

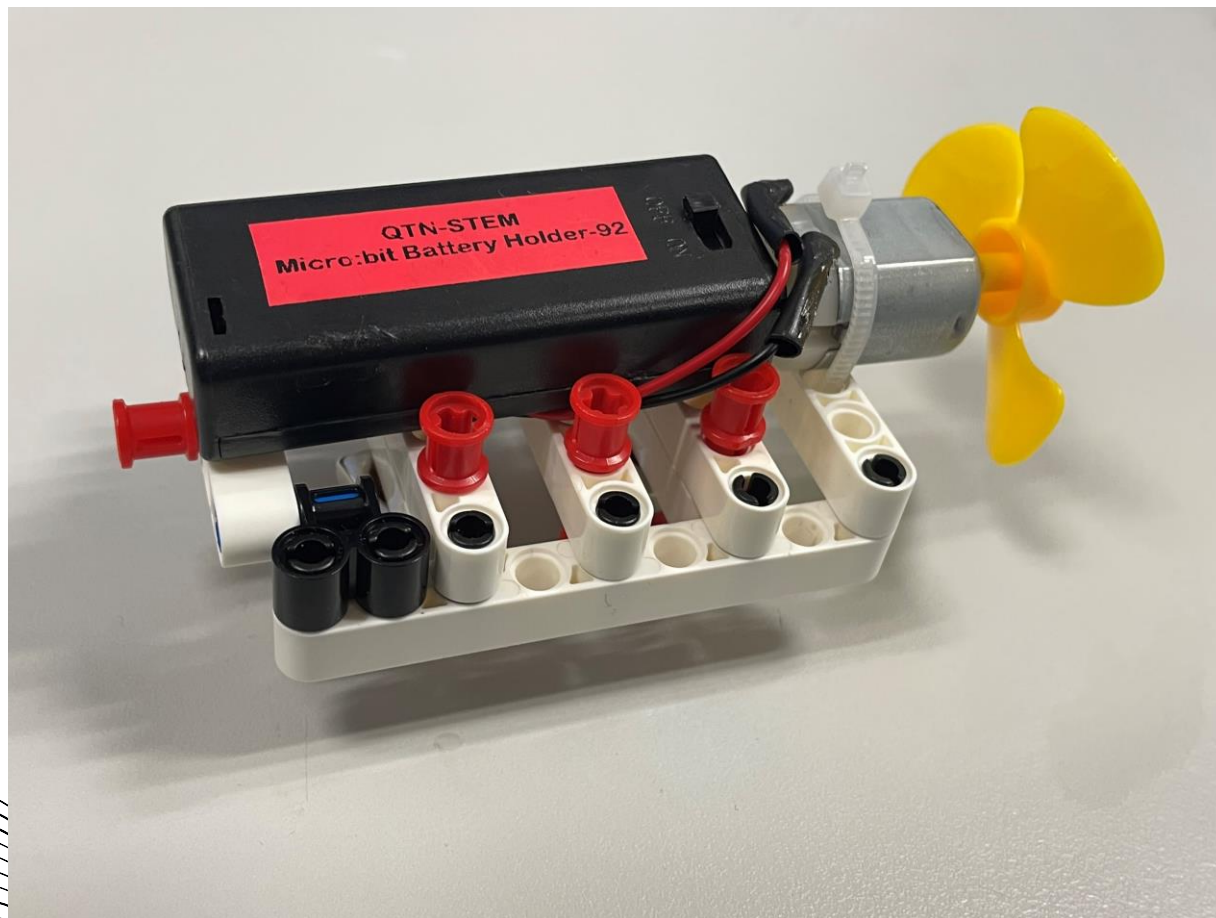
2024-2025 Quality Education Fund Thematic Network - Tertiary Institutes

STEAM Education with Self-directed and Progressive Learning of
Engineering Design Process for Problem-solving
透過STEAM教育自主學習有序發展STEAM素養

