



電學補充包 ELECTRICITY KIT

FUN LAB



1262

22 PCS

7+

知識來自於經驗

KNOWLEDGE COMES

FROM EXPERIENCE ALONE

20 MODELS TO BUILD



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各位小朋友，歡迎您加入 Gigo 智高的 FUN LAB 趣味實驗室。
 在 FUN LAB – #1262 電學補充包當中，我們添加了更多的趣味零件，透過與 #1261 科學探索組的相互結合，就能延伸出更多的創意。
 在我們動手組裝的過程當中，不僅能體驗創作的樂趣，更能學習到各種有趣的知識！讓我們將這些知識活用於日常生活吧！
 那麼，就讓我們一起探索、學習 FUN LAB 趣味實驗室吧！

Hello, everyone! Welcome to join Gigo's Fun Lab.

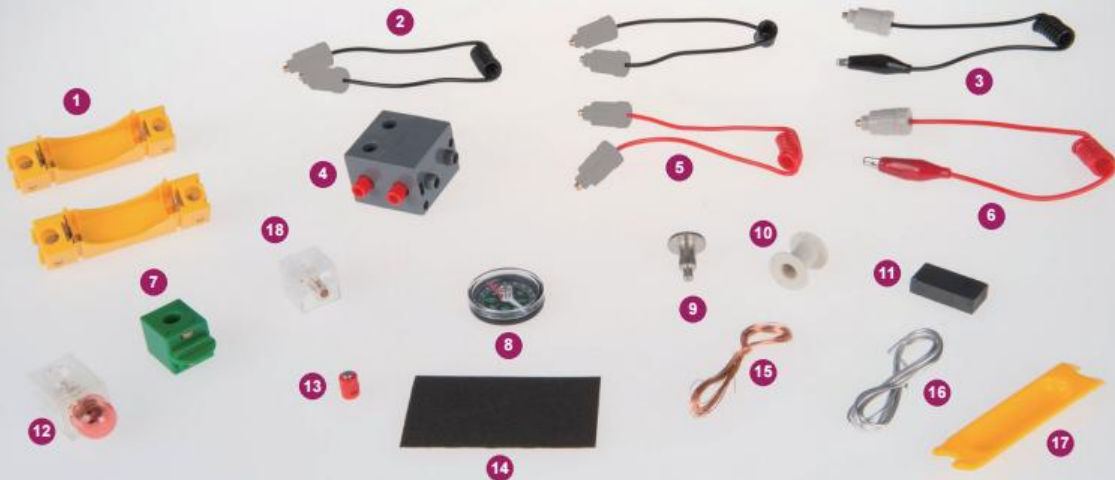
In the package of #1262 Electricity Kit, a Fun Lab accessories and add-ons, some extra fun parts are included. Working together with Kit #1261 Science Tour more creative ideas can be inspired.

During the process of assembly, we will experience the fun of creation and learn various interesting knowledge, which can hopefully be utilized in our everyday life.

Let's work together to explore Gigo's Fun Lab. During the process of assembly, we will experience the fun of creation and learn various interesting knowledge, which can hopefully be utilized in our everyday life.

Let's work together to explore Gigo's Fun Lab.
























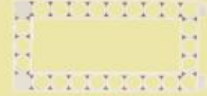





















#1262 電學補充包 零件表

#1262 Electricity Kit :
Parts List

1 C-1.5V 雙孔電池座 C-1.5V BATTERY HOLDER x2	2 C-雙頭彈力電線 C-WIRE CLIP x2	3 C-鱈魚夾彈力電線 C-WIRE CLIP x1	4 C-輪電學馬達 C-MOTOR WITH SPINDLE GEAR x1	5 C-雙頭彈力電線 C-WIRE CONNECTOR x1	6 C-鱈魚夾彈力電線 C-WIRE CONNECTOR x1	7 C-開關 C-SWITCH x1	8 C-指南針 C-COMPASS x1	9 C-鐵芯 C-IRON ROD x1
10 C-漆包線捲線器 C-WINDING REEL x1	11 C-方形磁鐵 C-C-MAGNET x2	12 C-燈座 C-BULB HOLDER x1	13 C-導電短結合鍵 C-PEG CONDUCTOR x1	14 C-砂紙 C-SANDPAPER x1	15 C-漆包線 C-PLASTIC SHEATH WIRE x1	16 C-剪折鋁線 C-C-ALUMINUM WIRE x1	17 B-扳手 B-PEG REMOVER x1	18 C-導電正方顆粒 C-CUBE CONDUCTOR x2

#1261 科學探索組 需用零件表

Parts Needed from Kit #1261 Scientific Tour

 1 C-軸扣鍵 C-AXLE CONNECTOR x10	 2 C-自轉軸鍵 C-AXLE x5	 3 C-凸輪連結鍵 C-CAM CONNECTOR x4	 4 C-長結合鍵 C-LONG PEG x15	 5 C-軸固定鍵 C-AXLE FIXING x5	 6 C-底座結合器 C-BASE GRID CONNECTOR x2	 7 C-軸轉接器 C-ROD CONNECTOR x2	 8 C-關節鍵 C-HINGE x4
 9 C-單向轉接鍵 C-FRONT CONVERTER x4	 10 C-雙向轉接鍵 C-LATERAL CONVERTER x4	 11 C-二合一結合鍵 C-TWO-IN-ONE CONVERTER x4	 12 B-短結合鍵 EXTRA LOOSE PEG x15	 13 C-3孔1/4 弧長條 C-BENDE ROD x8	 14 C-3孔超長條 C-3 HOLE DUAL ROD x4	 15 C-3孔長條 C-3 HOLE ROD LATERAL CLOSED x4	 16 C-3孔長條側有孔 C-3 HOLE ROD x4
 17 C-5孔超長條 C-5 HOLE DUAL ROD x4	 18 C-5孔長條 C-5 HOLE ROD LATERAL CLOSED x4	 19 5孔長條側有孔 C-5 HOLE ROD x4	 20 #7063 曲軸平 CRANK W/OUT FLANGE x2	 21 C-11孔長條 ROD x6	 22 C-15孔超長條 C-15 HOLE DUAL ROD x6		
 23 C-5x5孔正方形 C-5X5 FRAME x4	 24 C-5x10孔正方形 C-5X10 FRAME x4	 25 C-5x13孔超長方框 C-5X13 DUAL FRAME x1	 26 C-5x15孔正方形 C-5X15 FRAME x4	 27 C-20T齒輪 C-20T GEAR x6			
 28 C-40T齒輪 C-40T GEAR x6	 29 C-60T齒輪 C-60T GEAR x4	 30 C-80T齒輪 C-80T GEAR x2	 31 C-OD23mm滑輪 C-OD23 PULLEY x2	 32 C-OD33mm滑輪 C-OD33 PULLEY x2	 33 C-OD53mm滑輪 C-OD53 PULLEY x2		
 34 C-渦桿 C-WORM GEAR x1	 35 C-OD70x13mm橡膠輪 C-RACING TIRE x2	 36 C-100mm橡皮筋 C-100mm RUBBER BAND x2	 37 C-OD36mm橡膠圈 C-OD36 O-RING x2	 38 C-OD56mm橡膠圈 C-OD56 O-RING x2	 39 C-墊片 C-WASHER x5	 40 C-30mm II軸 C-30mm AXLE II x4	
 41 C-70mm II軸 C-70mm AXLE II x4	 42 C-100mm II軸 C-100mm AXLE II x4	 43 C-特多龍線 C-STRING x1	 44 B-扳手 B-PEG REMOVER x1	 45 C-8x12底座 C-BASE GRID x2			

小提醒：

課程開始前，請先搭配補充包說明書，將 # 1261 科學探索組的材料挑出，會更方便進行模型創作喔！

Reminders: Before the class, please read the instructions of Accessories and Add-Ons to pick out parts needed from #1261 Scientific Tour to make models assembly easier.

課前準備

Before the Class

課程須搭配 # 1261 棉線

一條 30cm、一條 170cm 共 2 條一起使用

Get two strings from Kit #1261, one 30 cm long and the other 170 cm, ready for the class.

電池座的使用方法

The usage of Battery Holder



串聯

Make series connection

並聯

Make parallel connection

放入電池

Load the battery

燈座的拆裝

Assemble or Disassemble the Bulb Holder



壓緊燈罩兩側，將燈罩拆開。
Squeeze the bulb cap to take it off the bulb holder.

依順時針方向轉即可裝上燈泡，逆時針轉則可卸除燈泡
Twist the bulb clockwise tightly to assemble it in good connection.
Twist the bulb counterclockwise to disassemble it.

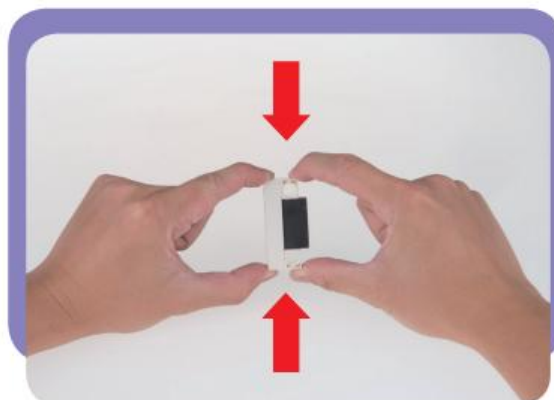
壓緊兩側將燈罩蓋回。
Squeeze the bulb cap and put it back onto the bulb holder.

磁鐵的固定

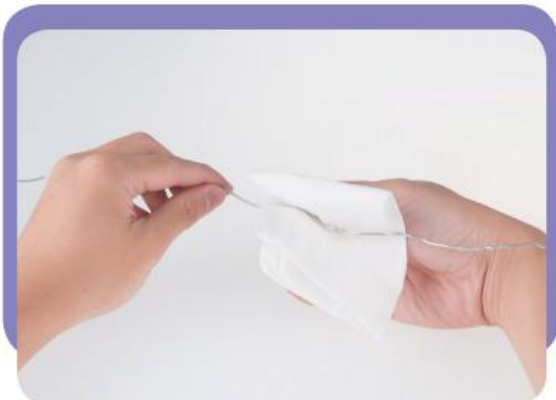
Install the Magnet



先組好磁鐵架，然後將磁鐵水平壓入。
Build up the frame first, then insert the Magnet horizontally into the frame.



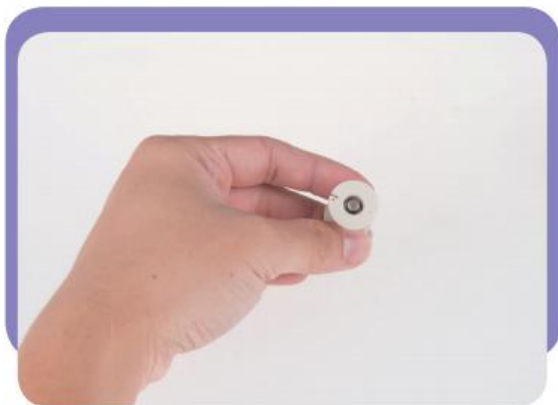
將磁鐵架兩端壓緊 以固定磁鐵。
Press two ends of the frame tightly to assure the installation.

鋁線的整理*Organize the Aluminum Wire*

一手緊握鋁線，另一手隔著衛生紙用力拉扯。
Hold the aluminum wire with one hand and pull it strongly with the other hand, using a tissue for separation to keep the hand clean.



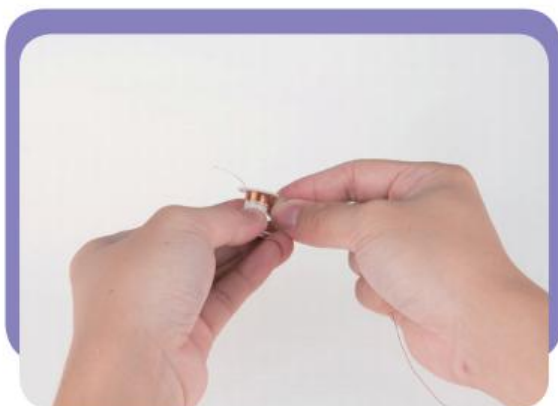
拉直後的鋁線光滑平整。
The pulled wire will become straight and smooth.

漆包線的纏繞*Coil the Plastic Sheath Wire*

有缺口的部分為漆包線捲線軸上方，漆包線由下方開始往上纏繞。
The end with opening at is the top of the Winding Reel. You should start the winding from the bottom.



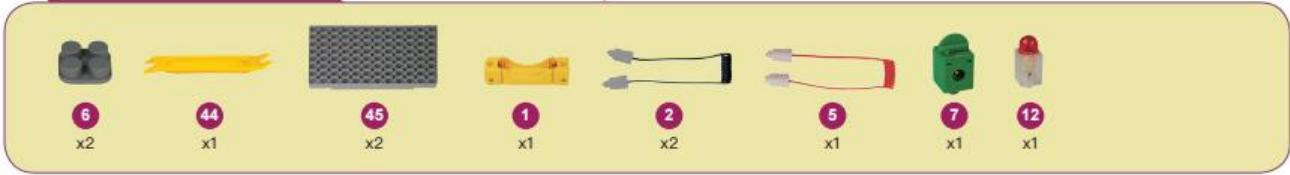
在一側缺口處先用漆包線捲線軸繞一圈。
Firstly wind up the Plastic Sheath Wire one circle at the opening on one side.



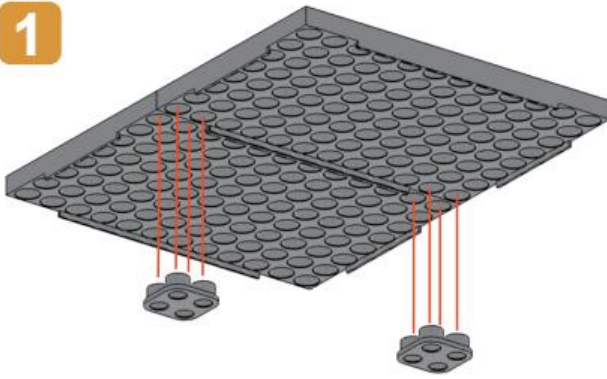
繼續將漆包線沿著線軸整齊的纏繞上。
Continue to wind up the rest of the Plastic Sheath Wire from the bottom of Winding Reel upward in turn and neatly.



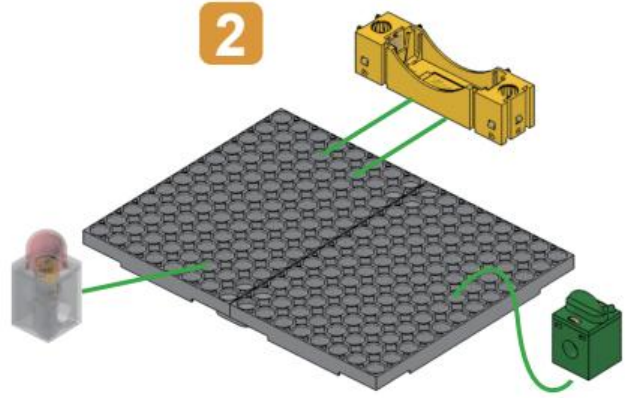
整個繞完後，從線軸的另一側缺口，將漆包線的尾端固定住。
End up the winding by fixing the last wire at the opening on the other side.



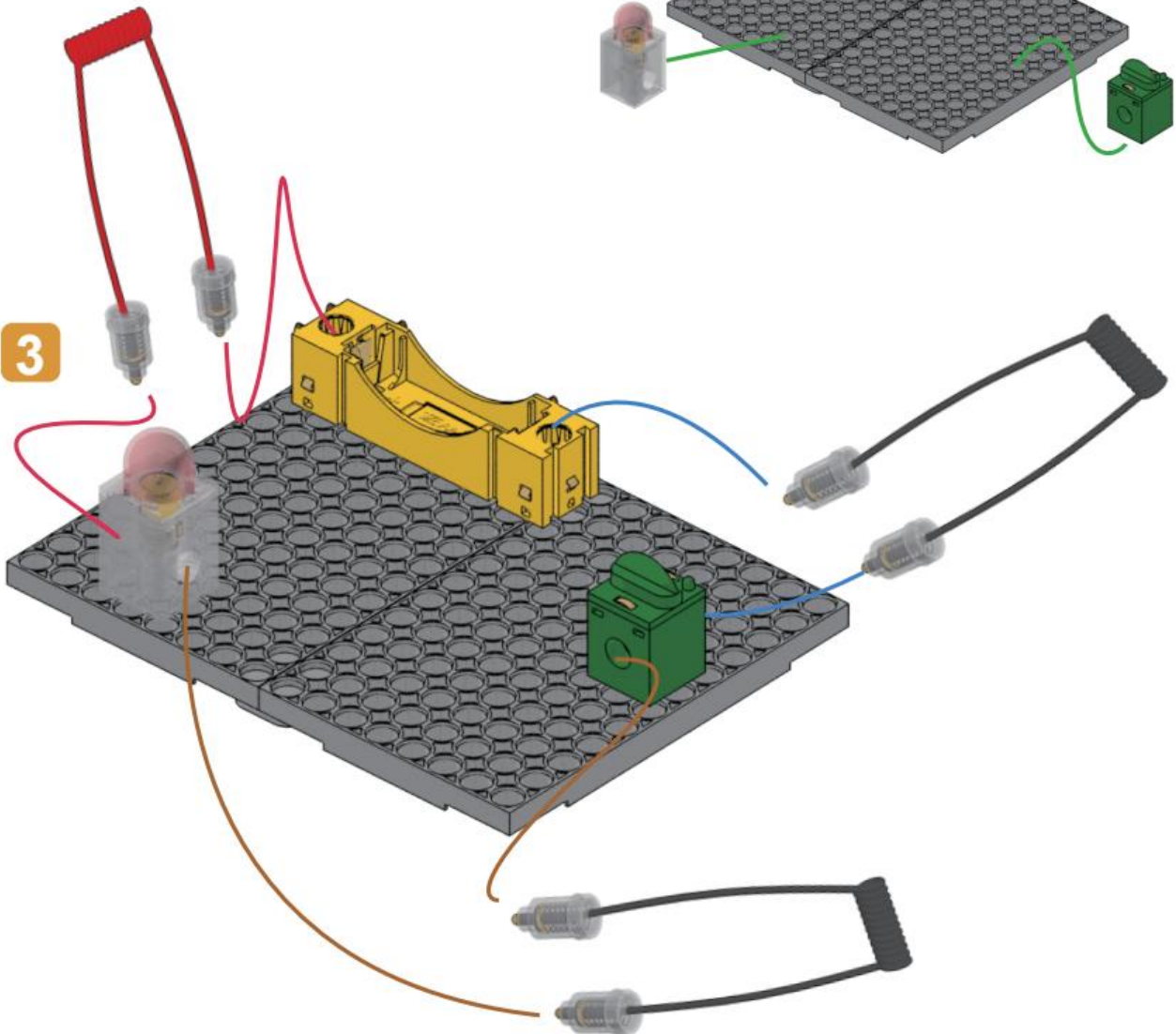
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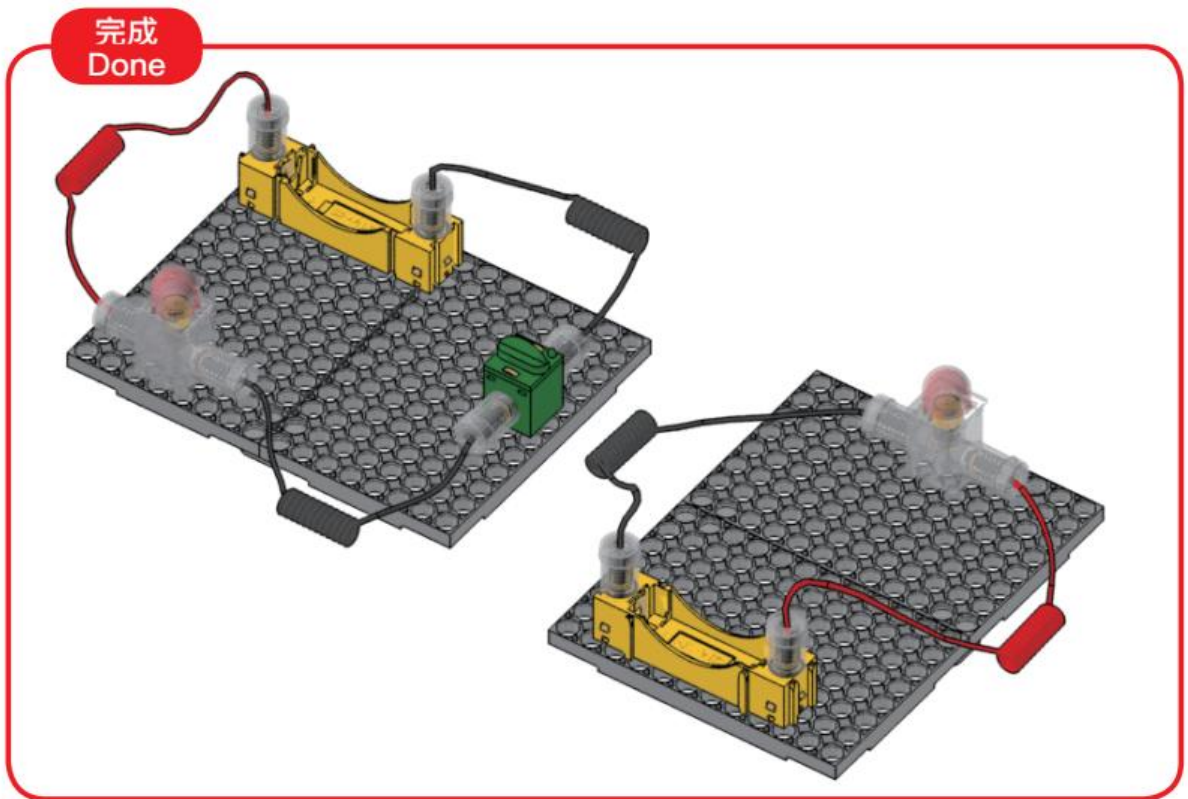
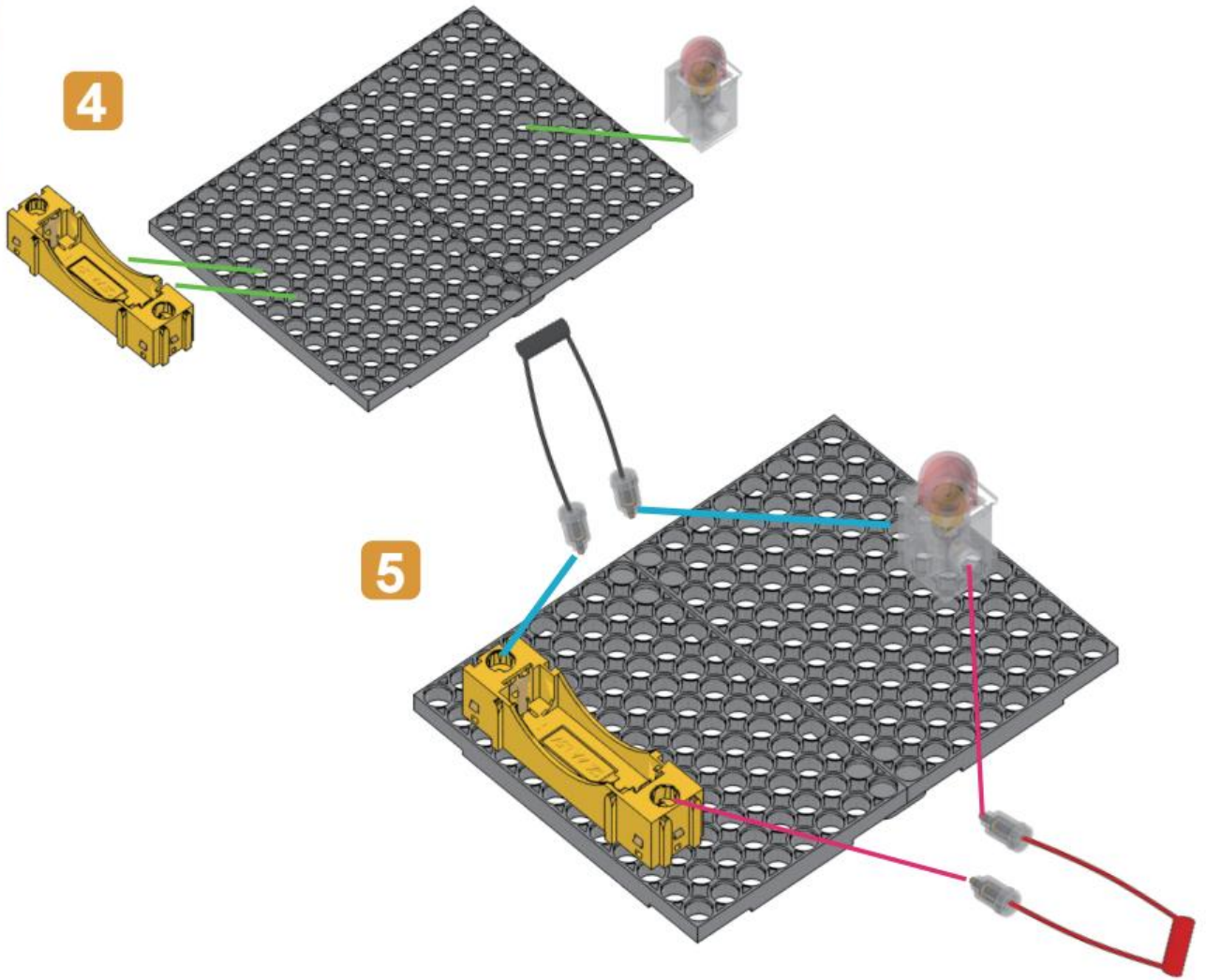


