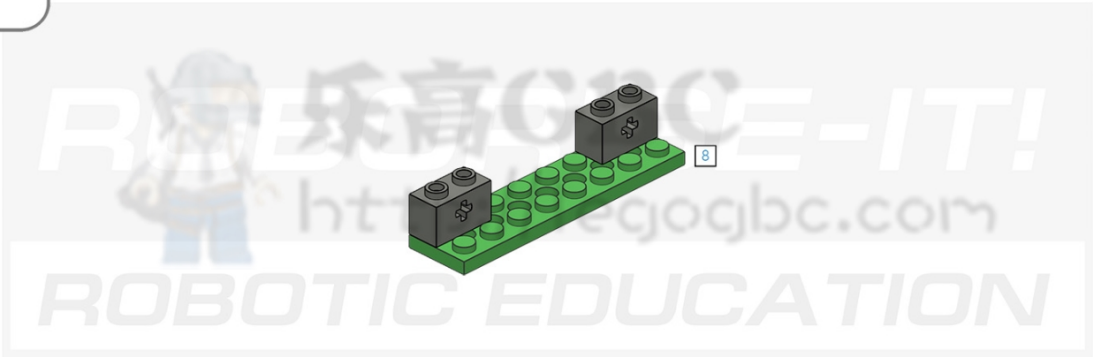
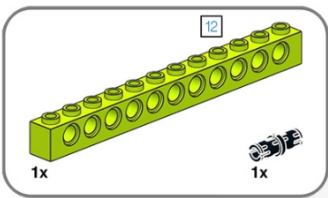
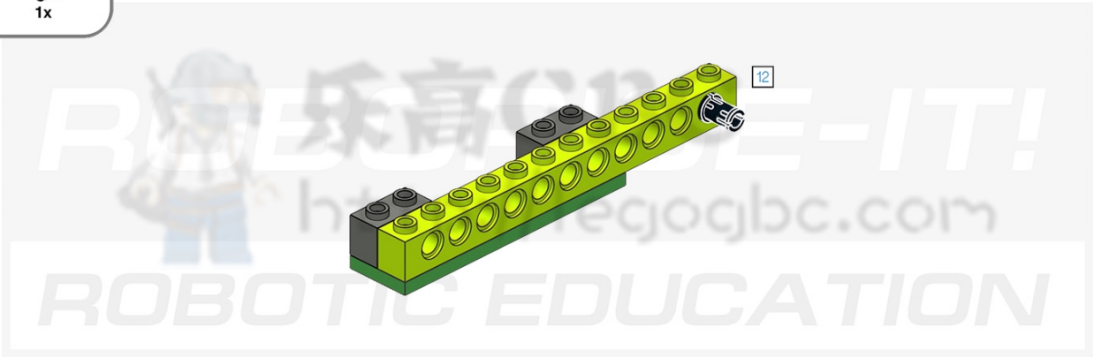


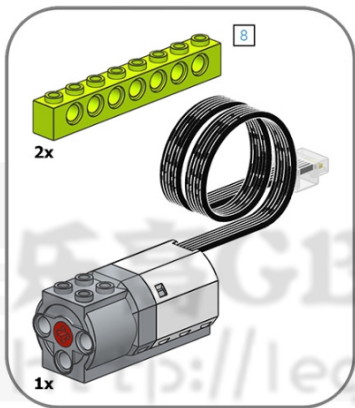
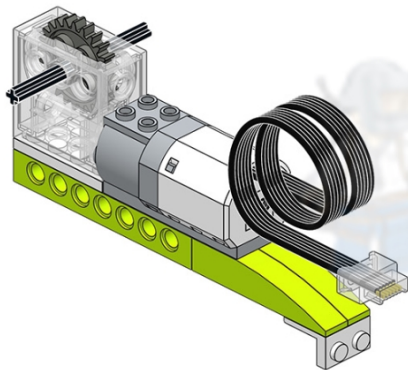
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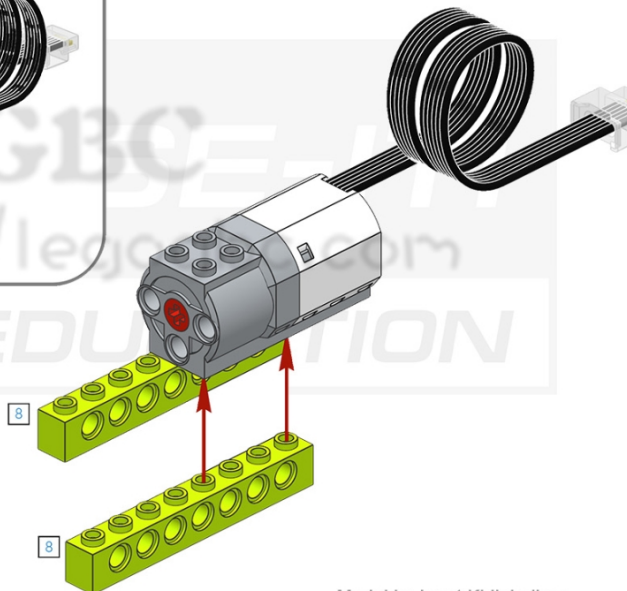


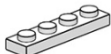
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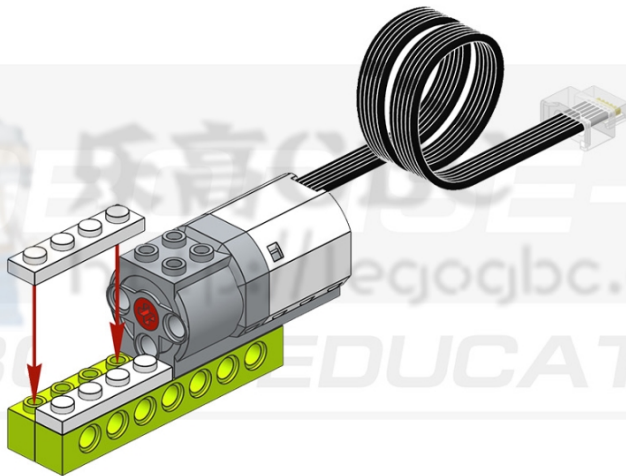
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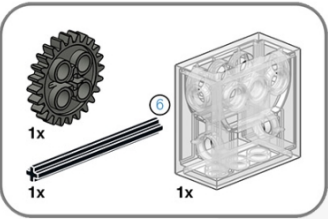


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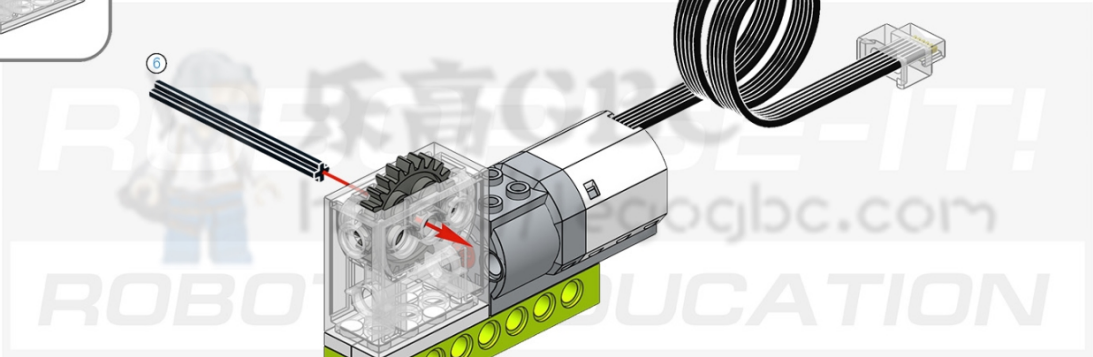
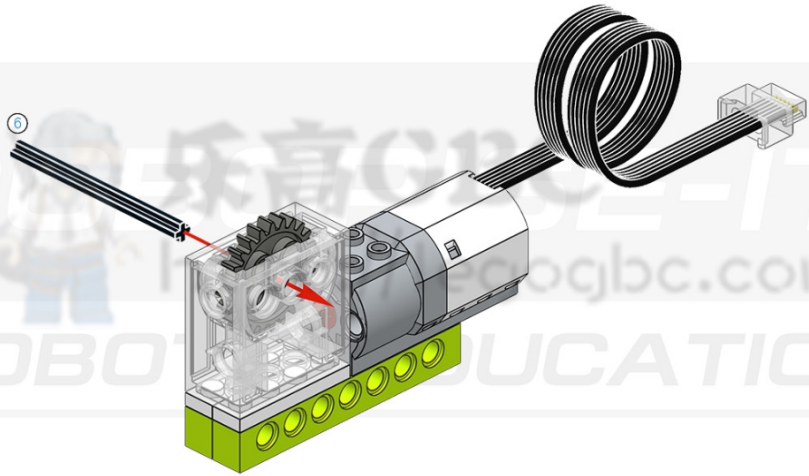
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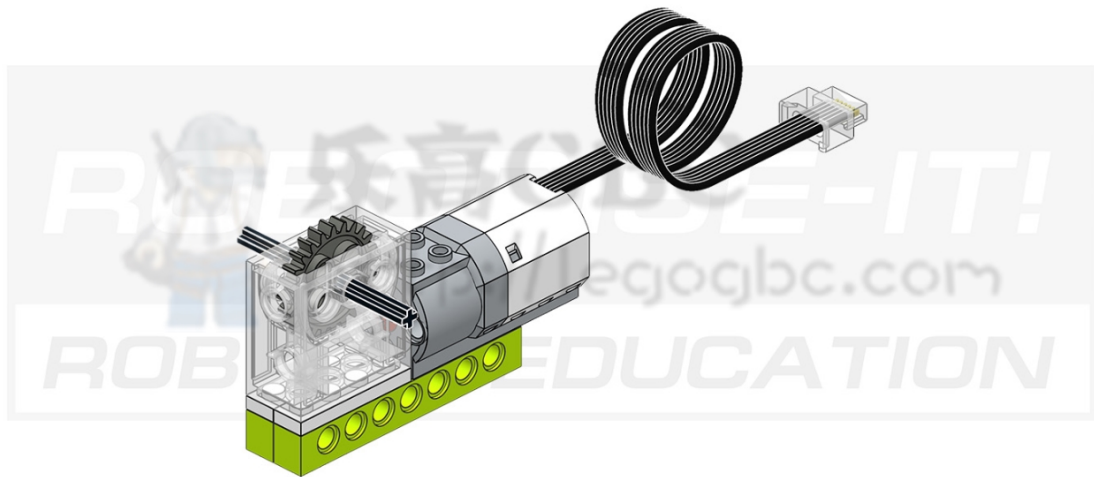
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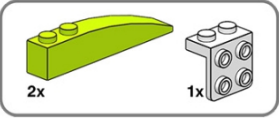