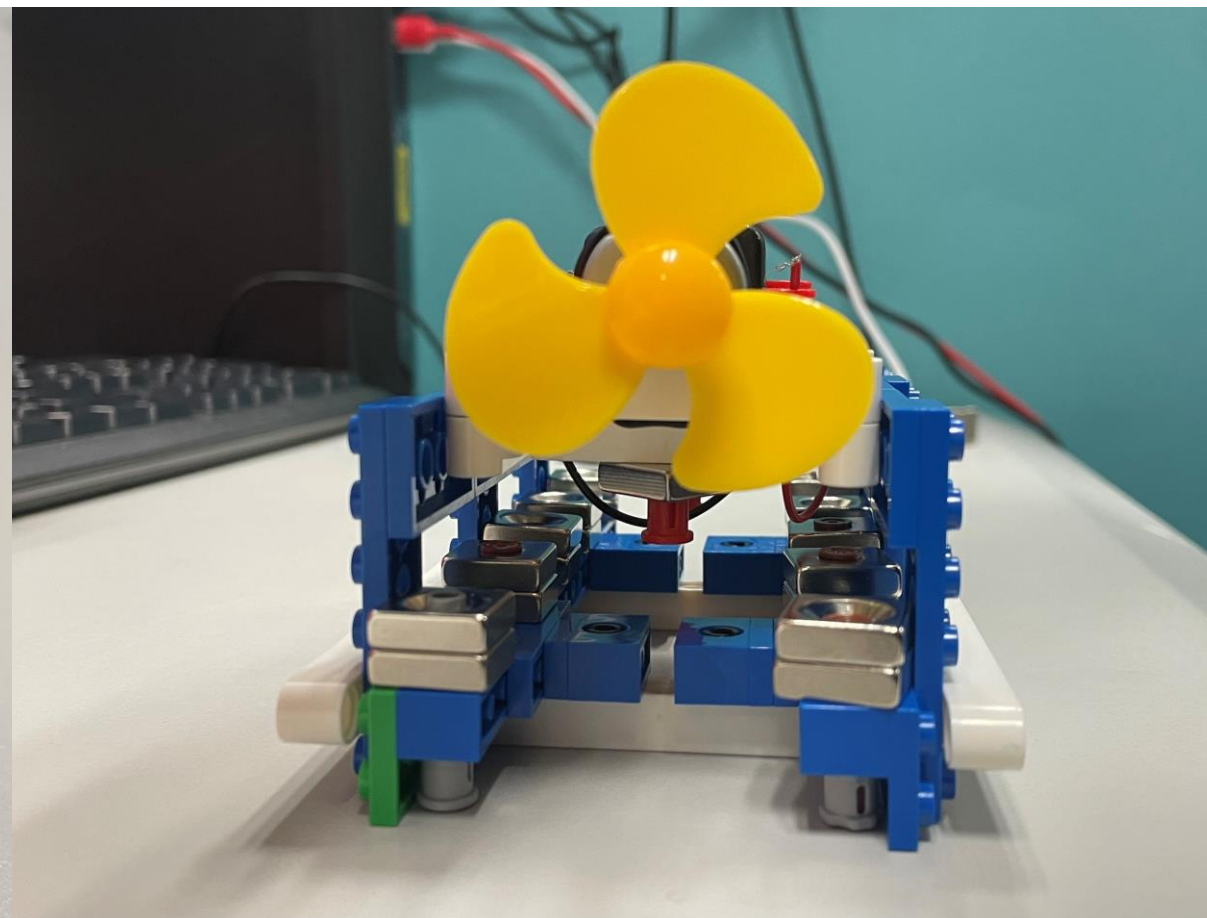
磁浮列車

匡智屯門晨崗學校

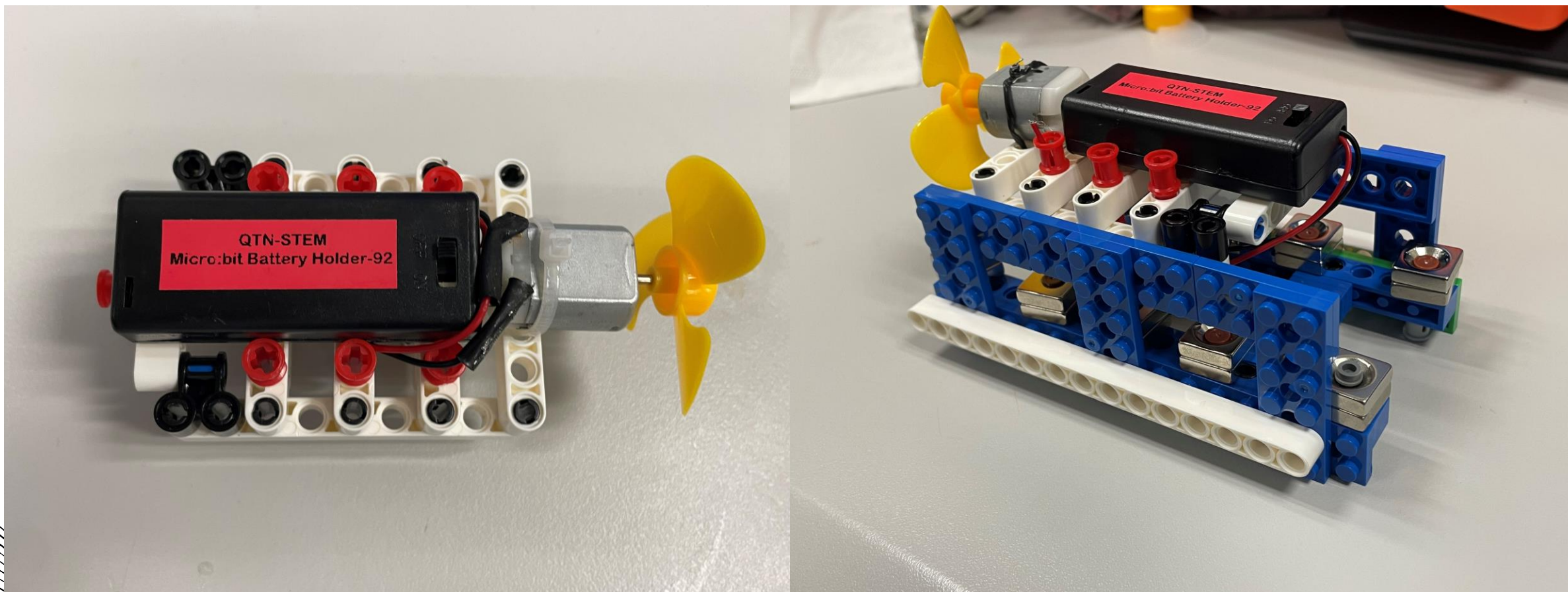
磁懸浮小車



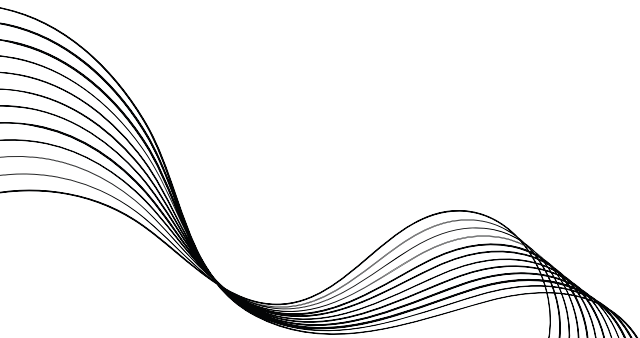
軌道



動力裝置



磁懸浮小車搭建



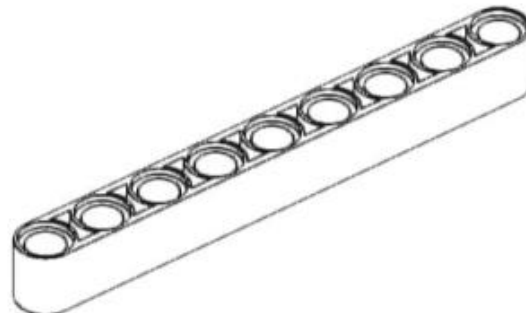
車架LEGO材料清單



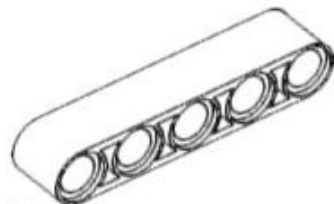
12x
4459
Black



2x
32291
Black



2x
40490
White



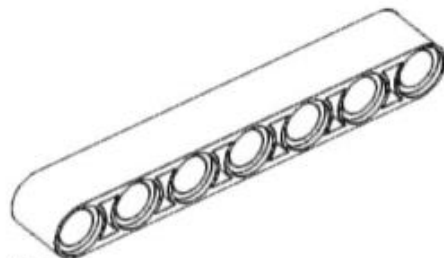
3x
32316
White



8x
32054
Red

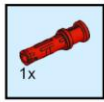


2x
3749
Blue

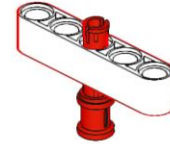
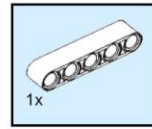


4x
32524
White

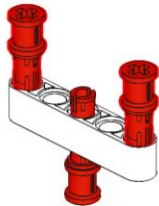
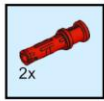
1



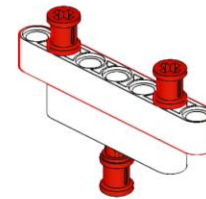
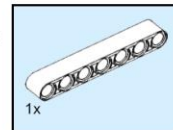
2



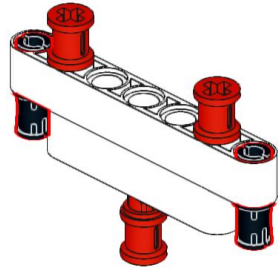
3



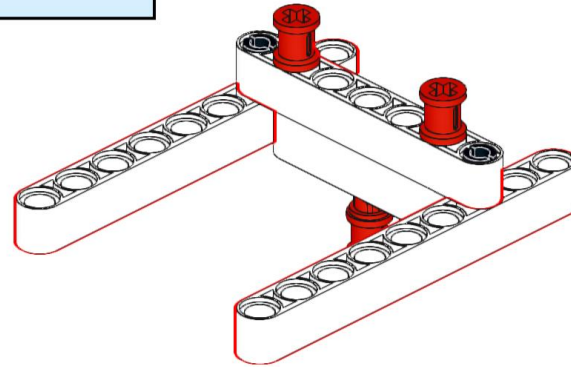
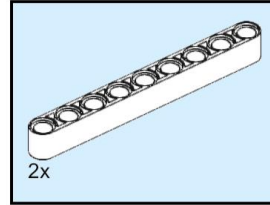
4



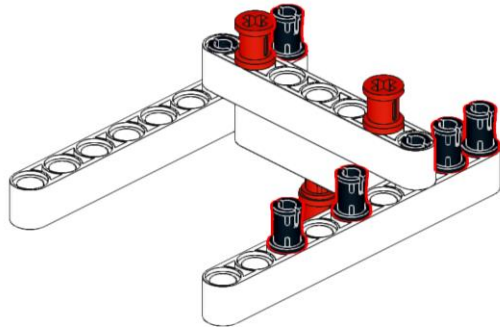
5



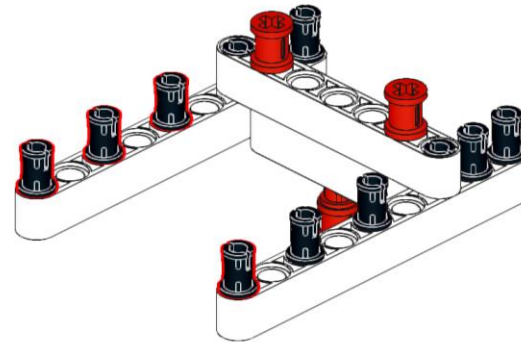
6



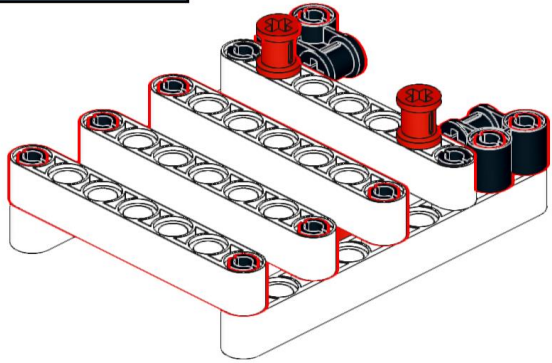
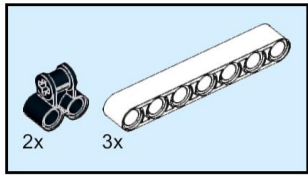
7



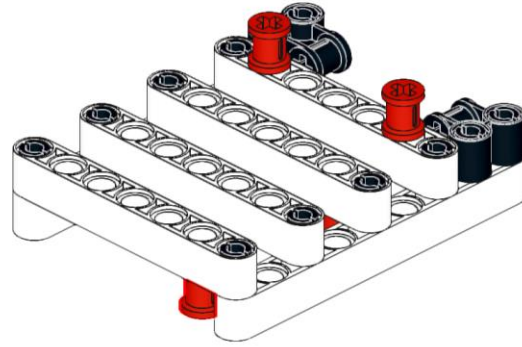
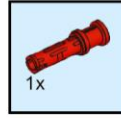
8



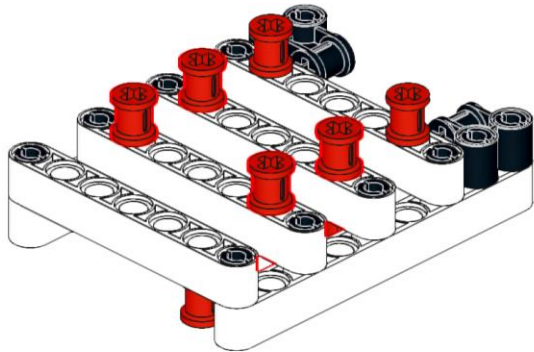
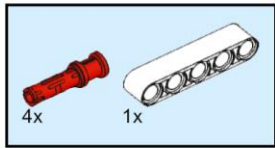
9



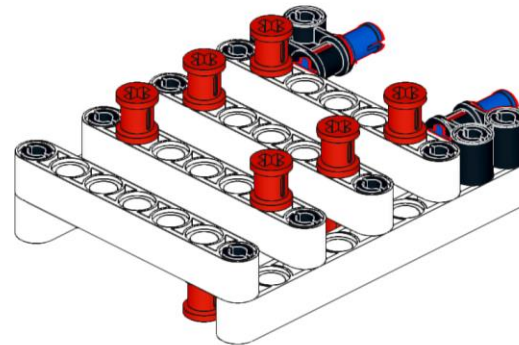
10



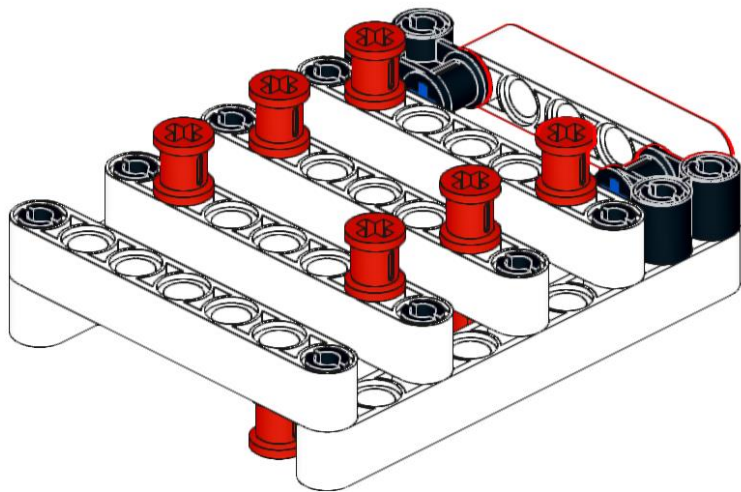
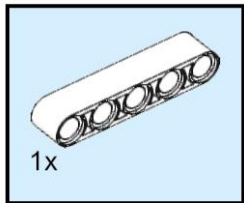
11



