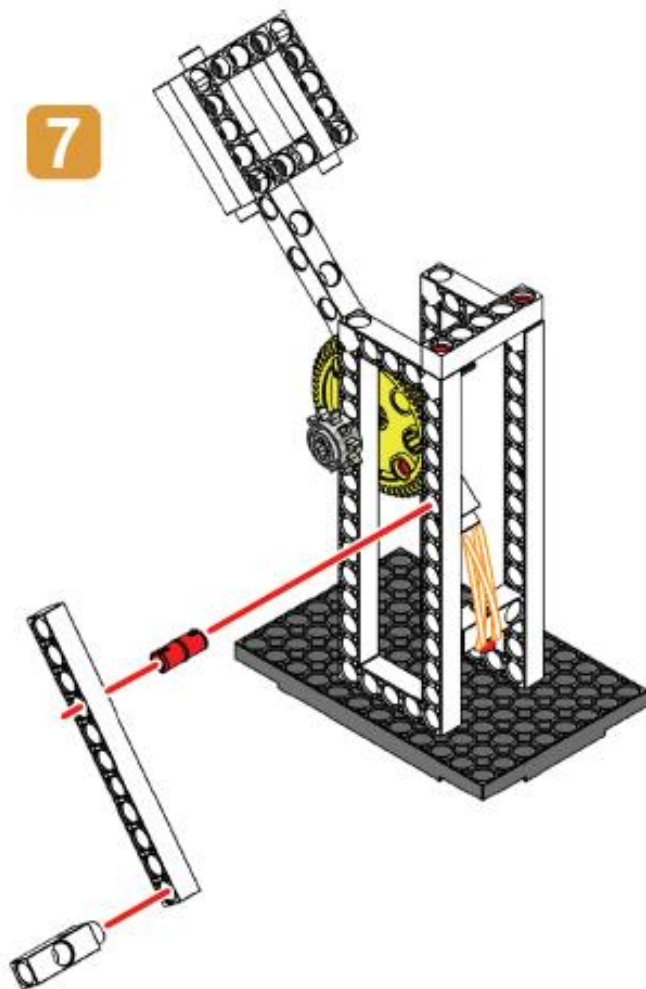


【競賽二：打擊入侵外來種】

6



【競賽二：打擊入侵外來種】



【競賽二：打擊入侵外來種】

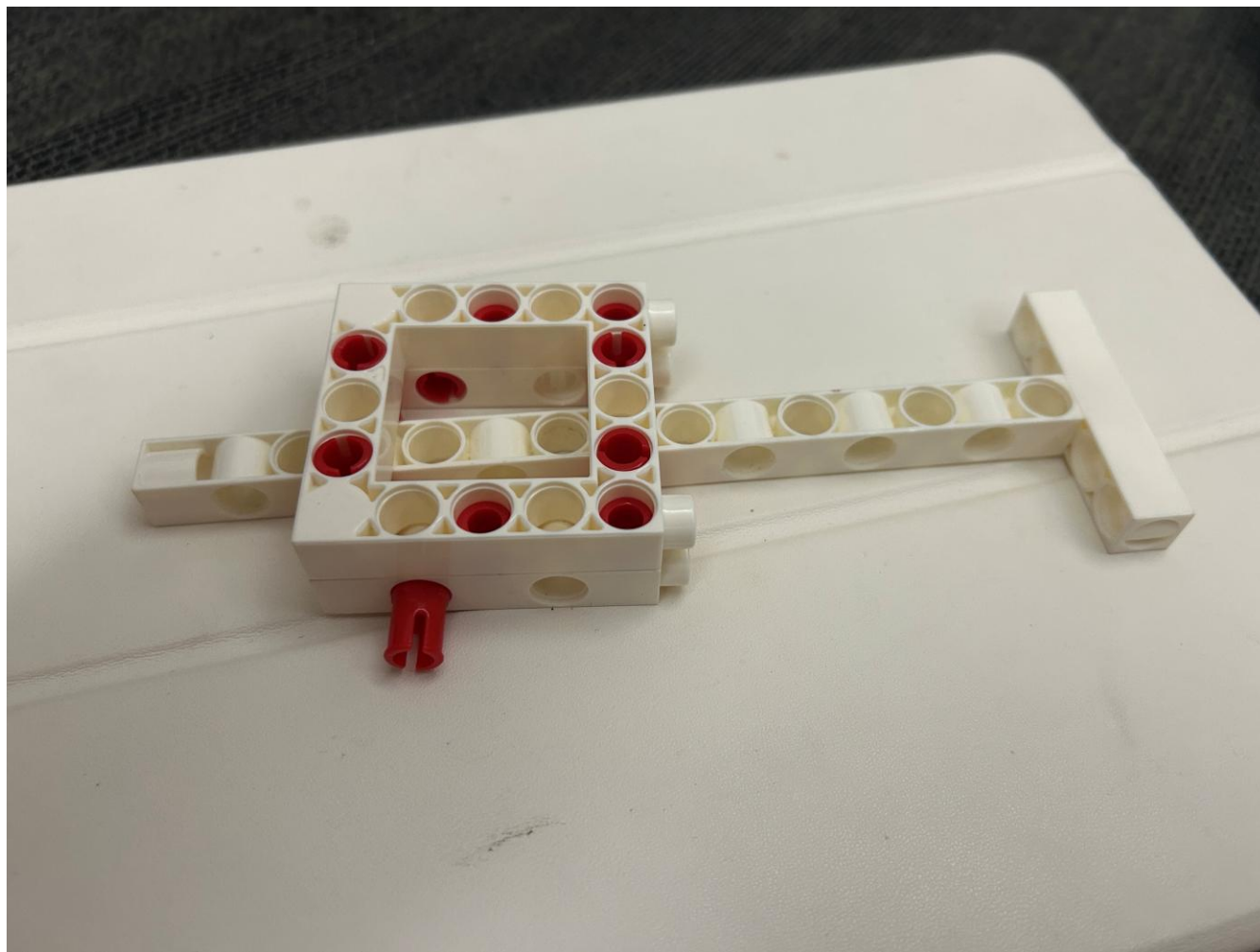