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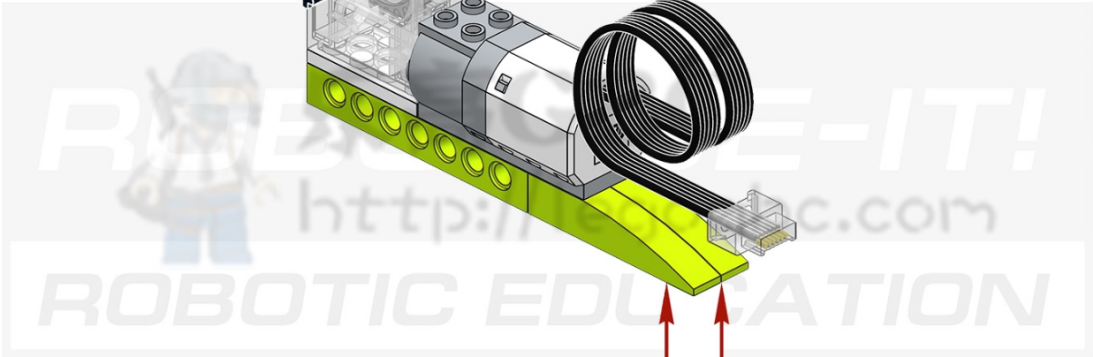
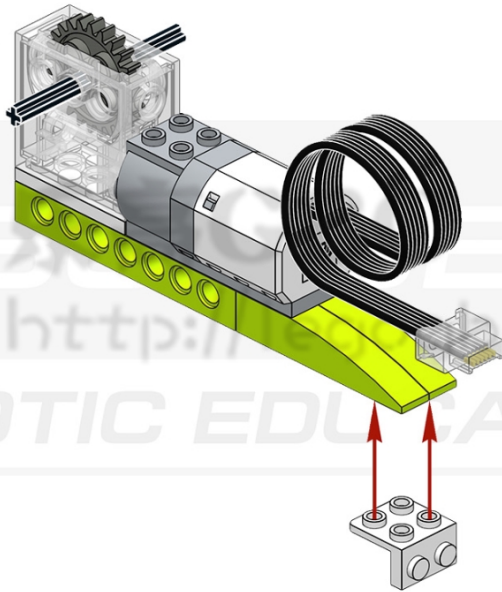


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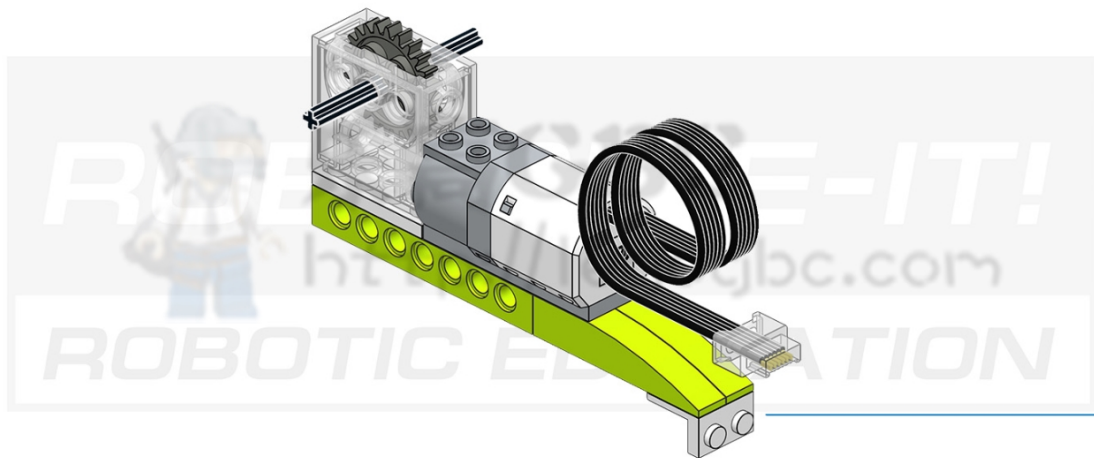




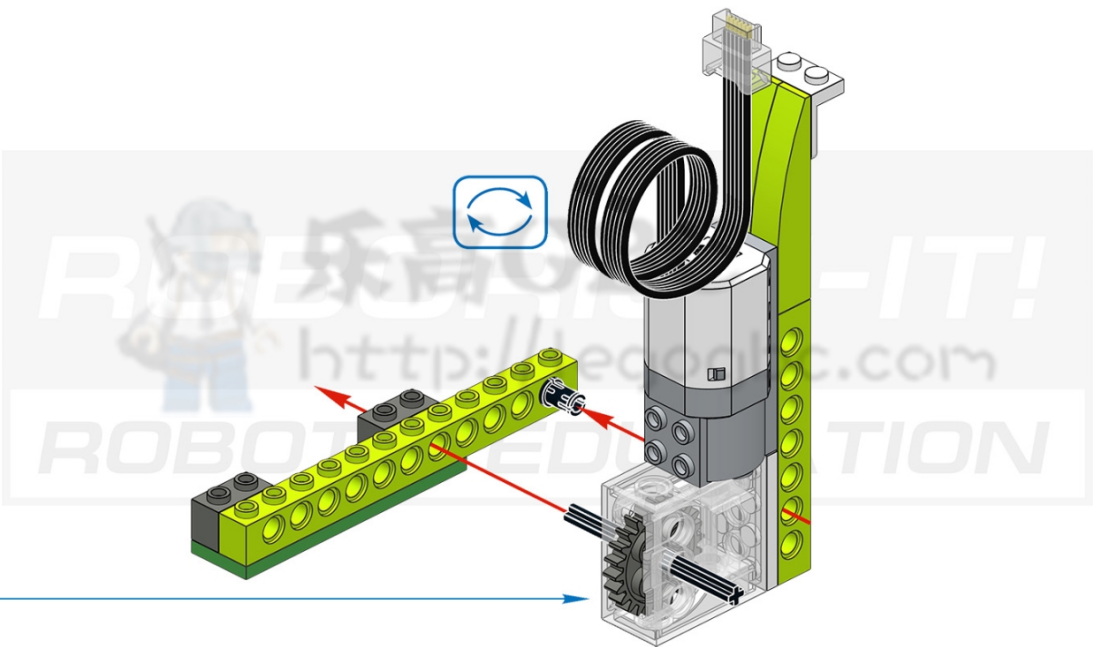
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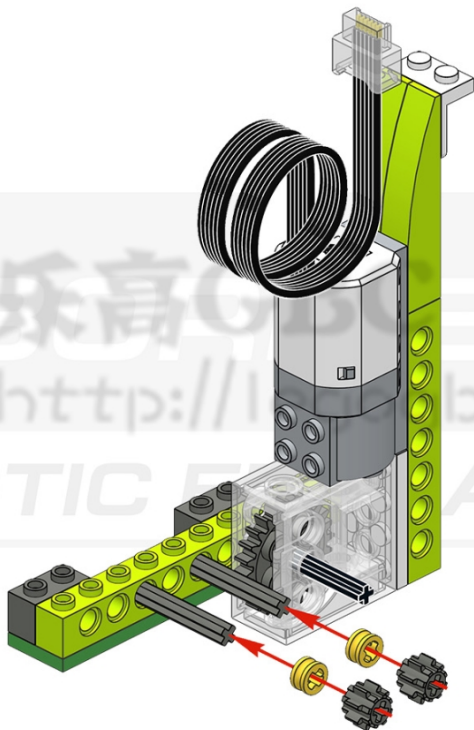


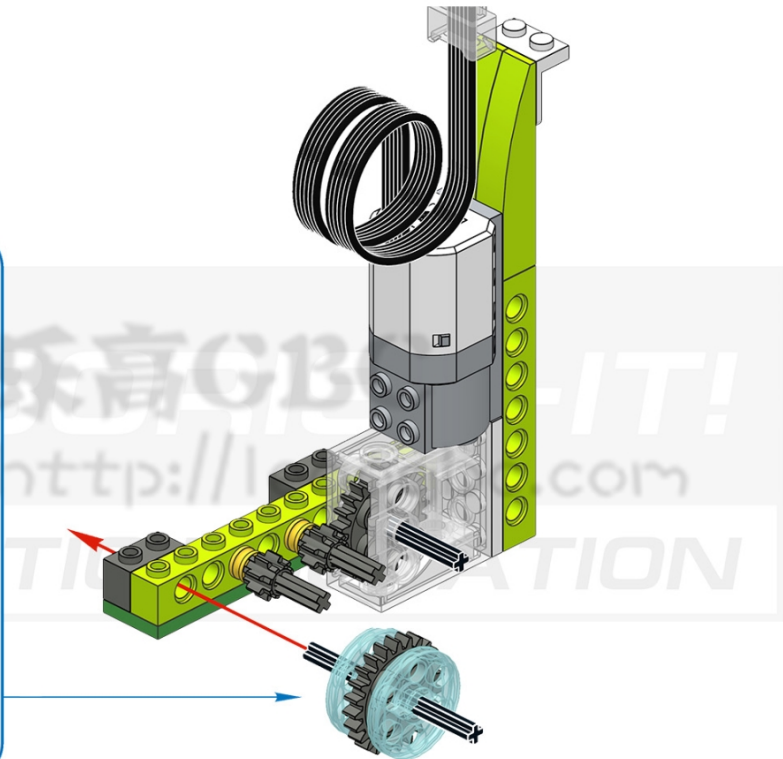
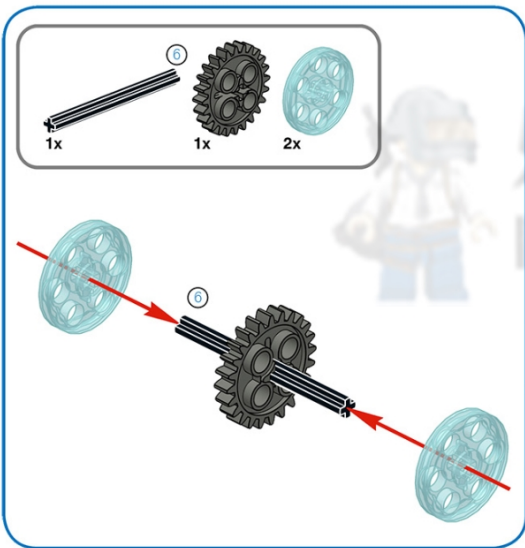
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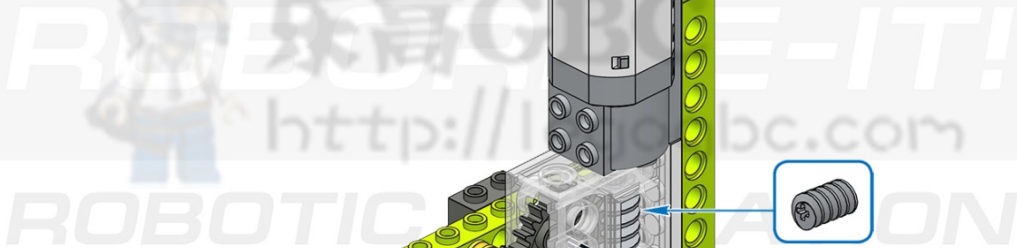


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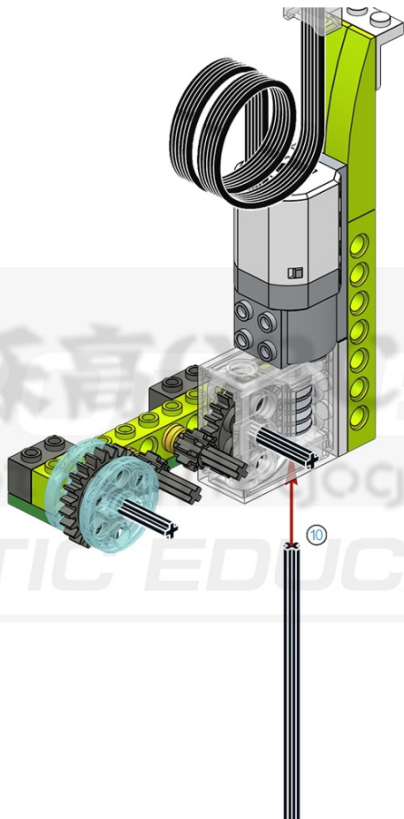