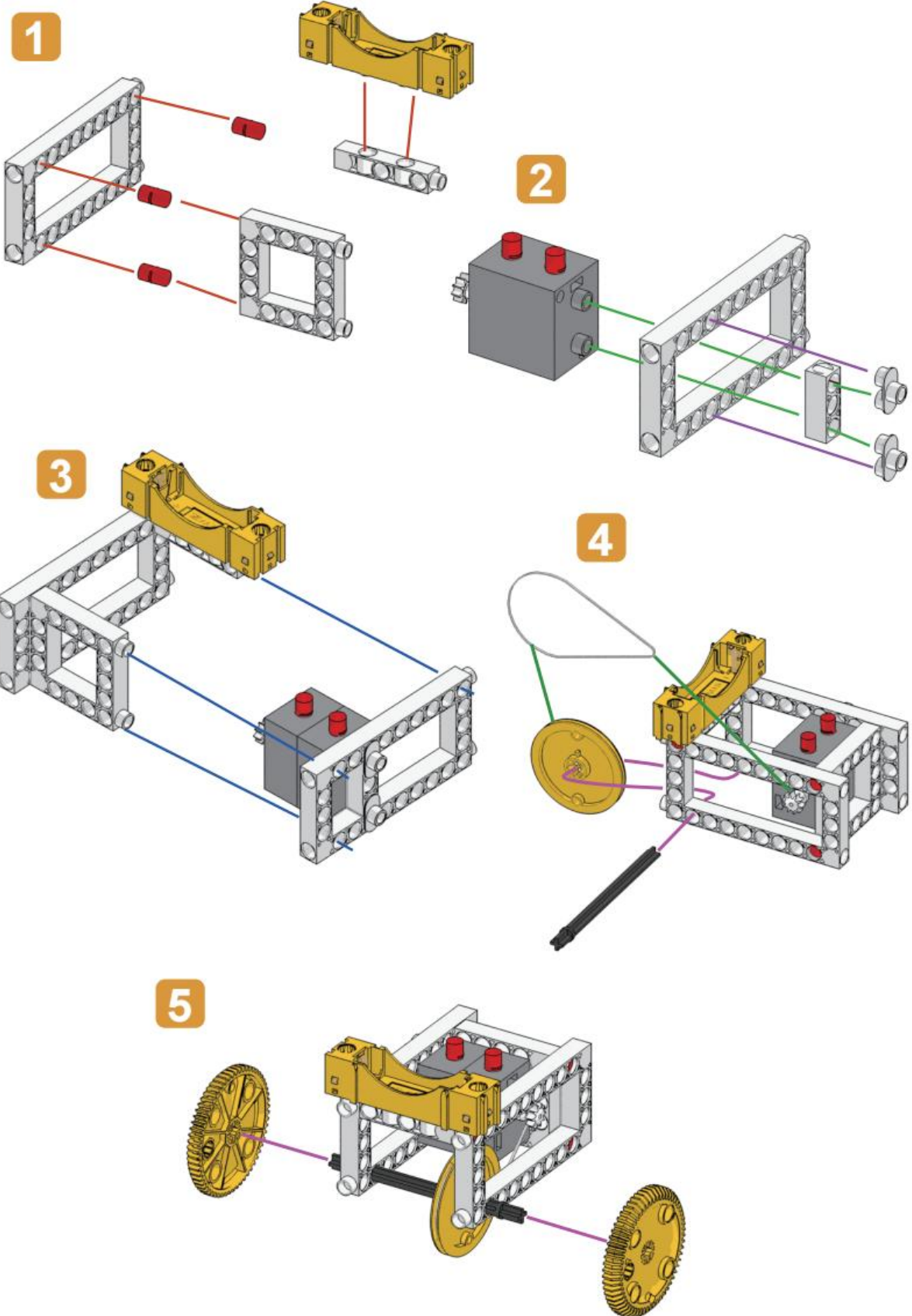
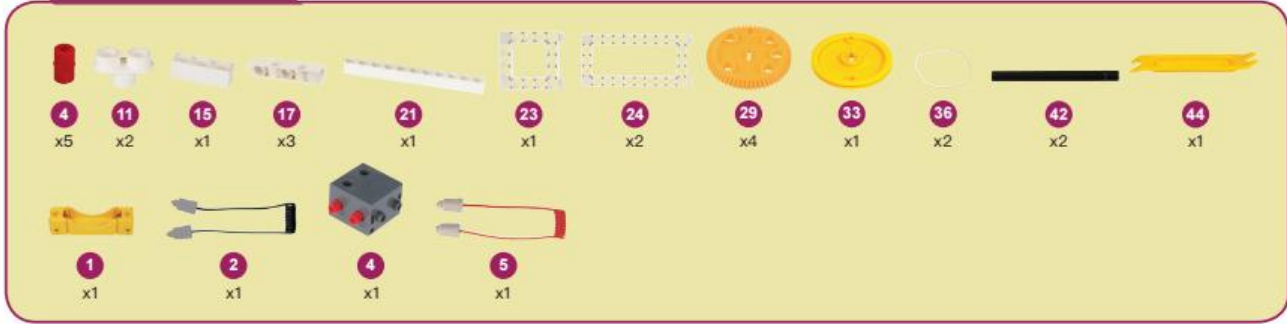
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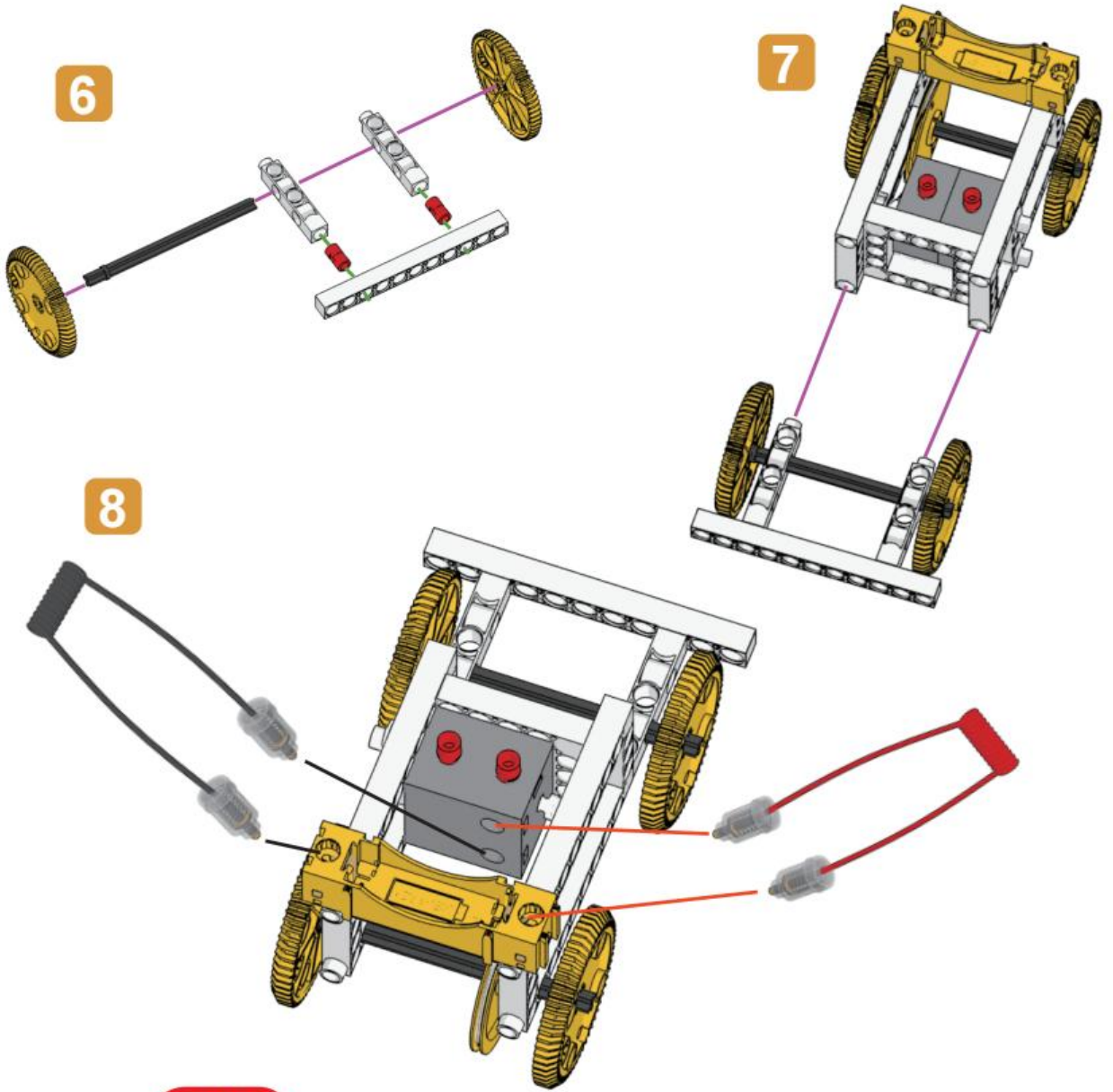


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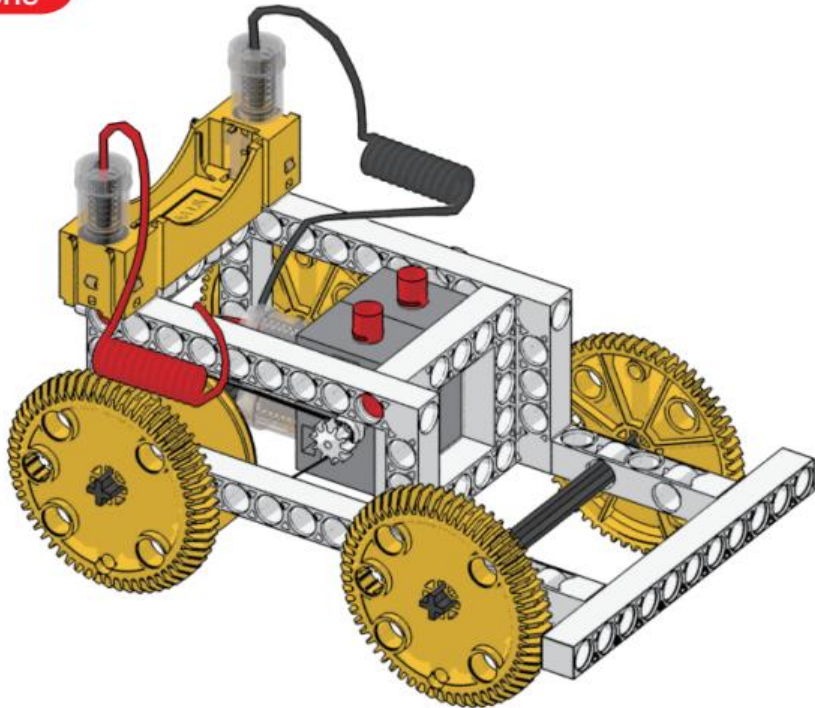






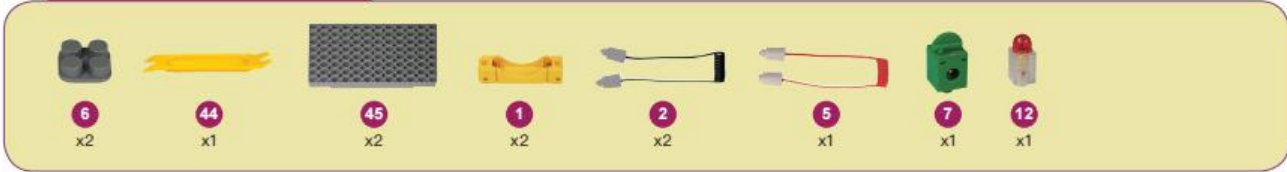


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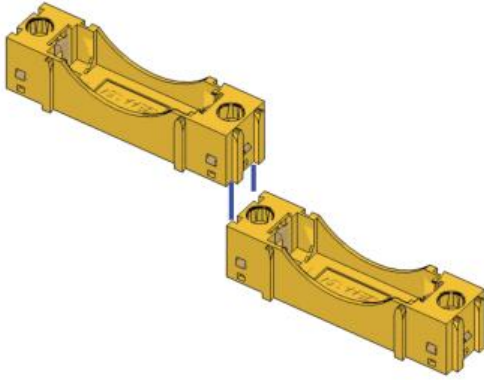


電池串並聯

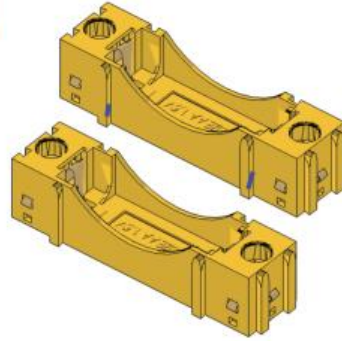
Series and Parallel Circuits with Battery 需用零件 Parts Needed



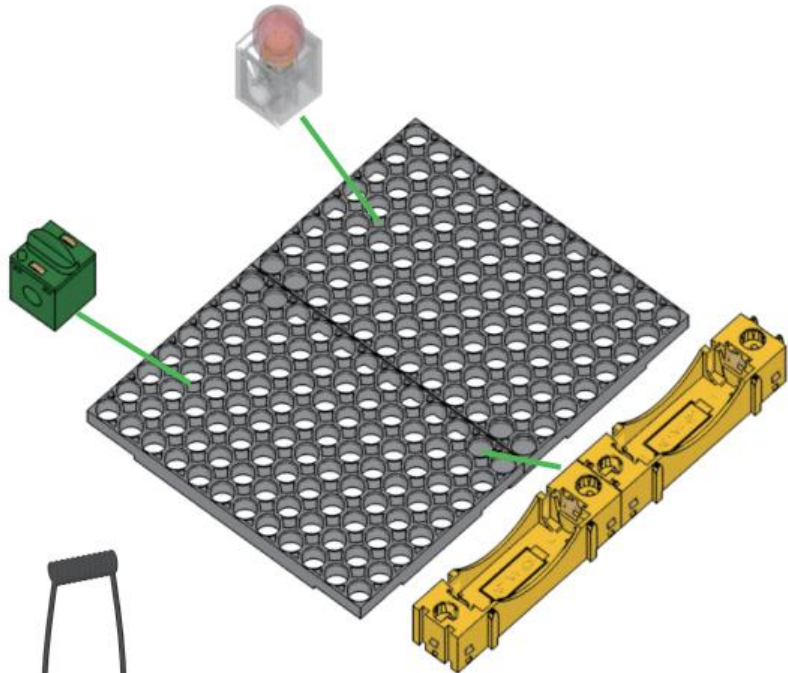
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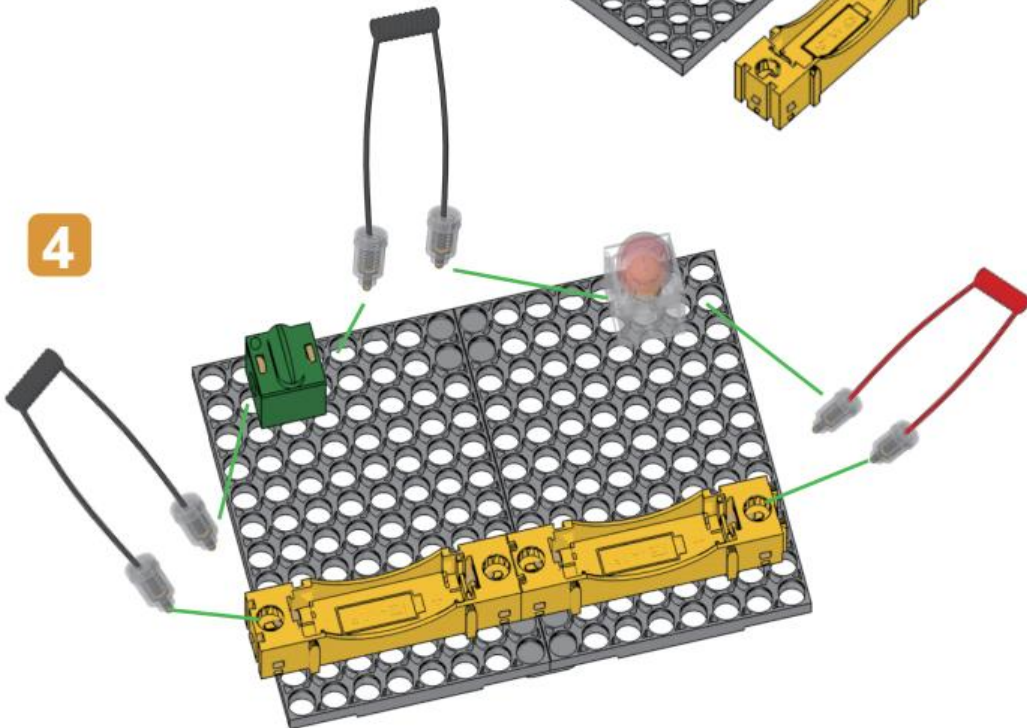
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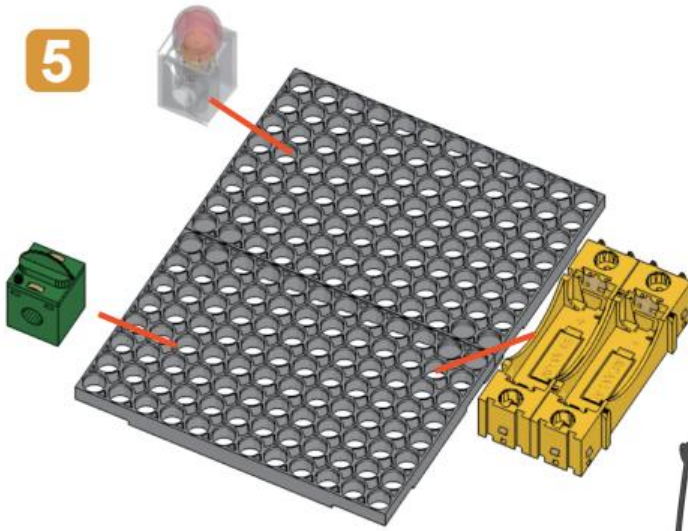
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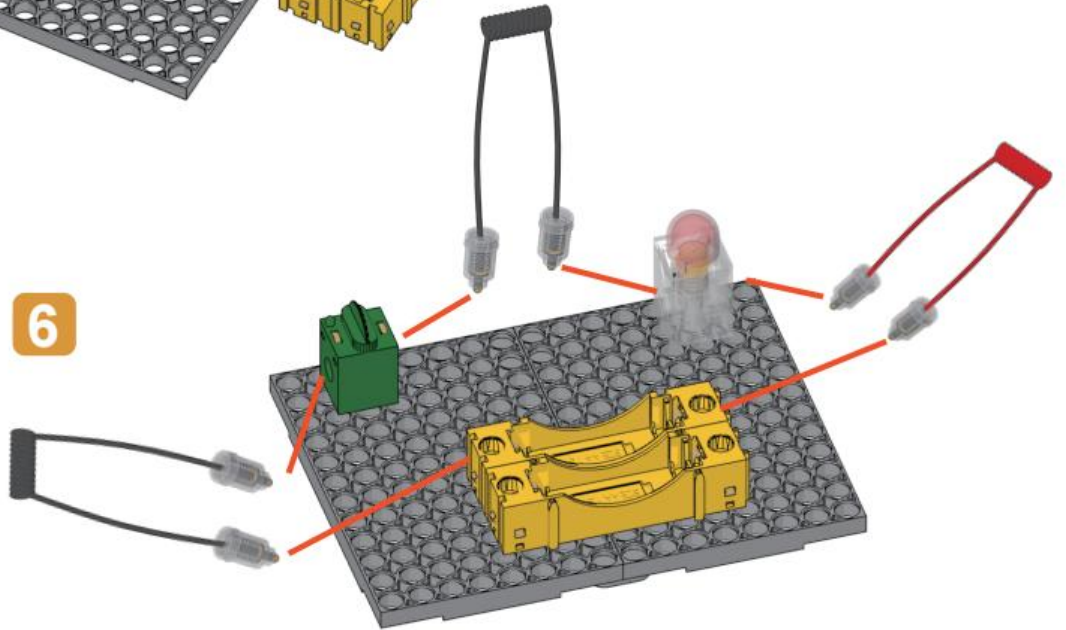
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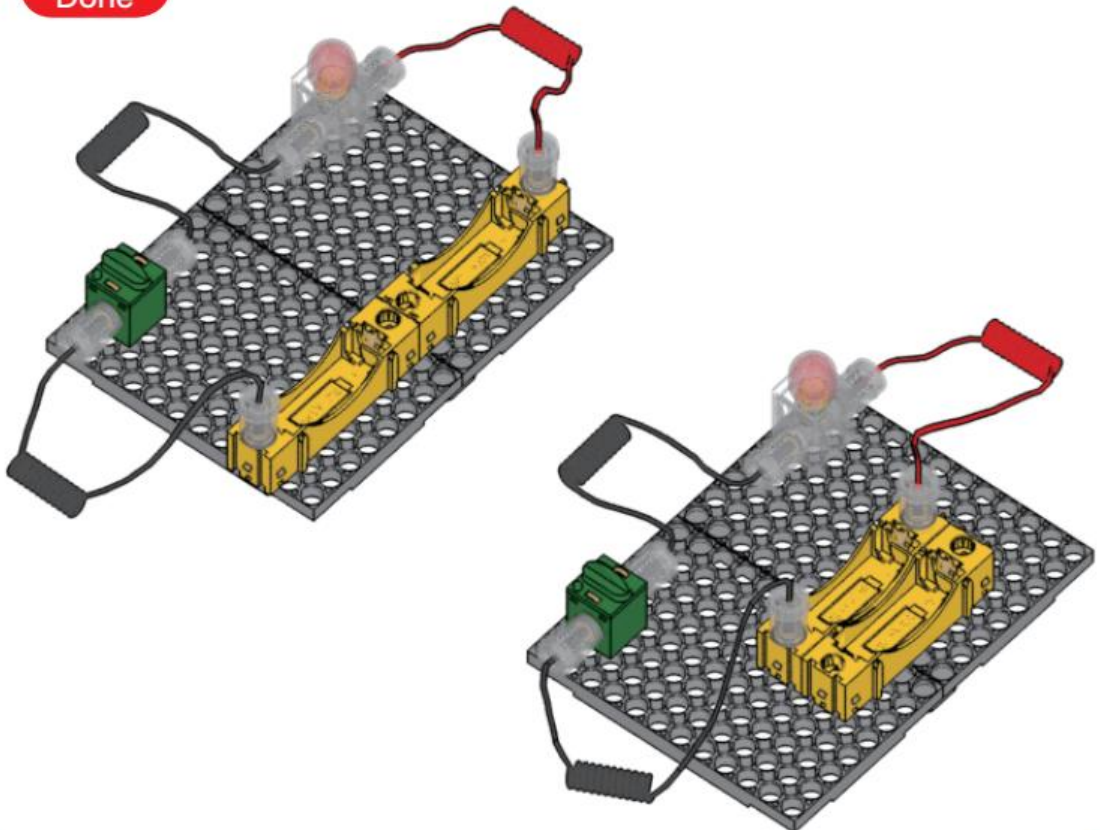
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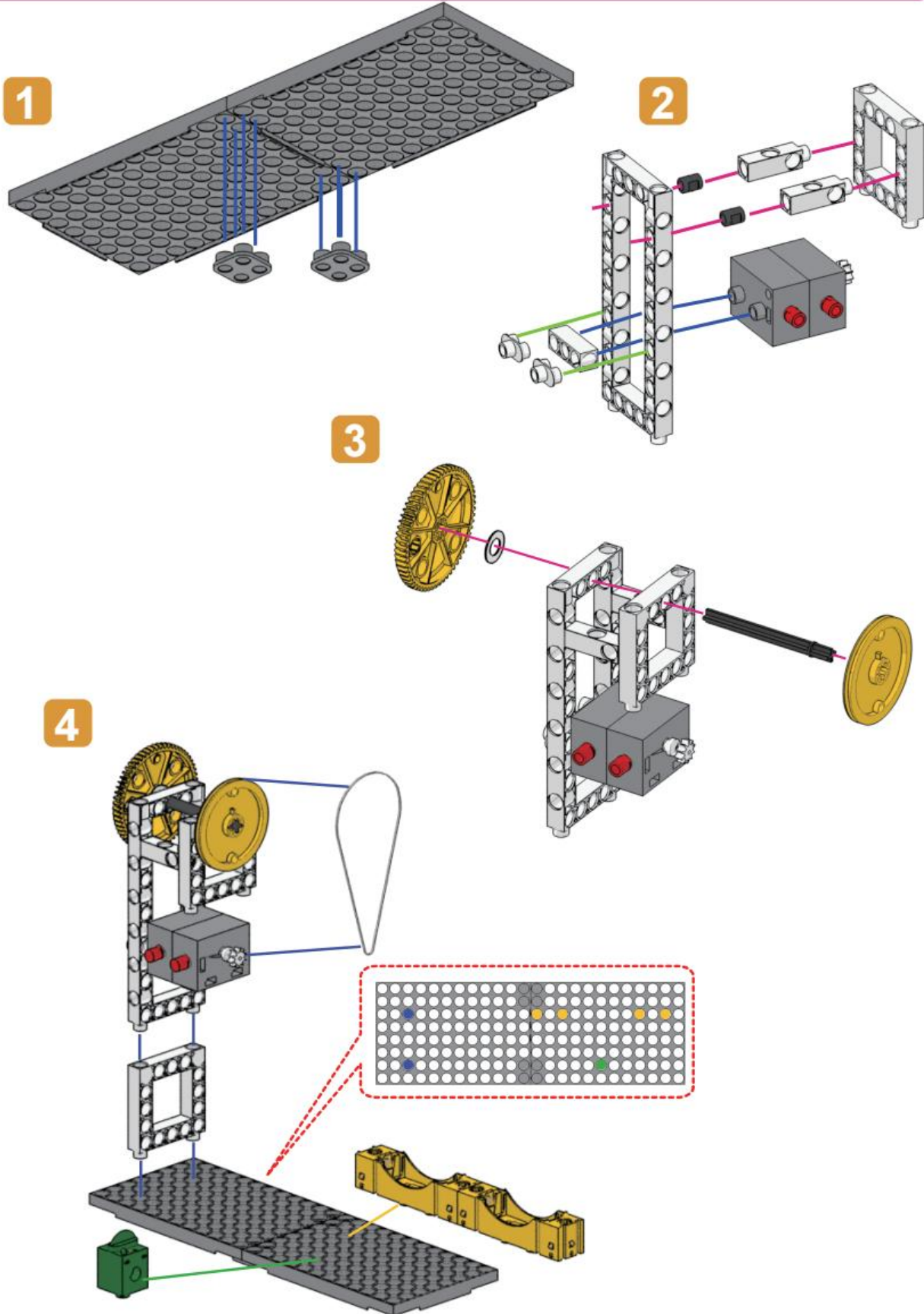


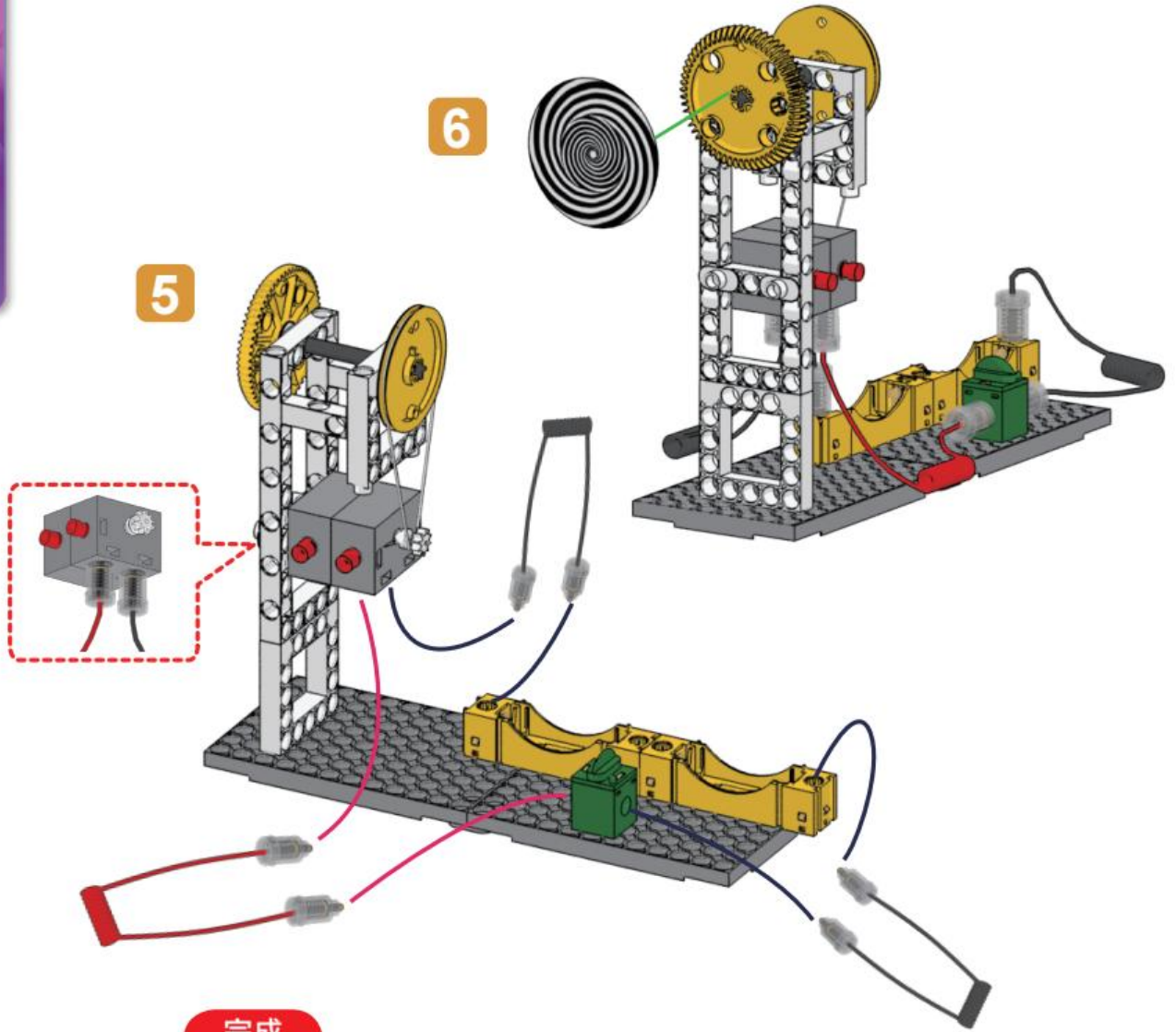
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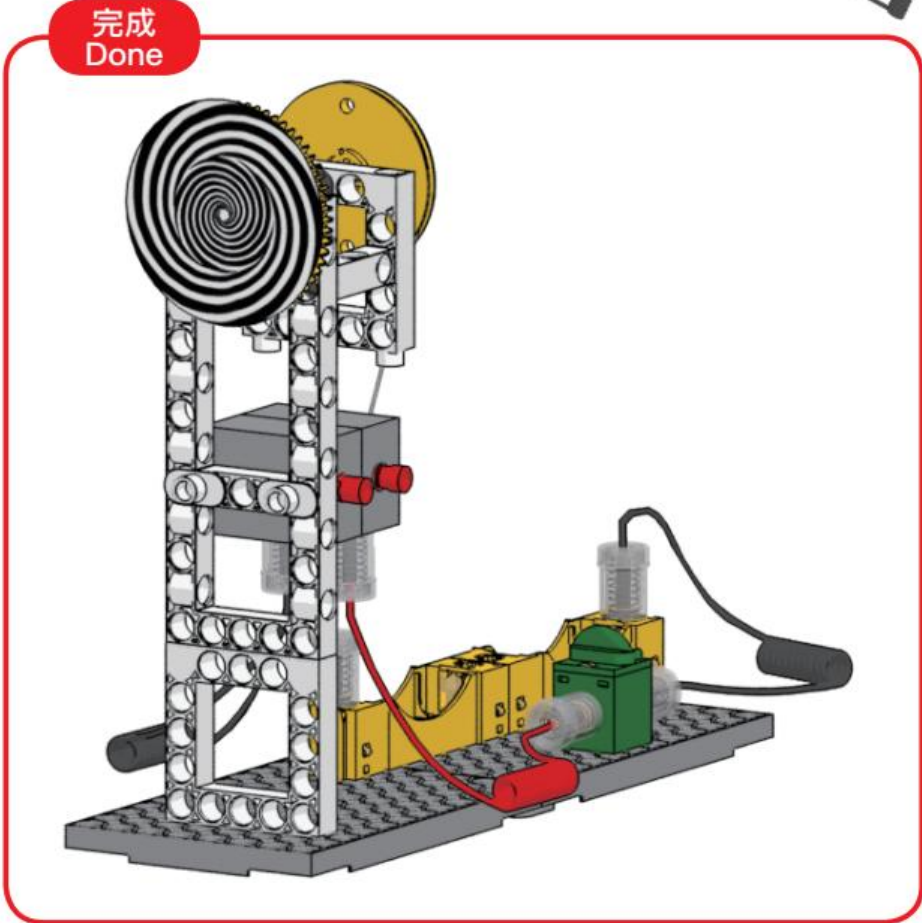
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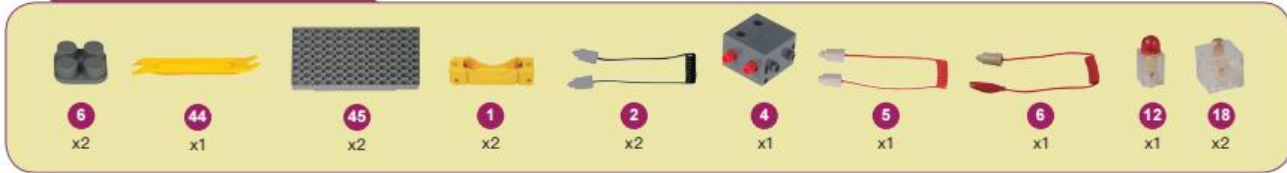
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x2	x2	x1	x1	x1