思考點

1. 如何固定子彈？
2. 如何拋到目標區？
3. 整體是否好操作？

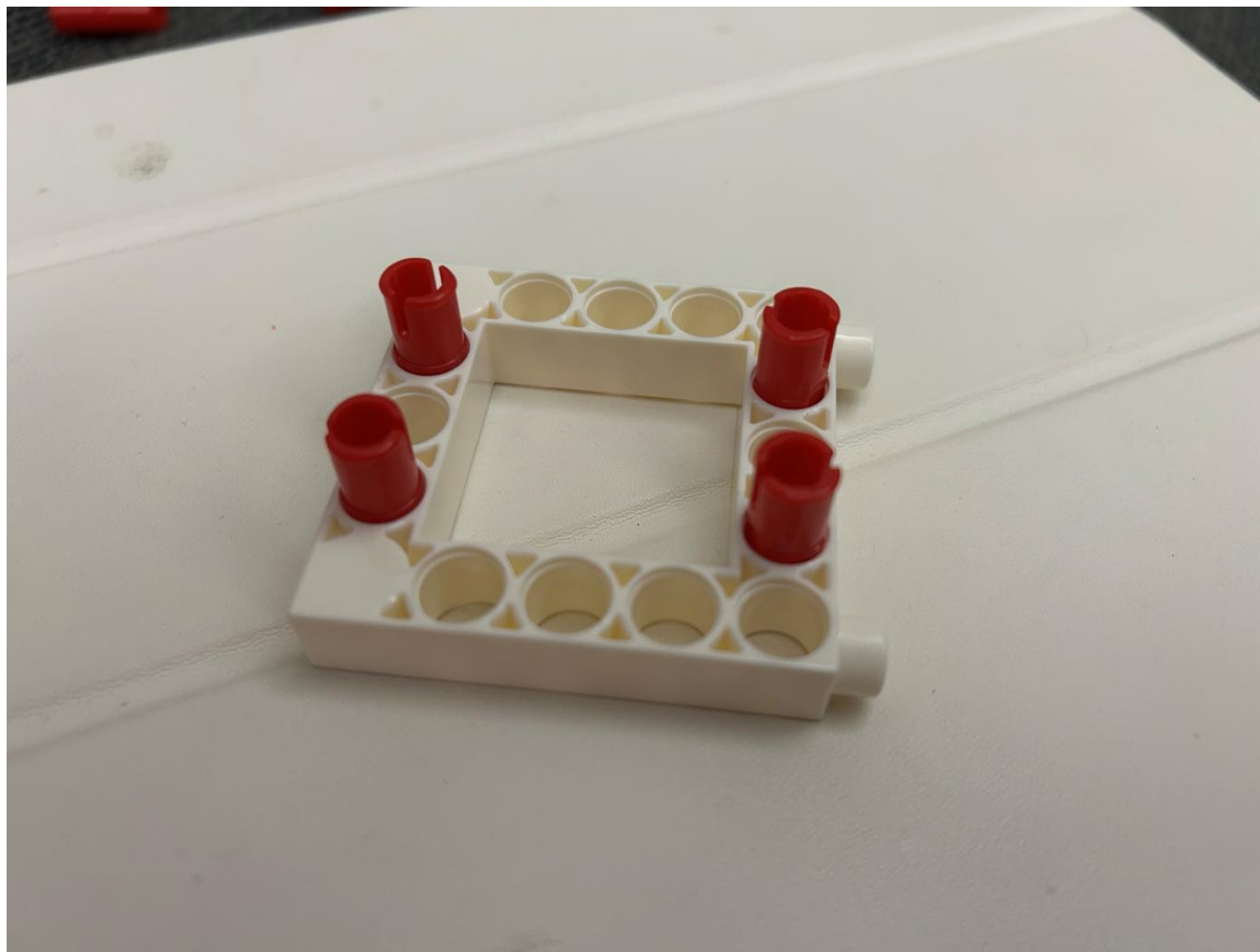
每隊製作一個以橡皮筋彈力為動力來源的發射器，需能將獵捕用的子彈射出。
(非以此方式操作者不予計分)