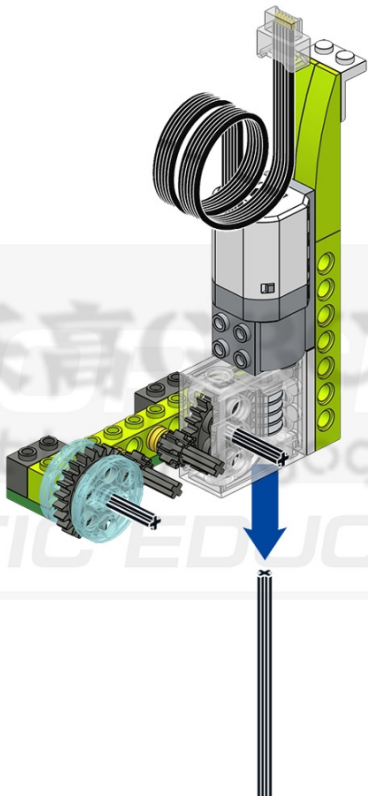
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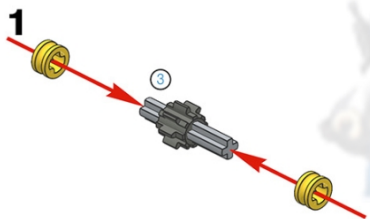
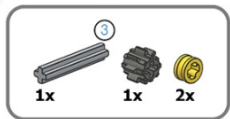


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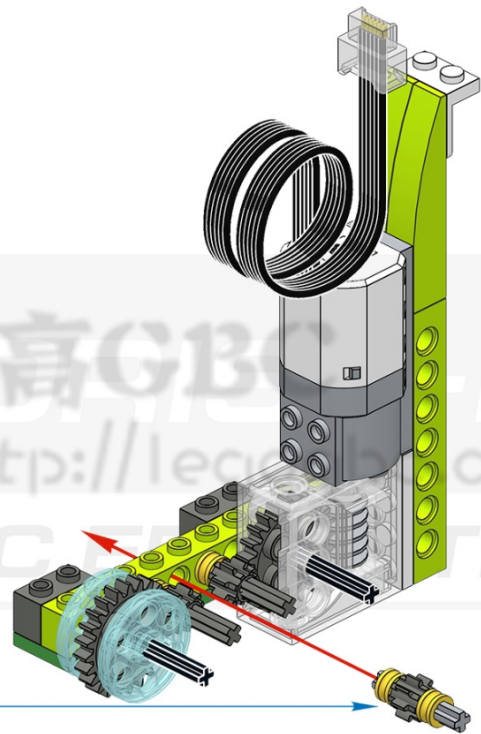
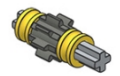
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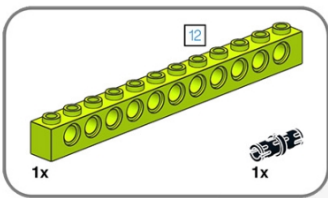




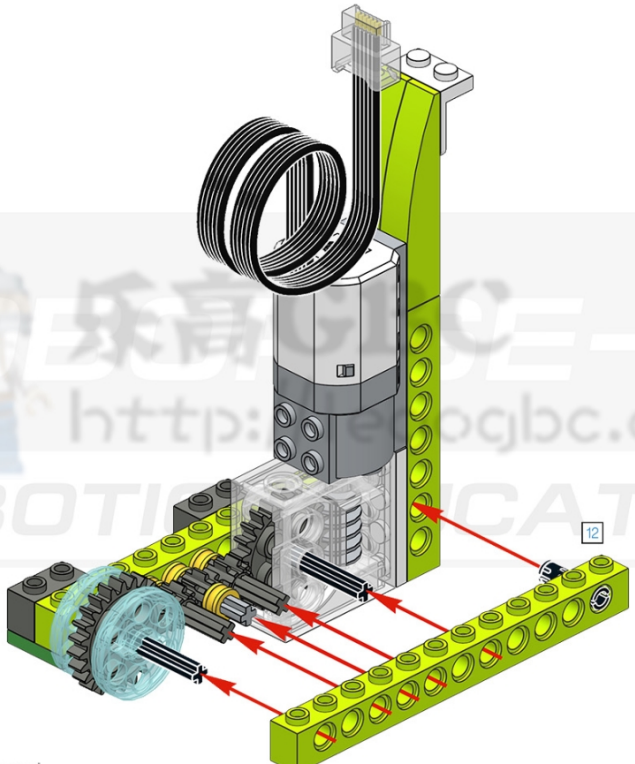
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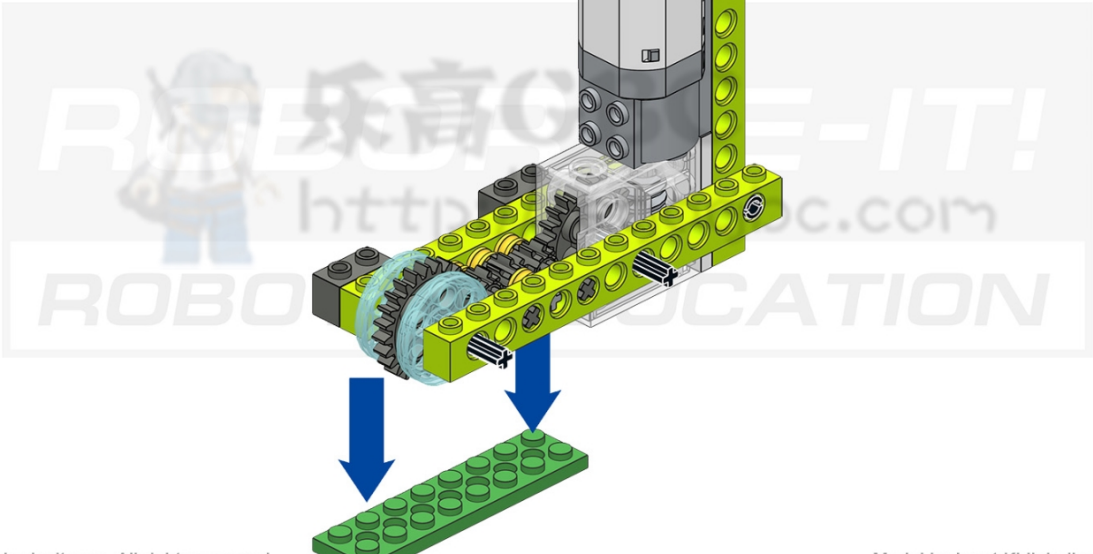


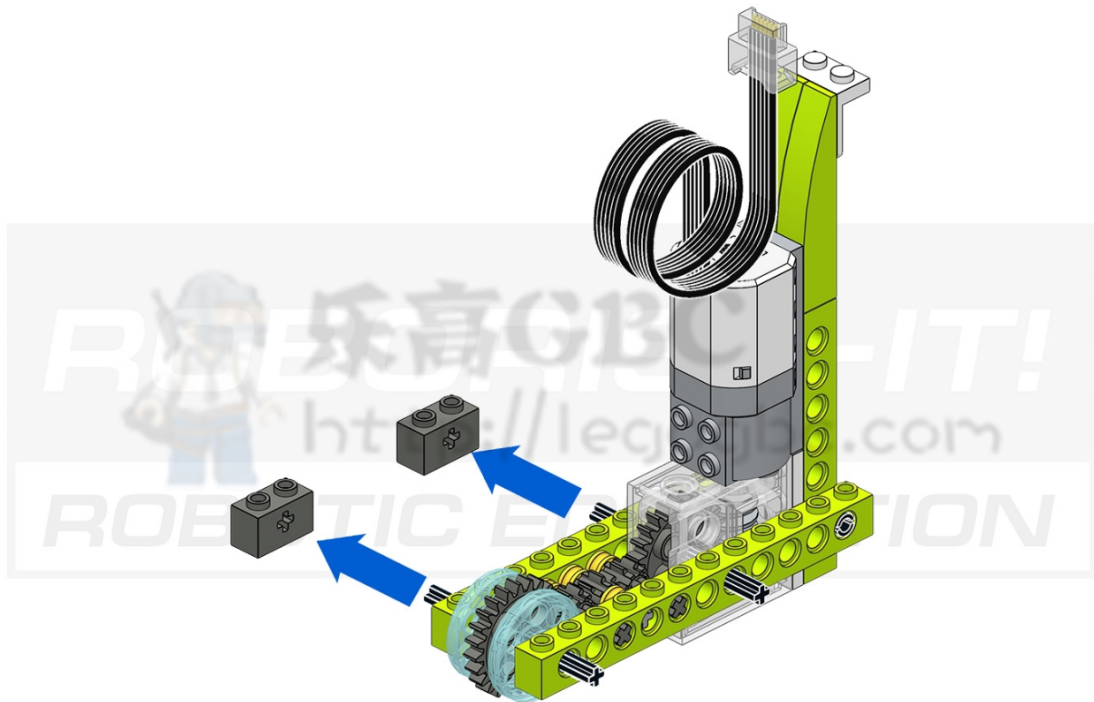
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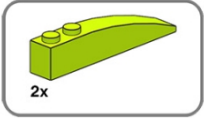


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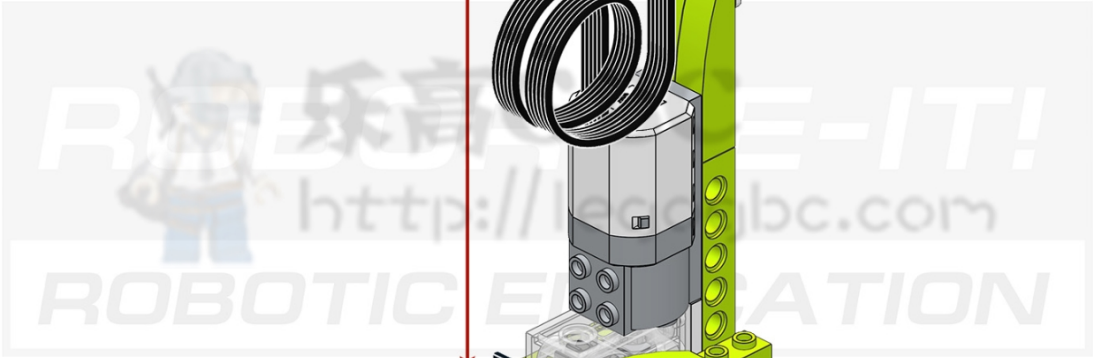
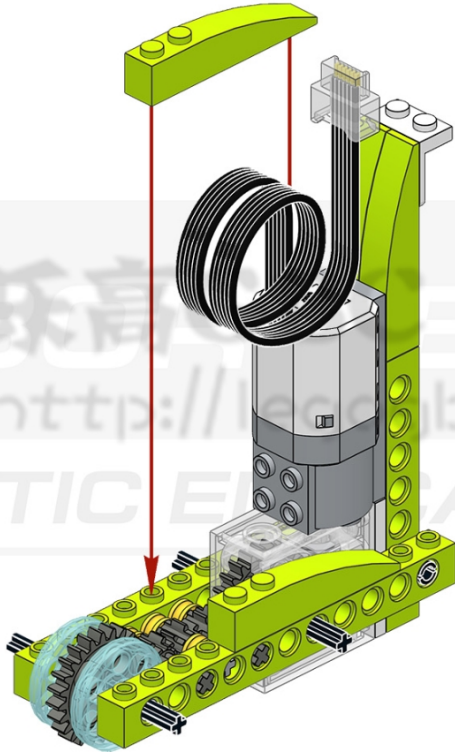
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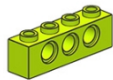