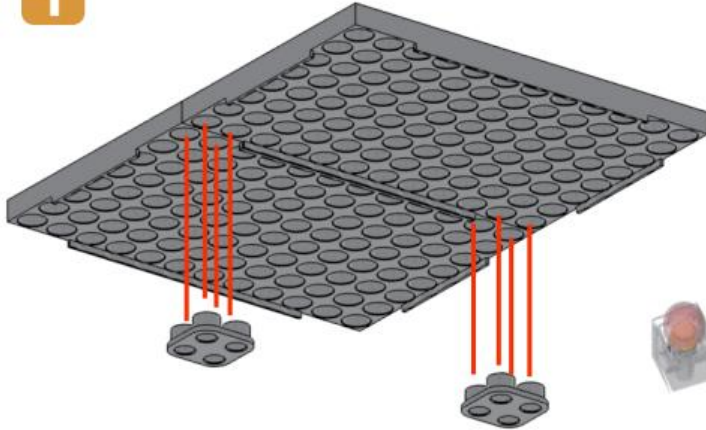


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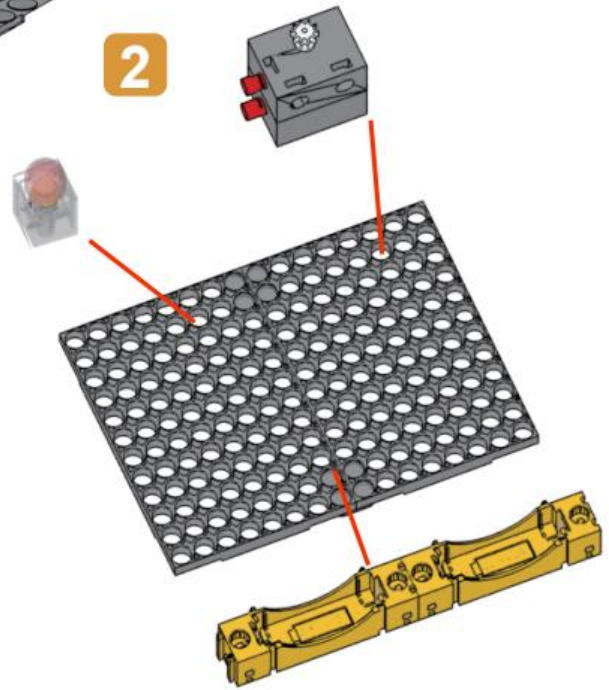




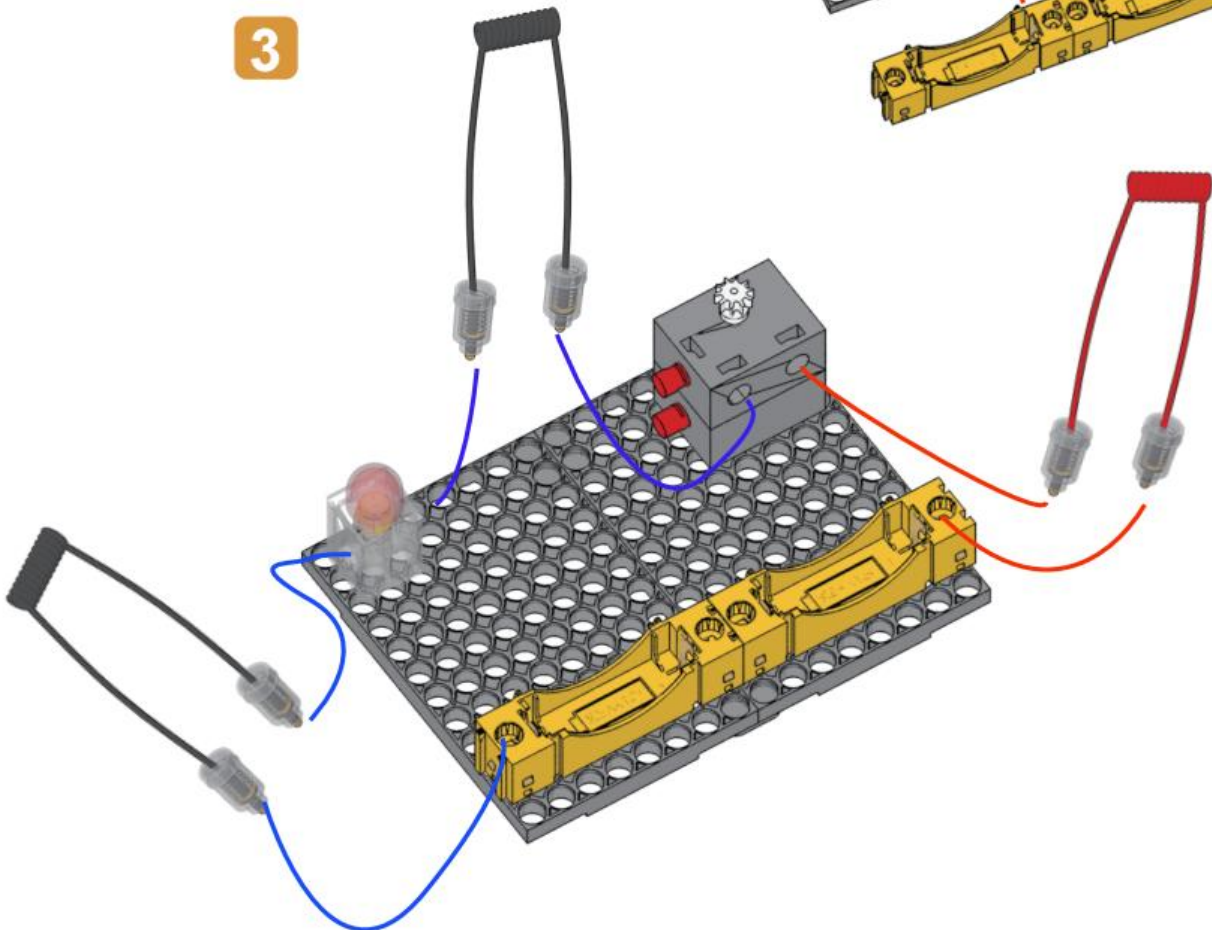
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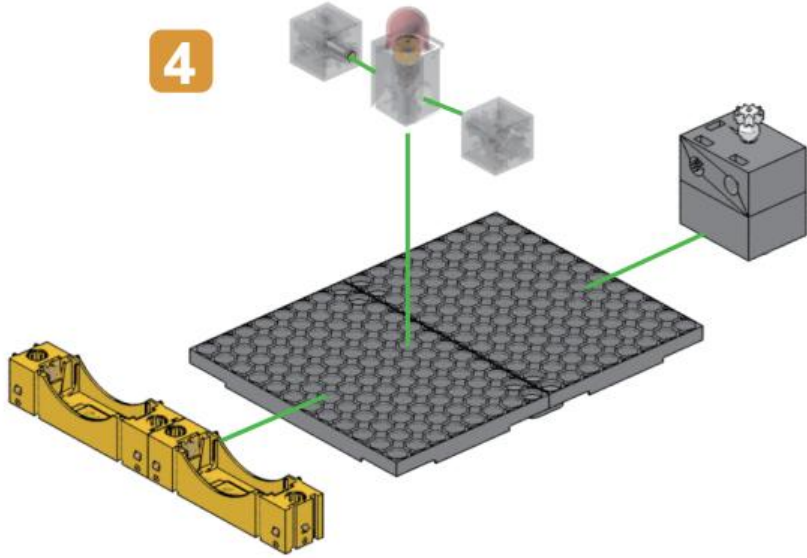
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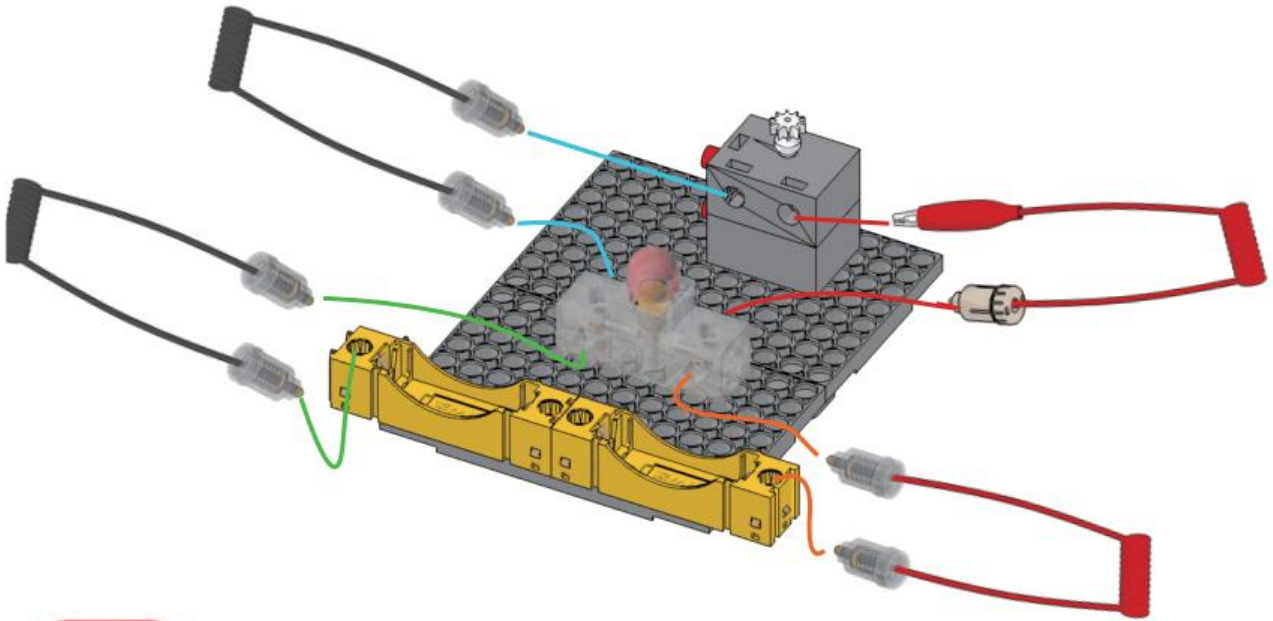
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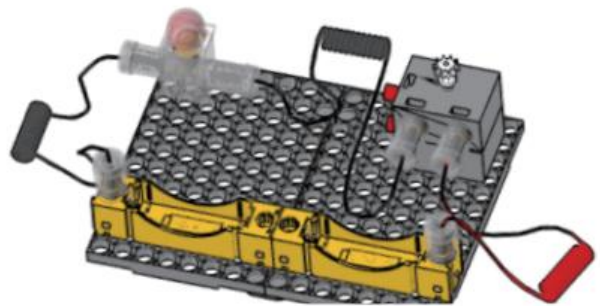
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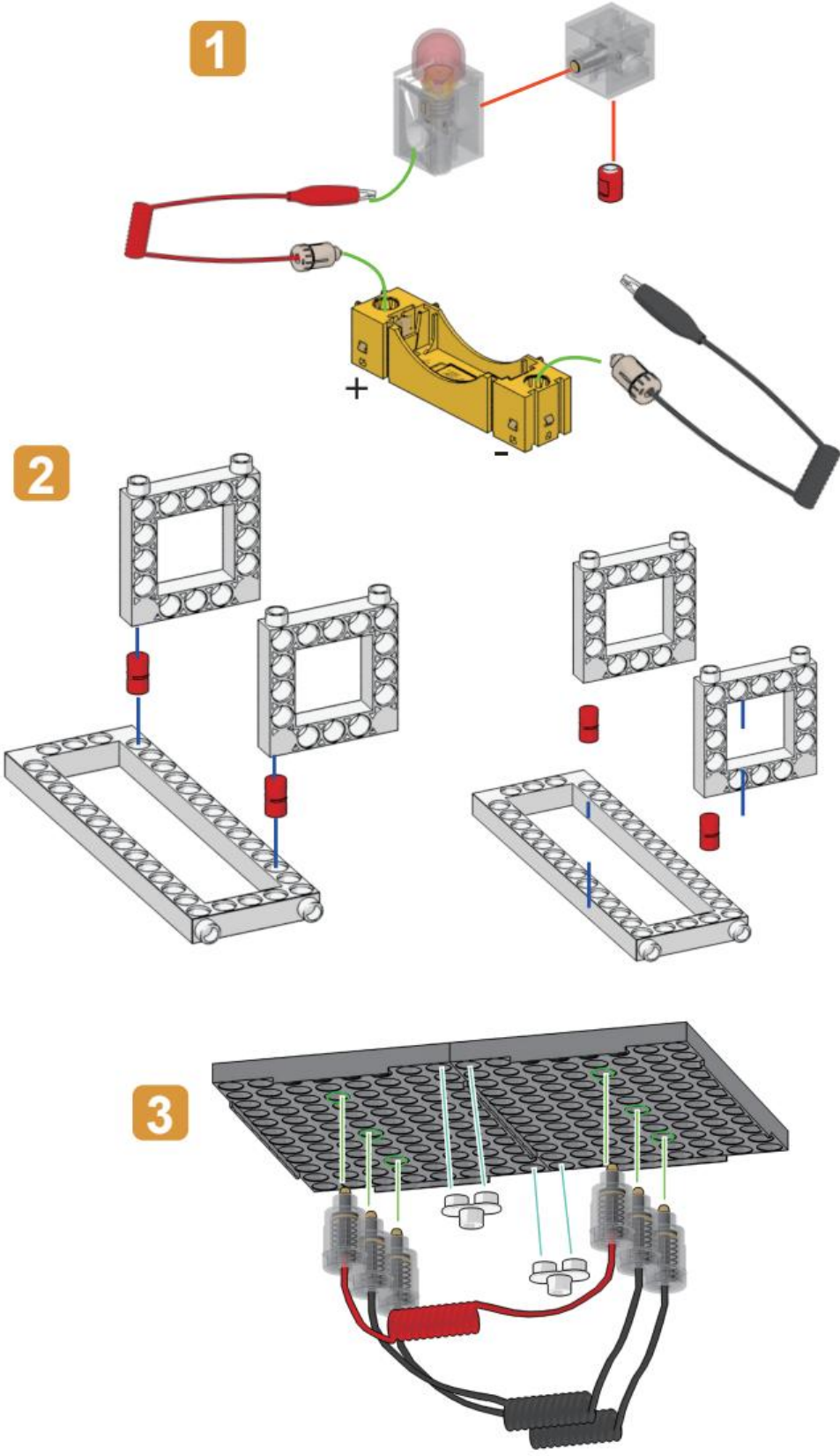
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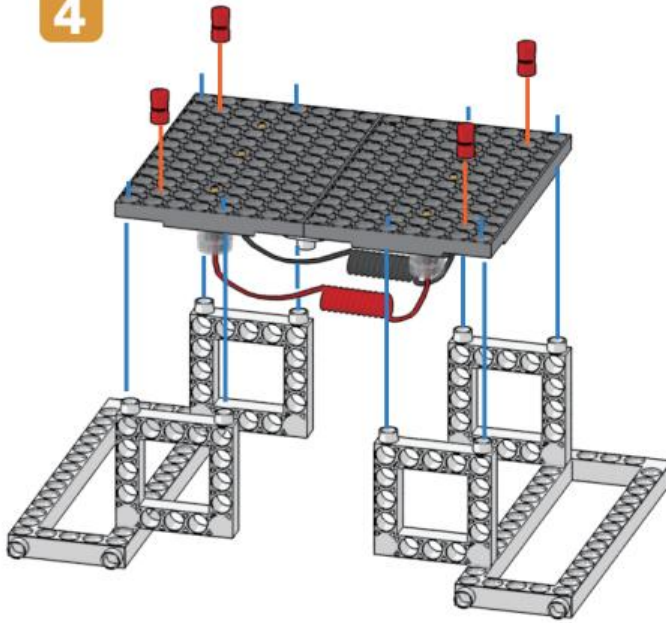
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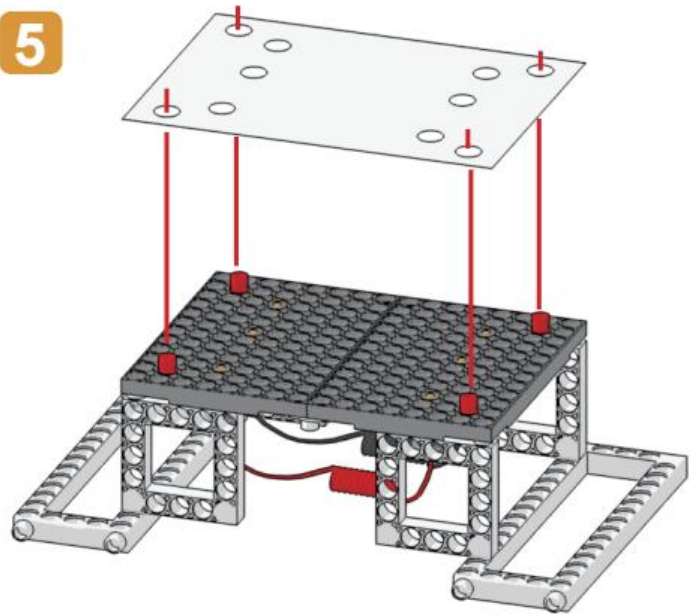
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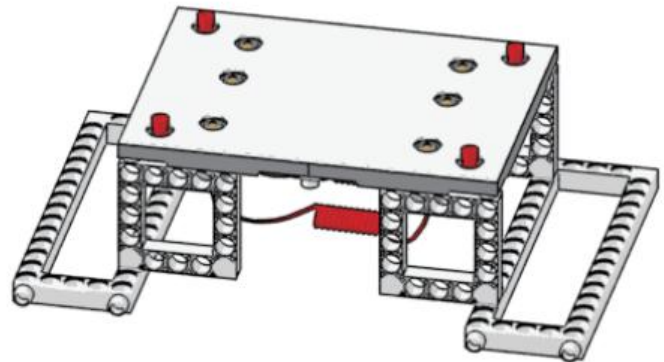
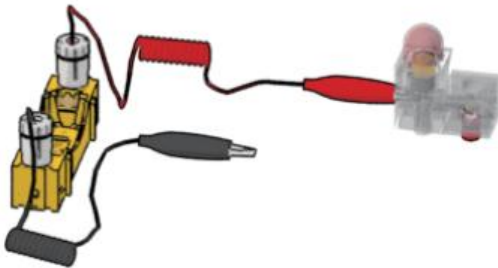
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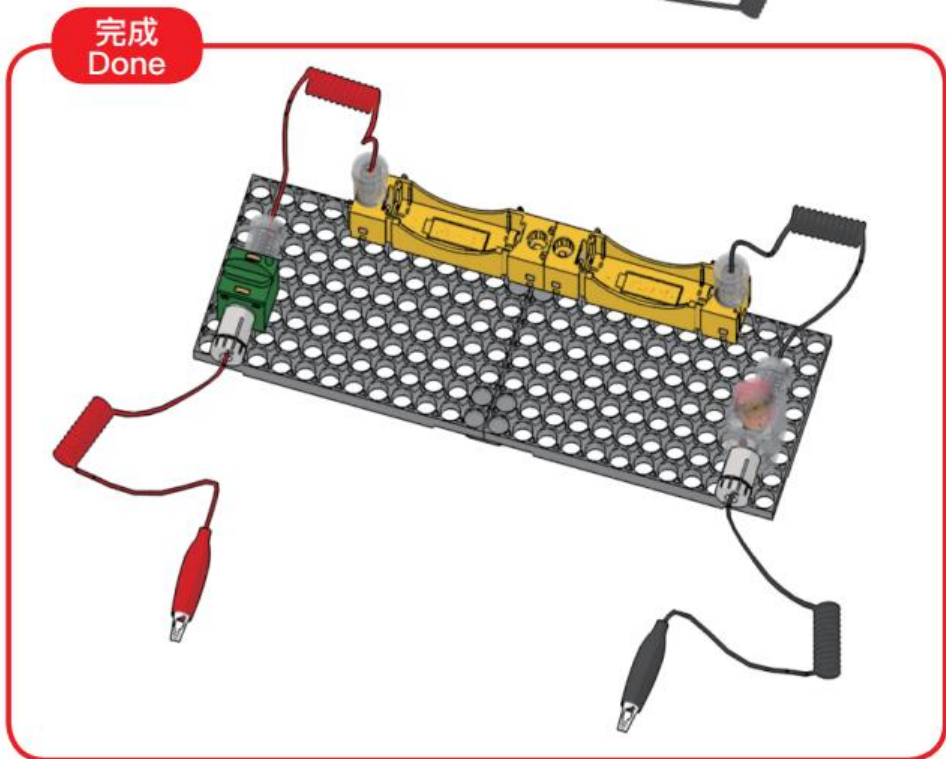
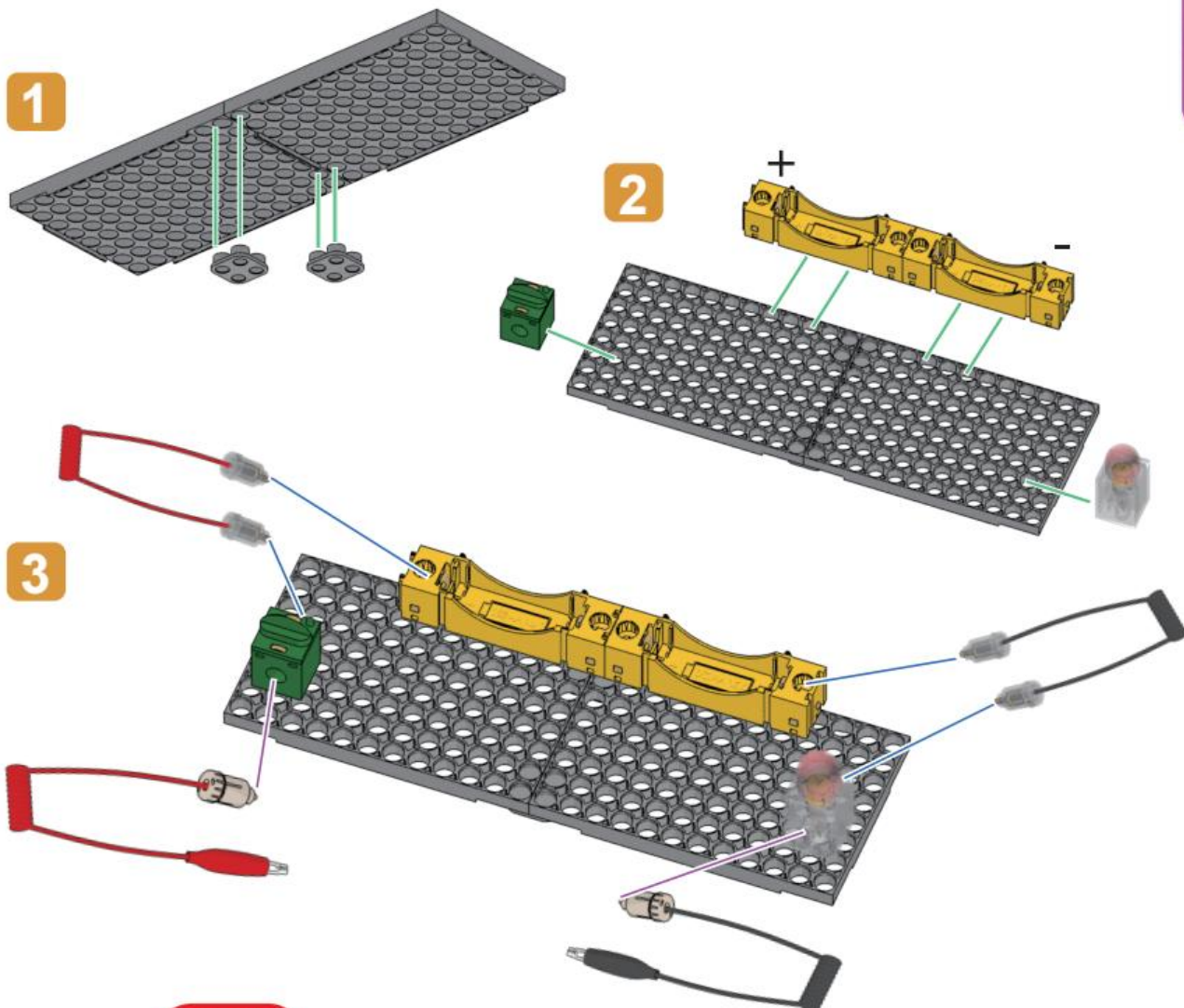
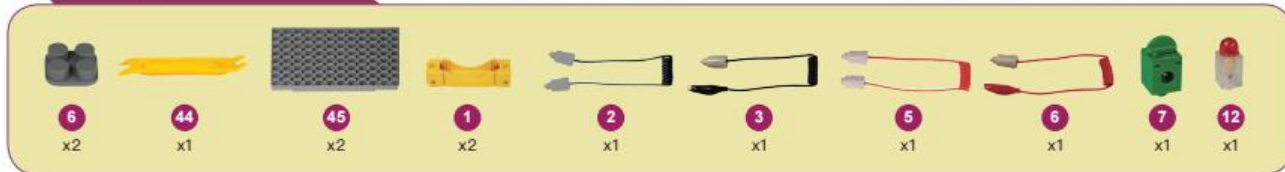