4. 拋石器型態非唯一解，還有其他方式嗎？

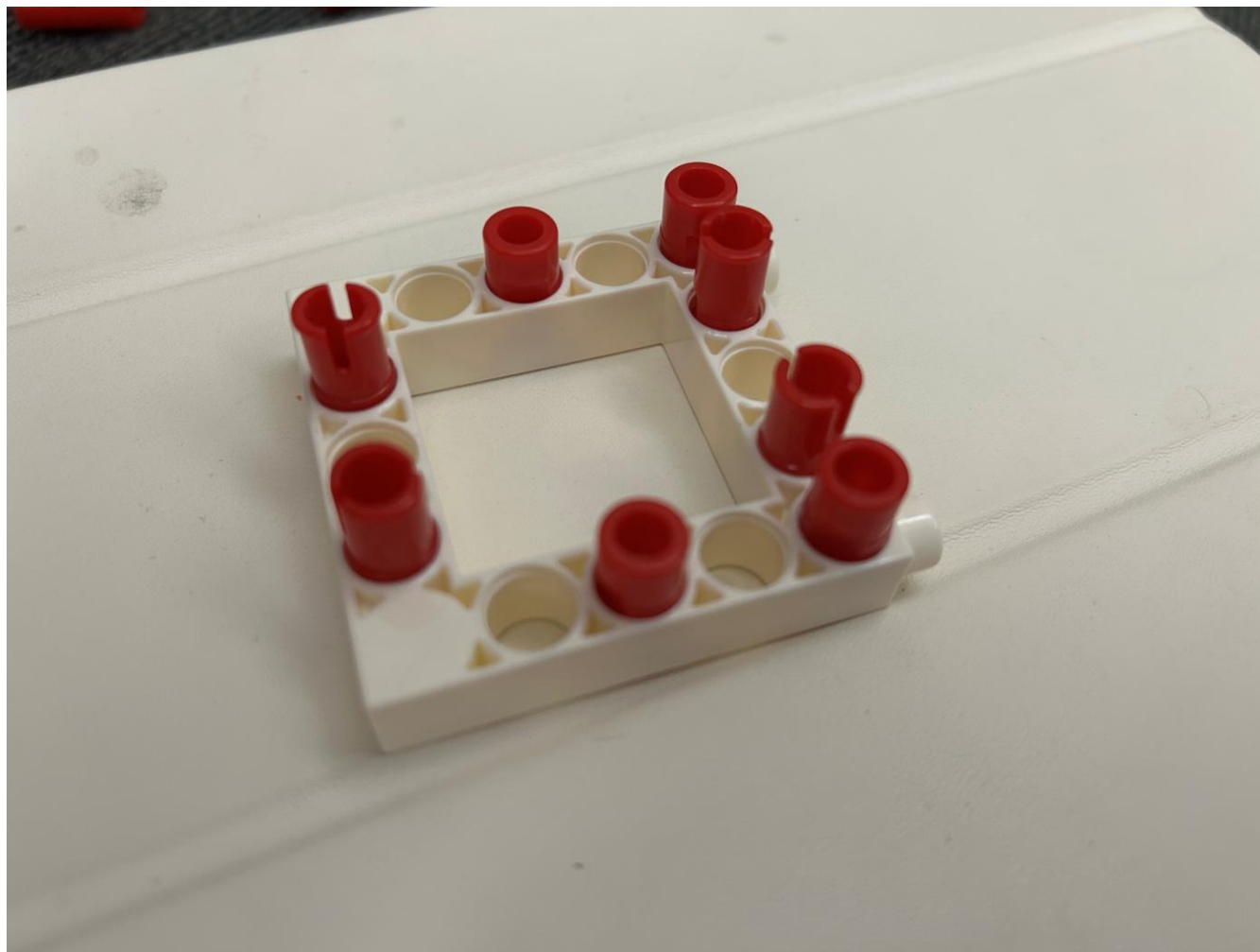
【競賽二：打擊入侵外來種】