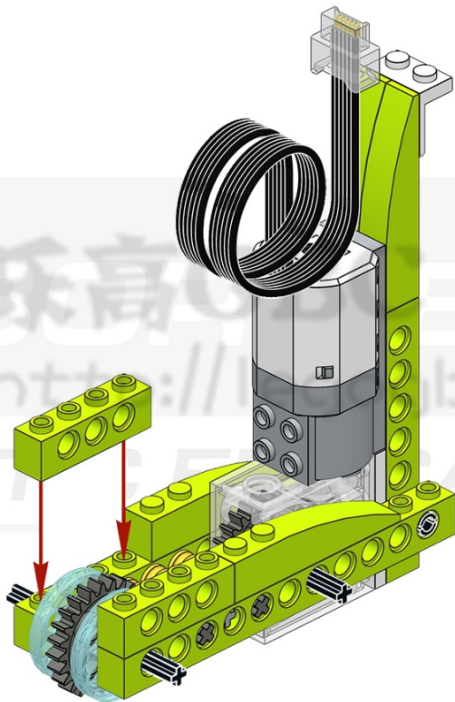
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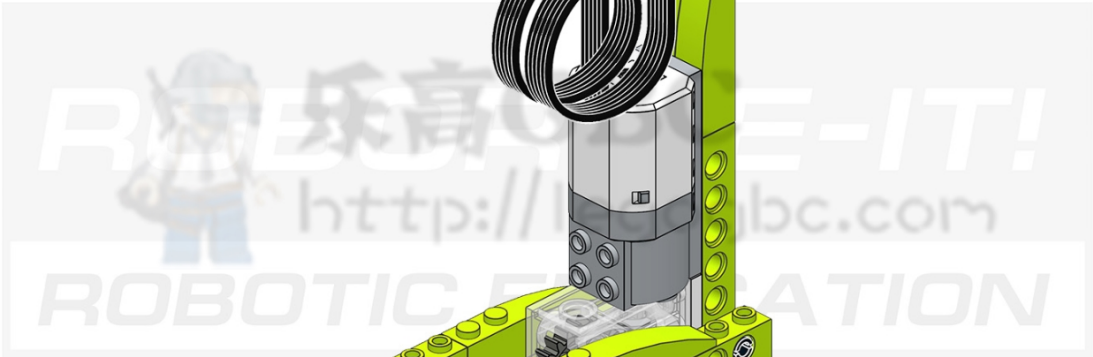
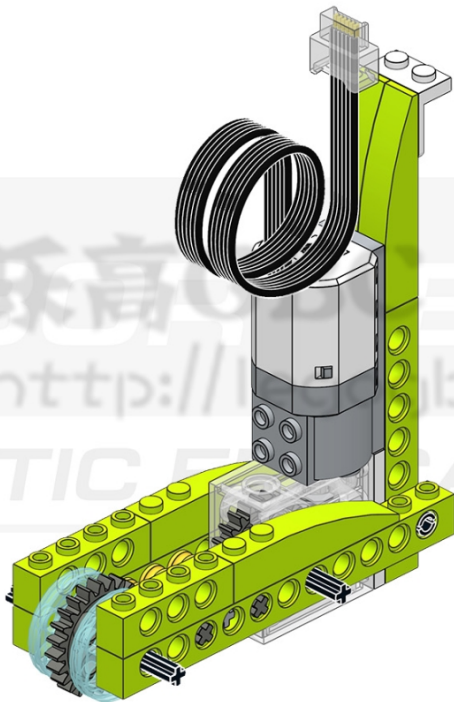


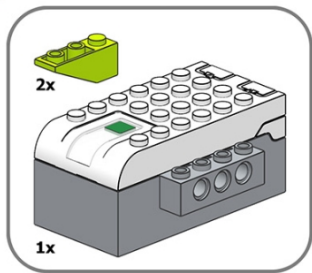
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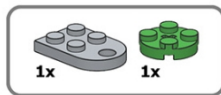
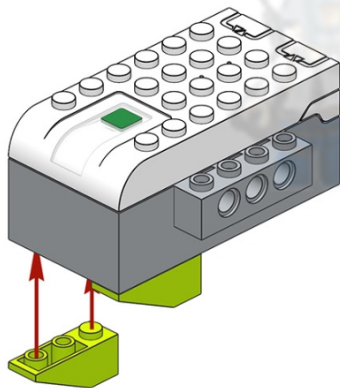


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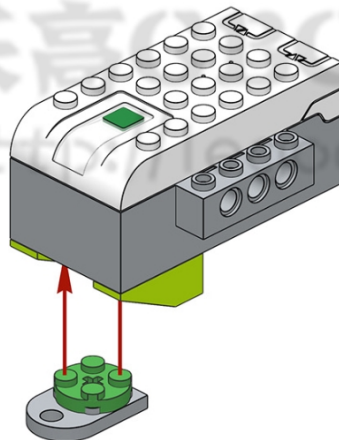




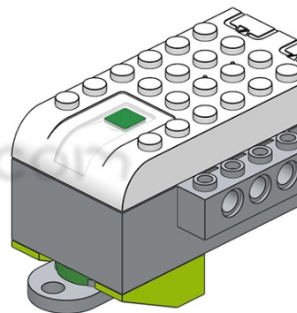
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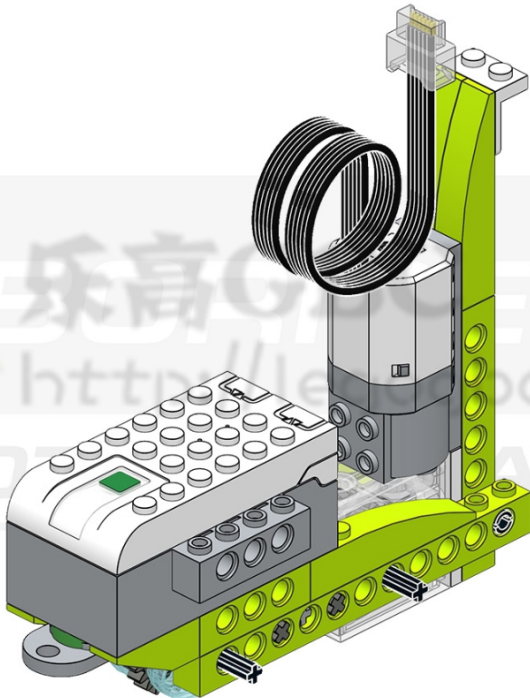


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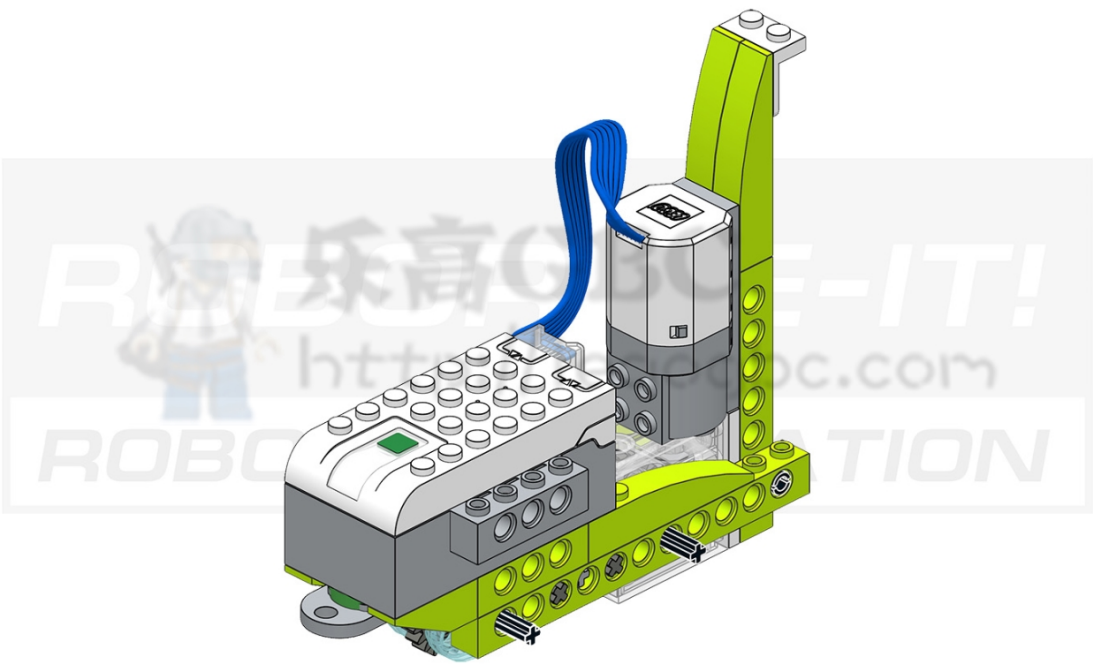


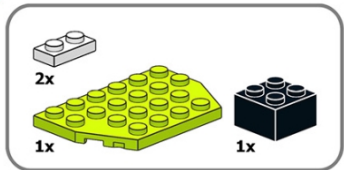
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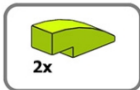
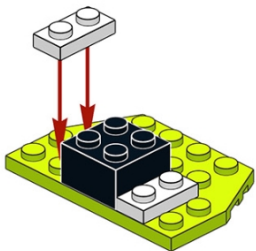


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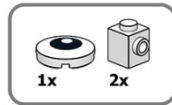
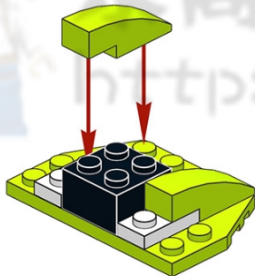




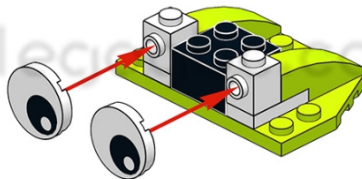
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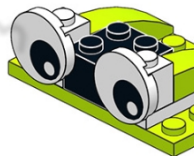
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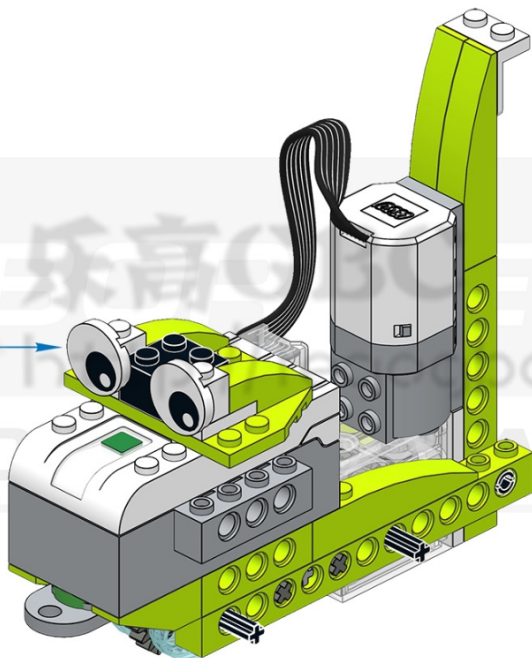