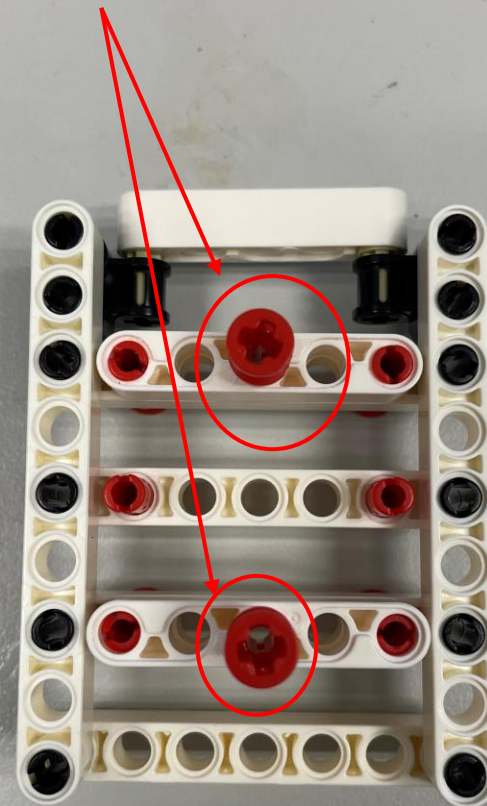
12



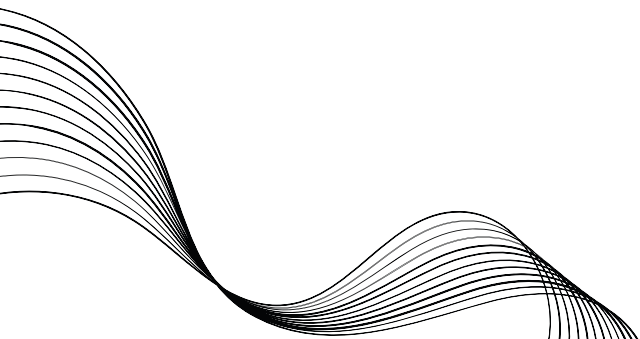
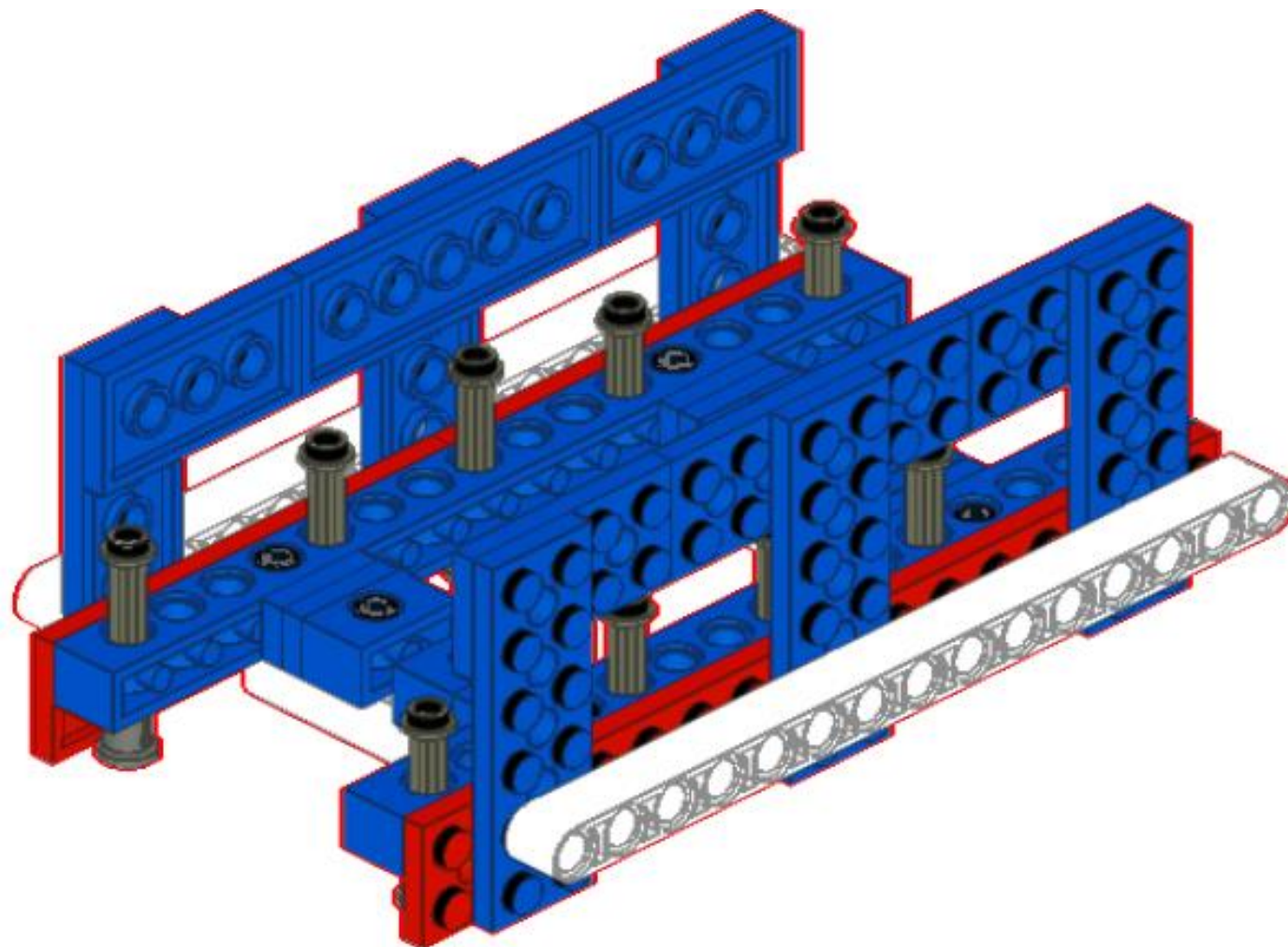
13



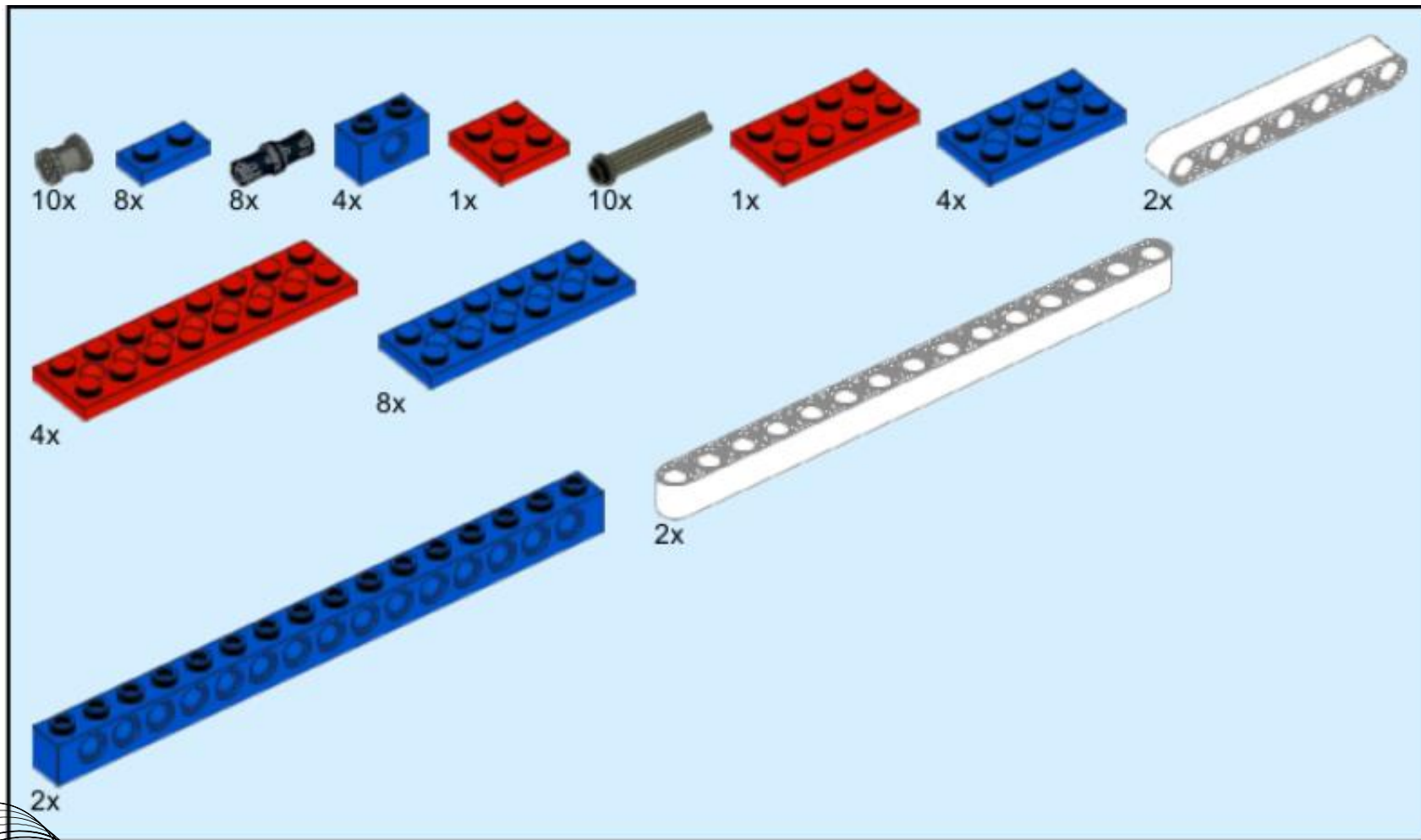
加裝磁石 (注意極性相同)



軌道架LEGO



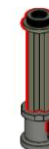
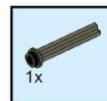
軌道架LEGO材料 (1 set)



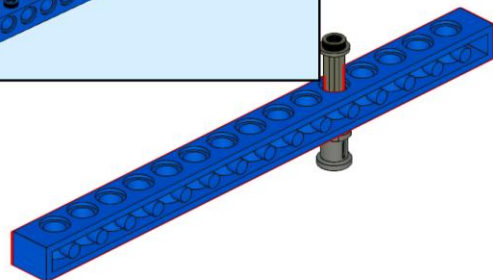
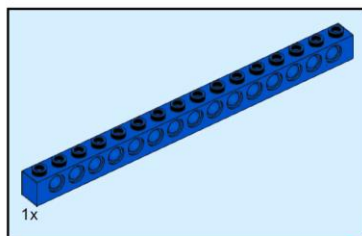
1