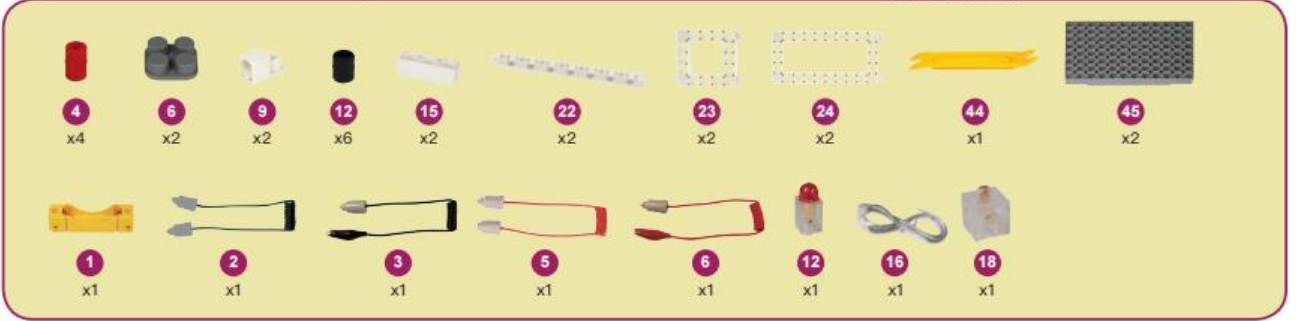
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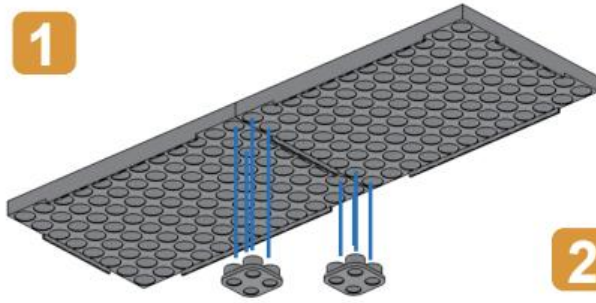
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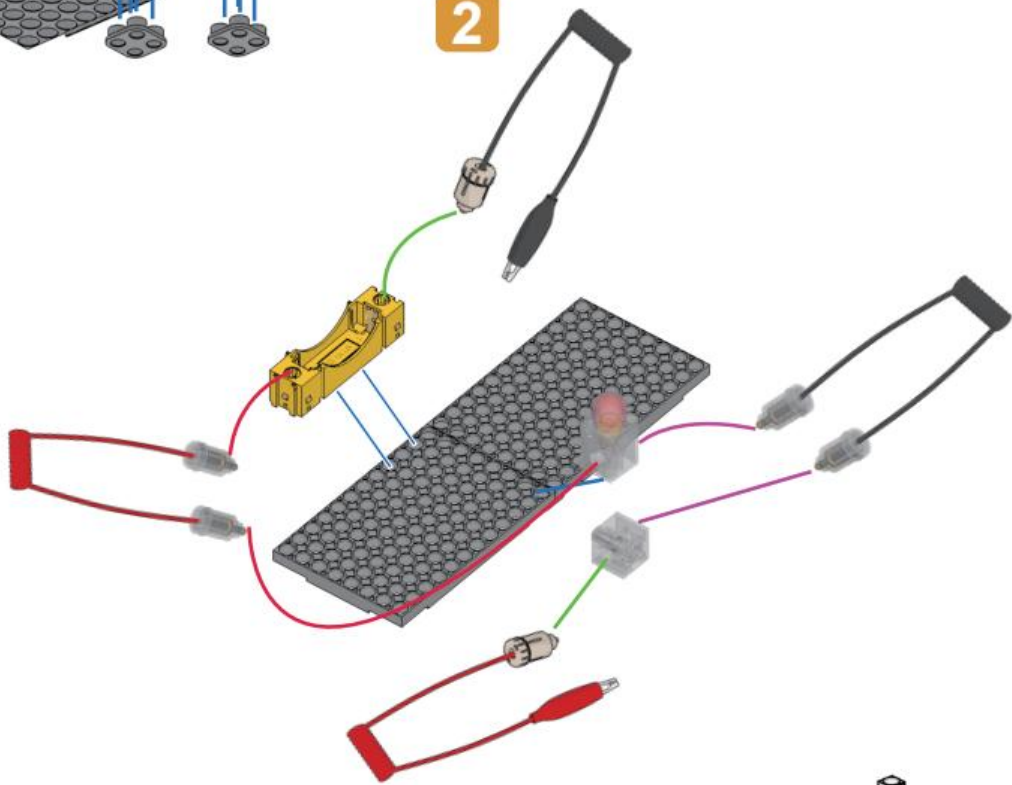




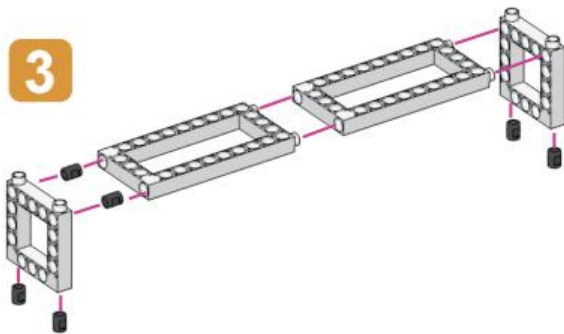
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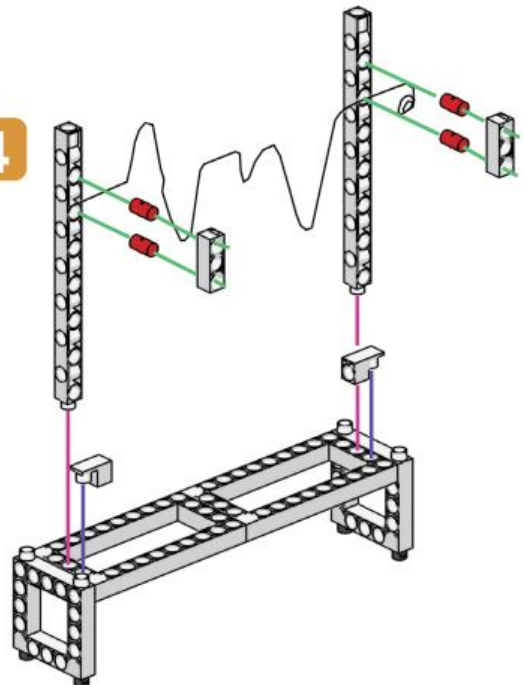
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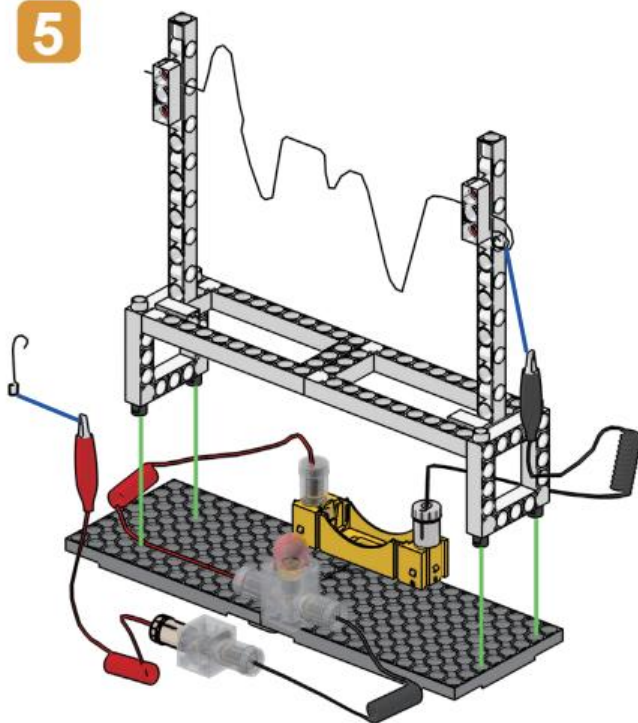
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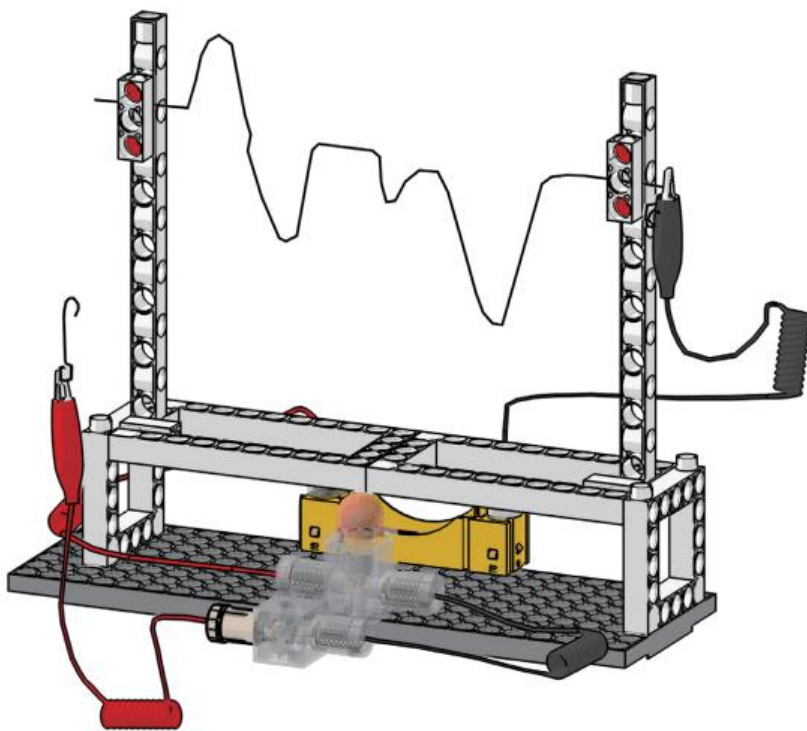
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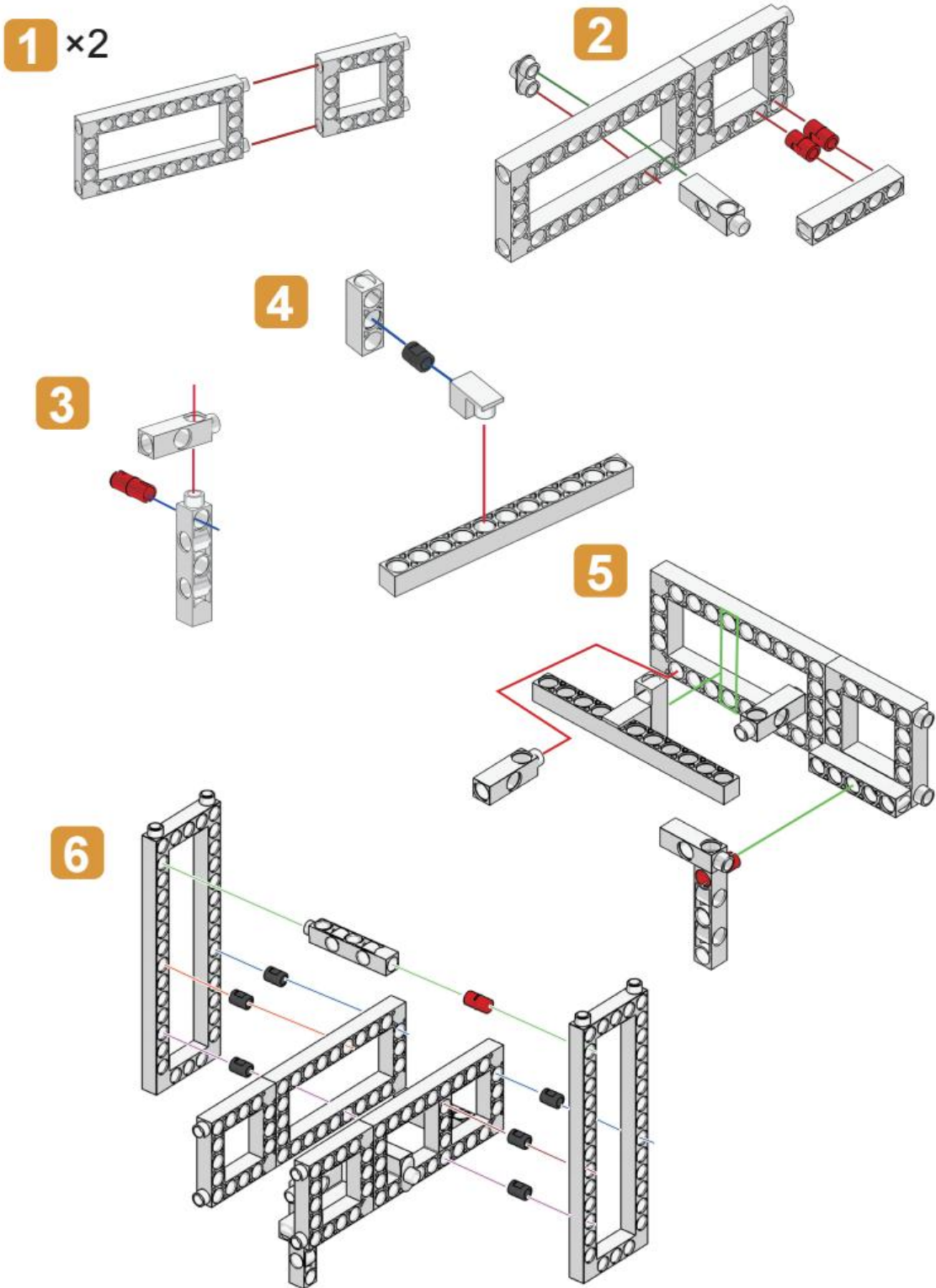
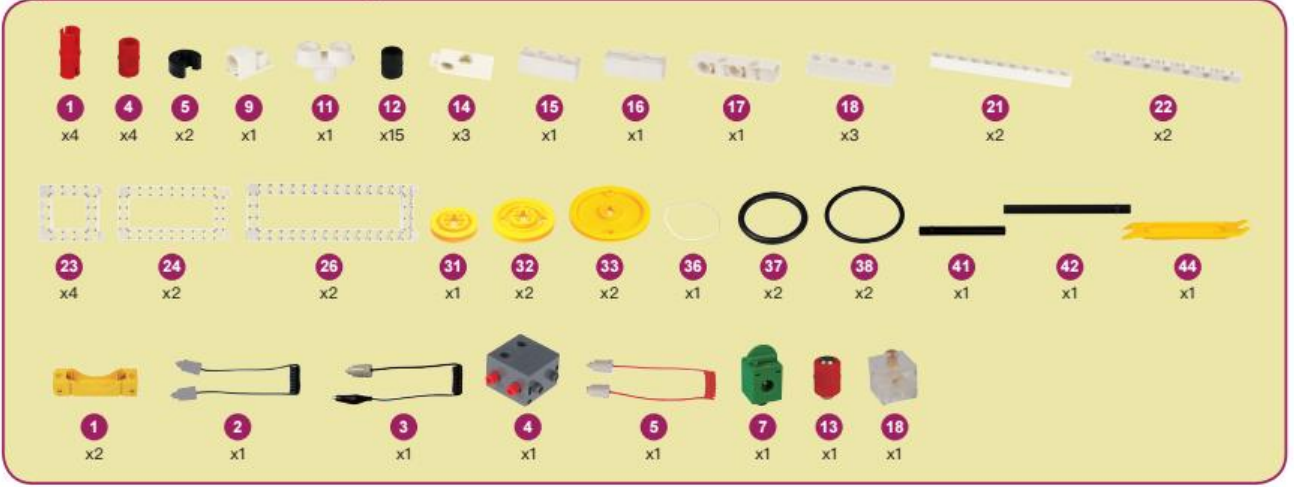
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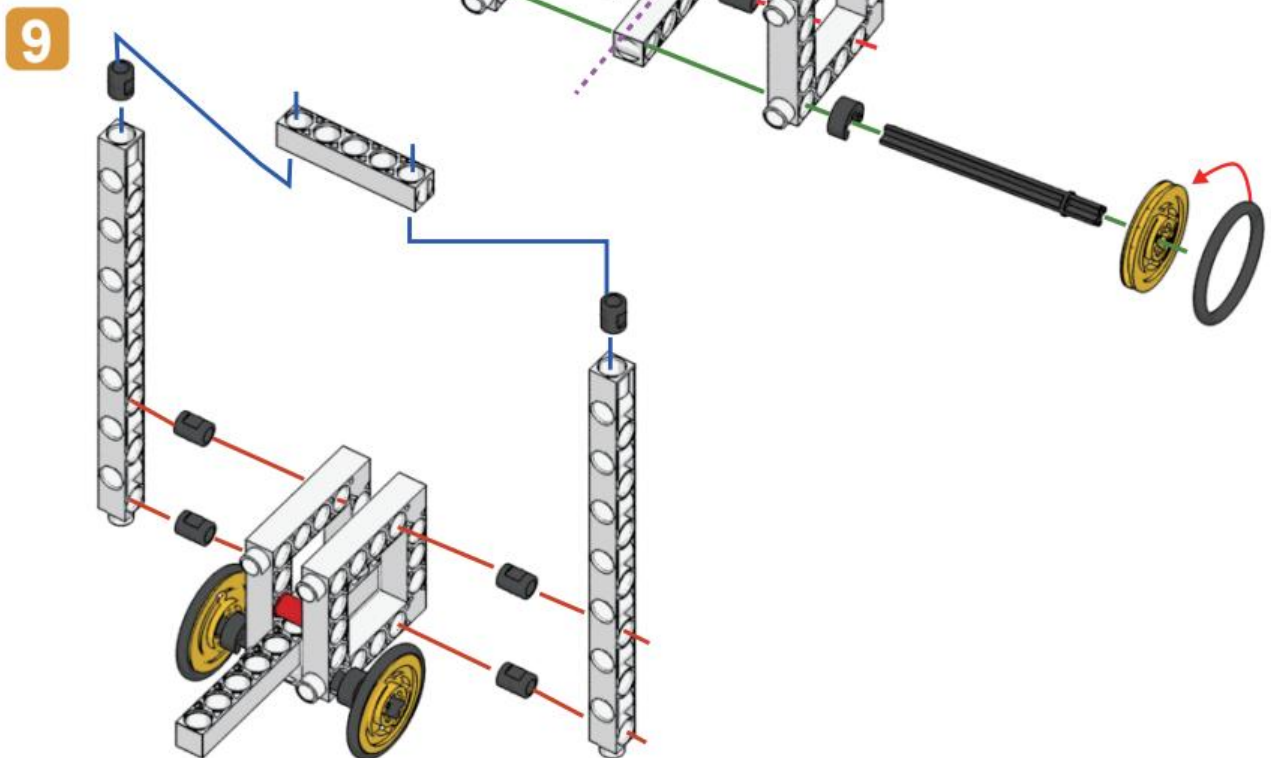
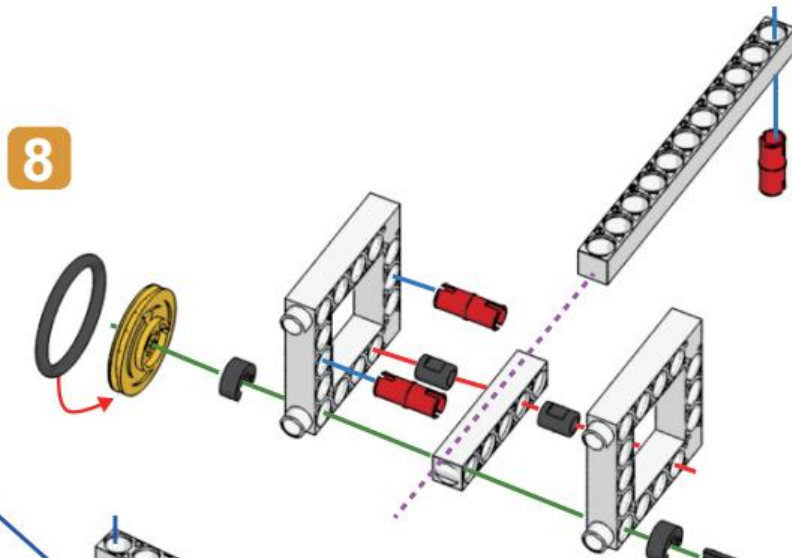
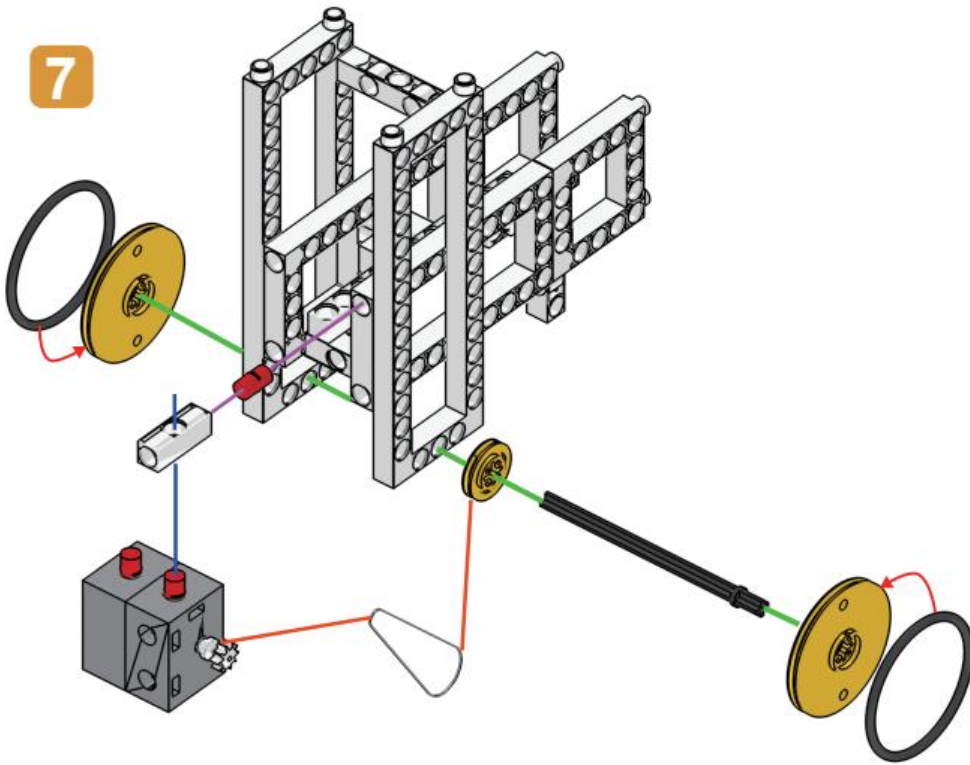


自動煞車器

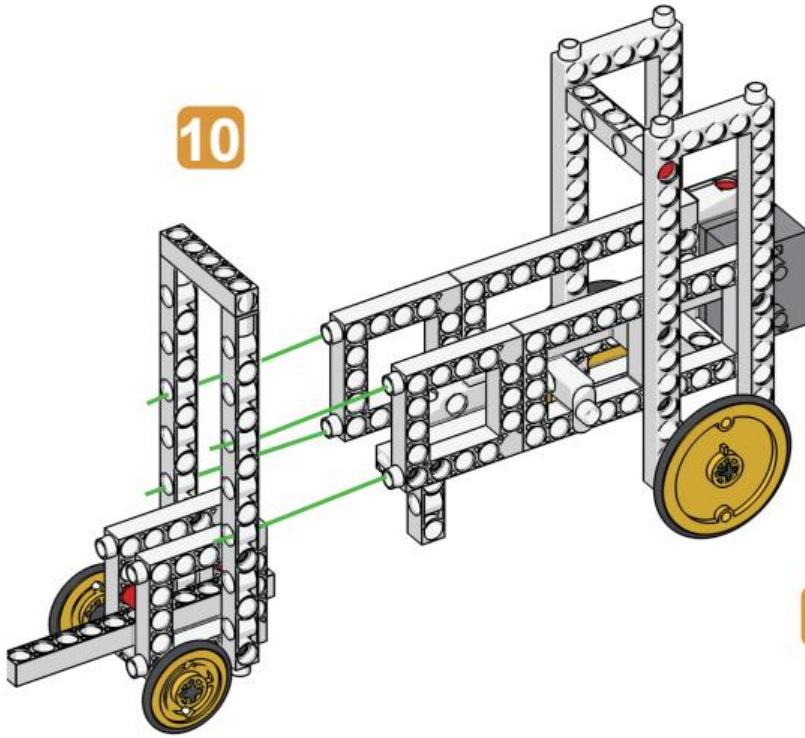
Auto Brake

需用零件 Parts Needed

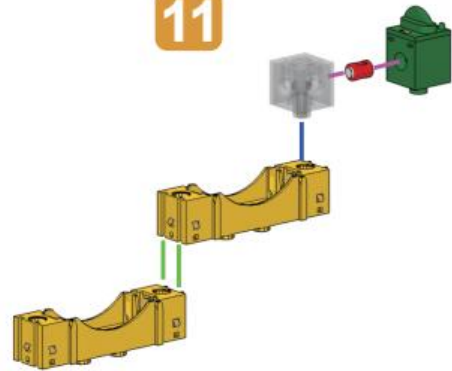




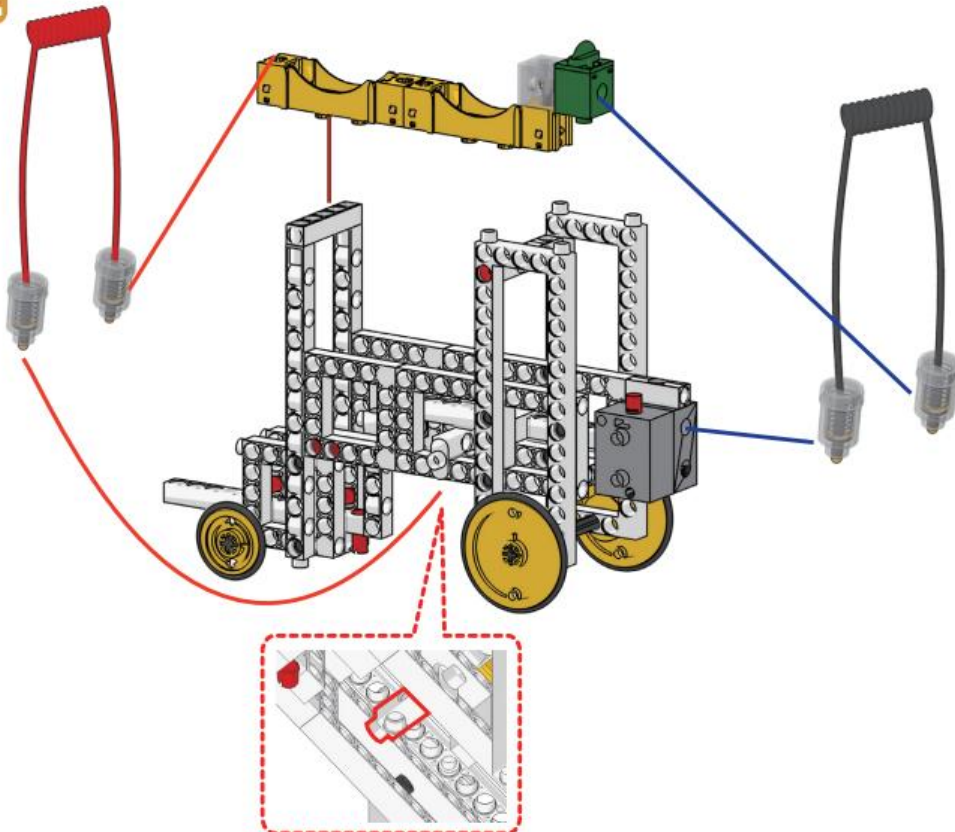
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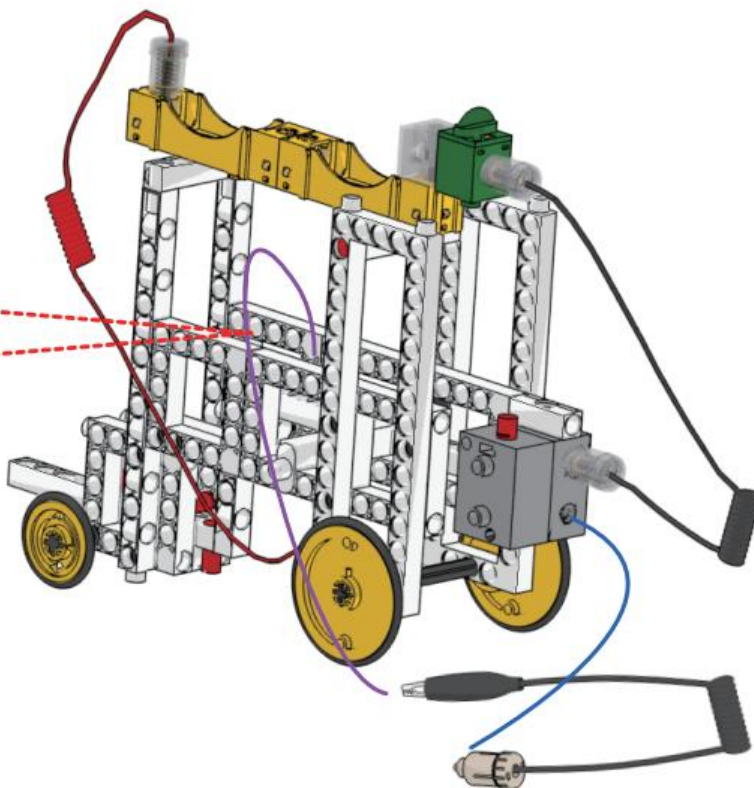
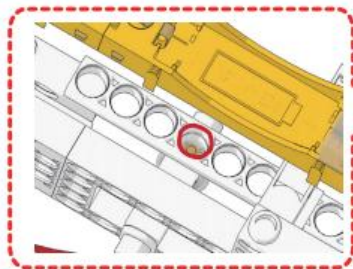
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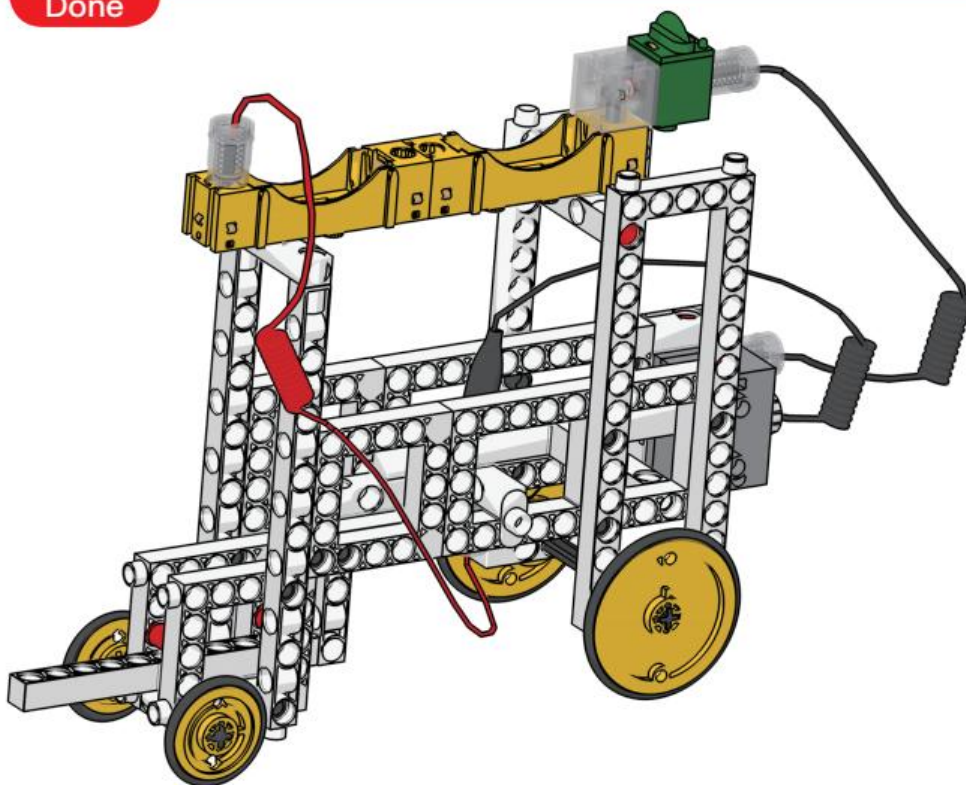
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13