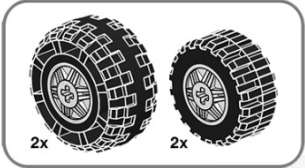
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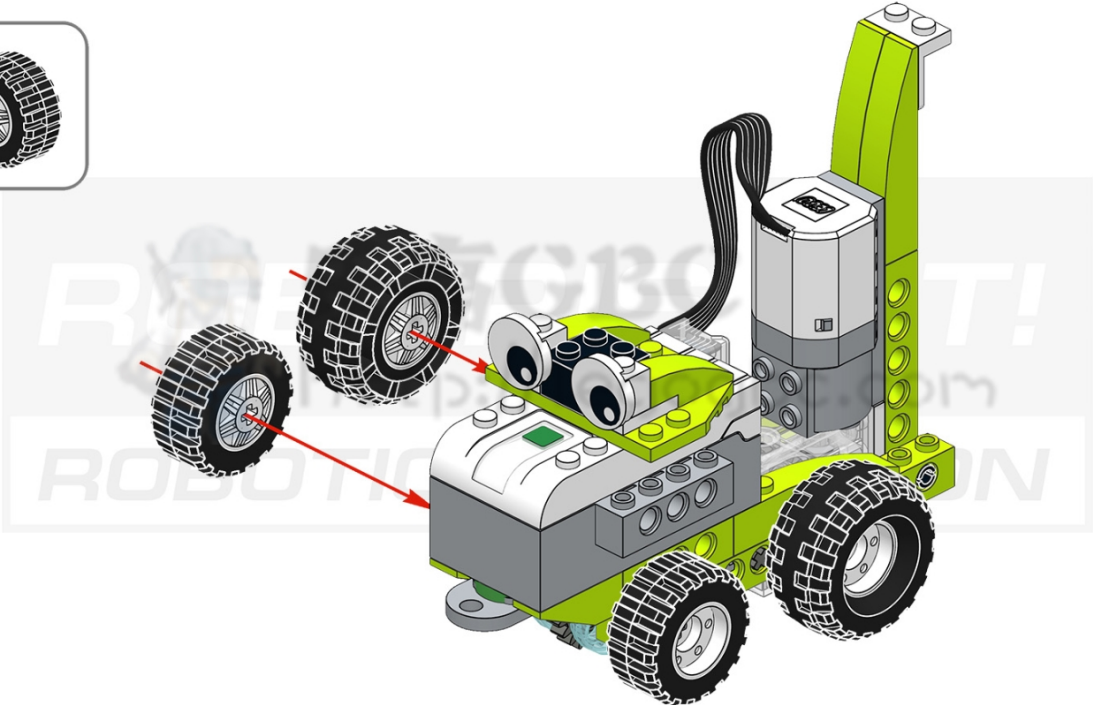
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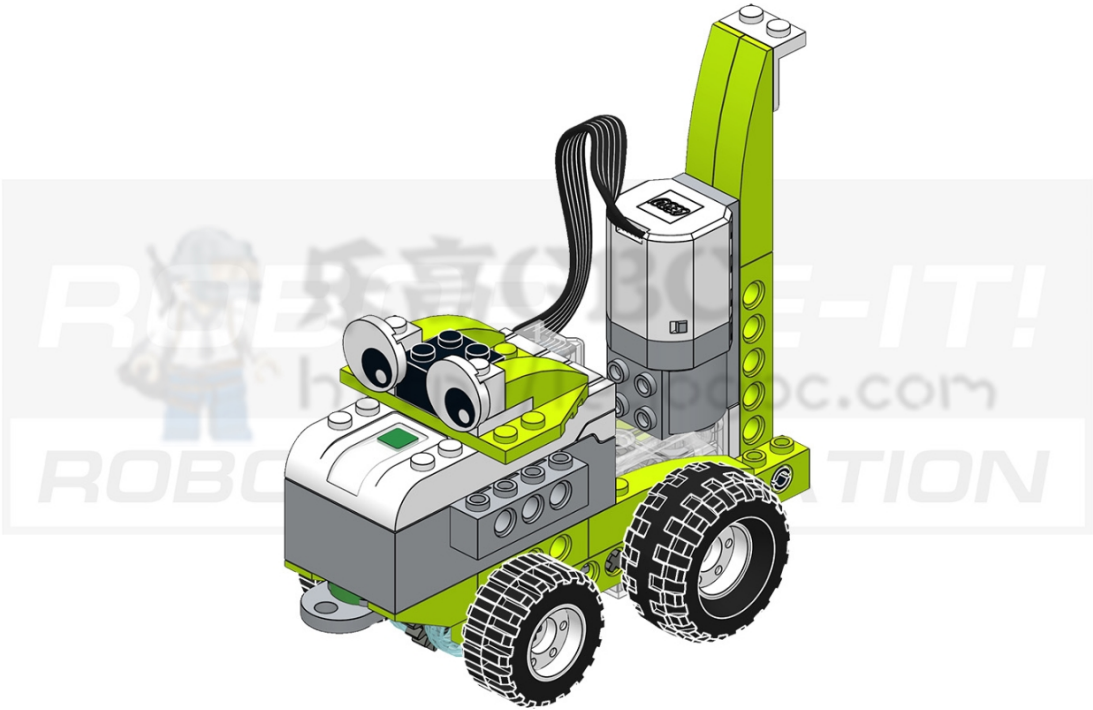






25







Tasks



Place the robot parts in the correct places



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Note!



The cables must not rub while the robot is moving!





Task 1



Program the movement of the robot forward and test the operation of the mechanism.





Discuss!



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Why do the legs create less pressure on the surface than the wheels?



Task 2



Replace the wheels of the robot with legs and check the walking of the robot.





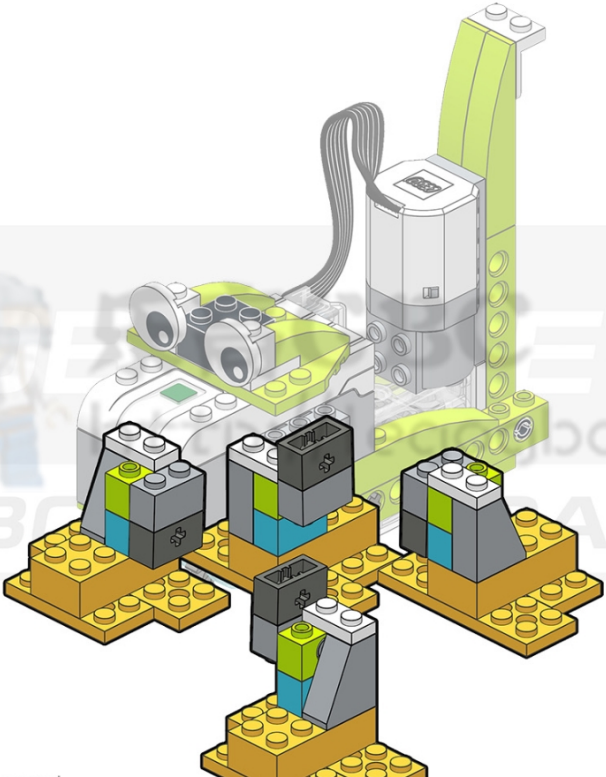
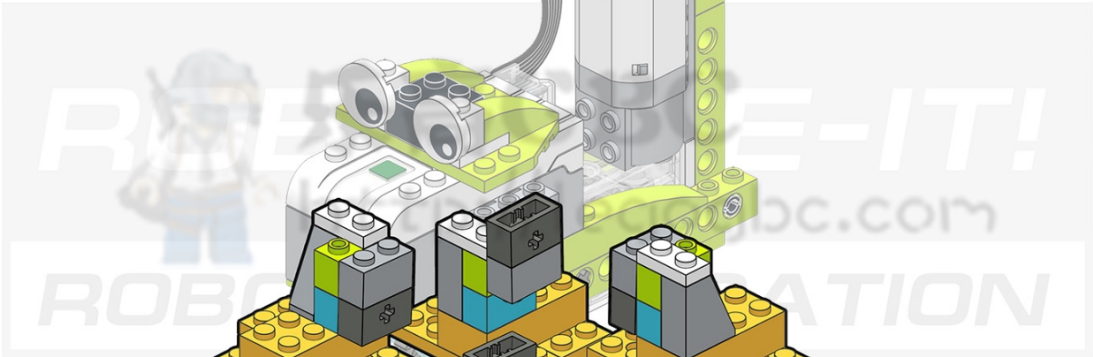
Walking version

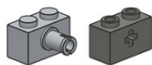


Replace the robot wheels with legs



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the instruction

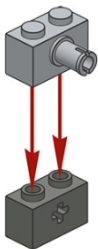




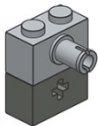
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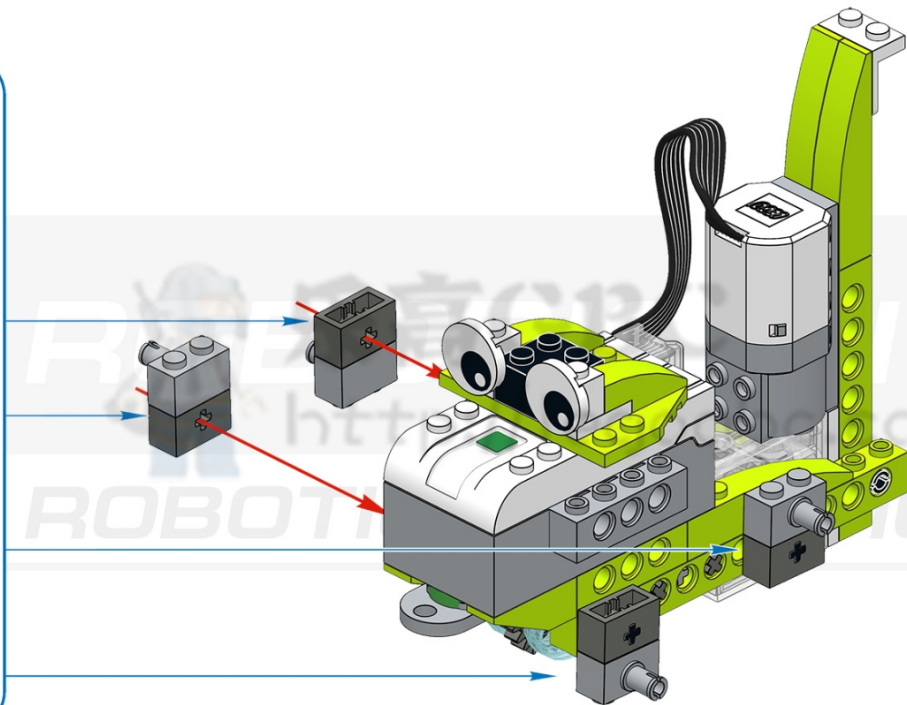
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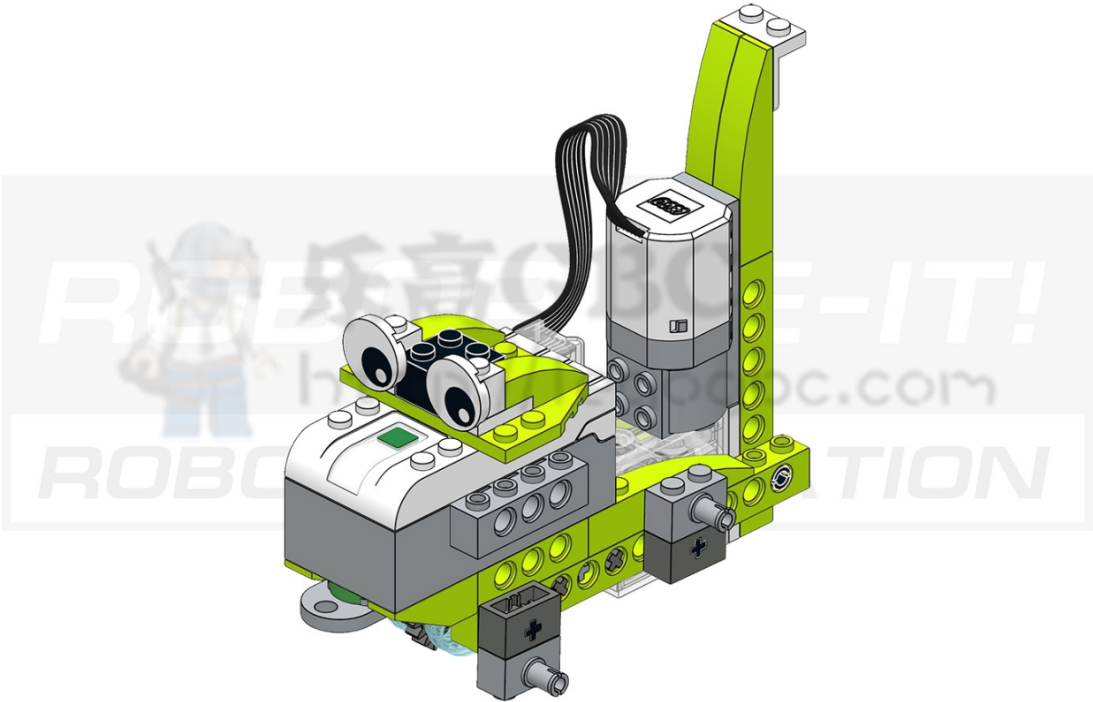