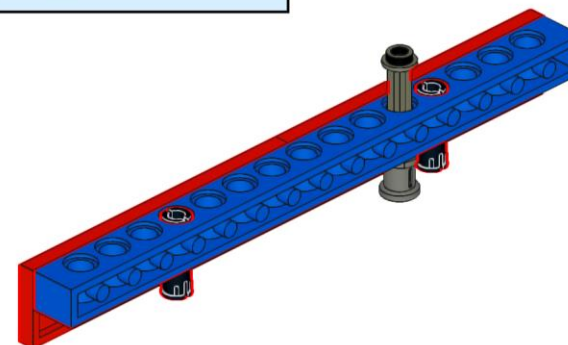
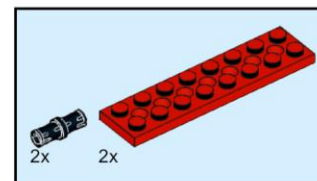
2



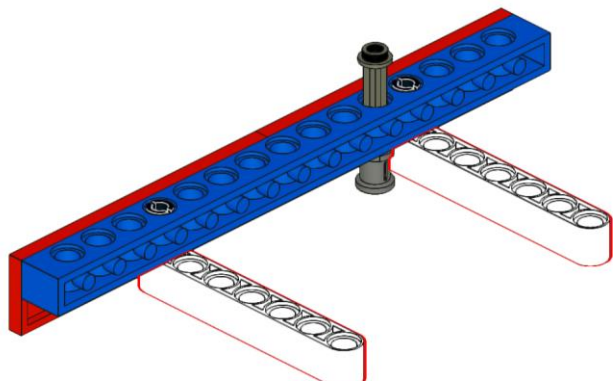
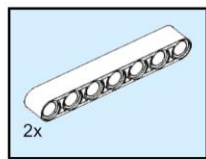
3



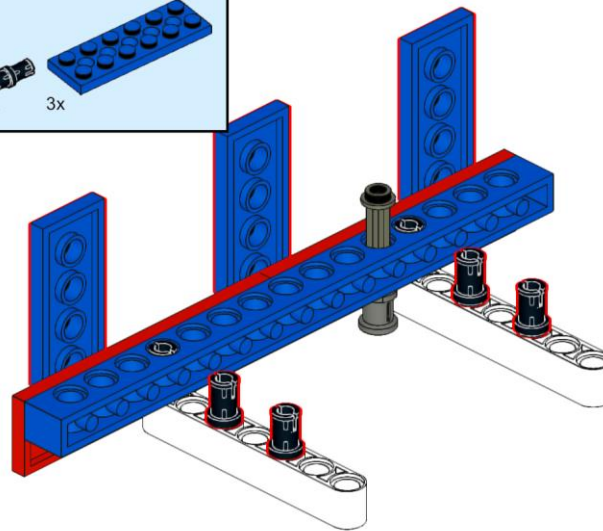
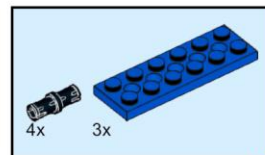
4



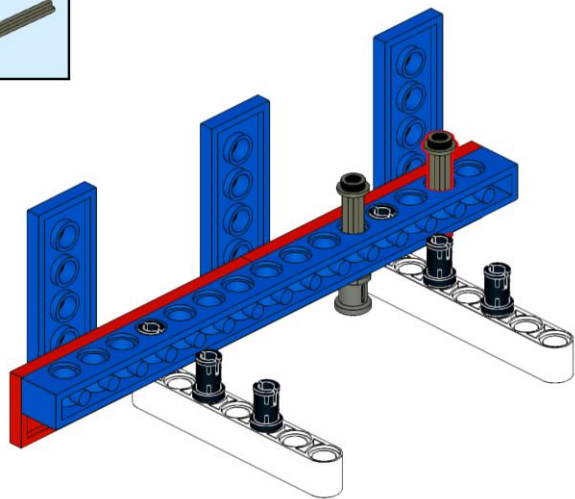
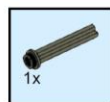
5



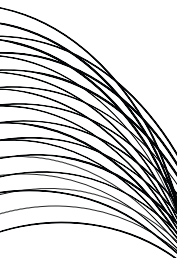
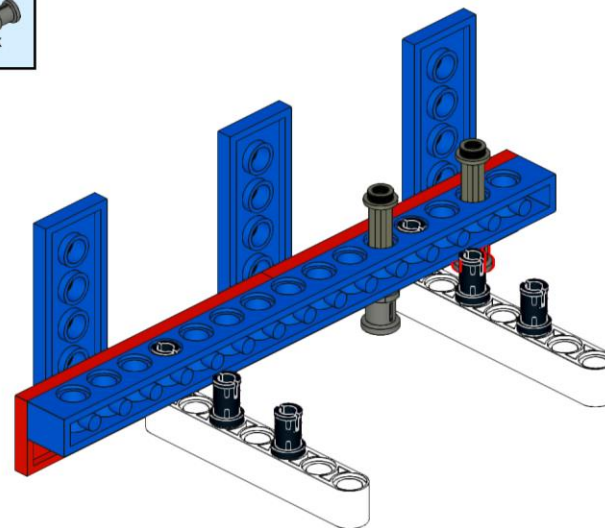
6

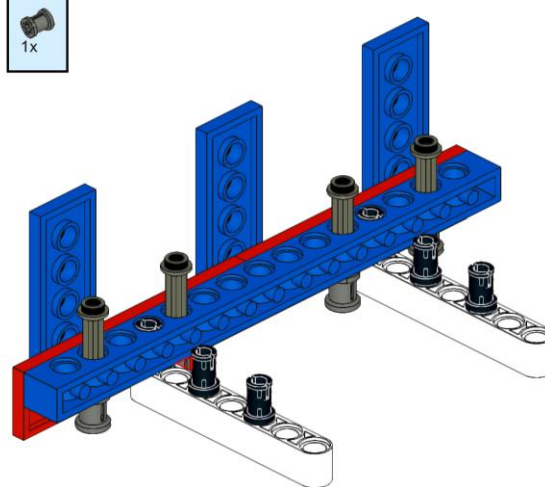
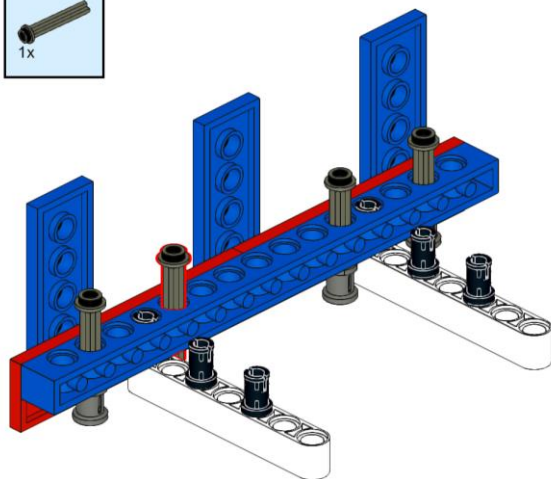
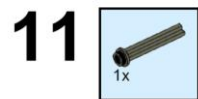
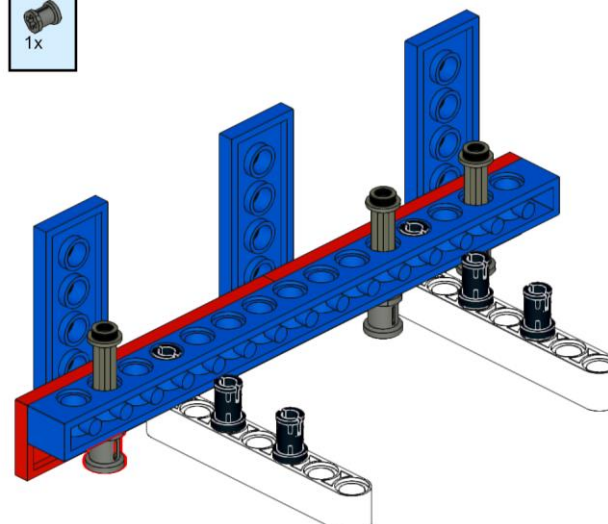
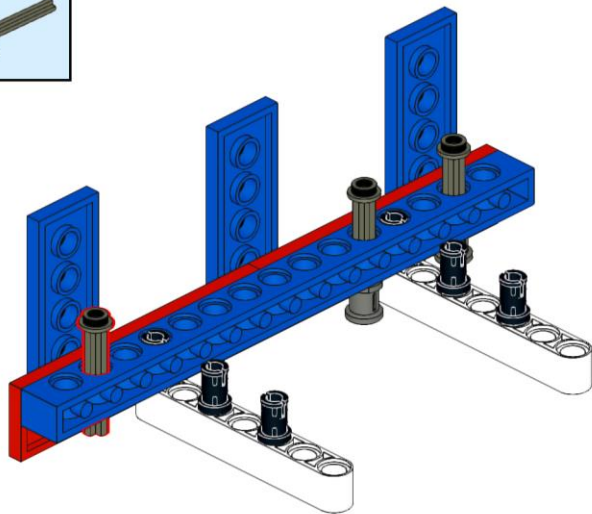
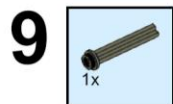


7

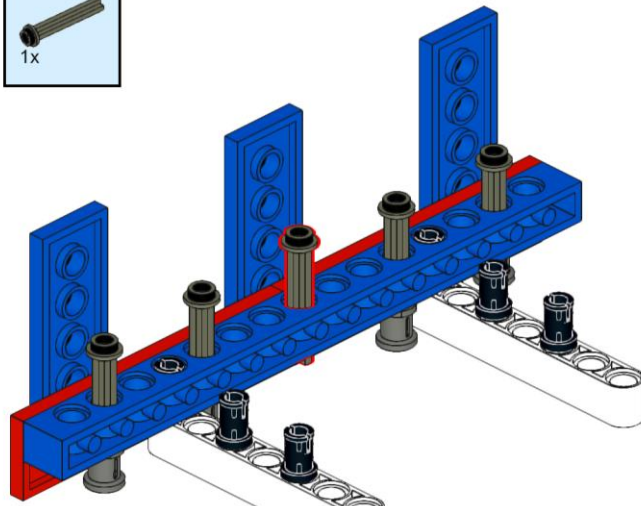
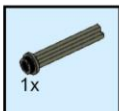