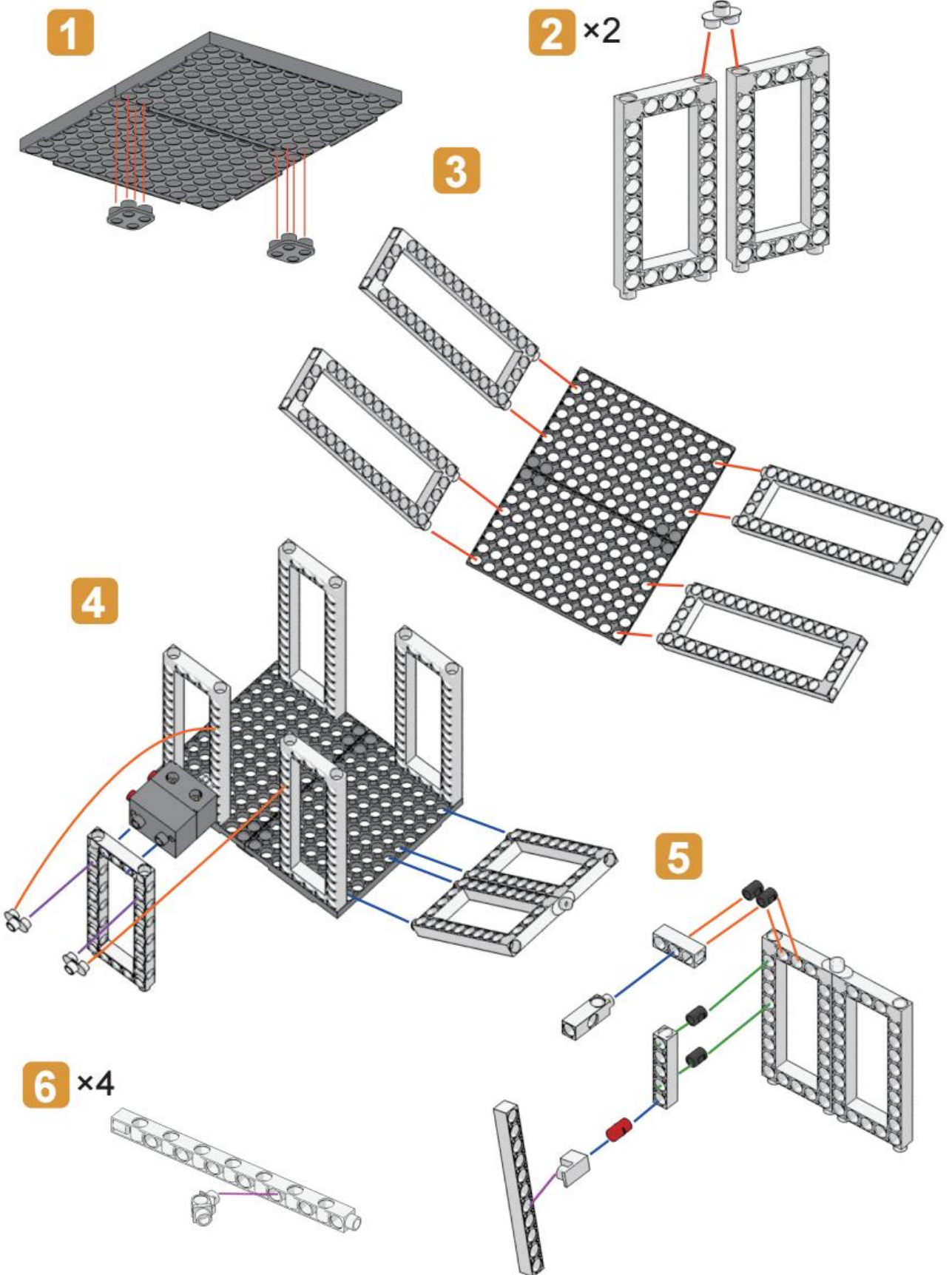
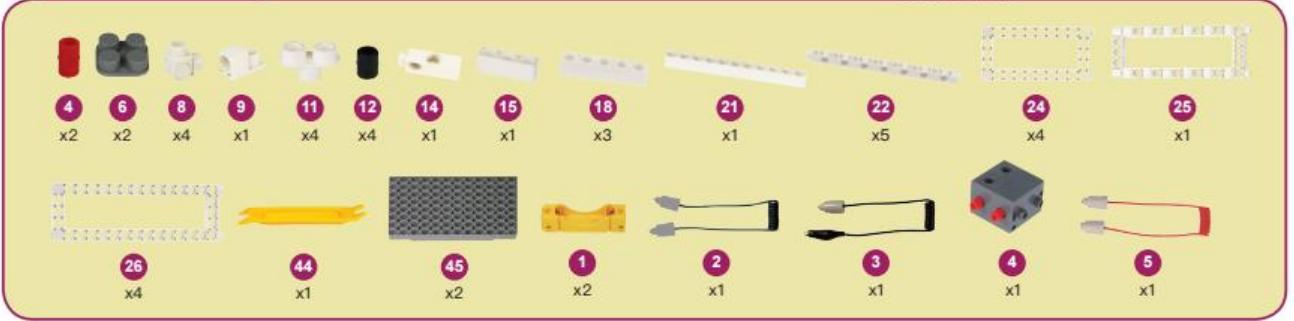
完成
Done



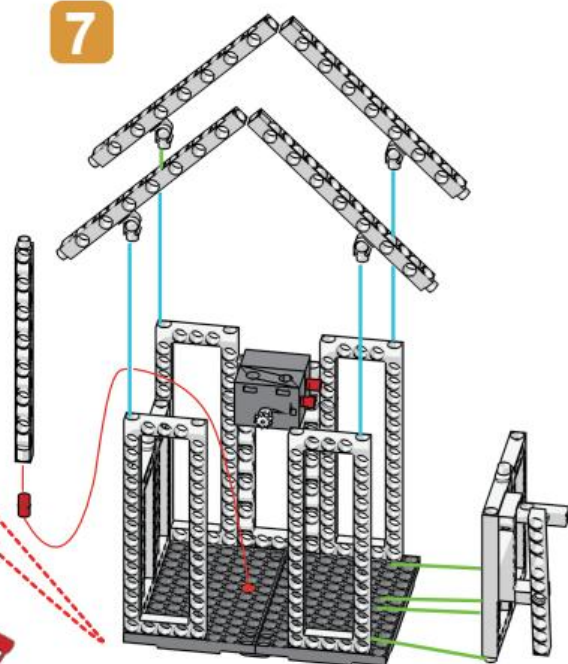
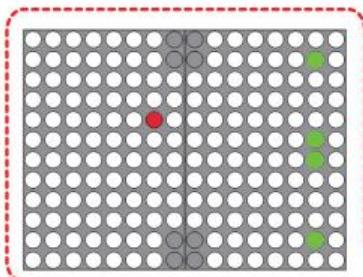
電鈴

Electric Bell

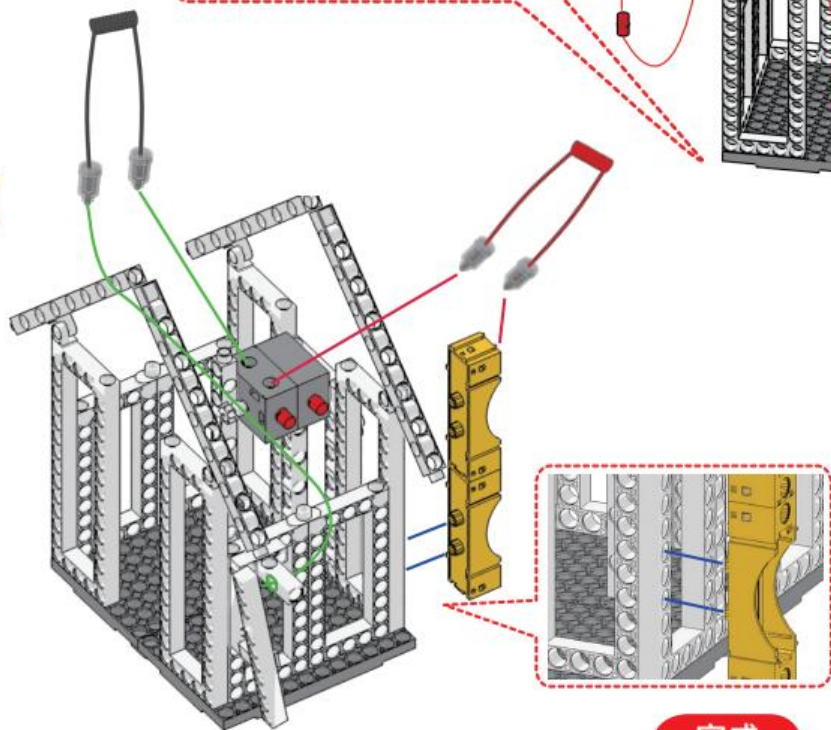
需用零件 Parts Needed



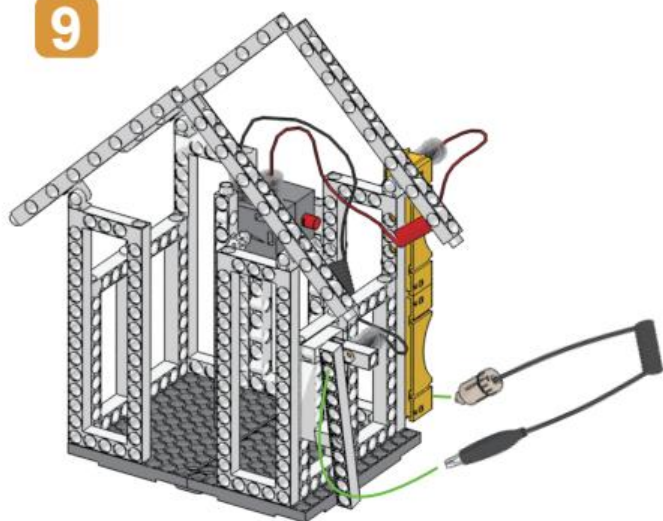
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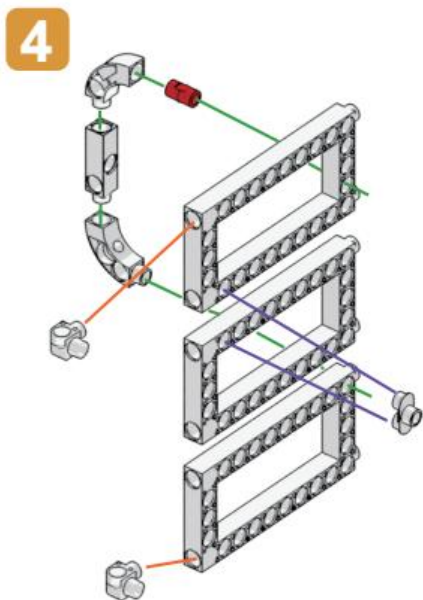
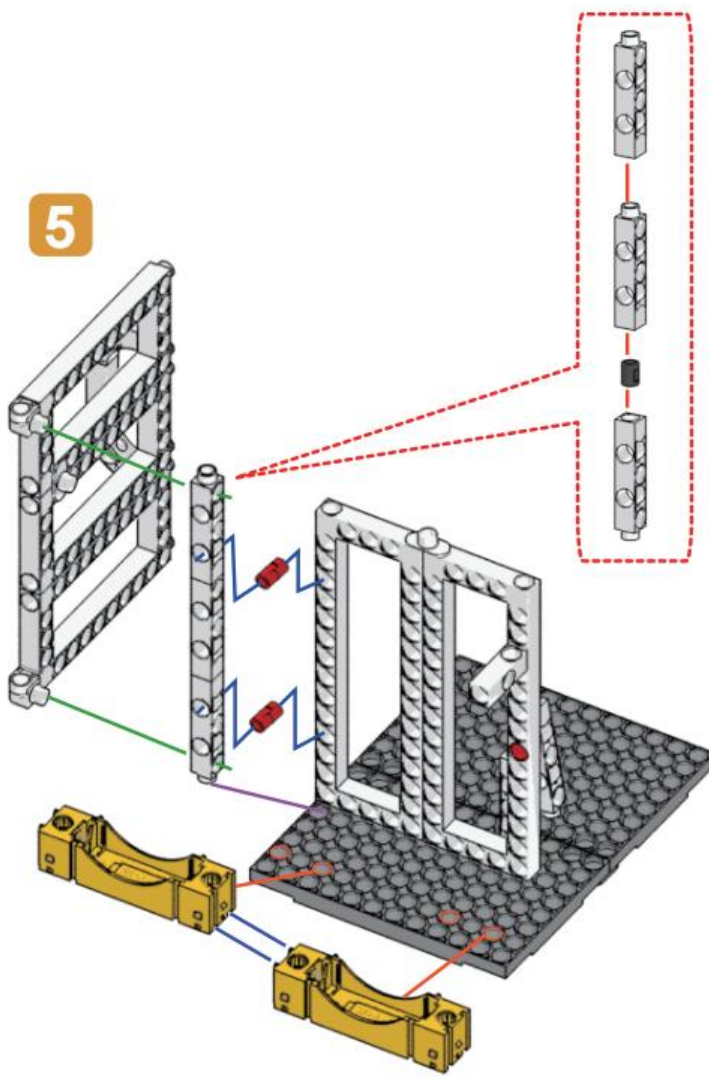
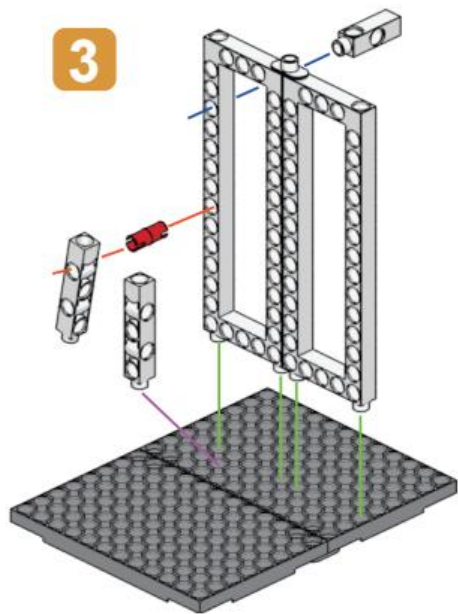
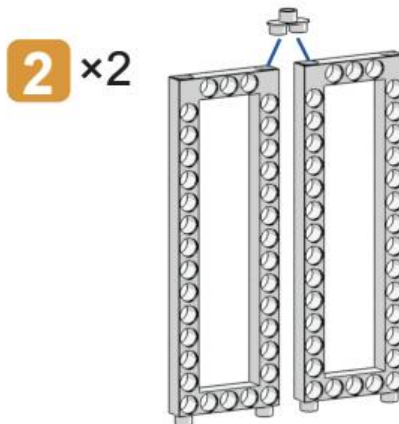
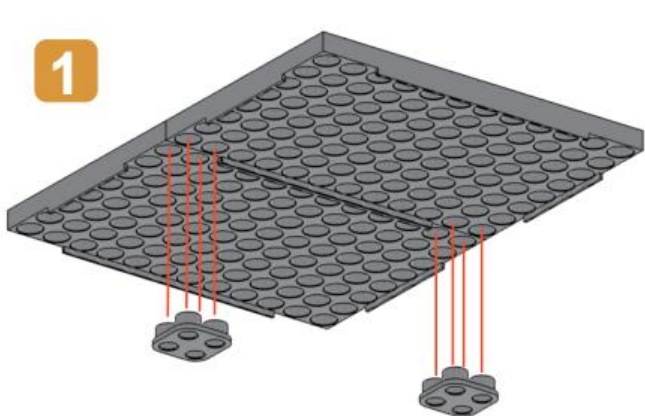
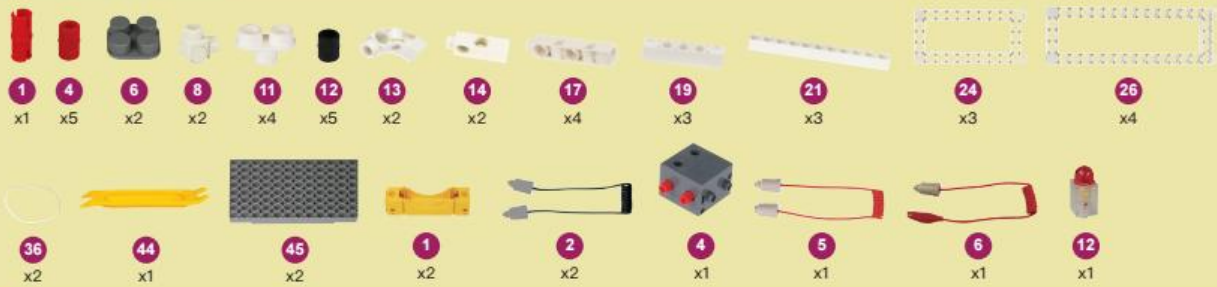


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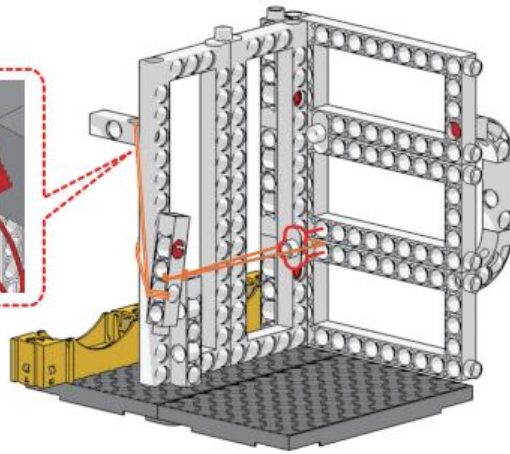
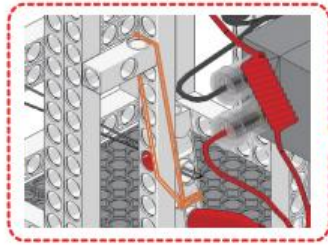


完成
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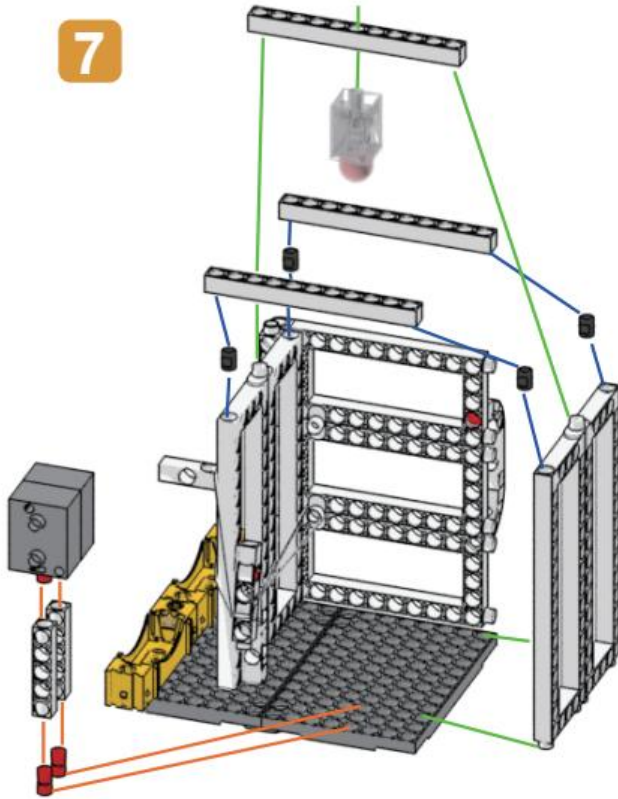




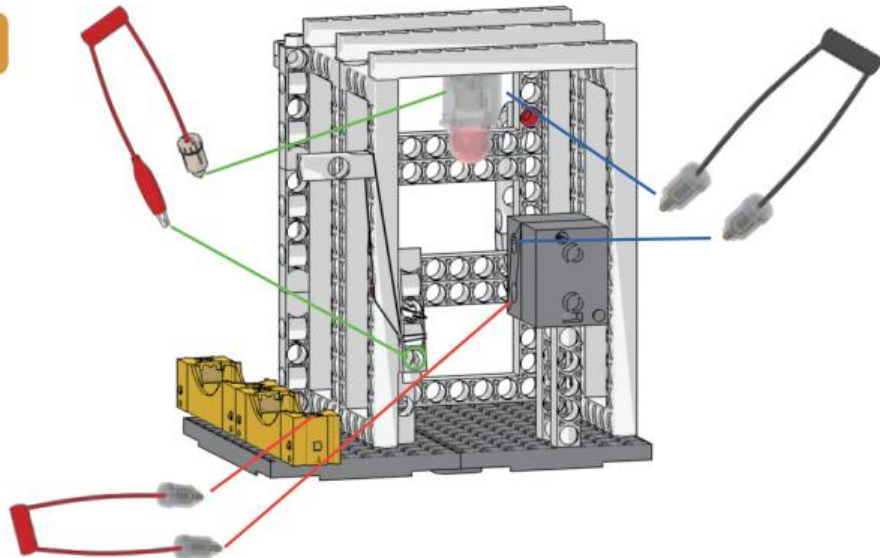
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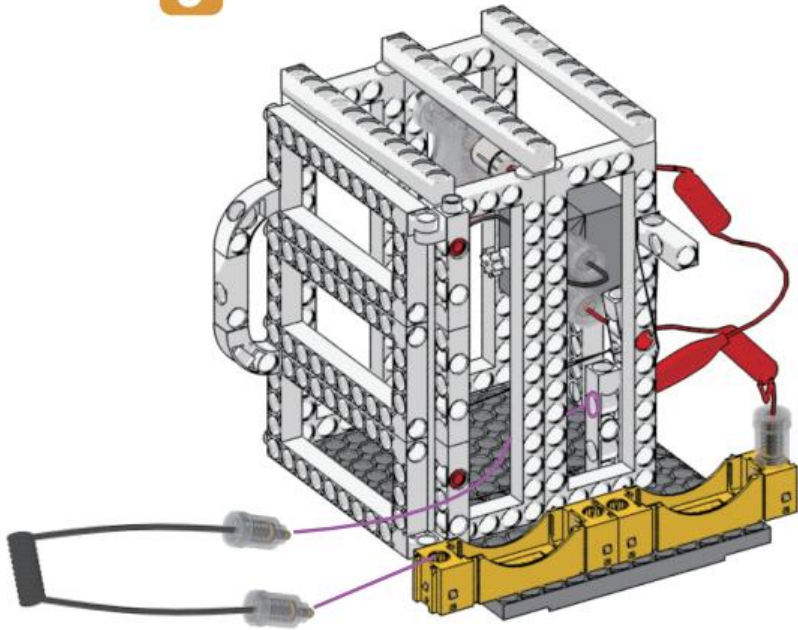
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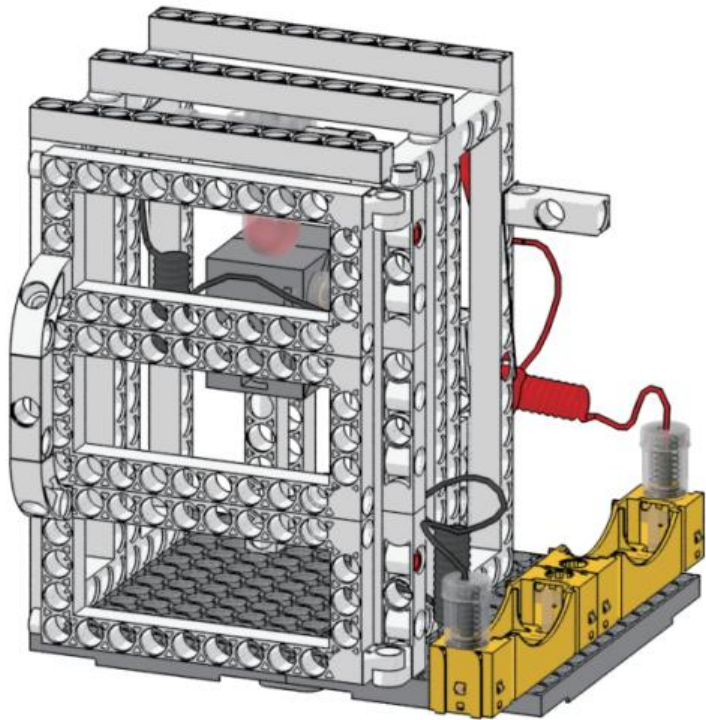
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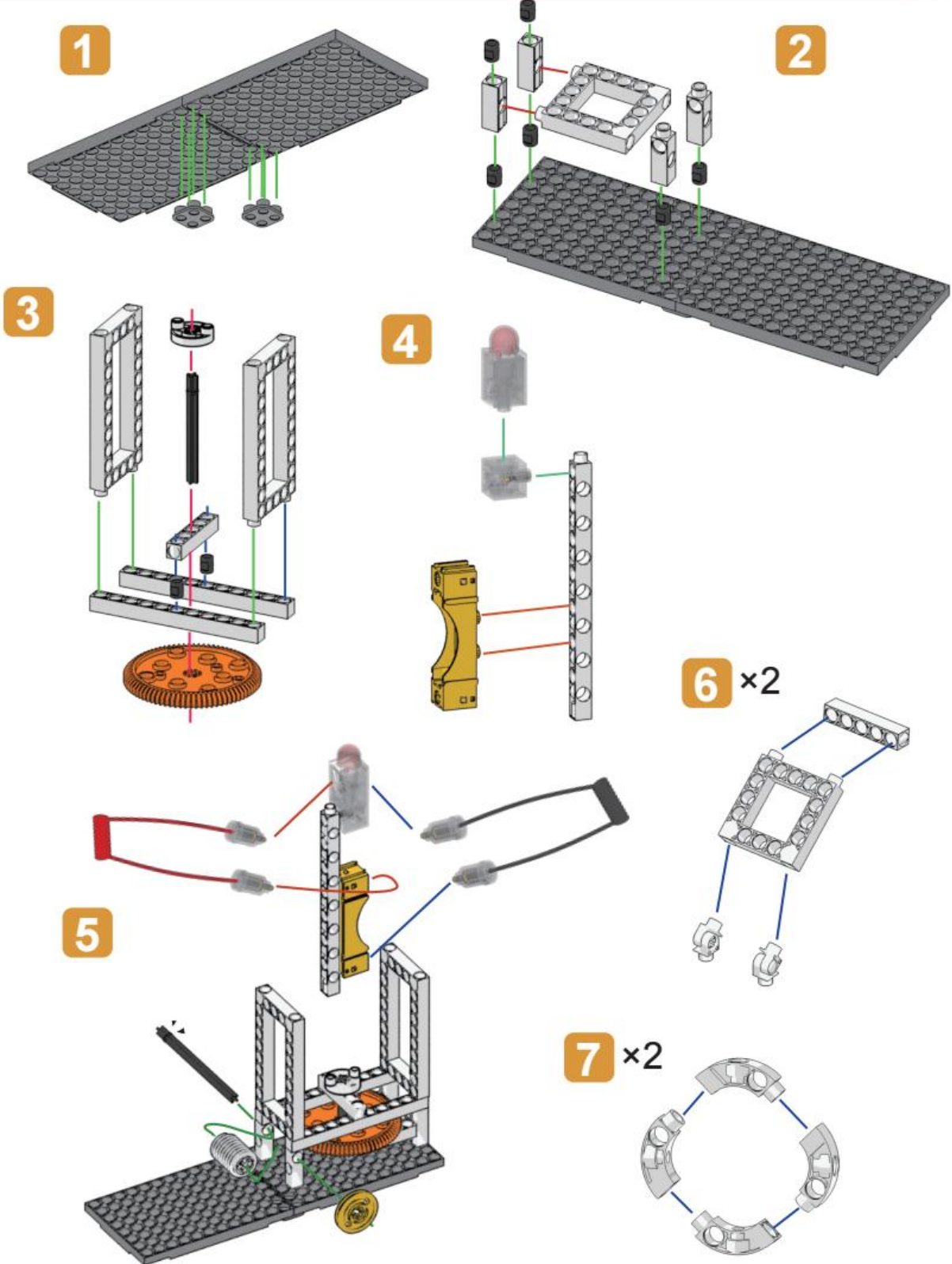
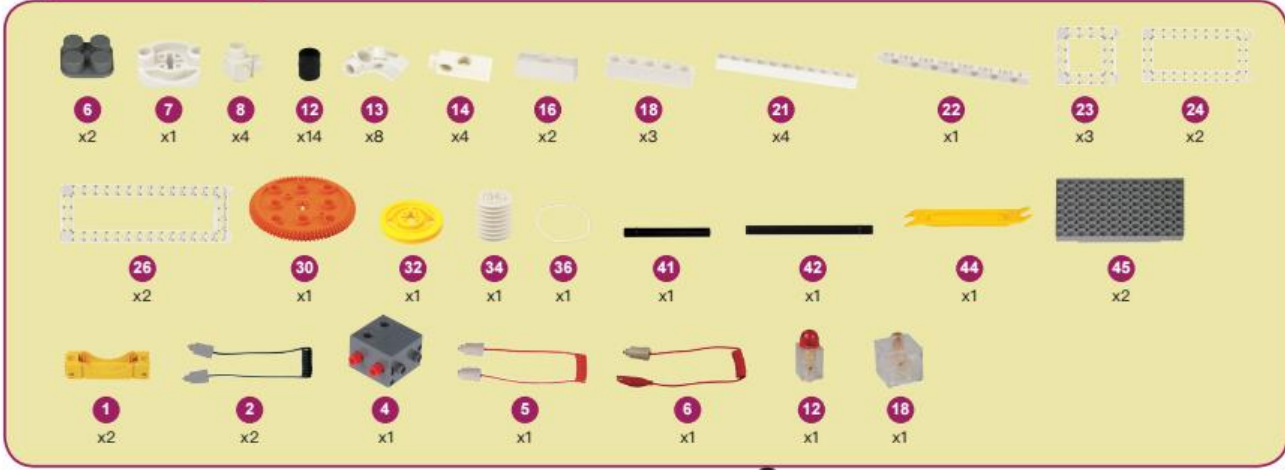