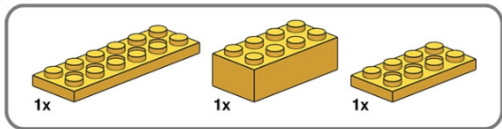
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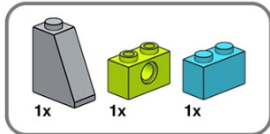
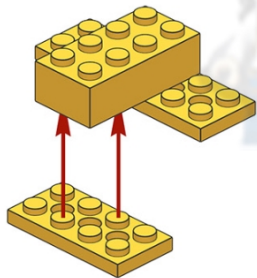
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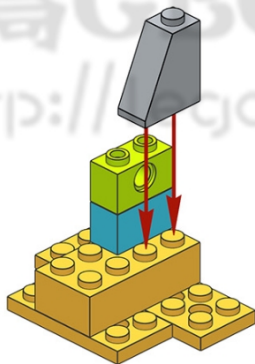




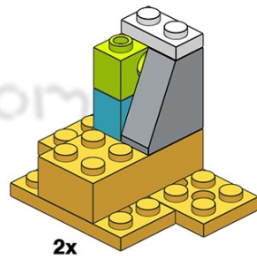
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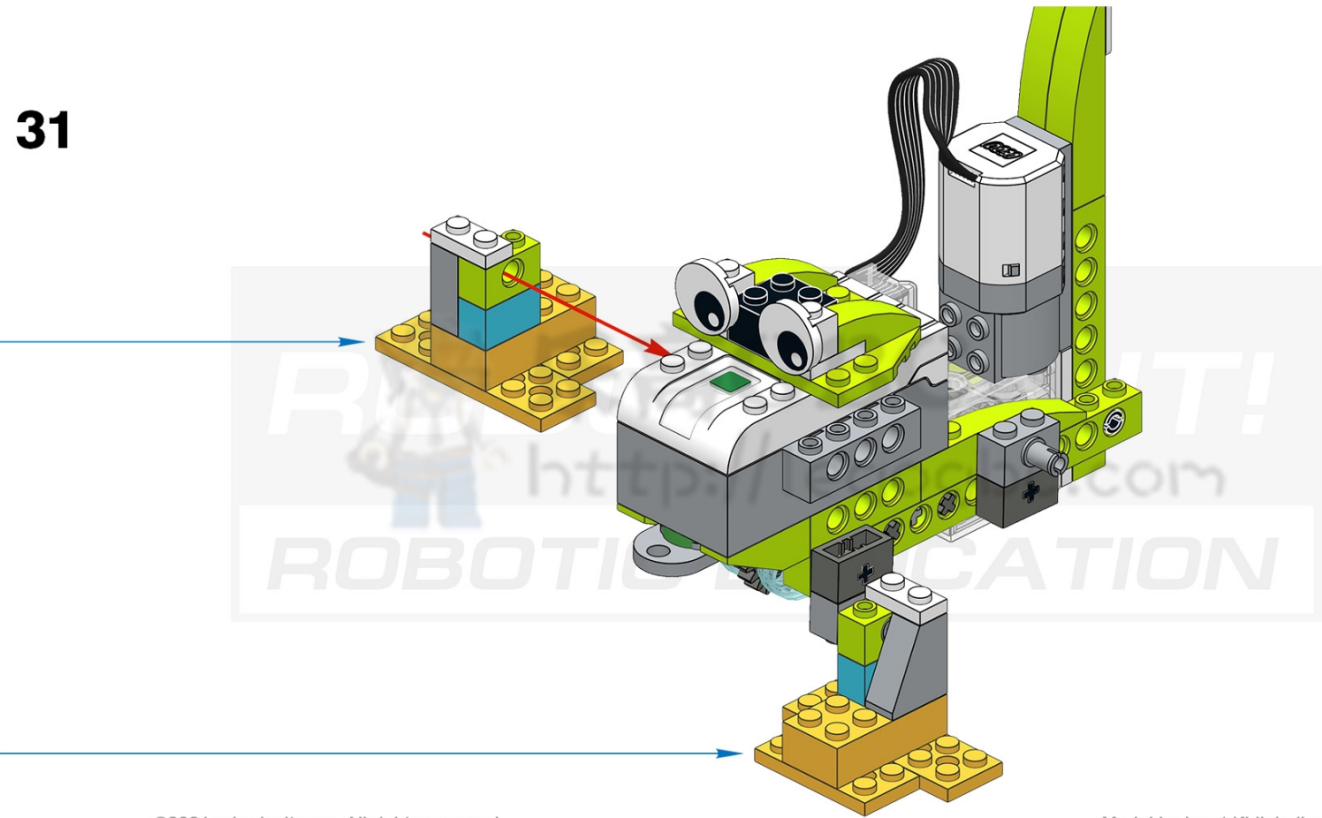
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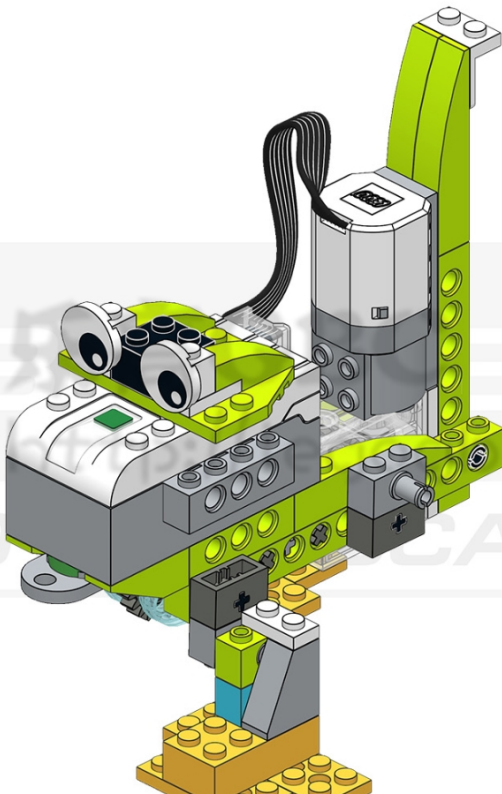
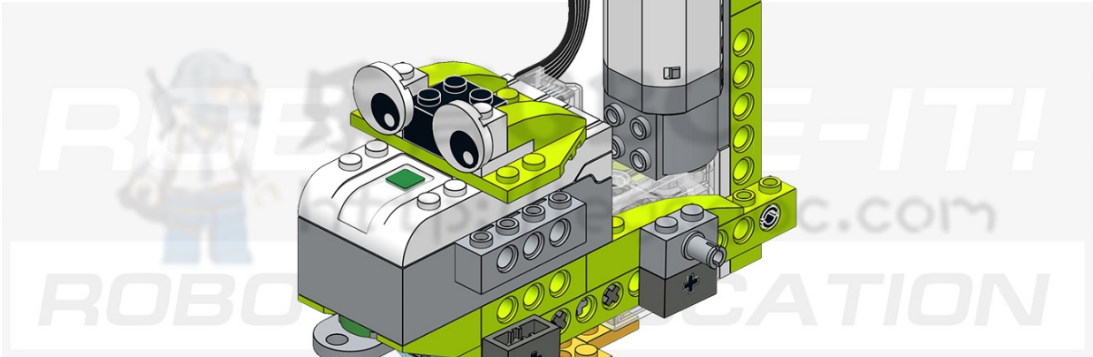


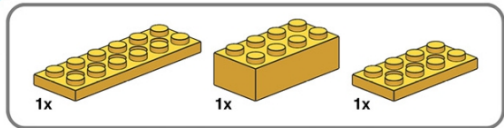
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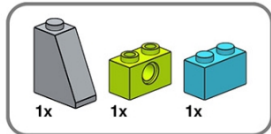
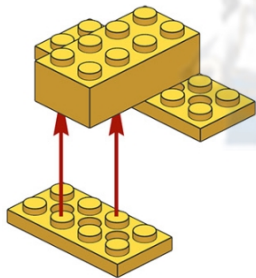
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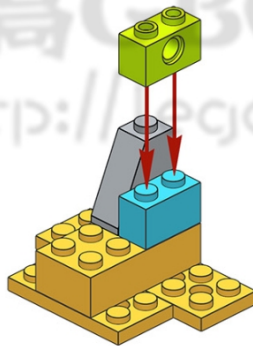




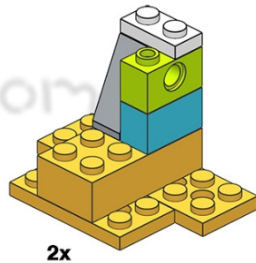
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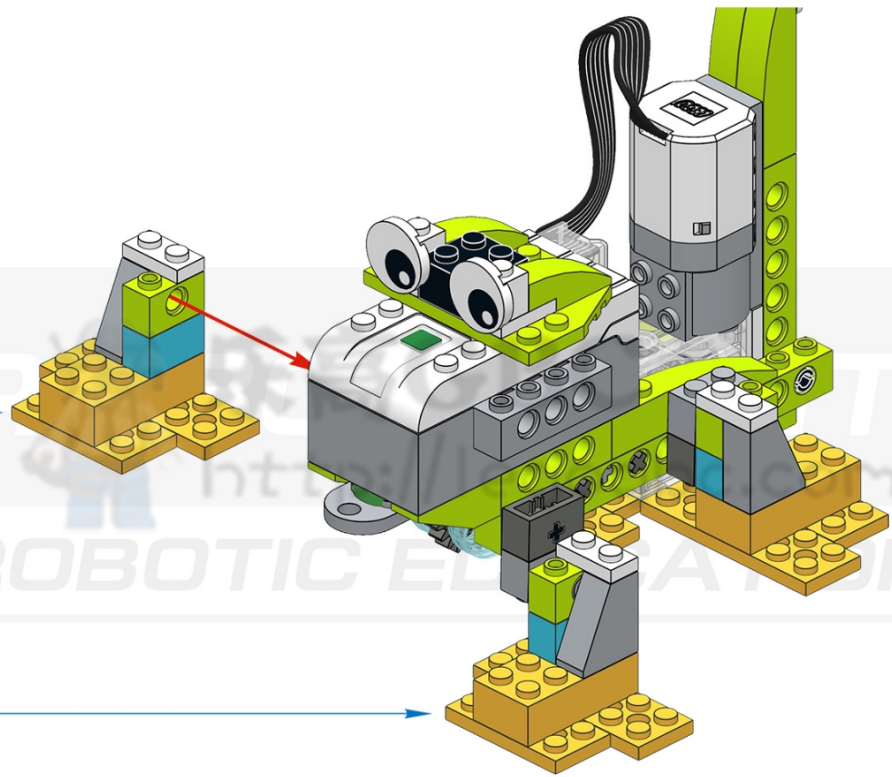