8

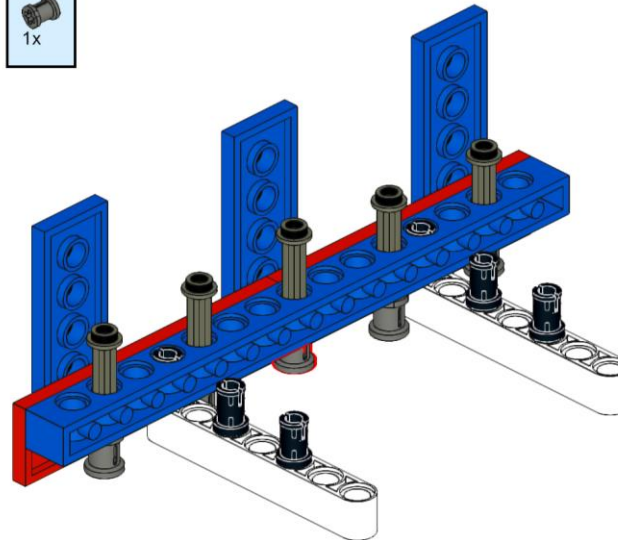




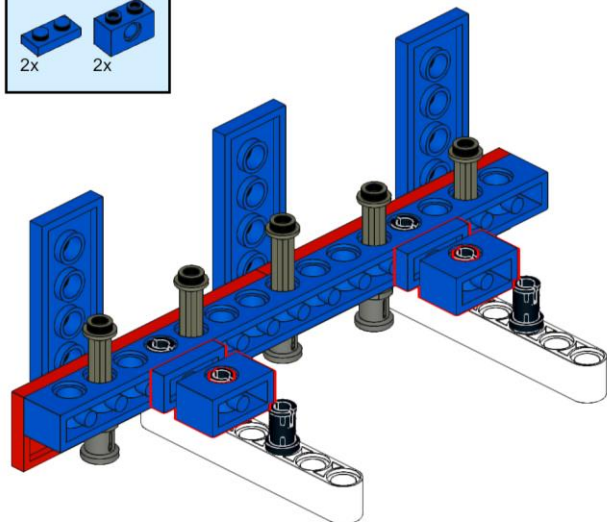
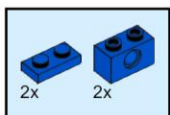
13



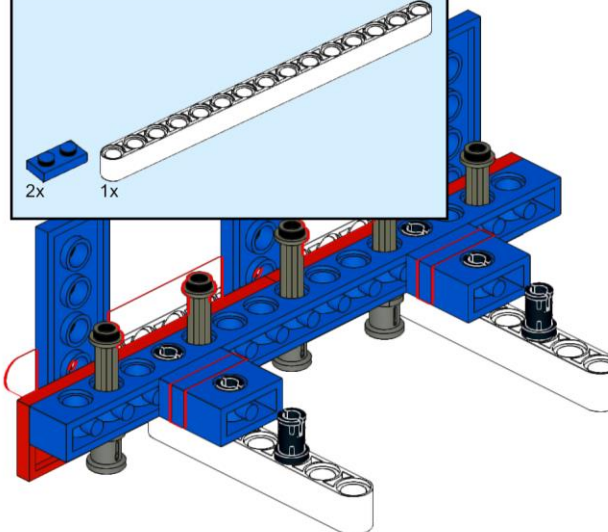
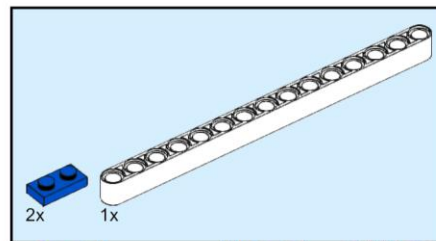
14



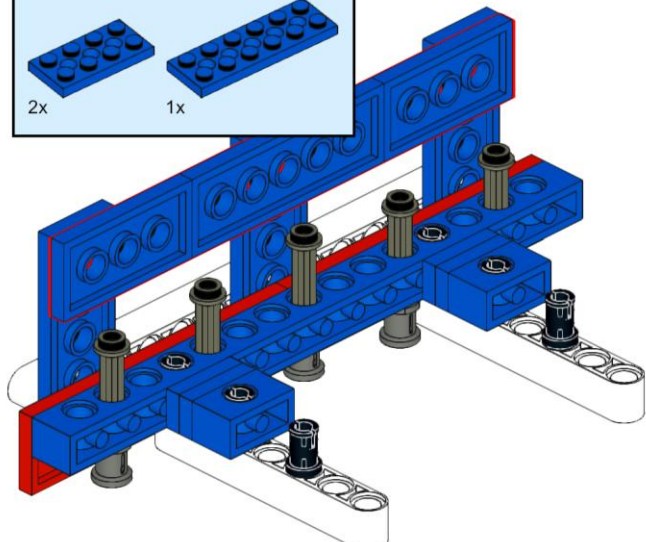
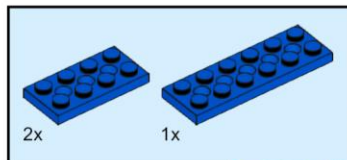
15



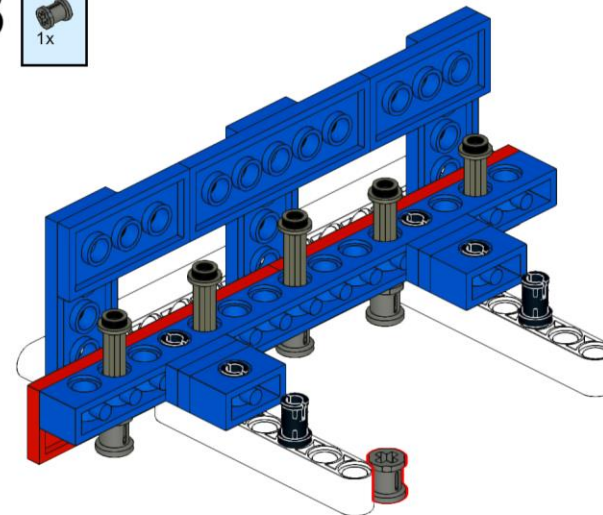
16



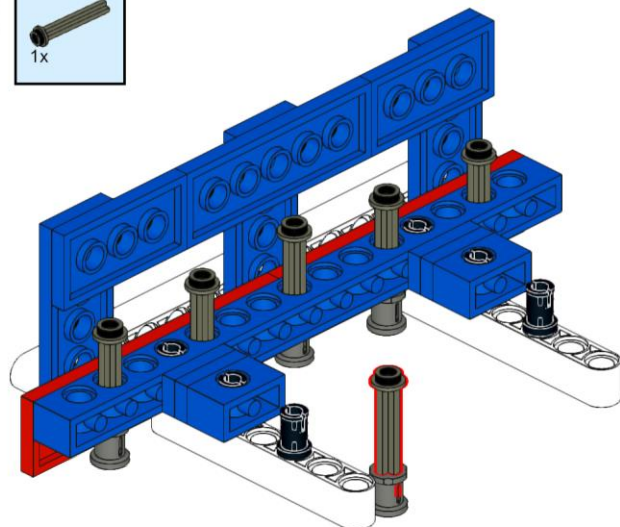
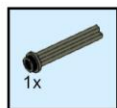
17



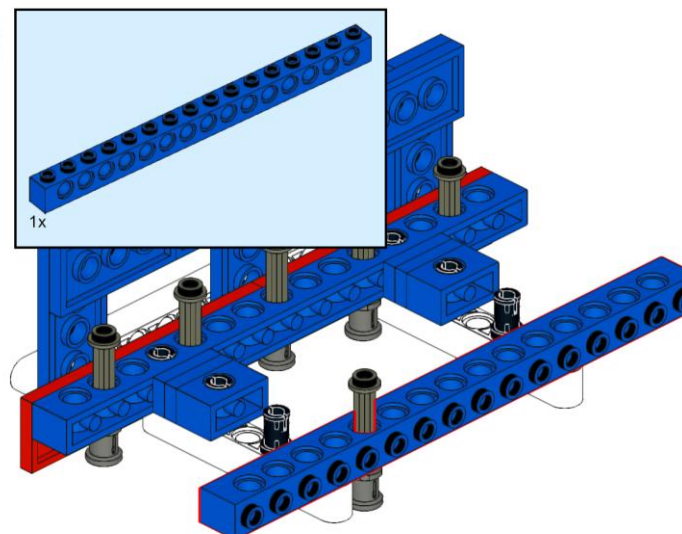
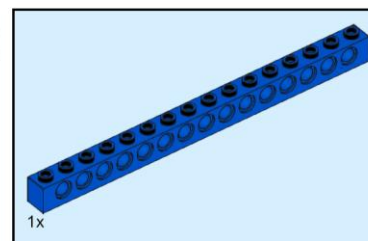
18