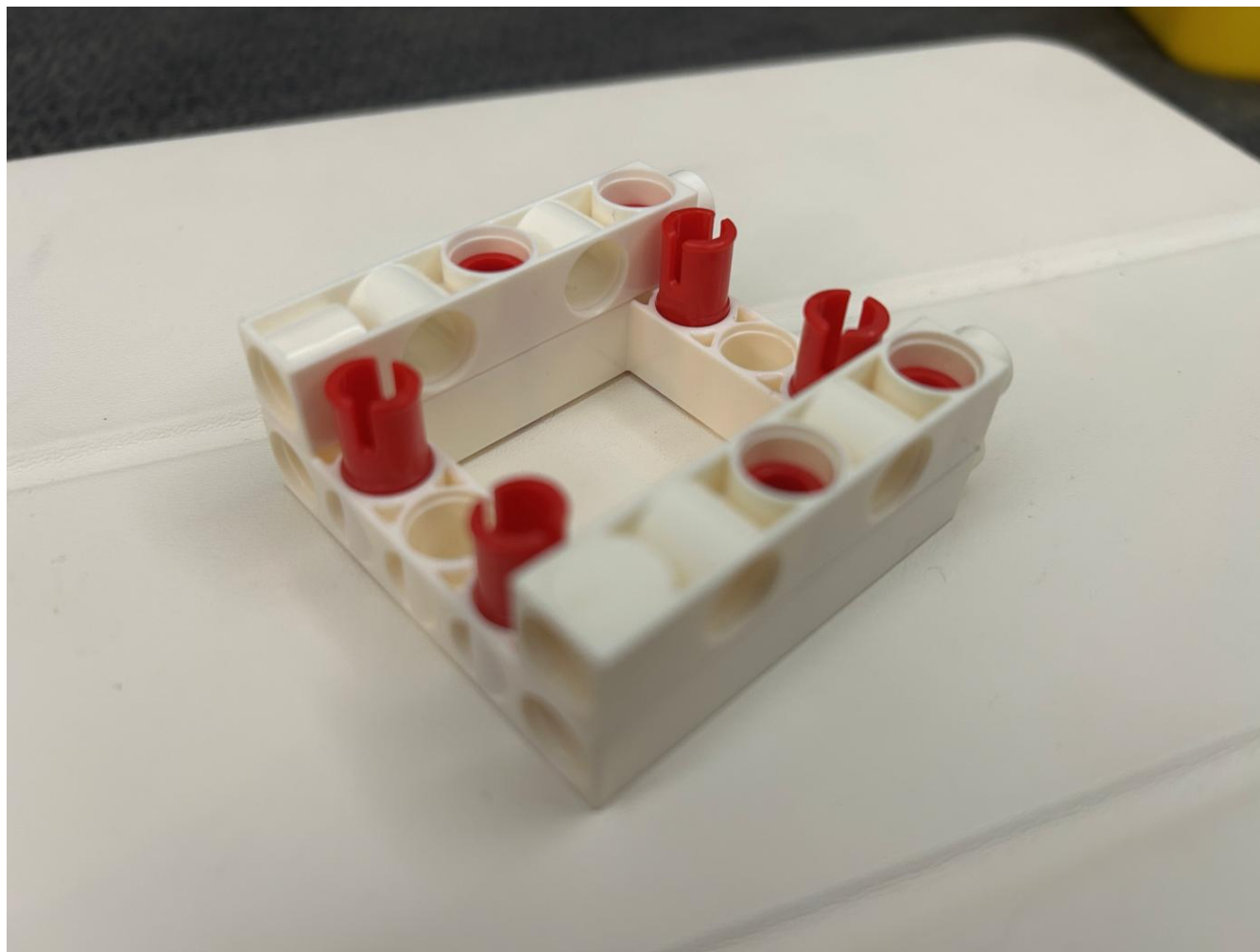
【競賽二：打擊入侵外來種】