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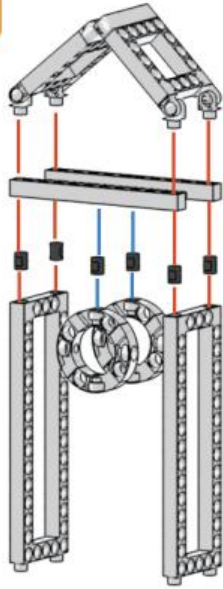


完成
Done

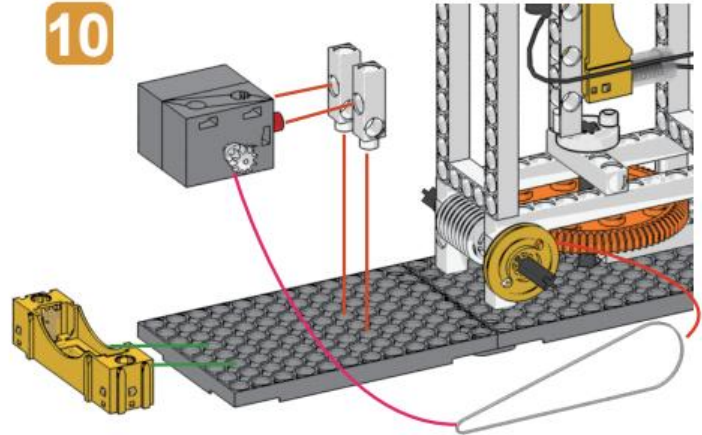




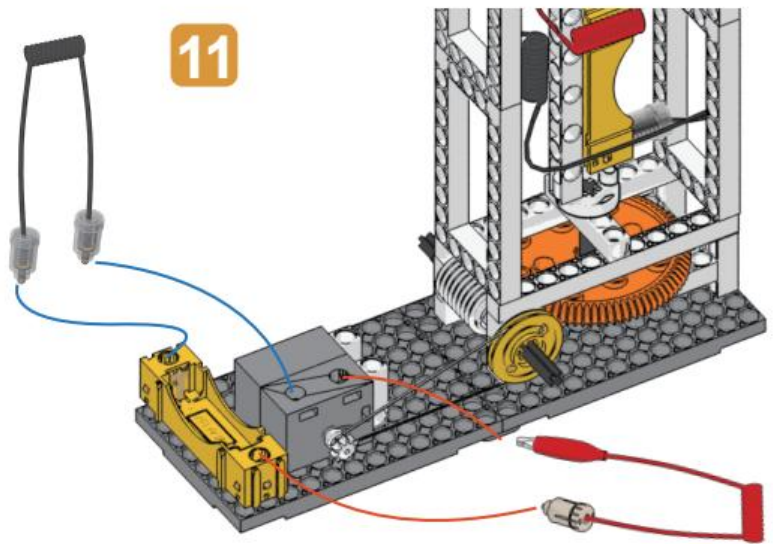
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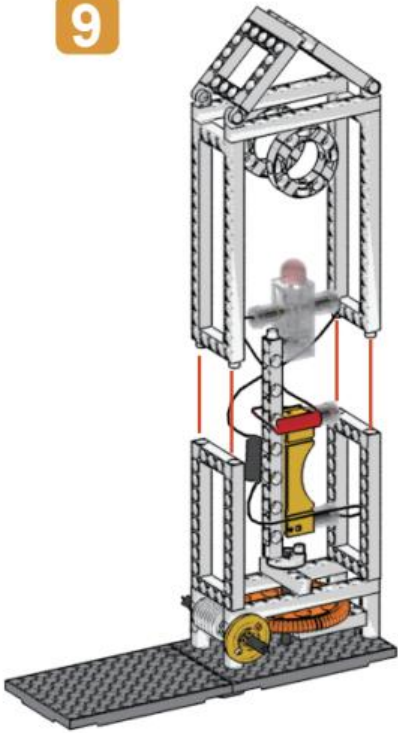
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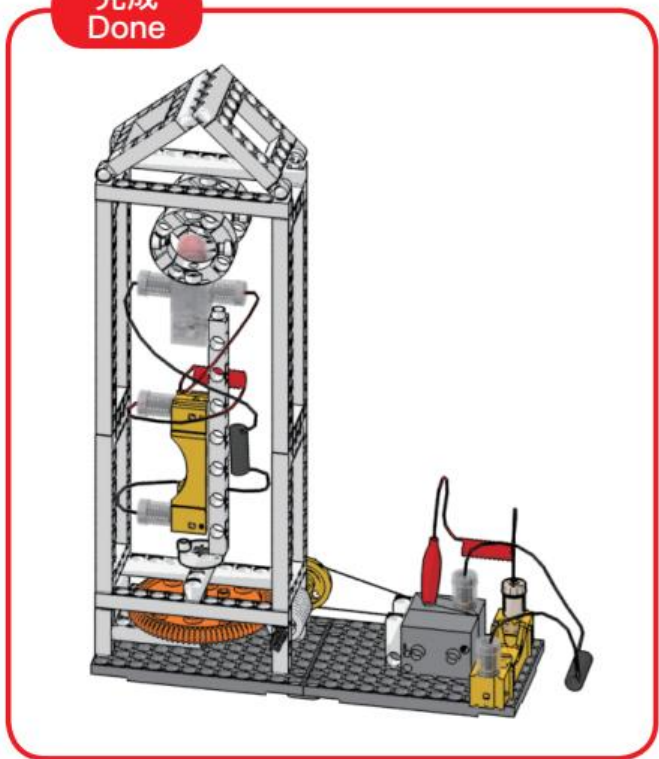
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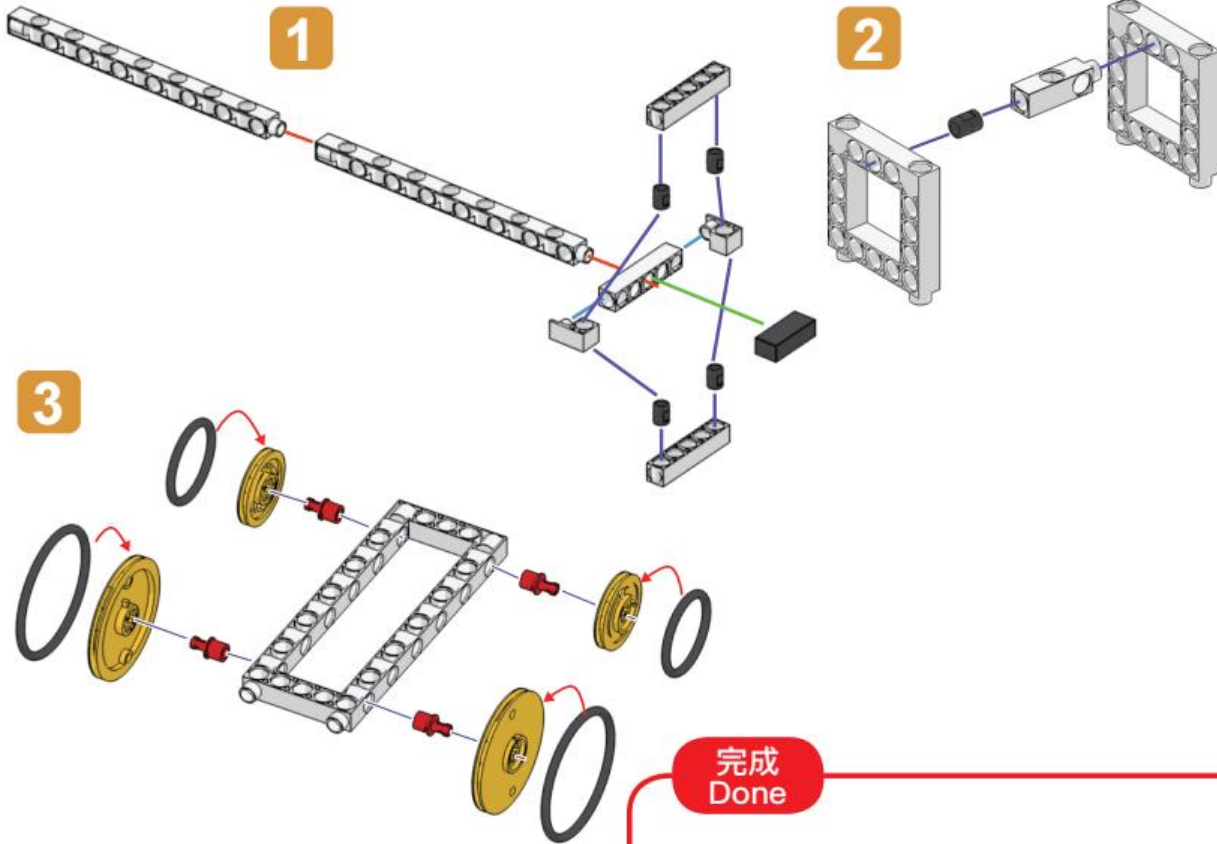


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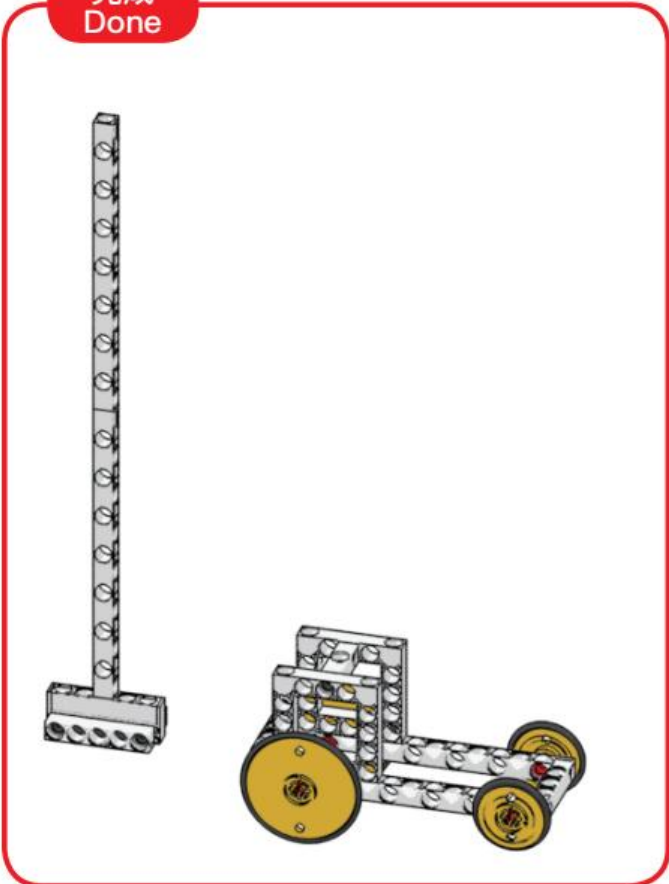
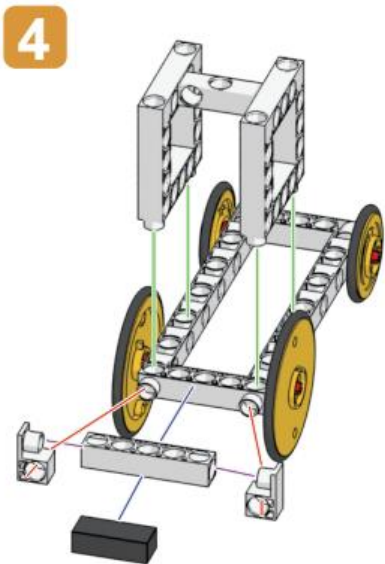


完成
Done





完成
Done



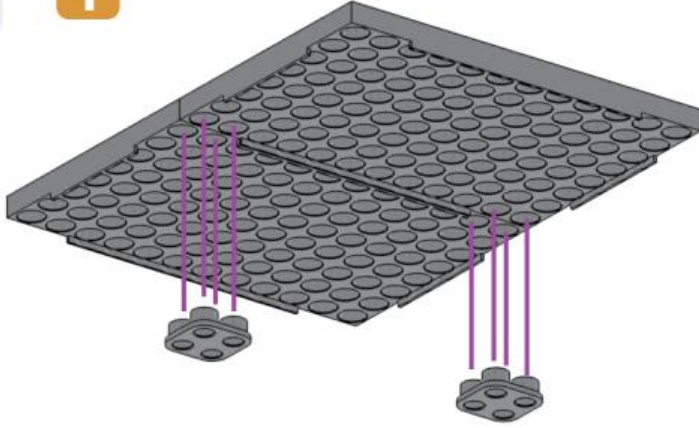
地球儀

Globe

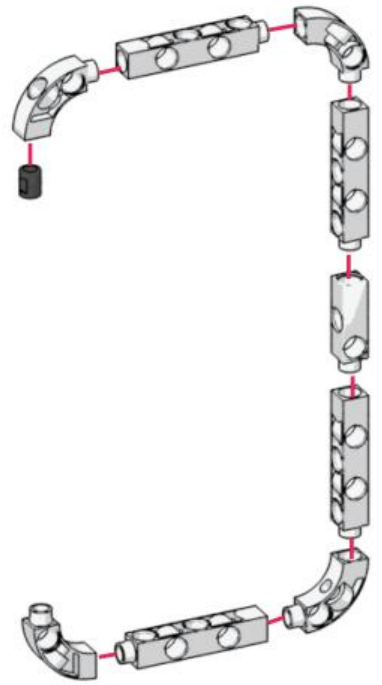
需用零件 Parts Needed

6	10	12	13	14	17	18	19	23	24	44	45	11
x2	x4	x11	x4	x1	x4	x2	x2	x4	x2	x1	x2	x2

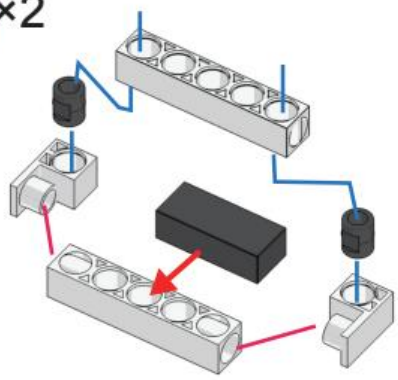
1



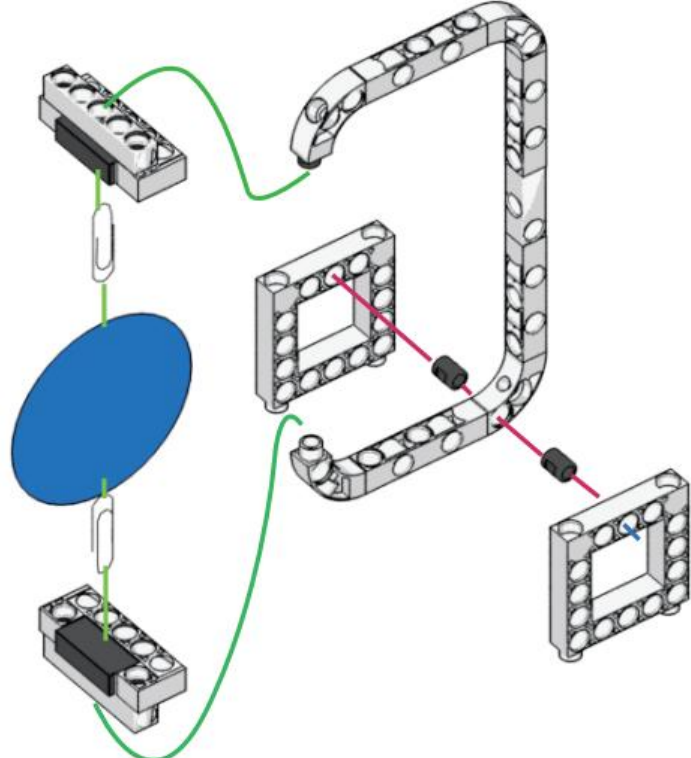
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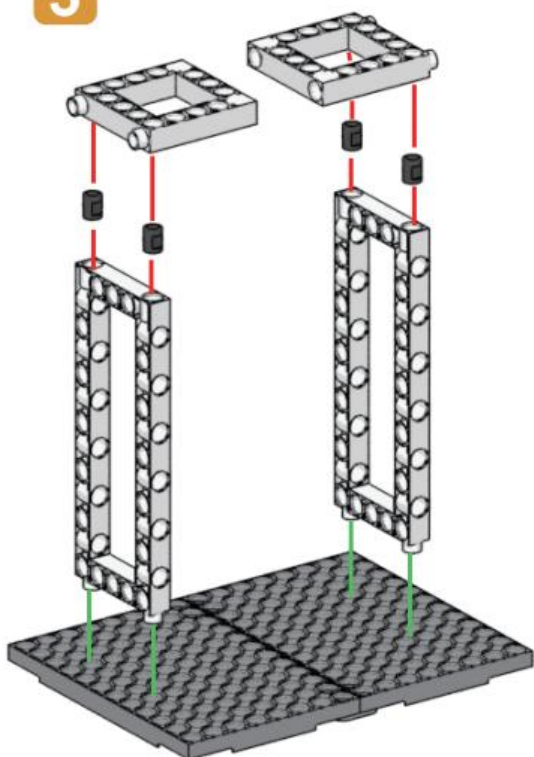
3 x2



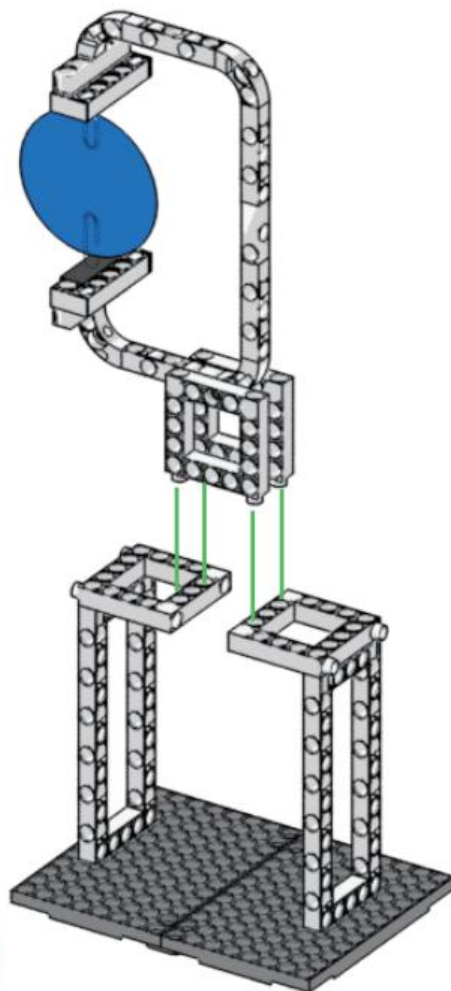
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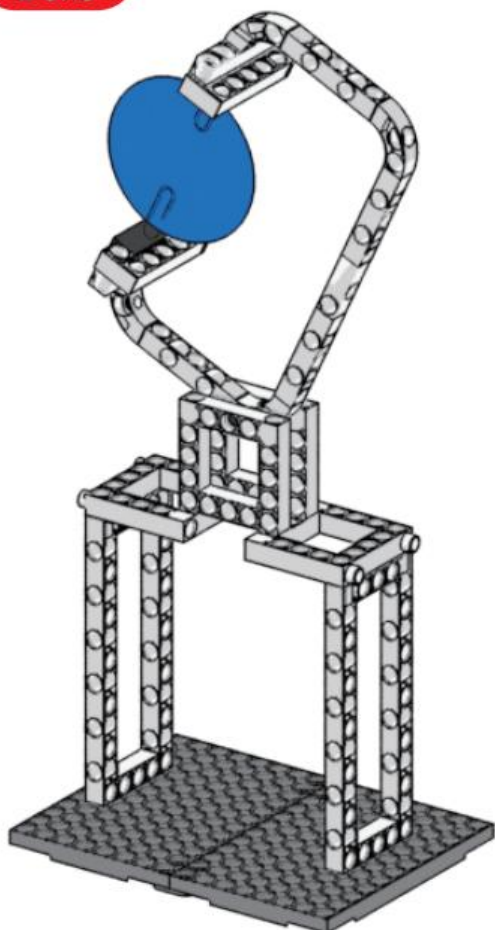
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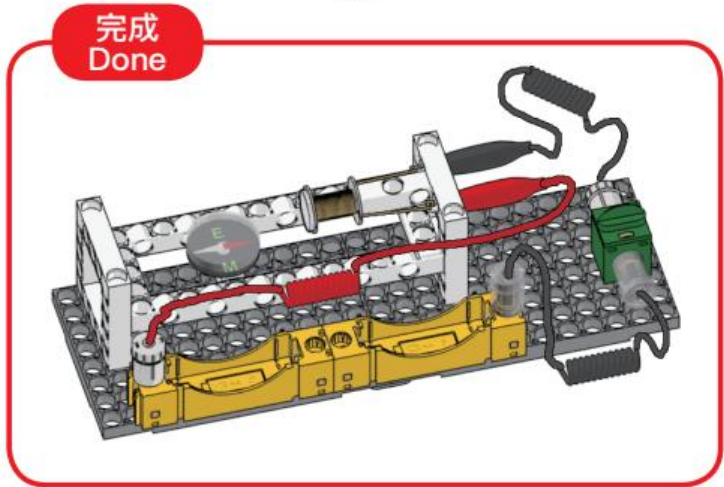
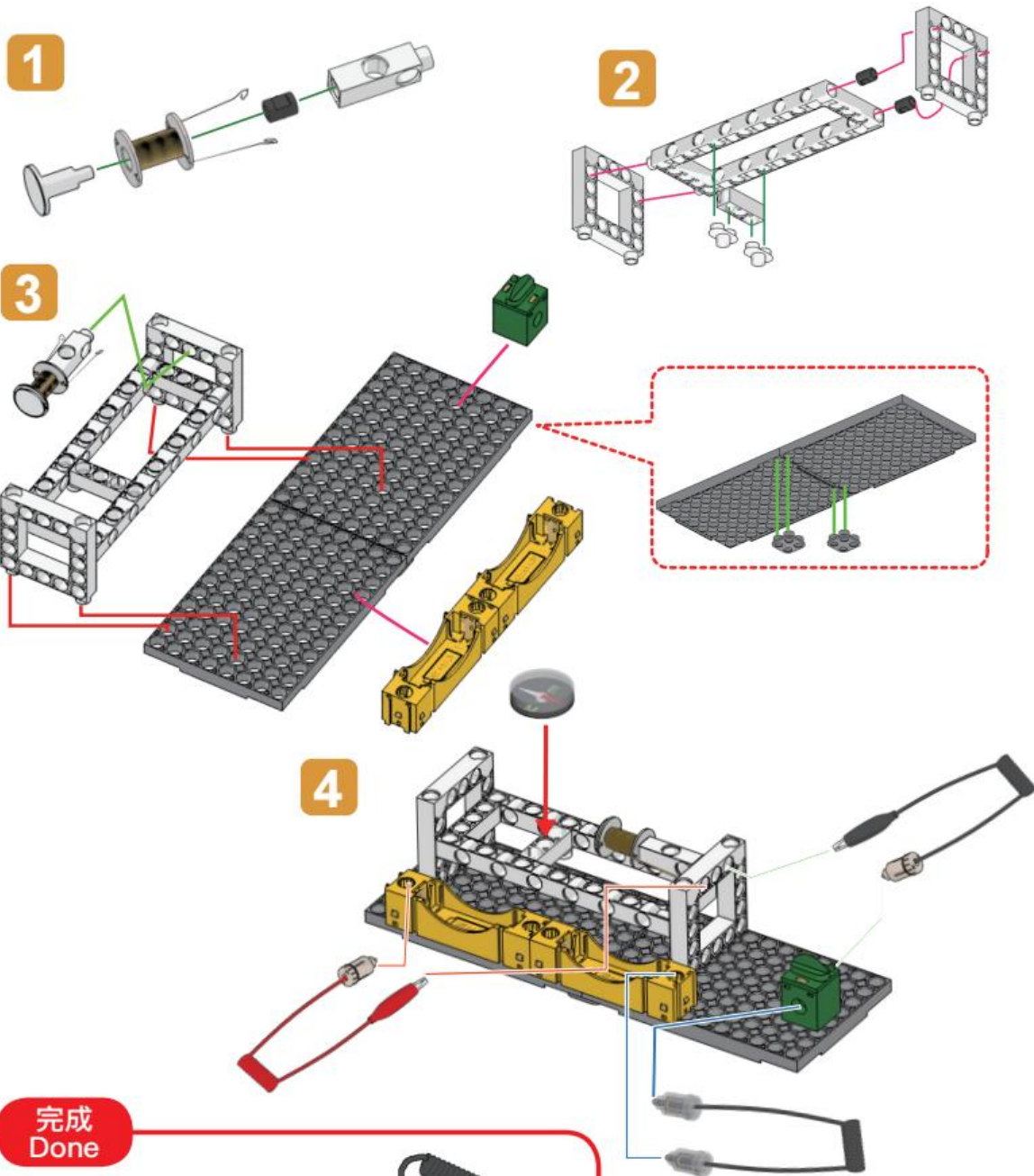
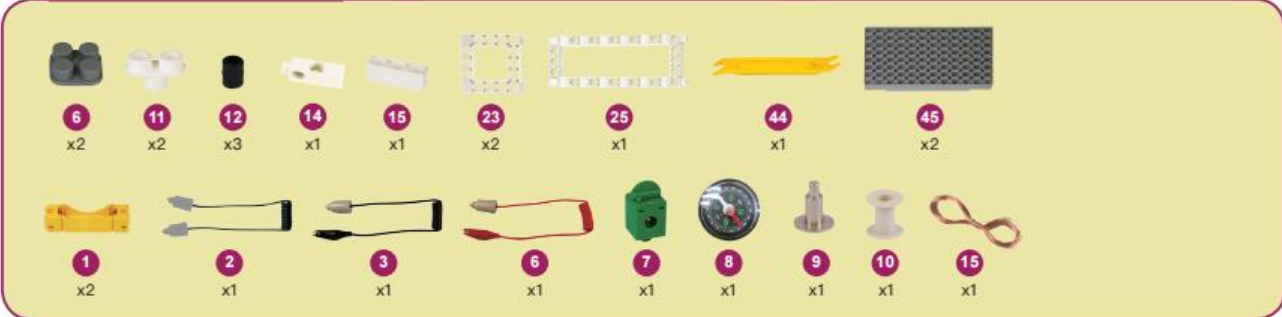