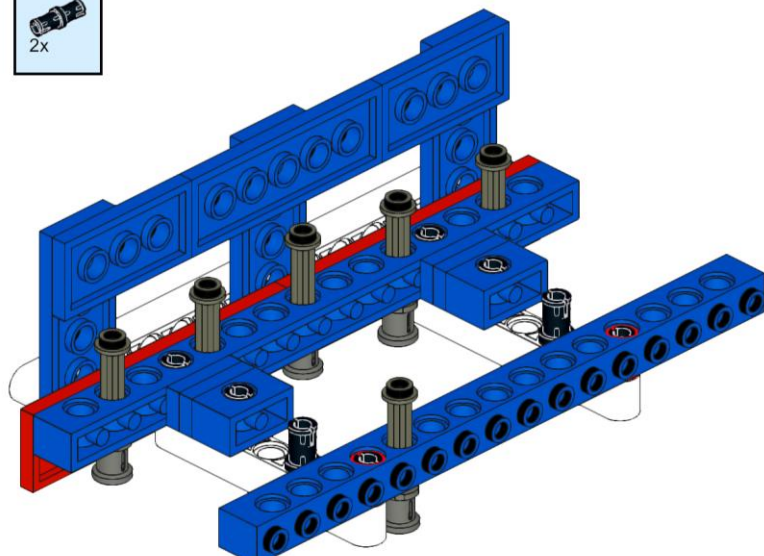
19

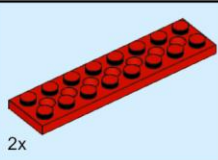


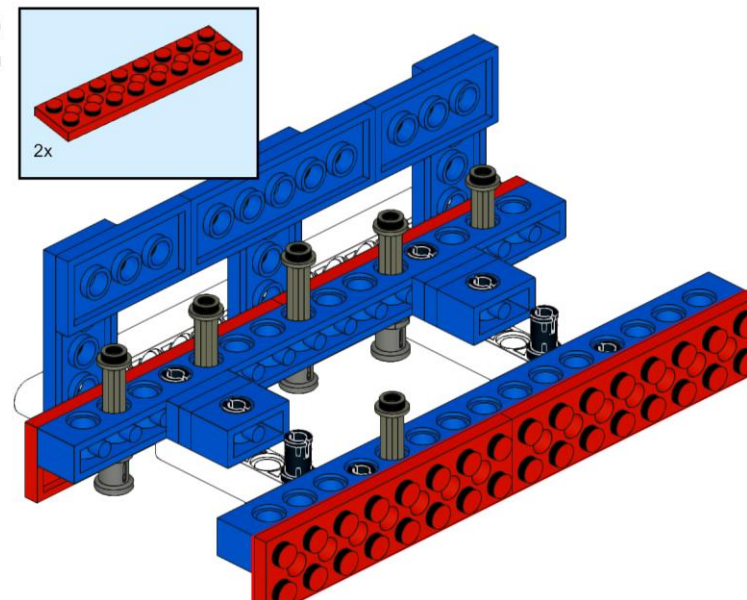
20

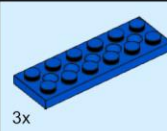


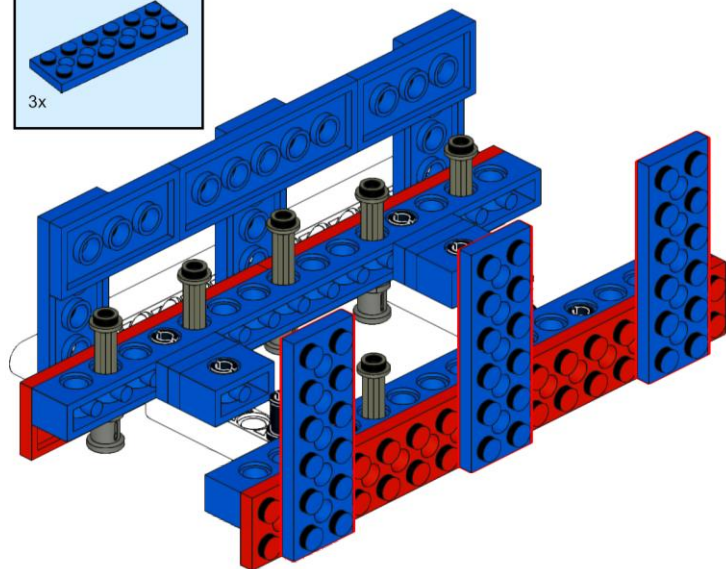
21  2x



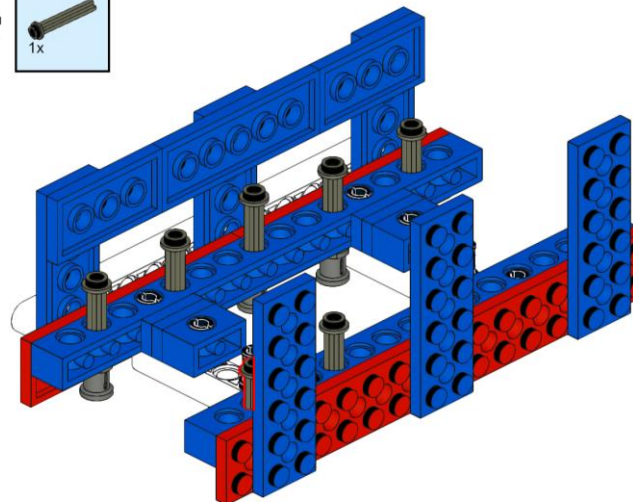
22  2x



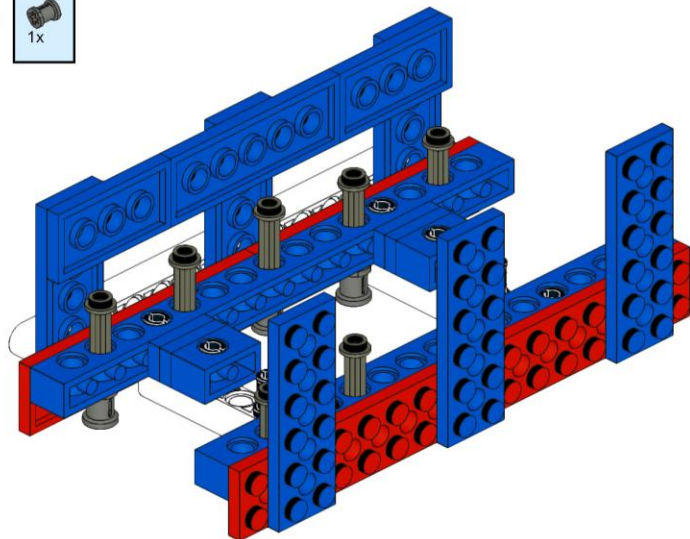
23  3x

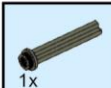


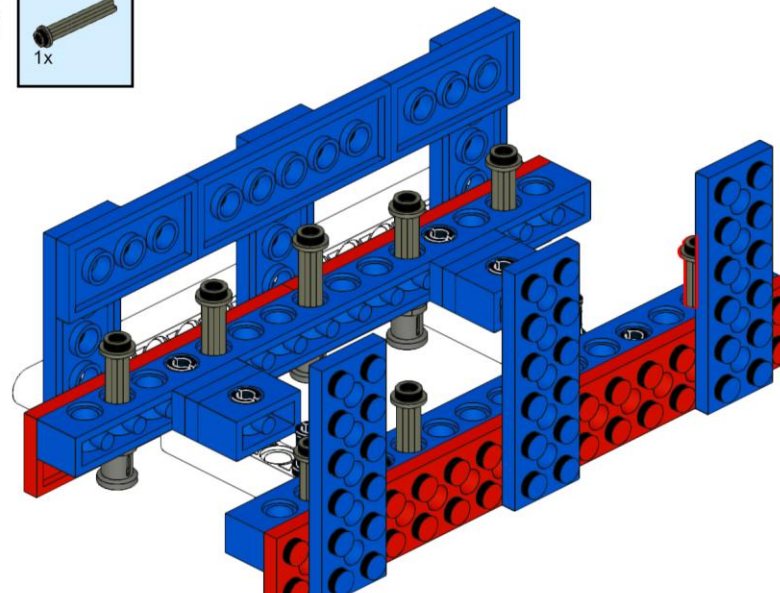
24  1x



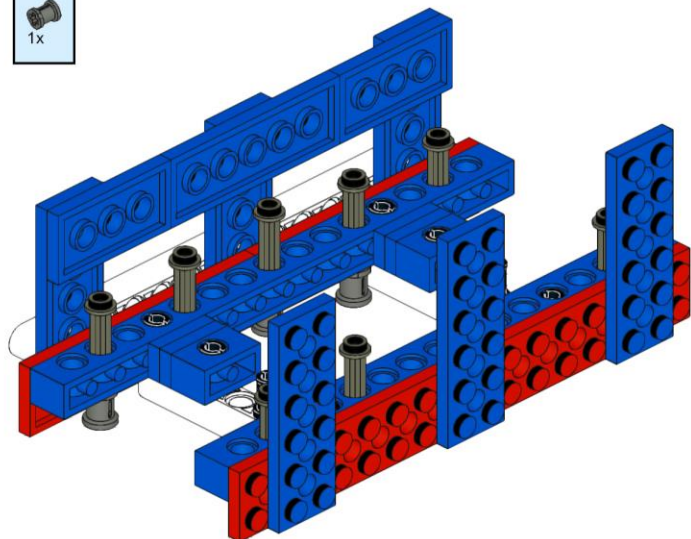
25  1x