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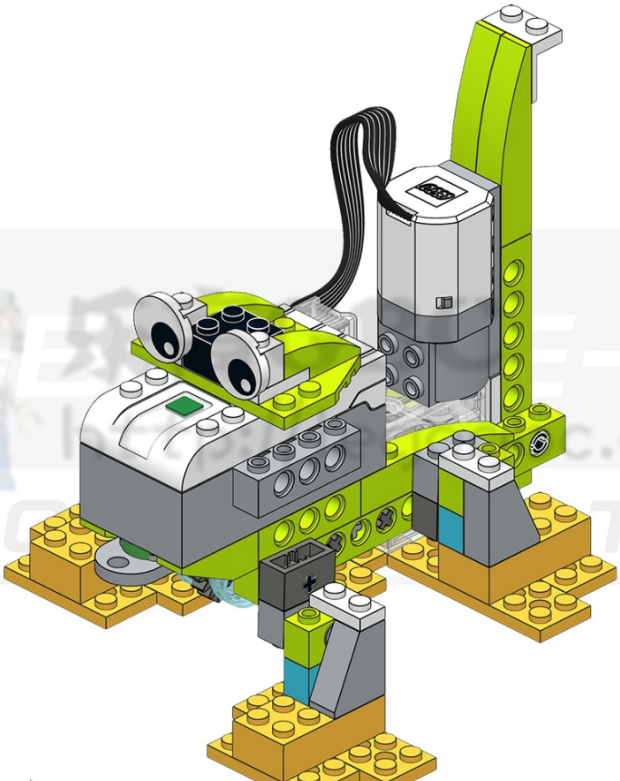
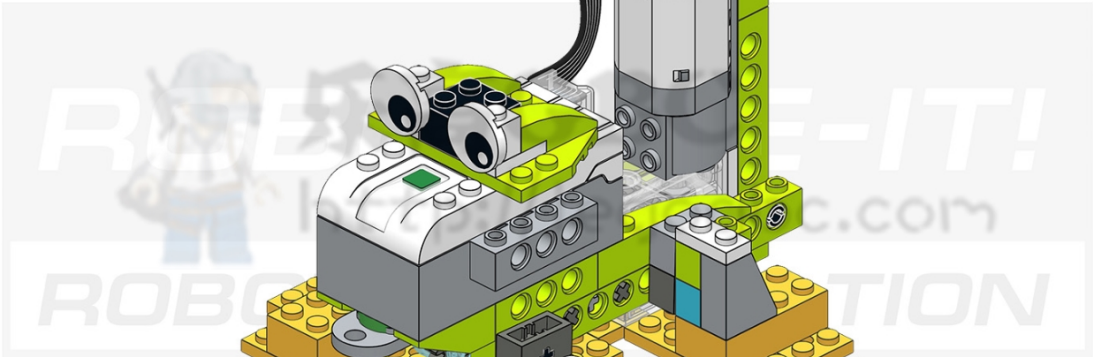


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Task 3



Equip the robot with a motion sensor to find plants from the Red Book and program it to move towards the plant.





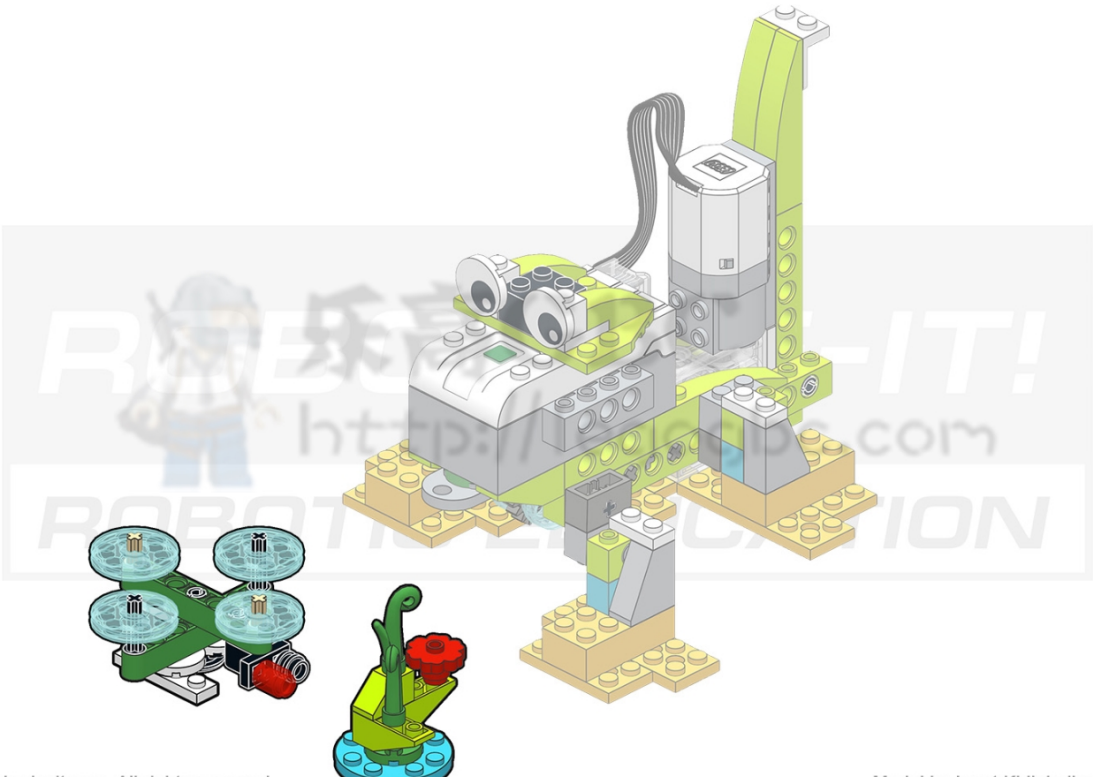
Drone and plant

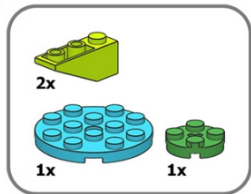


Build a recon drone and a plant from the Red Book.

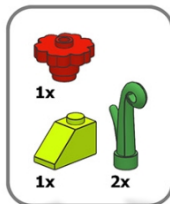
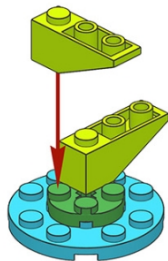


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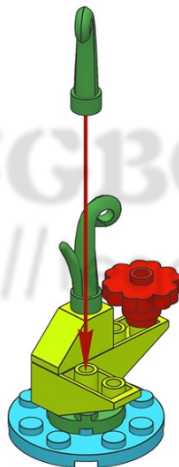




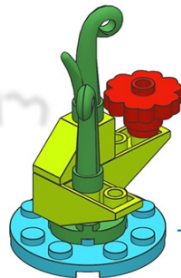
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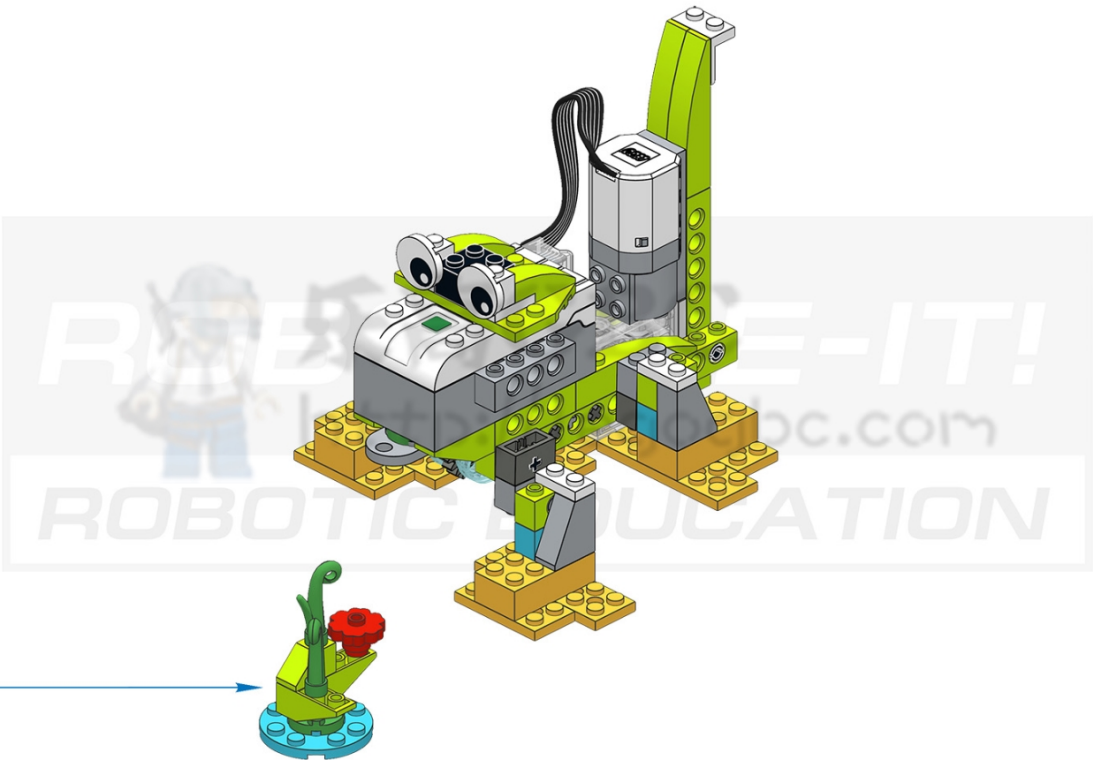


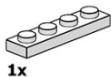
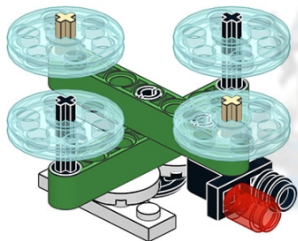
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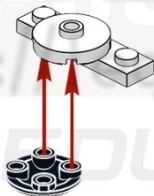


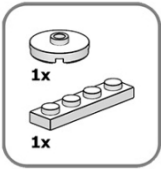
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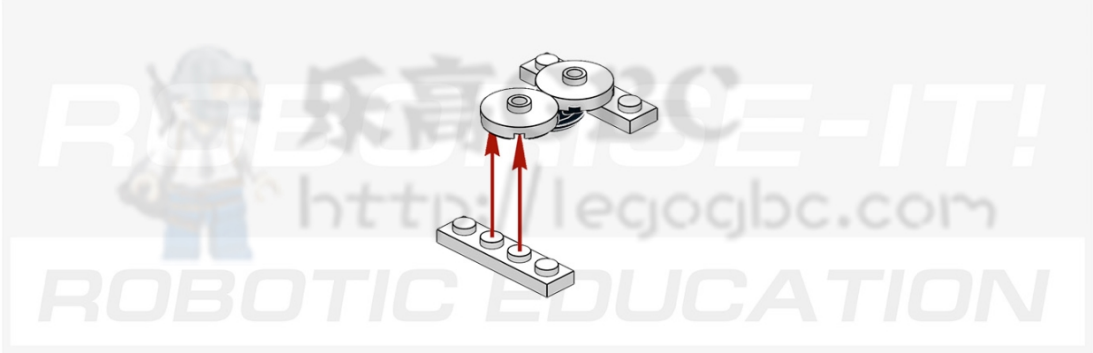
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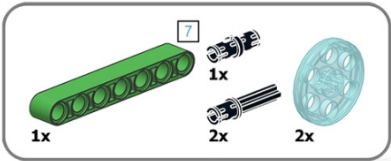
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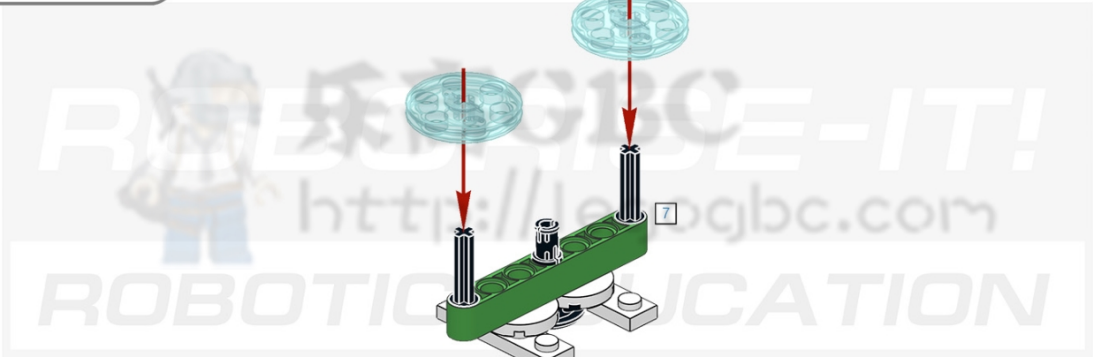