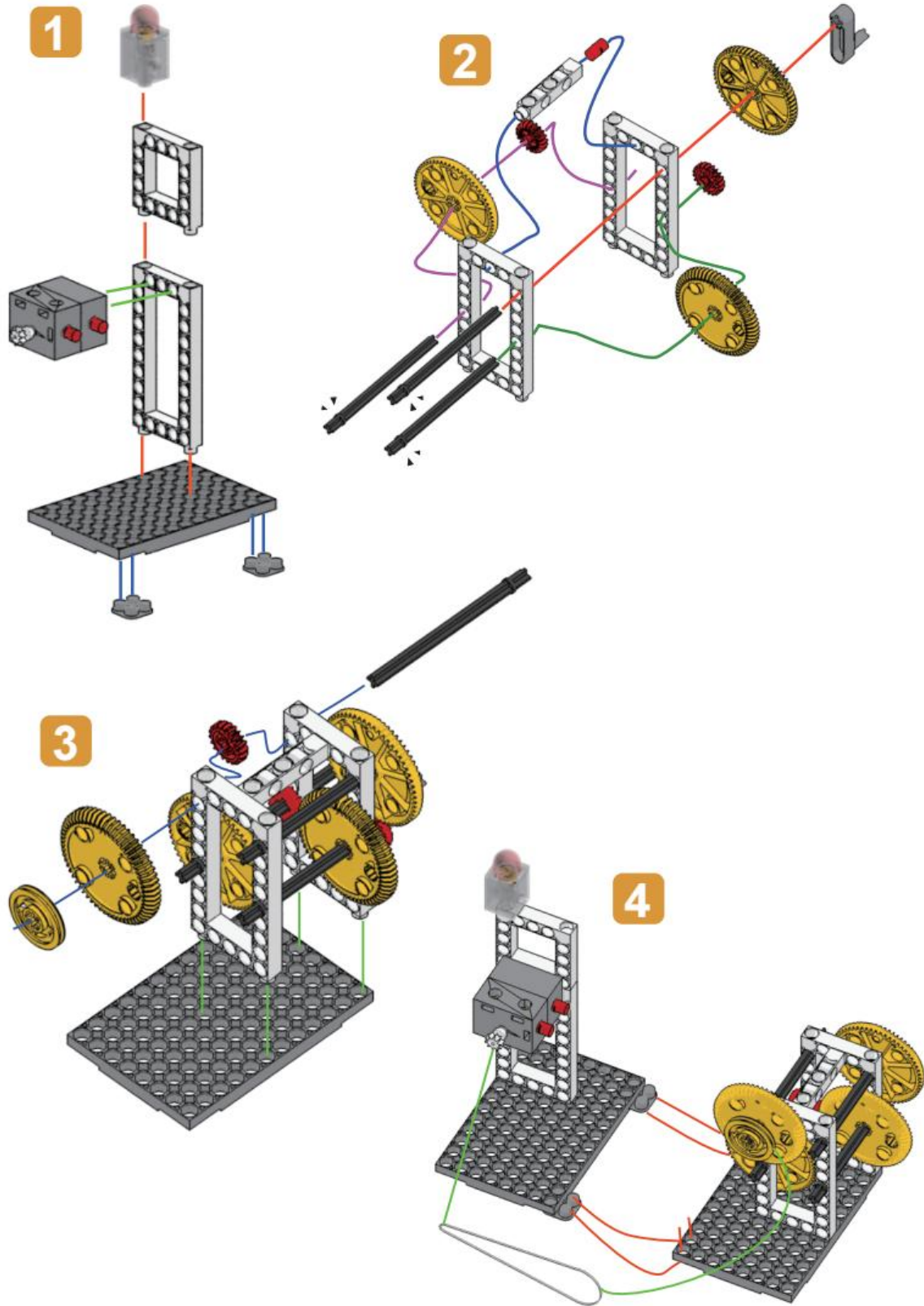
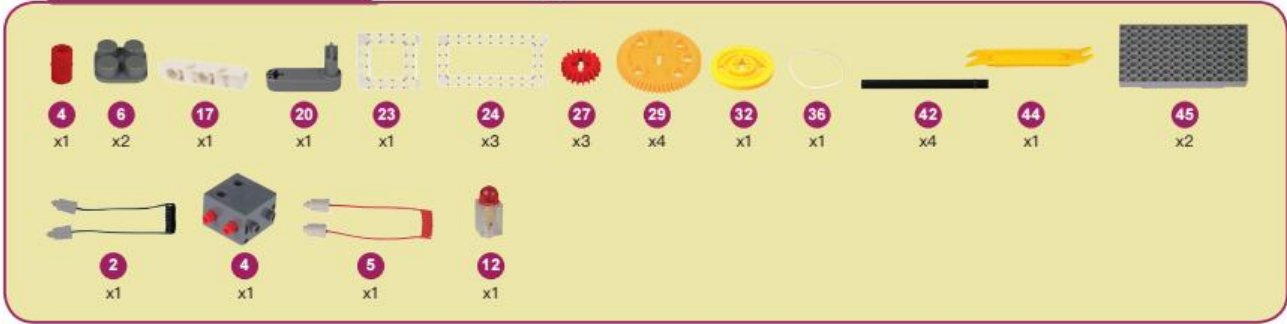
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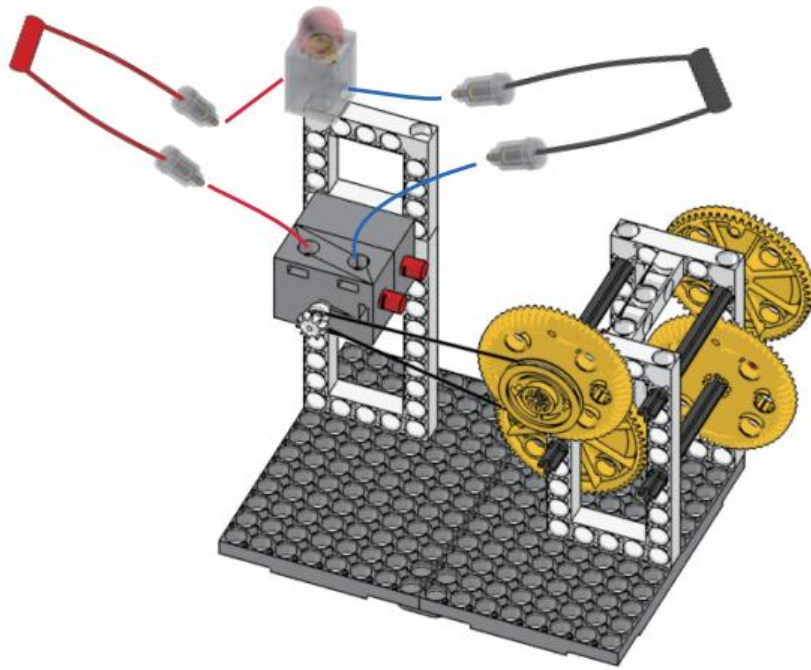
完成
Done



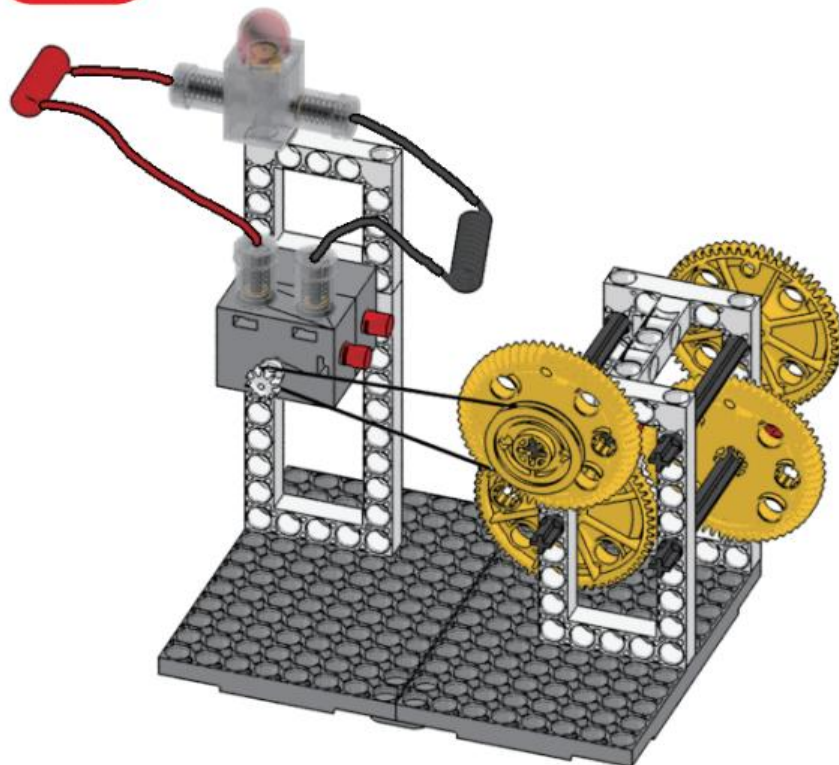


















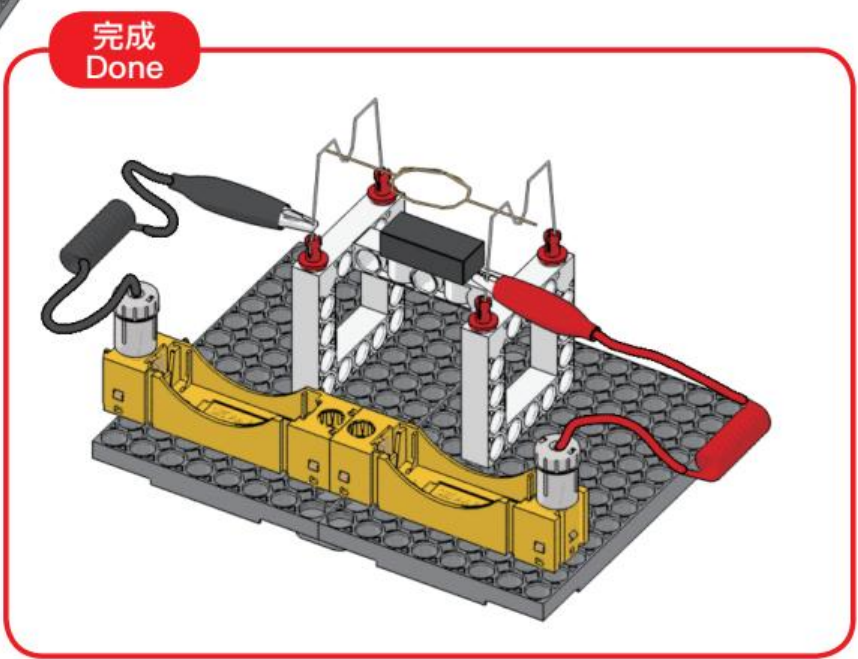
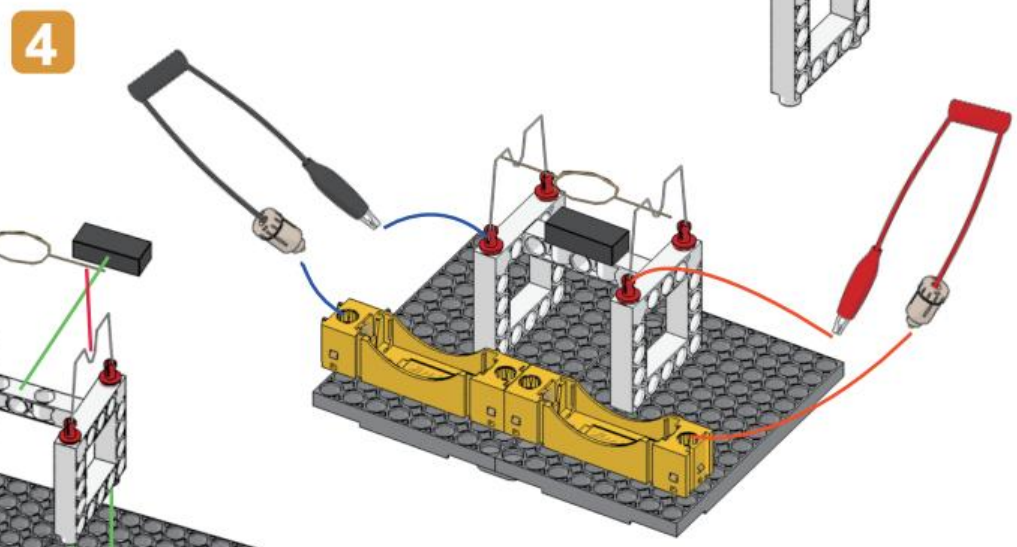
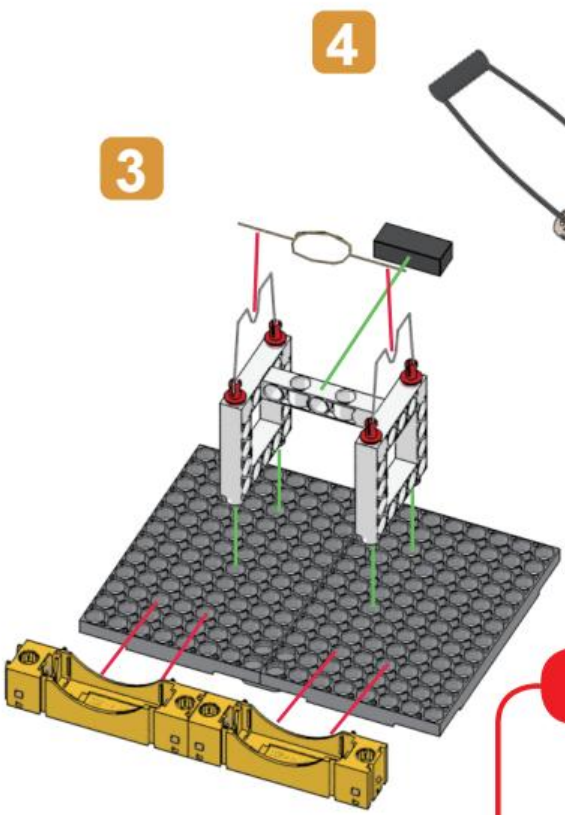
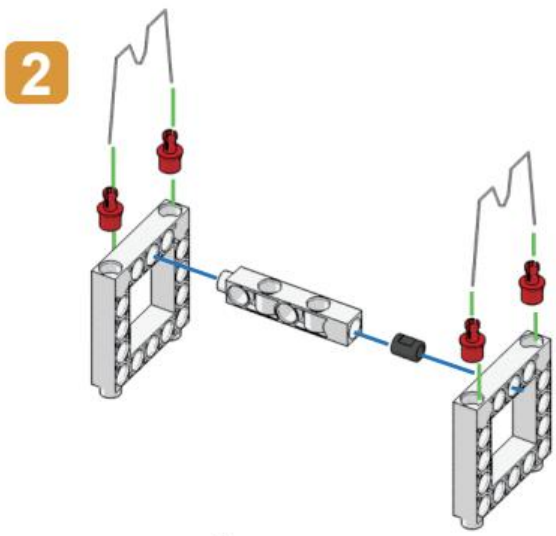
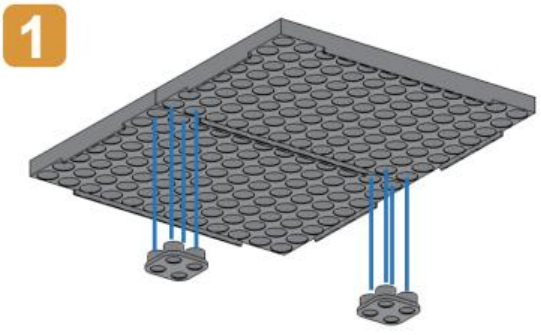
5



完成
Done



- 
2
x4
 - 
6
x2
 - 
12
x1
 - 
17
x1
 - 
23
x2
 - 
44
x1
 - 
45
x2
 - 
1
x2
 - 
3
x1
 - 
6
x1
- 
10
x1
 - 
14
x1
 - 
15
x1
 - 
16
x1

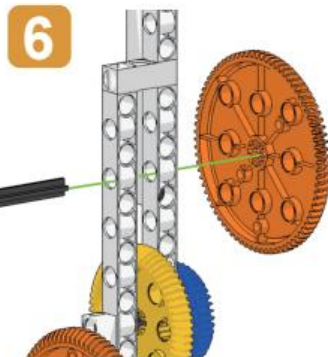
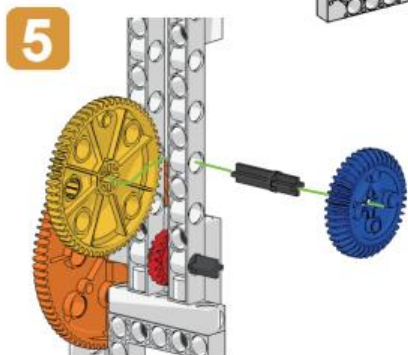
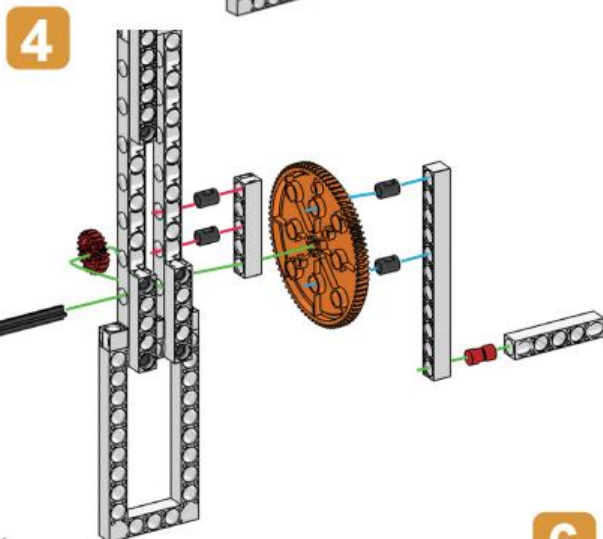
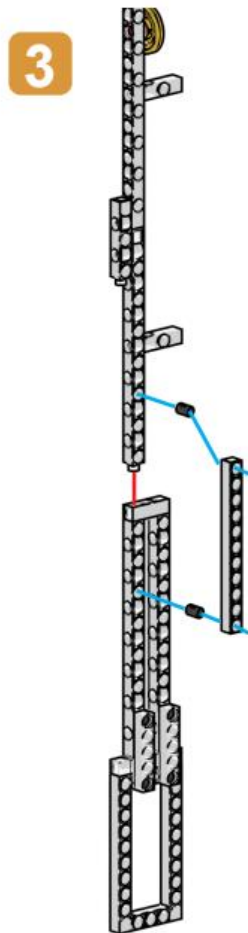
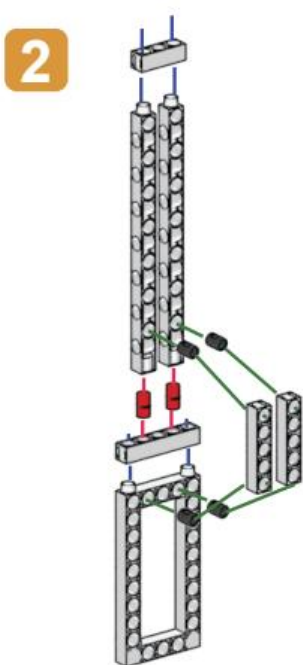
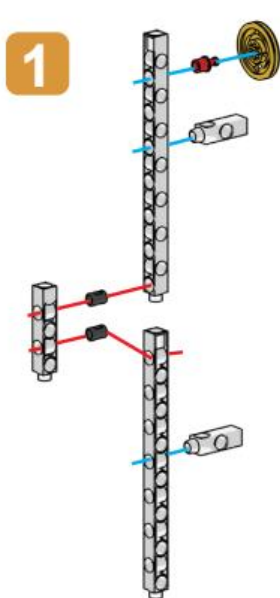


釣魚竿

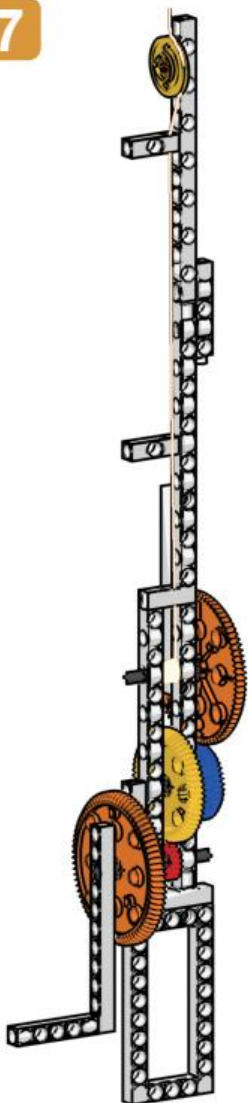
Fishing Rod

需用零件 Parts Needed

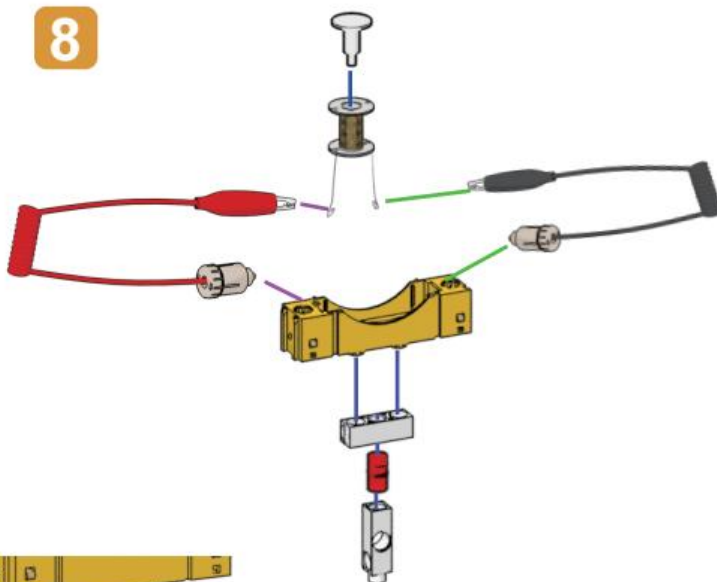
2	4	12	14	15	17	18	19	21	22	24	
x1	x4	x12	x3	x2	x1	x4	x1	x2	x4	x1	
27	28	29	30	31	38	40	41	44	1	3	
x1	x1	x1	x2	x1	x1	x1	x2	x1	x1	x1	
6	9	10	14	15							
x1	x1	x1	x1	x1							



7



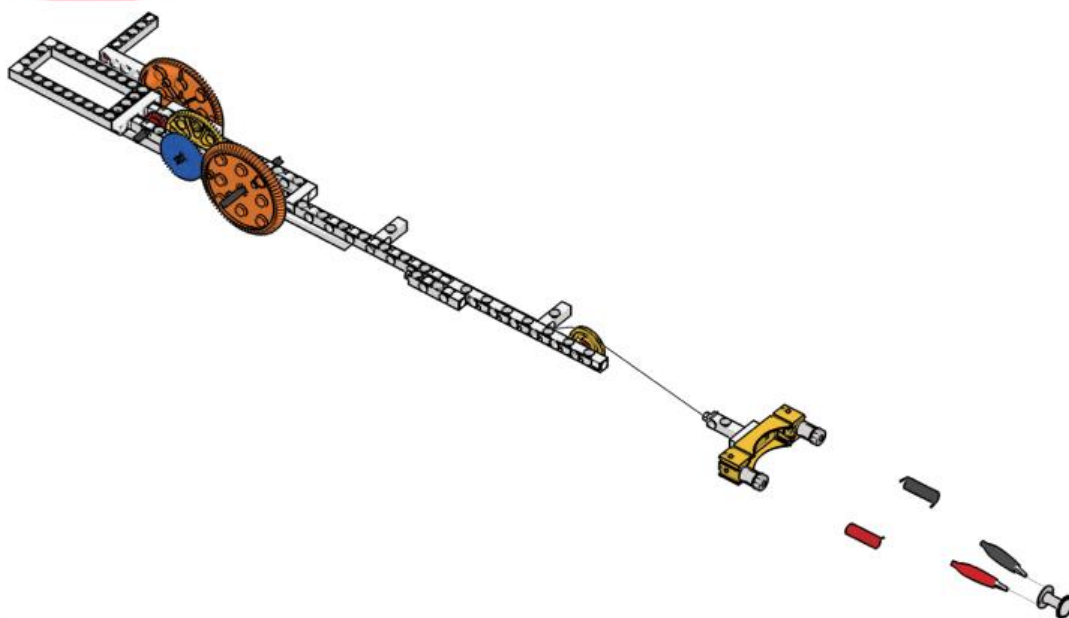
8



9



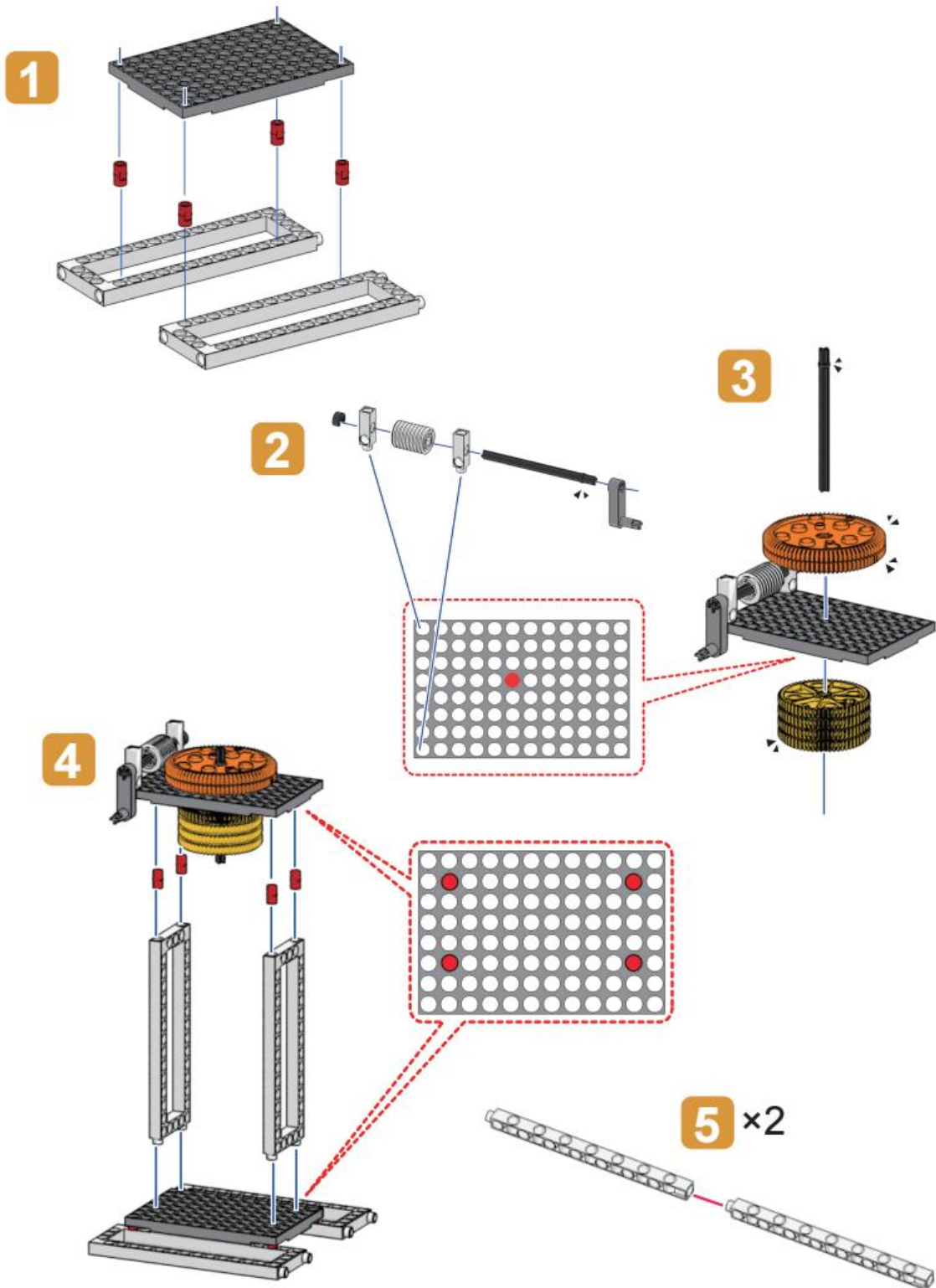
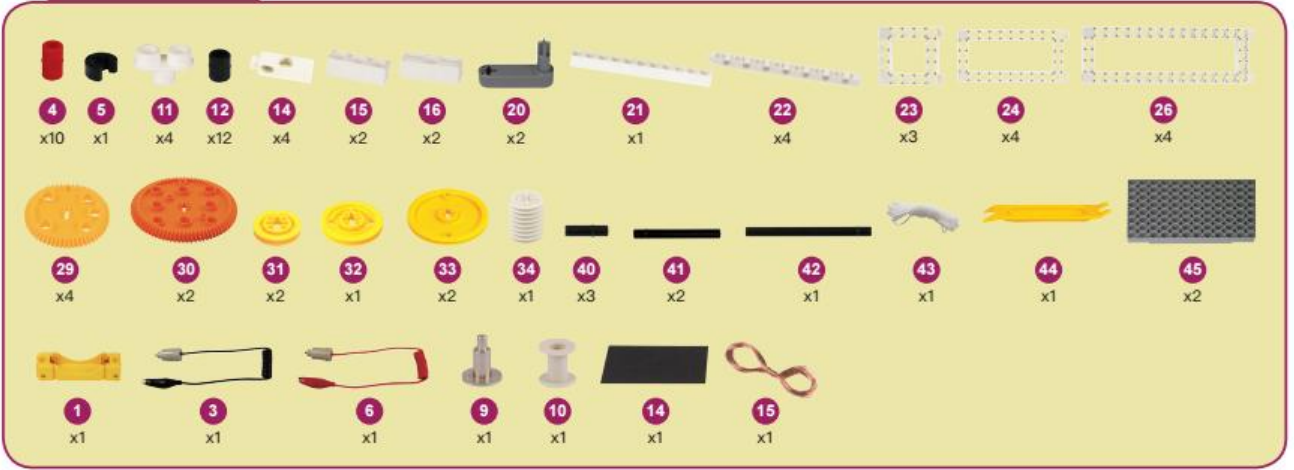
完成
Done