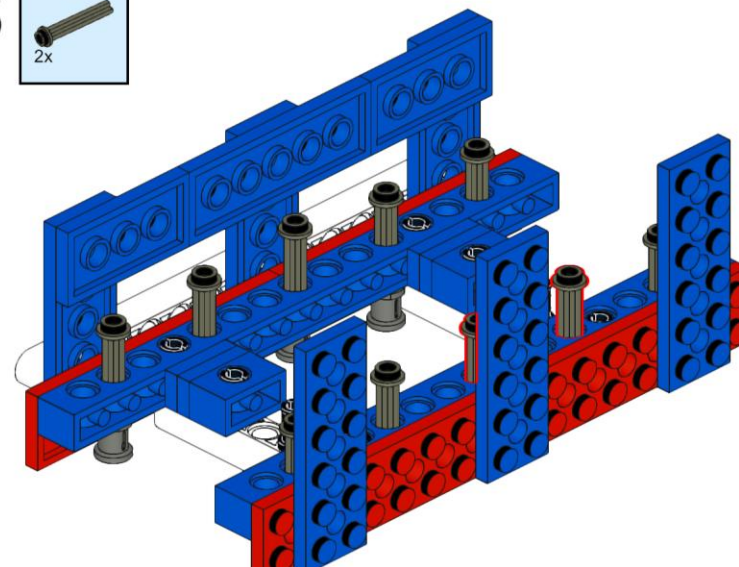
26  1x



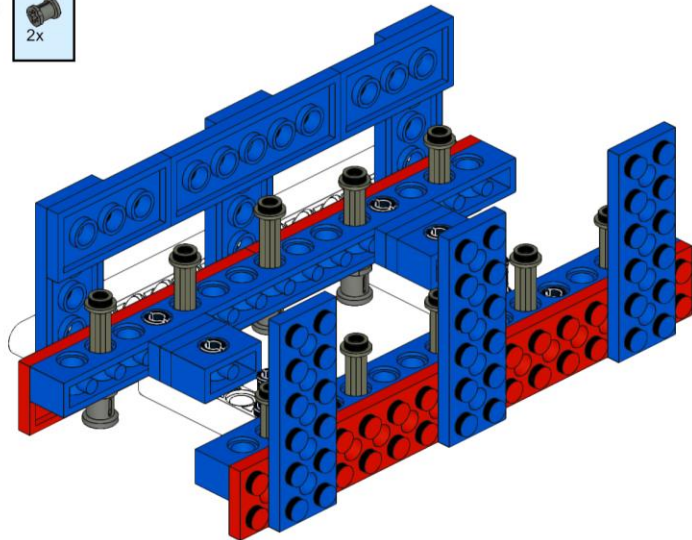
27  1x



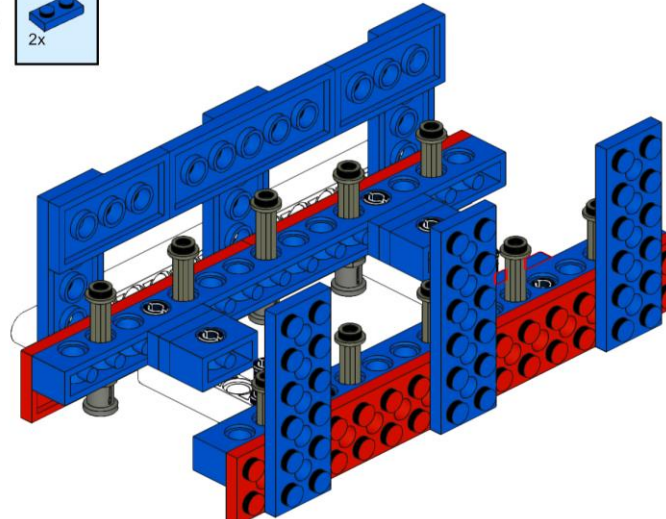
28  2x

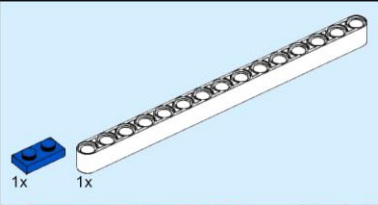



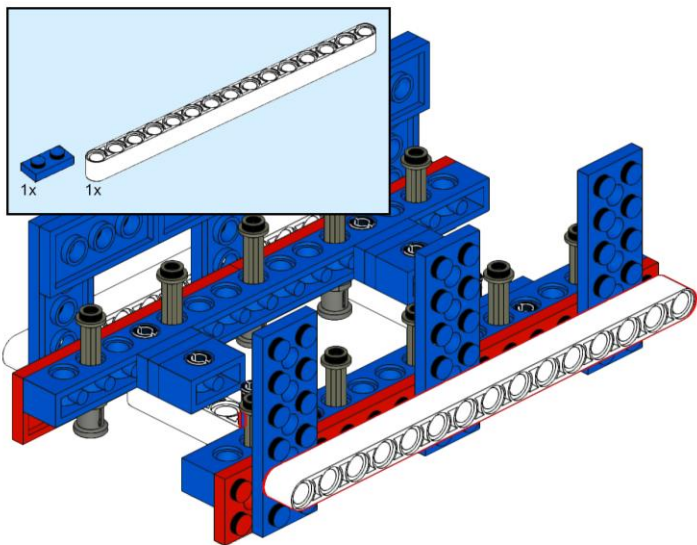
29  2x




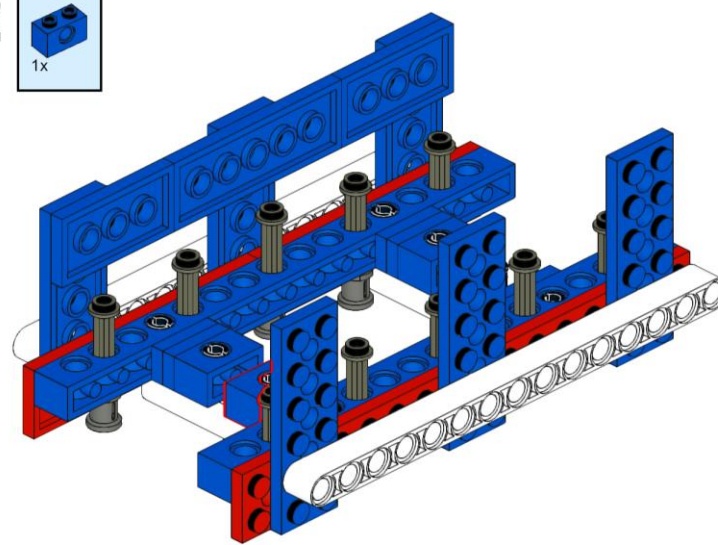
30  2x



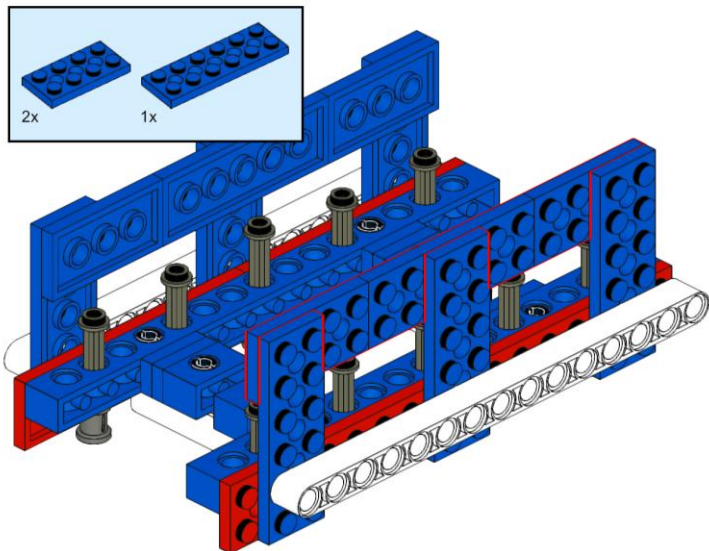
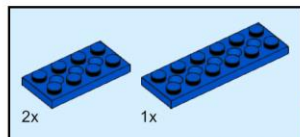
31  1x  1x



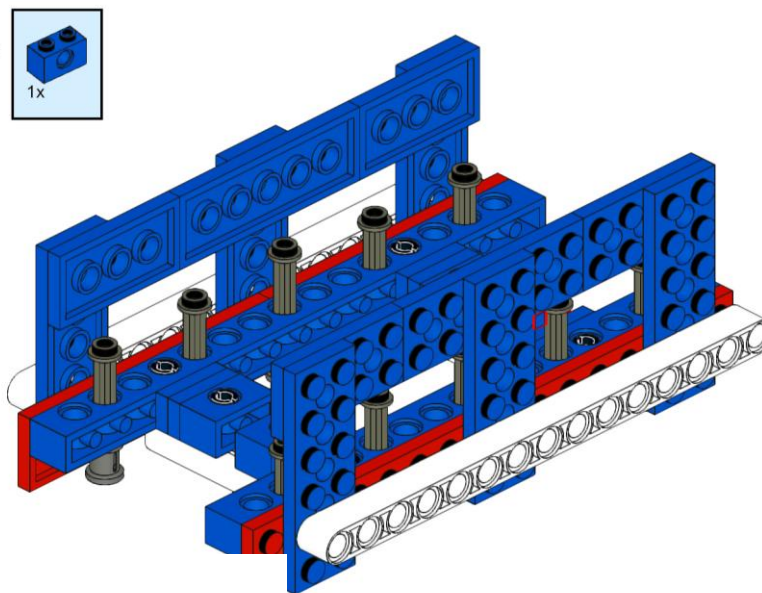
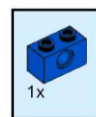
32  1x