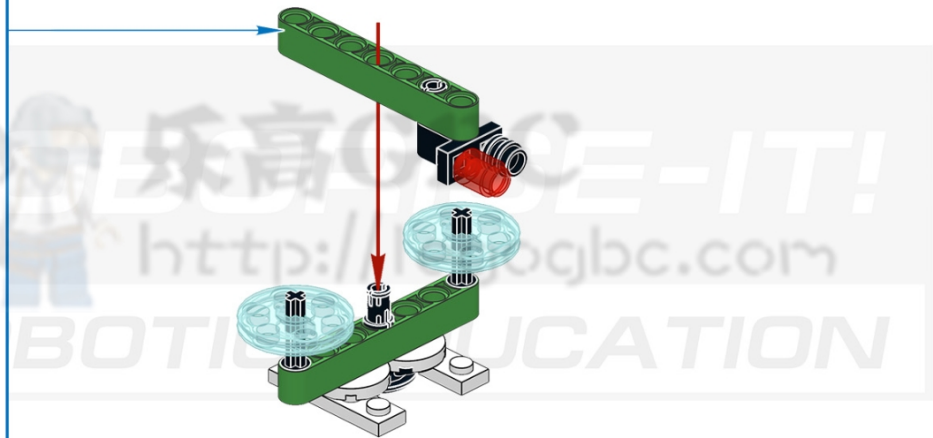
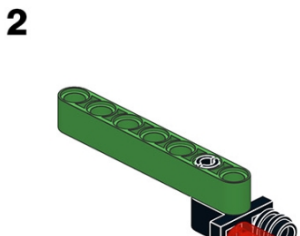
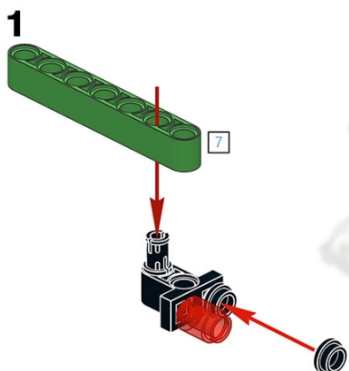
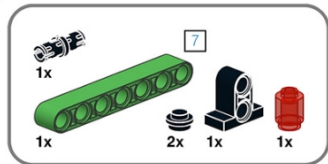
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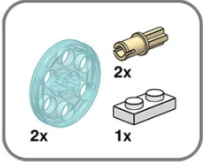




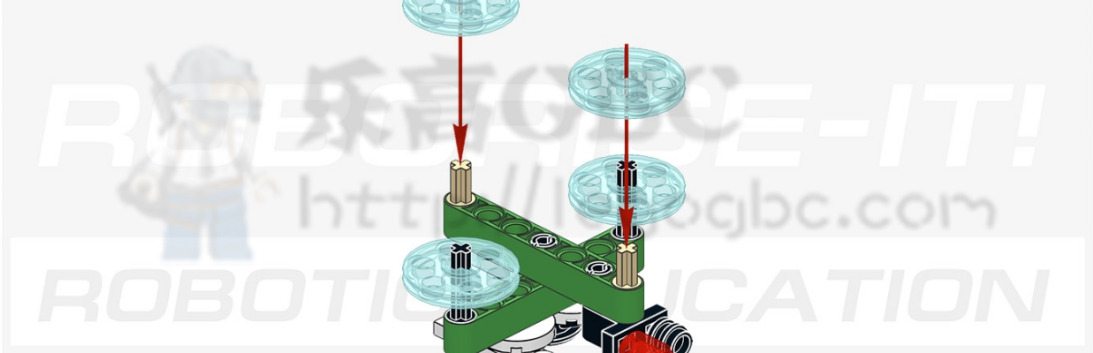
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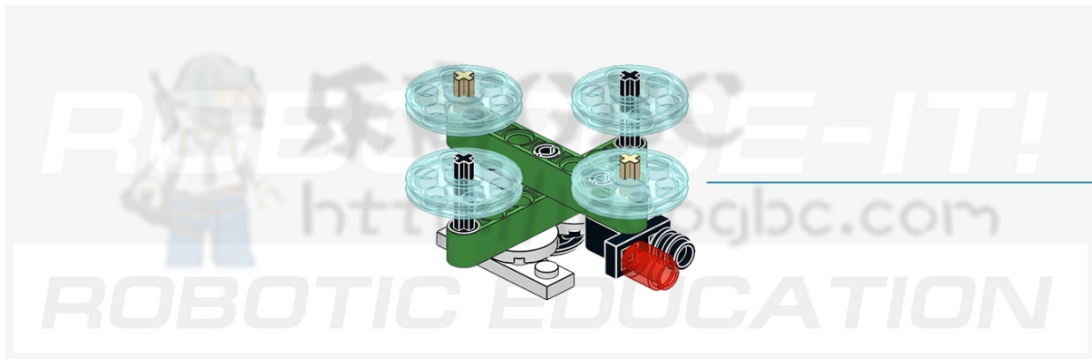


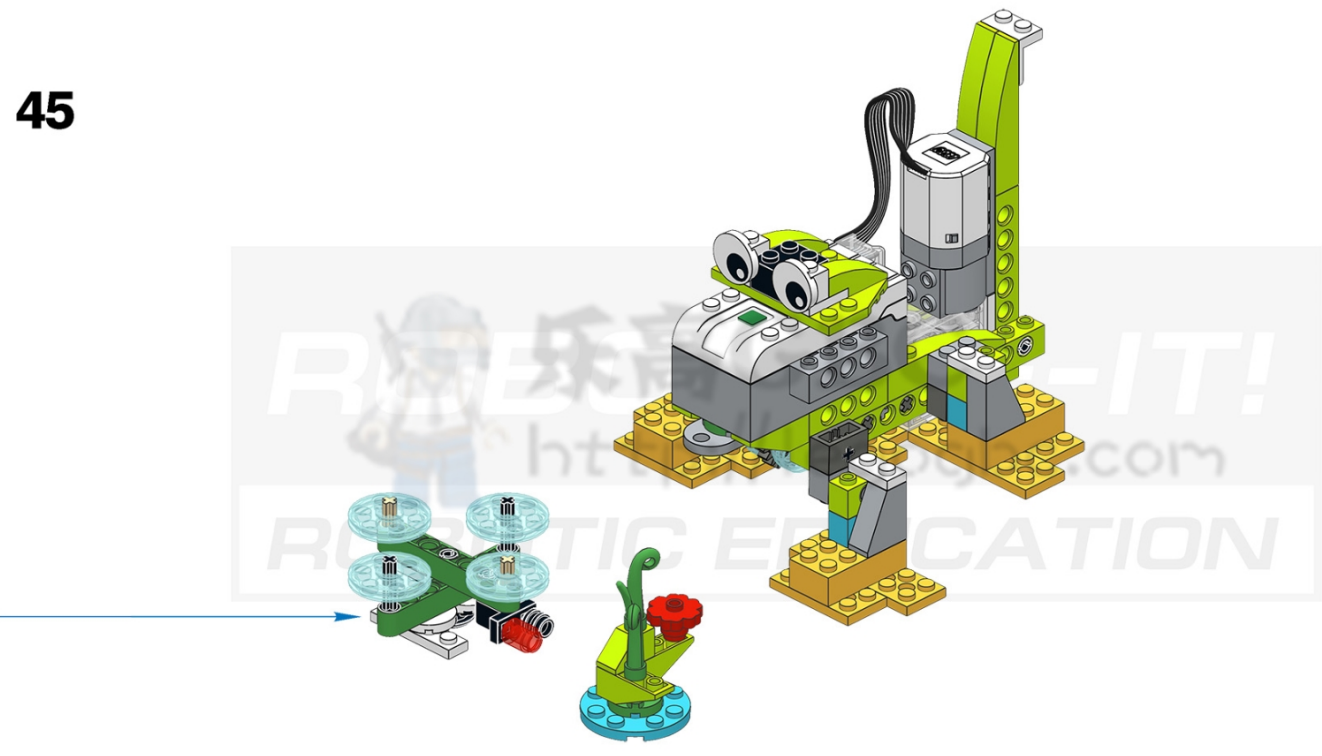




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Task 3. Program



Scratch

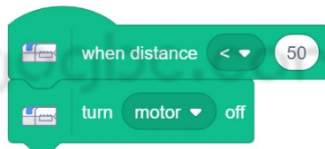
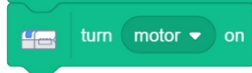
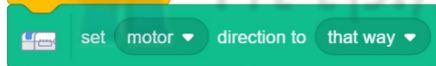
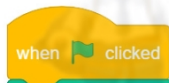


WeDo Software



Program the movement of the robot towards the plant

In the Scratch 3.0 programming environment, the program looks like this:





Task 3. Program



Scratch



WeDo Software



Program the movement of the robot towards the plant

In WeDo Software, a similar program looks like this:





Task 4



Change the position of the sensor and program the detection of the takeoff of the reconnaissance drone. After takeoff, the robot begins to receive route data and can start moving





Task 4. Program



Scratch



WeDo Software



Write the following program:

In the Scratch 3.0 programming environment, the program looks like this:





Task 4. Program



Scratch



WeDo Software



Write the following program:

In WeDo Software, a similar program looks like this:





Question

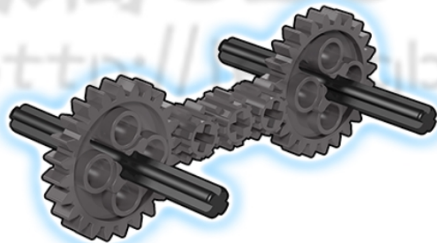


Which of the gears shown are idler gears?



乐高GBC

<http://gbc.com>





Question



Which part turns the rotation into raising and lowering the legs?





Question



Scratch



WeDo Software



Which program block allows the further execution of the program when the threshold is exceeded by the distance to the obstacle?





Question



Scratch



WeDo Software



Which of the wait blocks skips the execution of the program when the distance to the obstacle increases?





Discuss!

- Why is it necessary to monitor the state of nature of forests?
- Why do the legs create less pressure on the surface than the wheels?
- Why is less pressure on the surface better than high pressure in this case?
- What additional functions of the robot have you programmed?





Your achievements

Total:

0



1



2



3



4