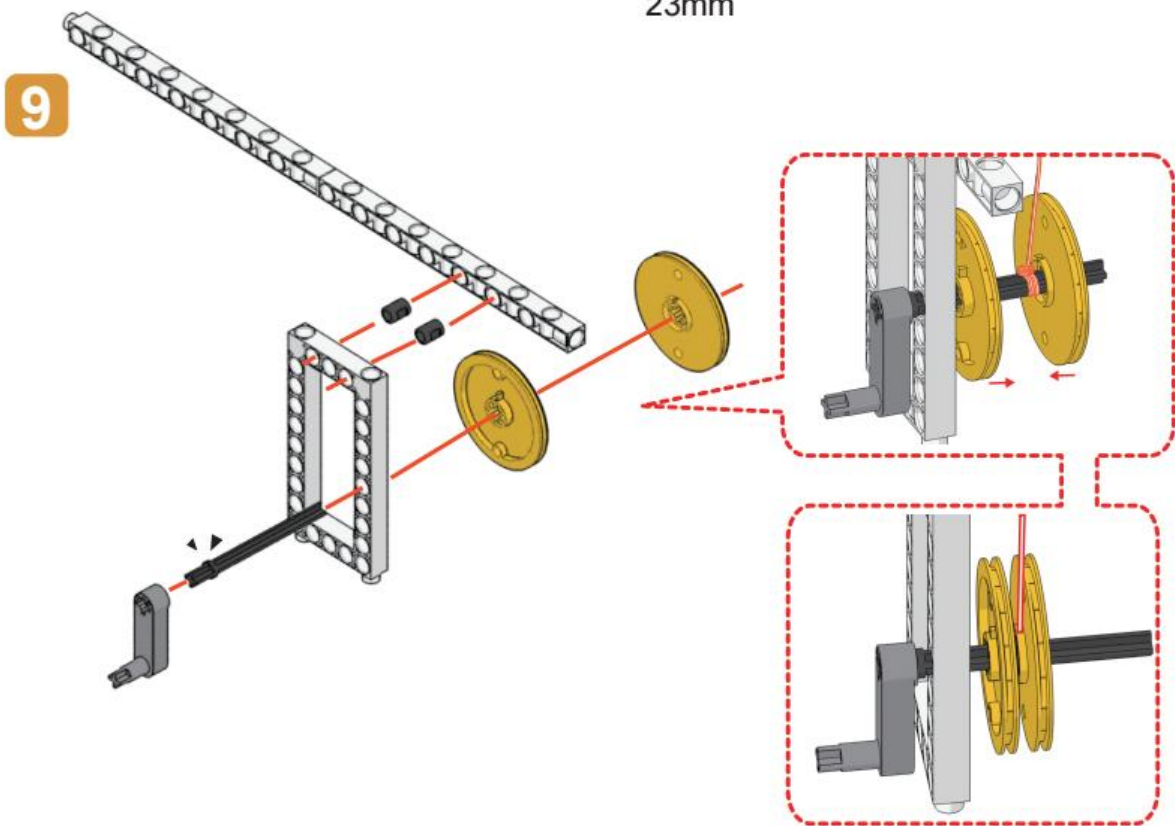
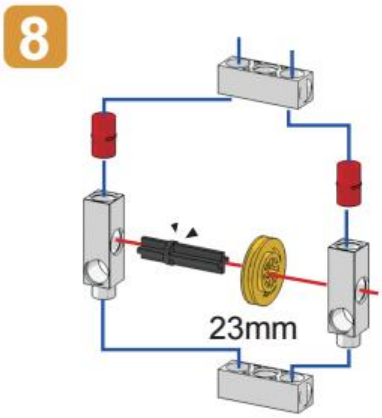
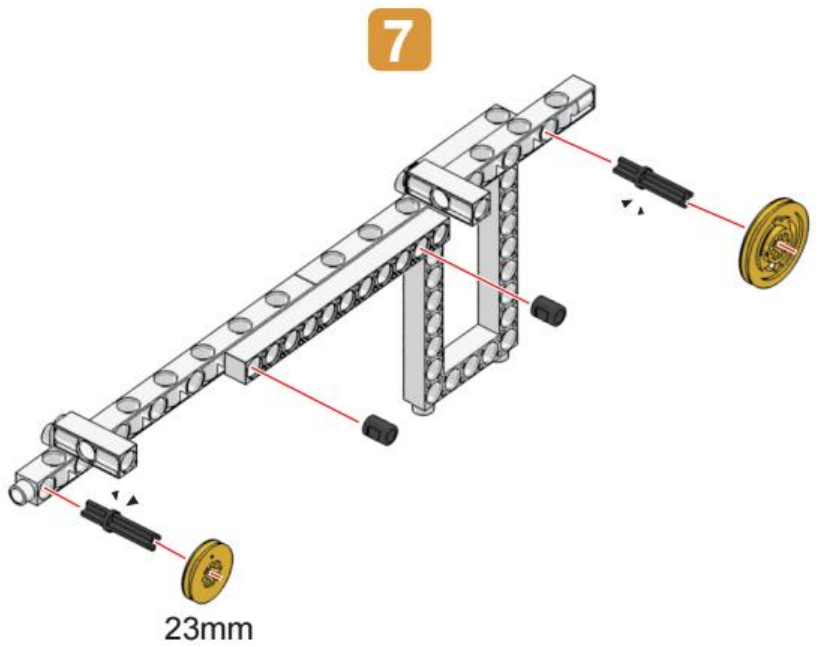
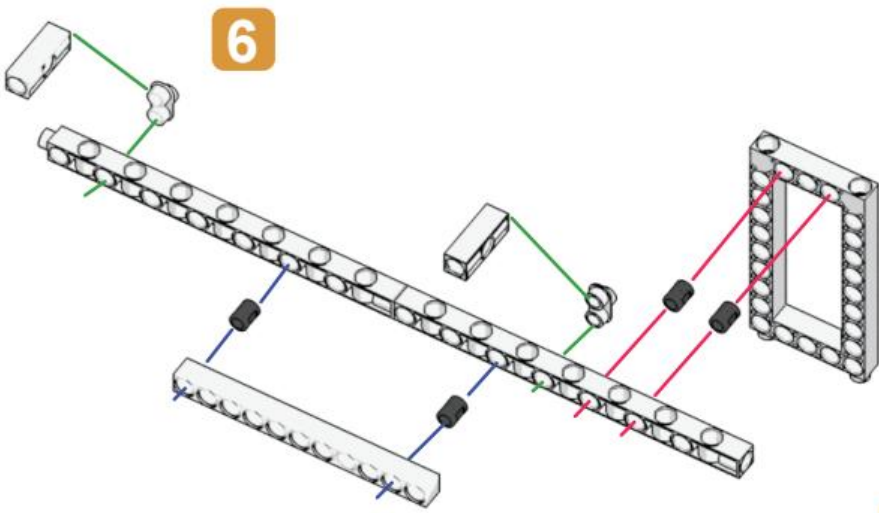


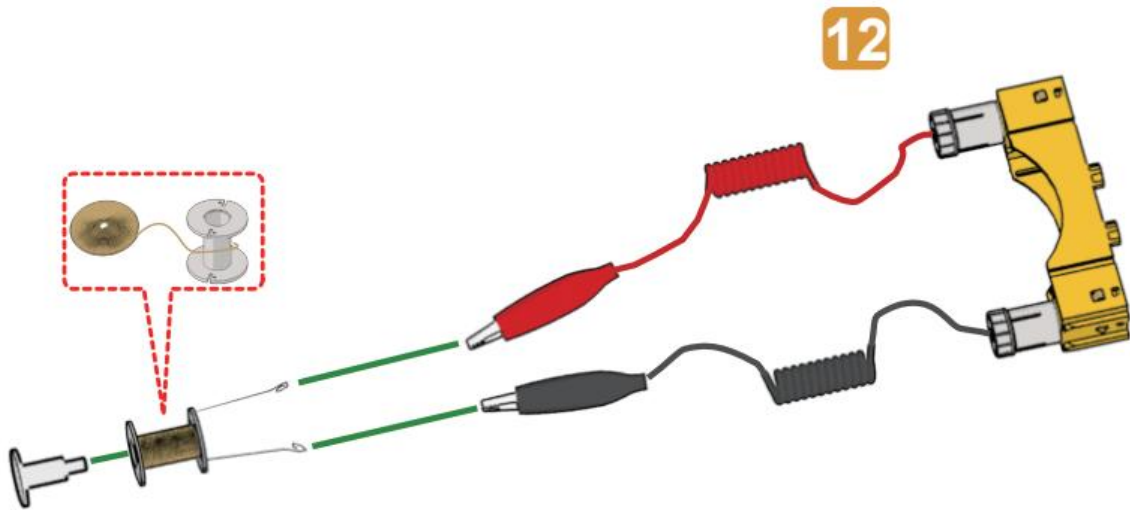
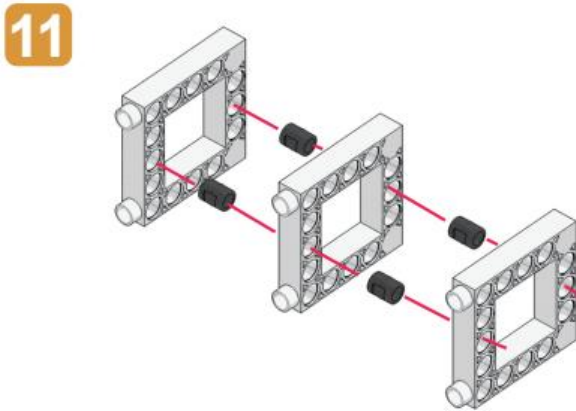
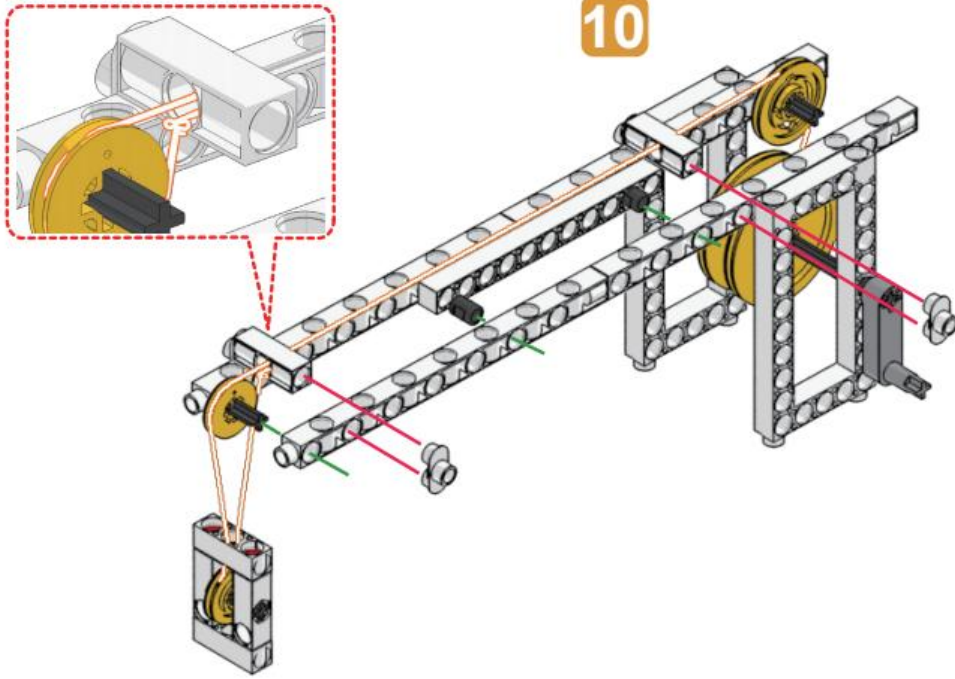
吊車

Crane

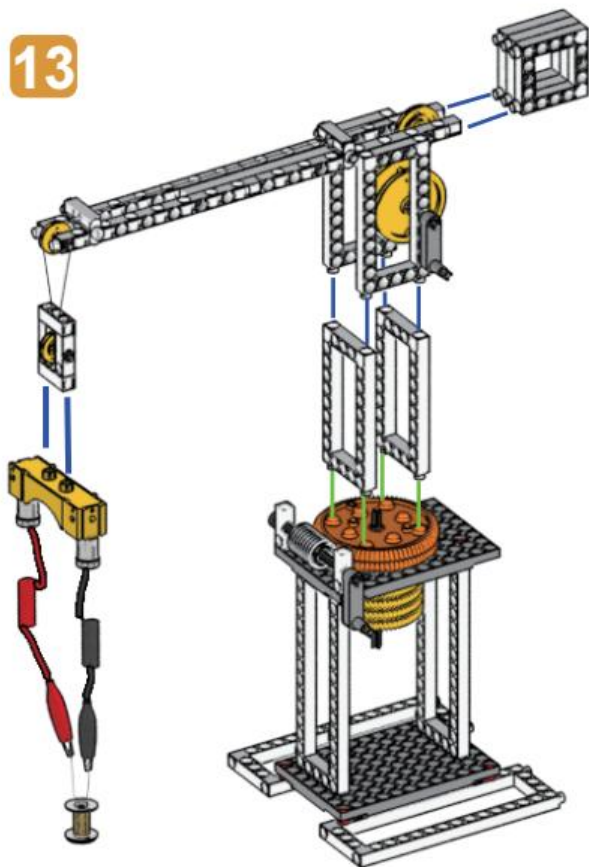
需用零件 Parts Needed



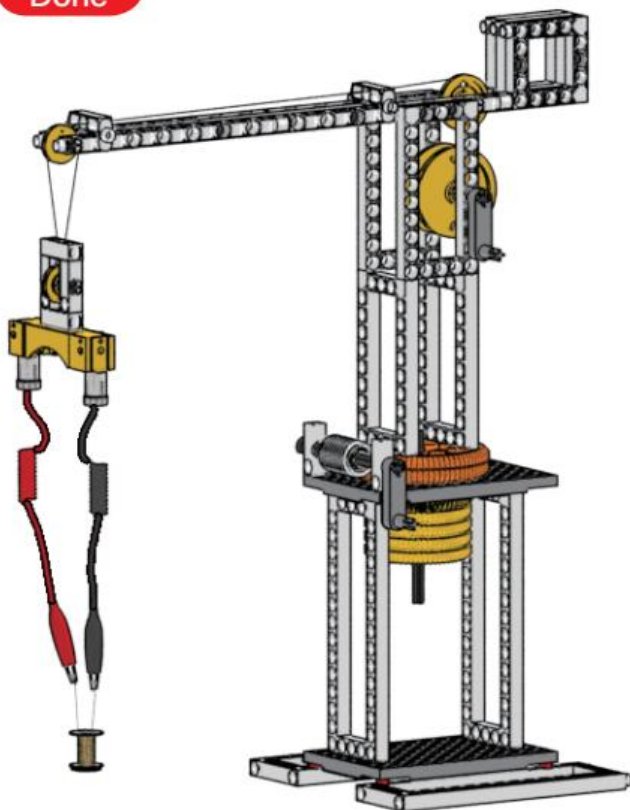




13



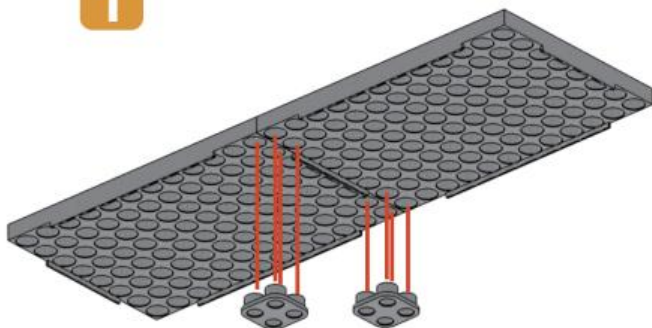
完成
Done



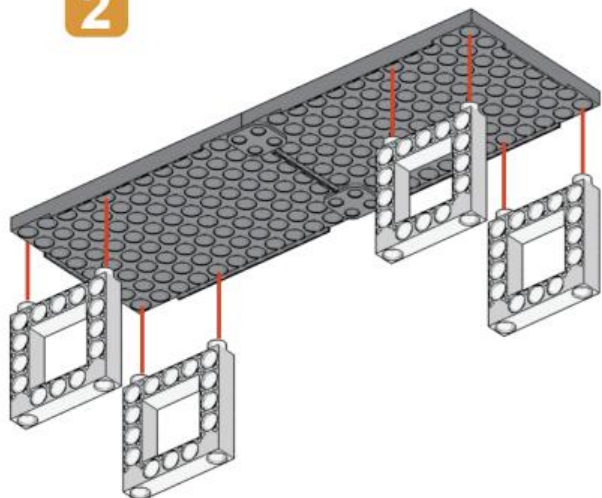
1	2	5	6	11	12	13	14	22	23	27	36	41	44
x1	x1	x1	x2	x1	x3	x2	x2	x1	x4	x1	x1	x1	x1

45	1	2	5	6	7	12
x2	x2	x2	x1	x1	x1	x1

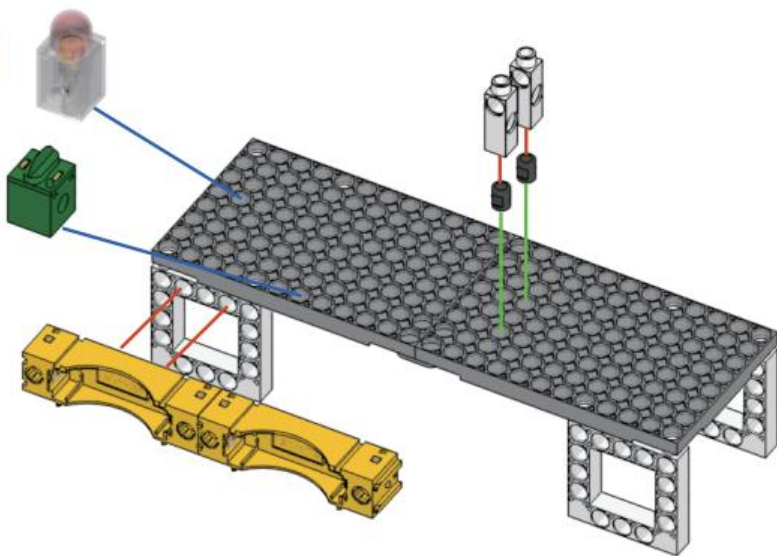
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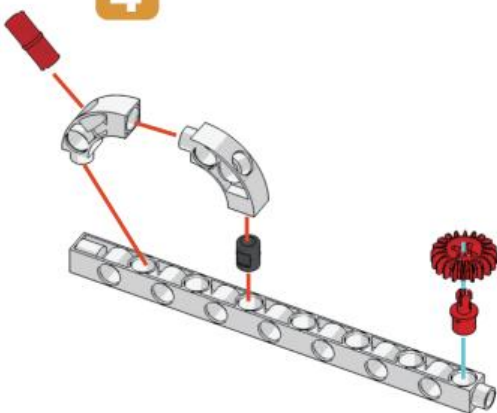
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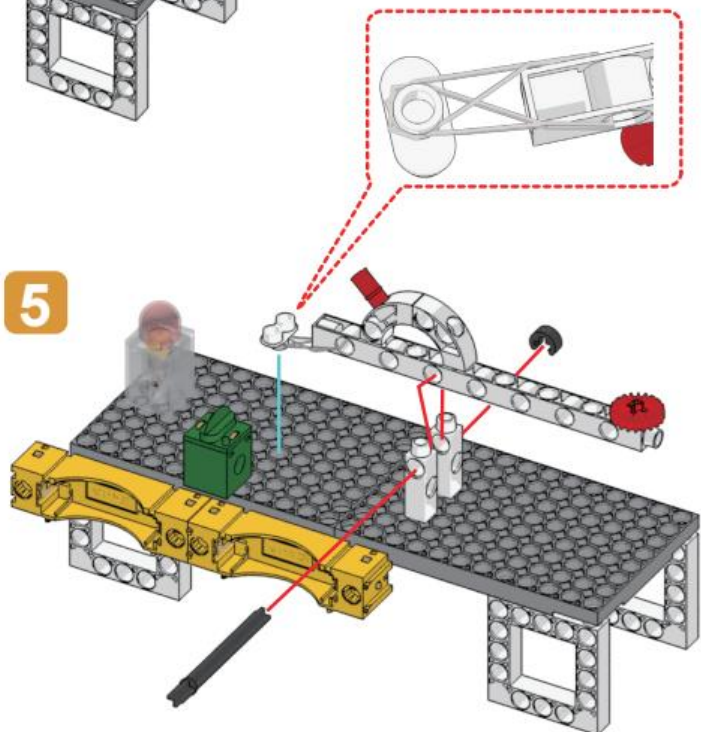
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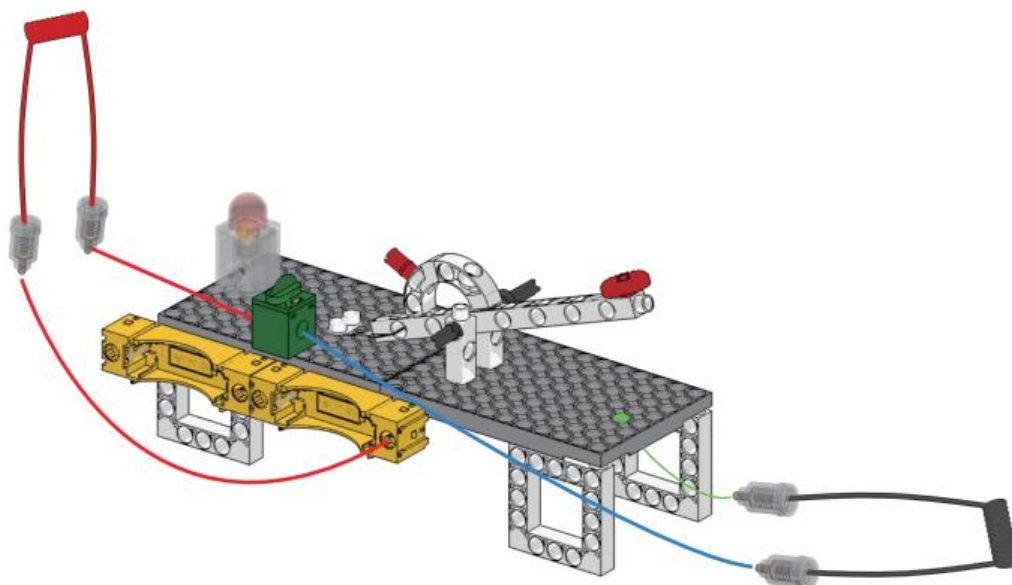
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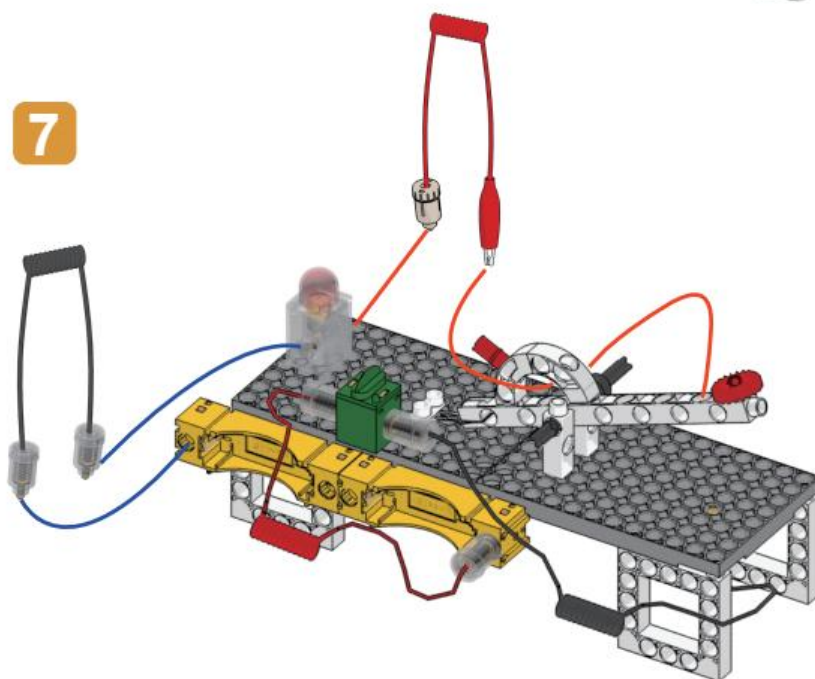
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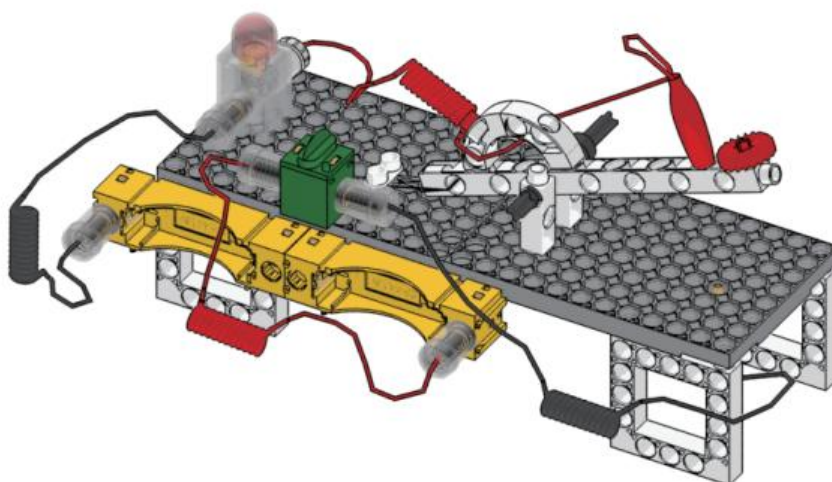
6



7



完成
Done



FUN LAB



#1260
創意積木組
CREATIVE CUBE



#1261
科學探索組
SCIENTIFIC TOUR



#1270
趣味機關組
FUN WITH MECHANISM



#1262
電學補充包
ELECTRICITY KIT



#1264
氣動補充包
PNEUMATICS
KIT



#1265
風力補充包
WIND POWER KIT



#1266
水力補充包
HYDRAULICS
KIT



#1267
太陽能補充包
SOLAR POWER
KIT



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