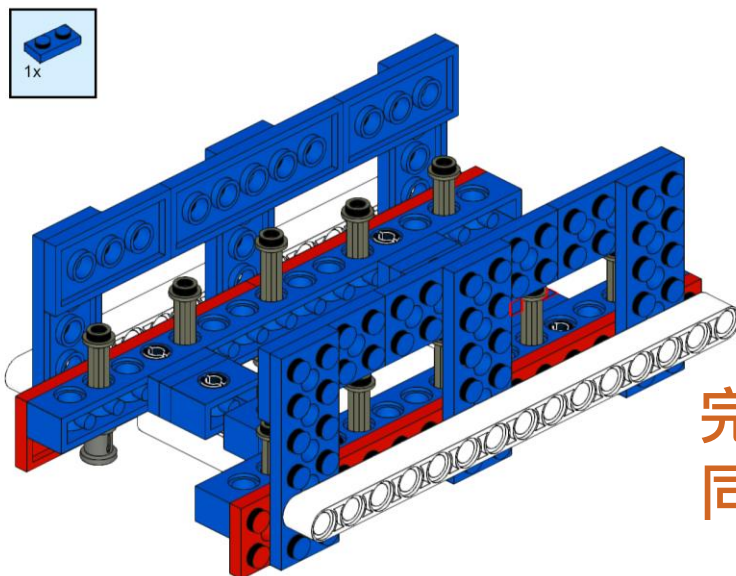
33



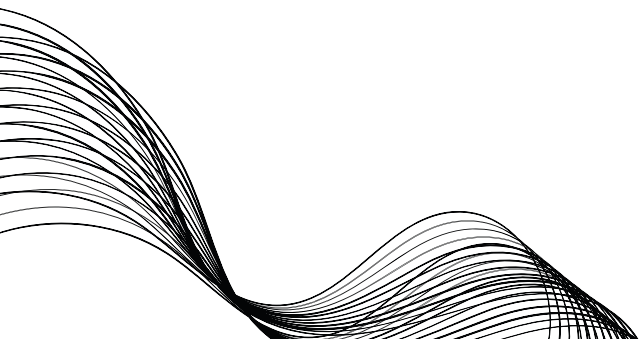
34



35

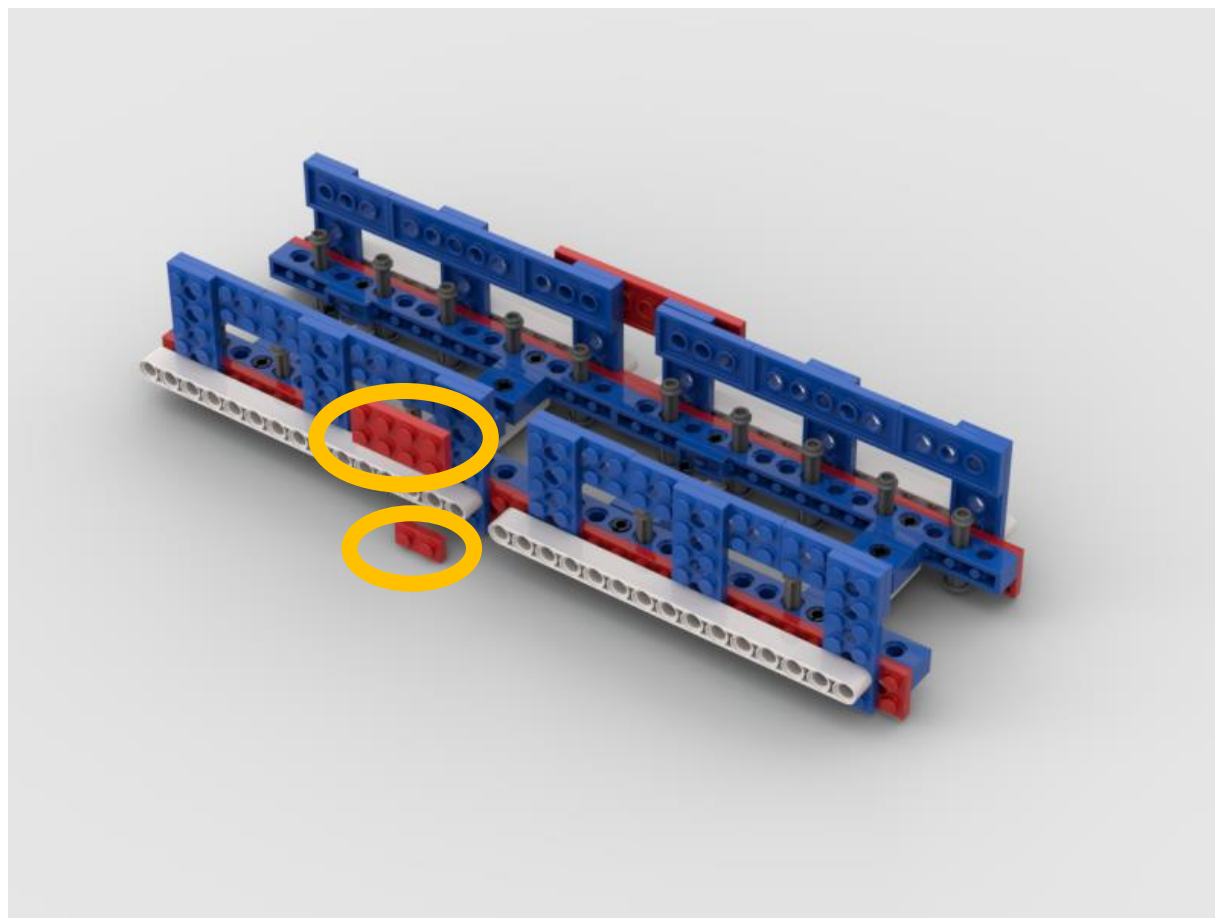


完成1套車軌！
同樣完成几套可以接駁延長軌道



多軌道接駁

完成1套車軌後
可以繼續製作幾
套車軌並把幾套
車軌連接起來



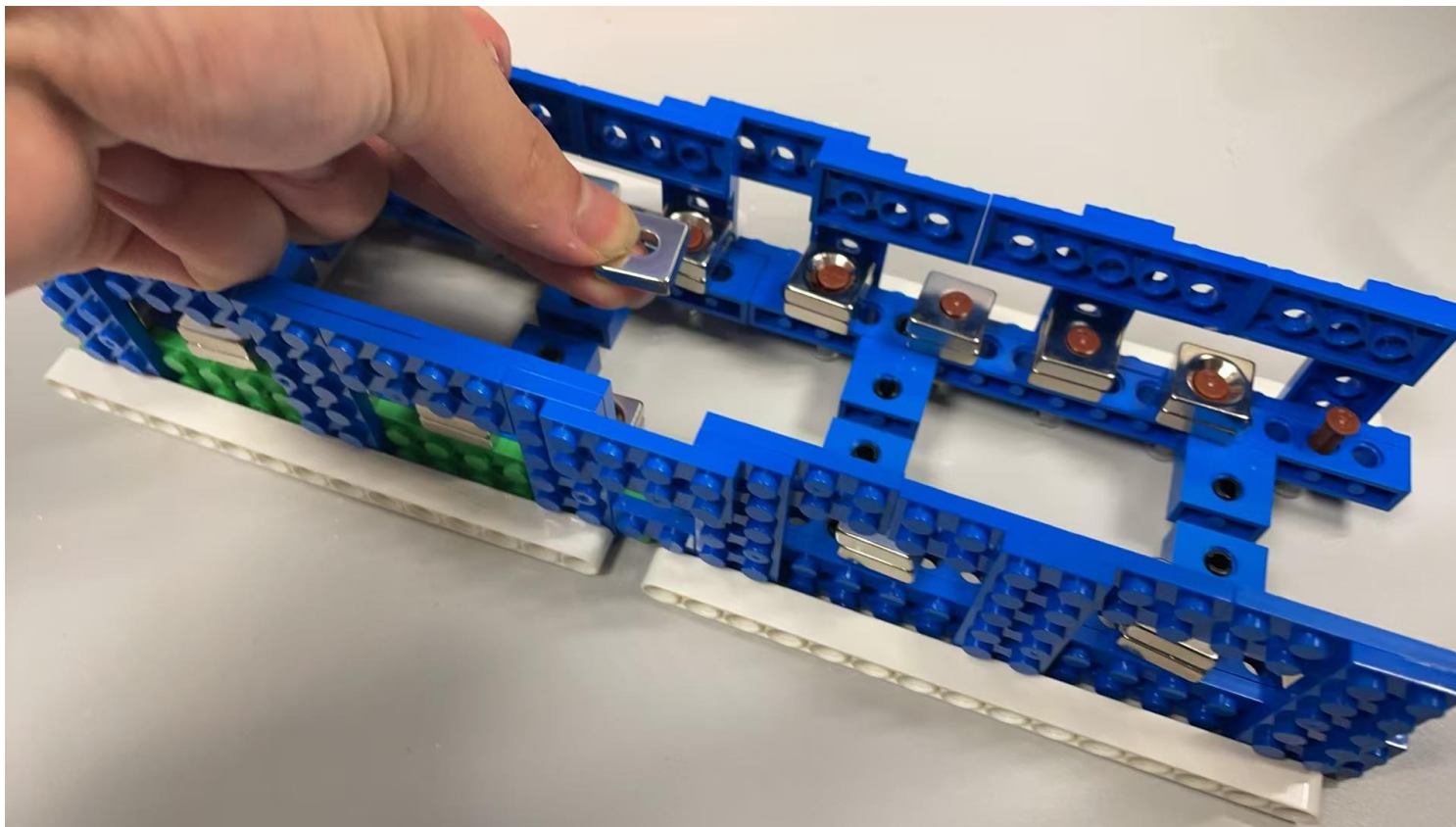
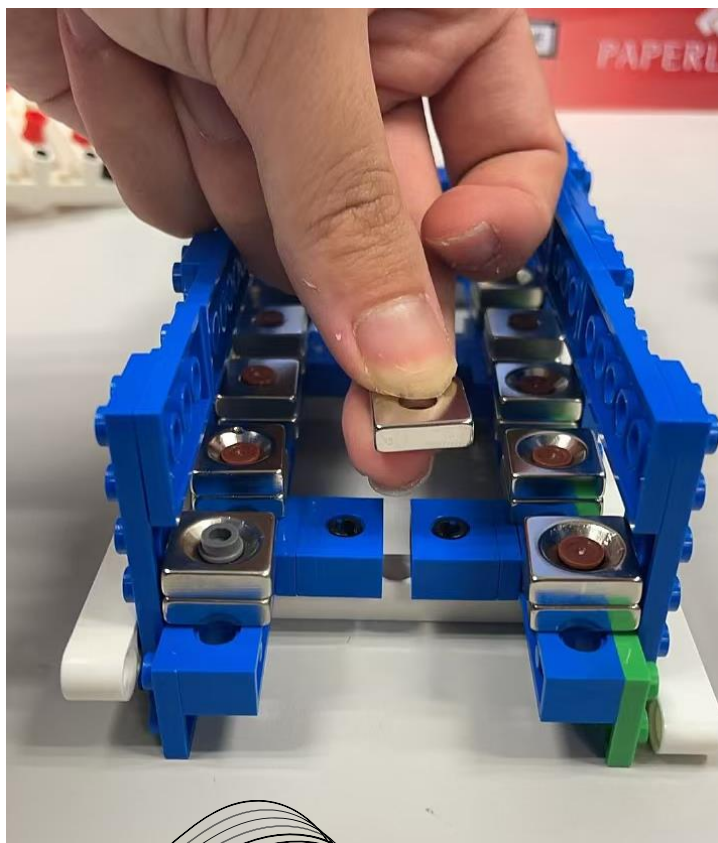
接駁材料：

2×4 Plate * 1

2×1 Plate* 1

極性測試

1. 拿一粒磁鐵放到路軌中間的上方，如果感受到向上的力說明此時手上磁鐵的極性方向正確，同時車身上的磁鐵極性需要跟手上磁鐵一致小車才能獲得向上的力。
2. 如果磁懸浮小車不能懸浮可能需要調整車身磁鐵的方向



接駁完成效果圖