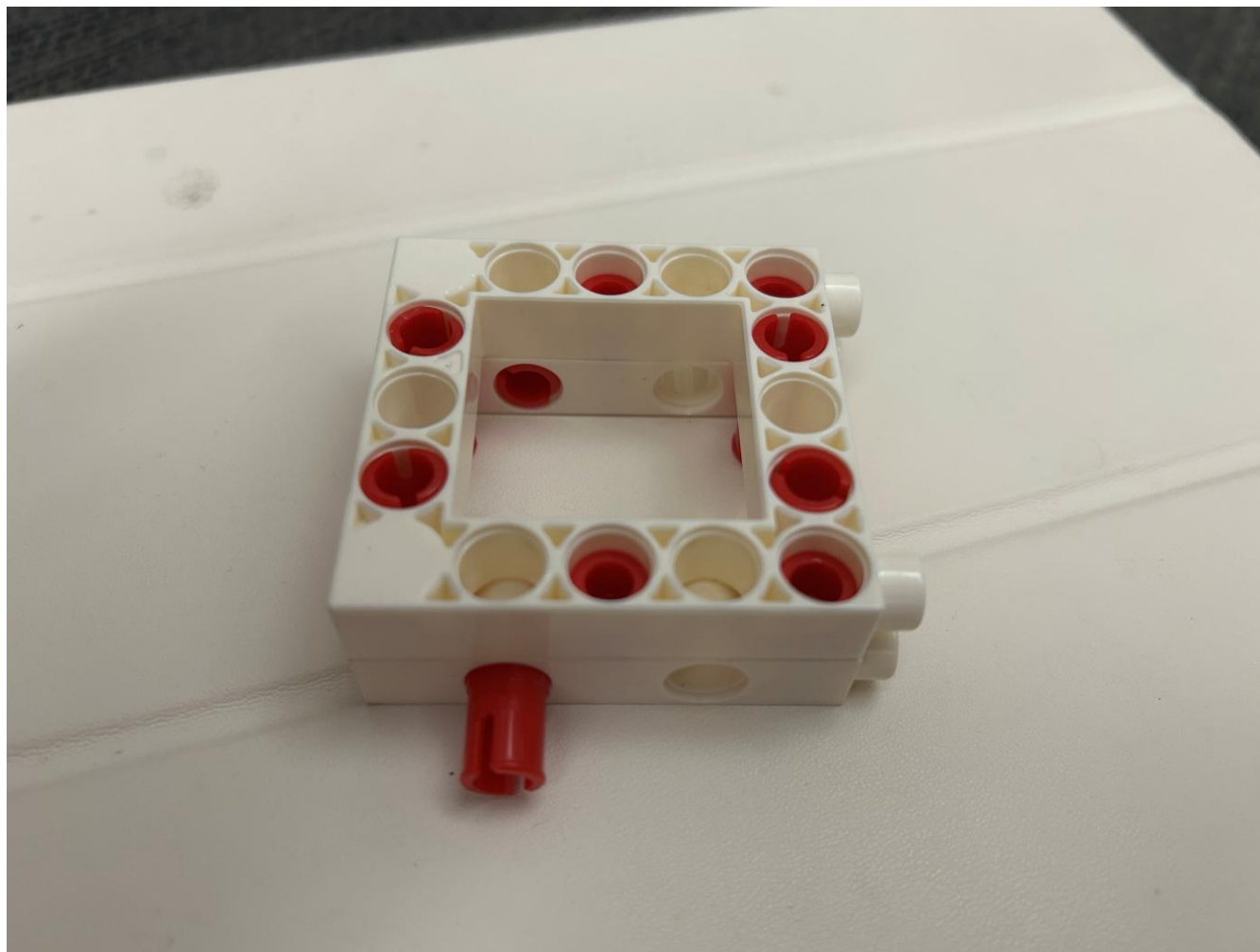
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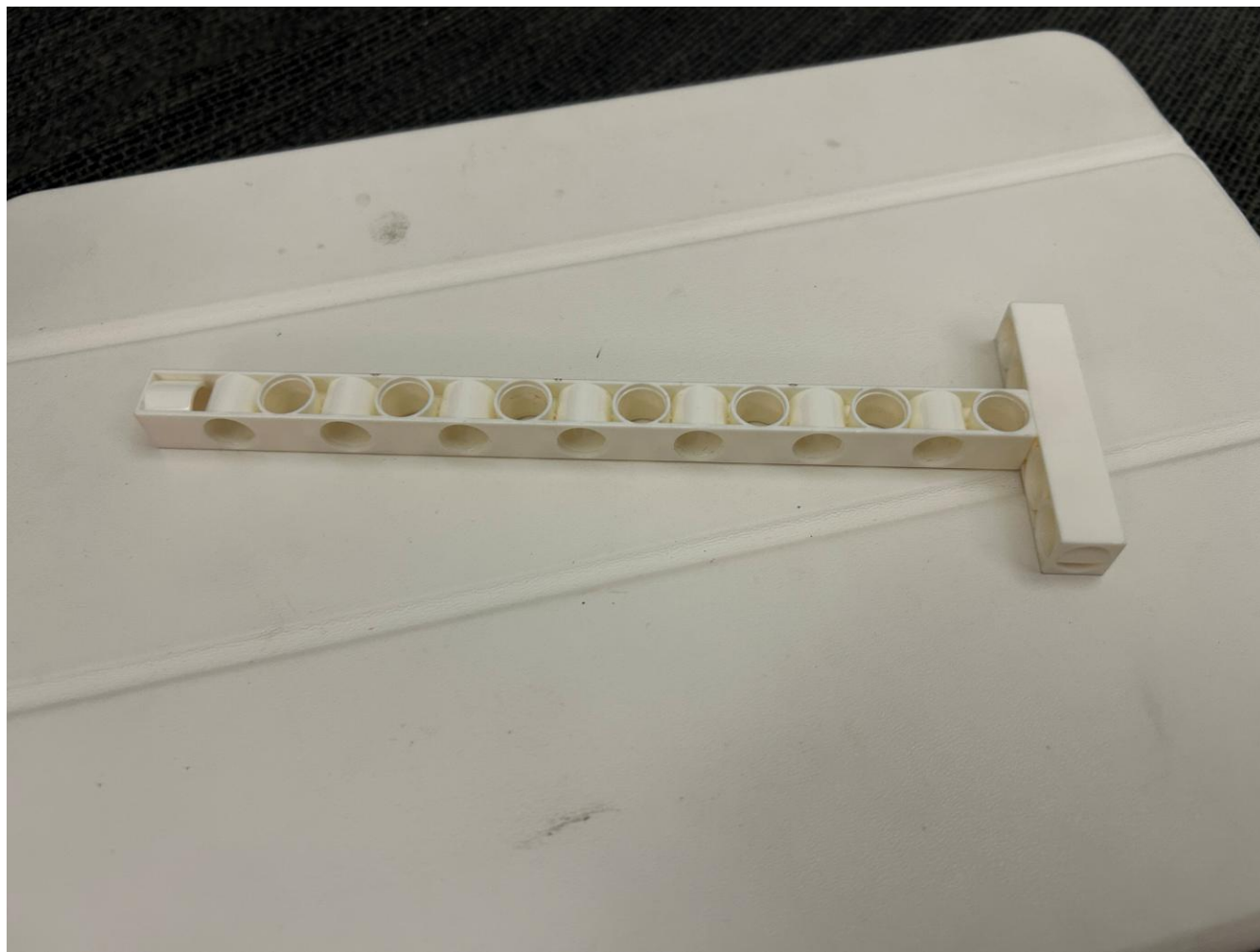
【競賽二：打擊入侵外來種】



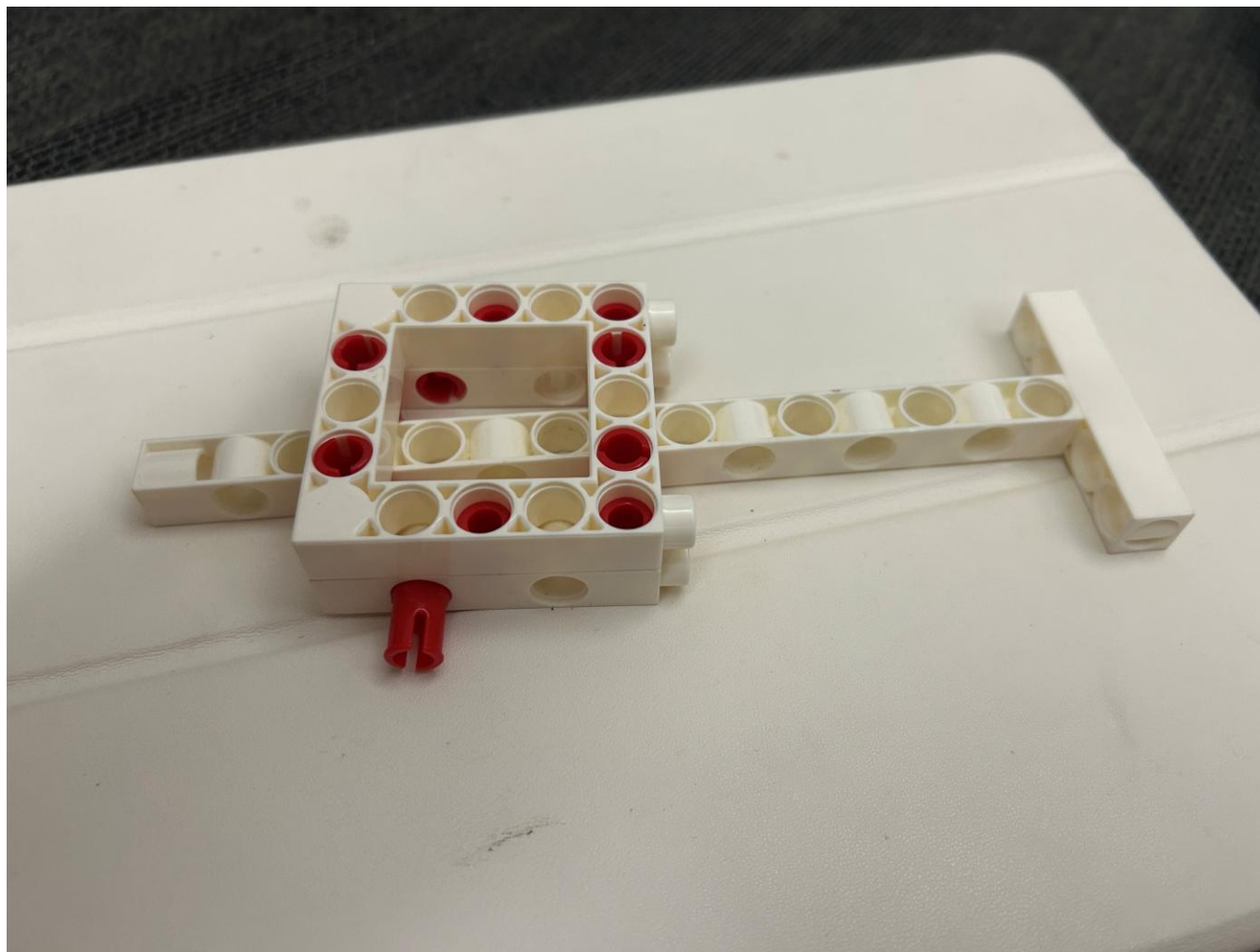
【競賽二：打擊入侵外來種】



【競賽二：打擊入侵外來種】



【競賽二：打擊入侵外來種】





世界機關王
感謝您