

## World Robot Olympiad 2024

### RoboMission – Junior

#### **Additional Challenge “Windmill” for the International Final October 8<sup>st</sup> 2024**

*It is not necessary to solve this extra challenge to participate in the International Final!*

There is one windmill on the game field that is always placed on the red umbrella on the right side of the bridge on the beach (see photo). It is parallel orientated to the long side of the field and one blade should always look completely to the sky.

**It is the task to bring the windmill to the wind park area (square with the light grey line on the sea). Full points are awarded if the windmill is completely in the wind park area (the white line counts towards the area).**



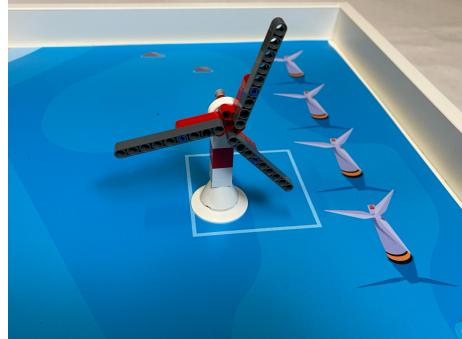
Additional scoring lines will be added to the scoring sheet:

Windmill is touching the wind park area	5	
Windmill is completely in the wind park area	7	
<b>New maximum score</b>	<b>127</b>	

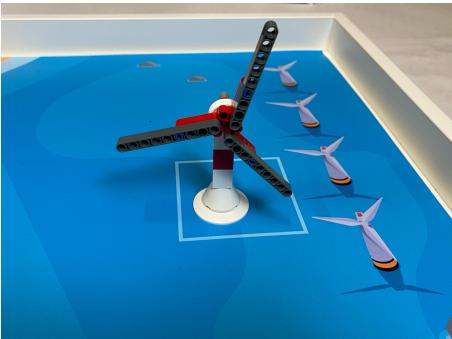
## Scoring Interpretation



5 points (touching)



7 points (completely in, white line counts as completely in)



7 (completely in)



0 points – have you ever seen a windmill lying like this?

# New Full Scoring Sheet

Team name: \_\_\_\_\_

Round: \_\_\_\_\_

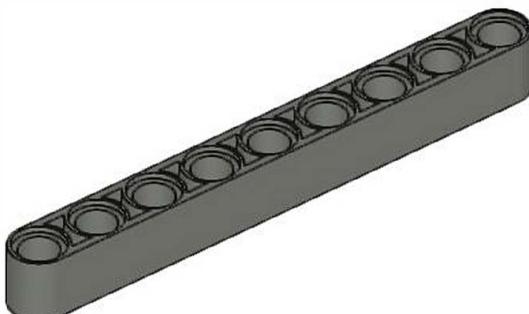
Tasks	Each	Max.	#	Total
<b>Create new green areas</b>				
<i>Maximum one lake element and two green elements count per park area. Objects must stand upright.</i>				
Lake or green element partly in a green park area	4			
Lake or green element completely in a green park area	<b>8</b>	<b>48</b>		
<b>Greening houses</b>				
<i>Maximum one green starter set per area counts. Door is considered closed if it is in top-view inside the grey area.</i>				
Green starter set partly in grey area of a house	4			
Green starter set completely in a grey area of a house ( <i>the green area inside the middle house belongs to the grey area</i> )	<b>8</b>	<b>24</b>		
Additionally: Green starter set is inside the house and door closed		<b>8</b>		
<b>Electrical charging and connection</b>				
E-Bike is completely inside the charging area A	<b>7</b>	<b>14</b>		
Cable is touching the charging area B	5			
Cable is completely the charging area B		<b>11</b>		
<b>Bonus for Fences &amp; Apartment houses</b>				
Apartment house is not damaged or moved	<b>3</b>	<b>6</b>		
Fence is not damaged or moved	<b>3</b>	<b>9</b>		
<b>International Final: Windmill</b>				
Windmill is touching the wind park area	5			
Windmill is completely in the wind park area		<b>7</b>		
<b>Maximum Score</b>		<b>127</b>		
<b>Surprise Rule</b>				
<b>Total Score in this run</b>				
<b>Time in full seconds</b>				



9x  
2780  
Black



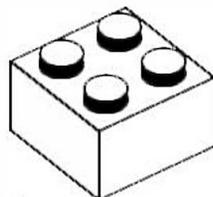
1x  
3705  
Black



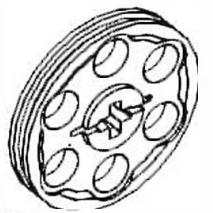
3x  
40490  
Dark Bluish Gray



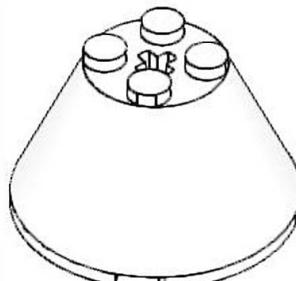
1x  
3713  
Light Bluish Gray



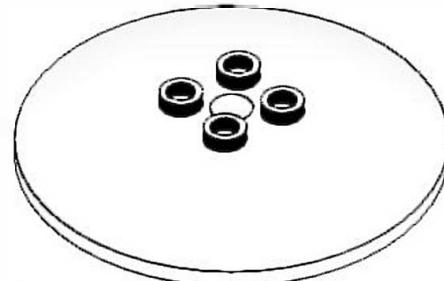
4x  
3003  
White



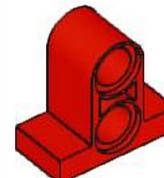
2x  
4185  
White



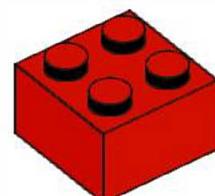
1x  
3943b  
White



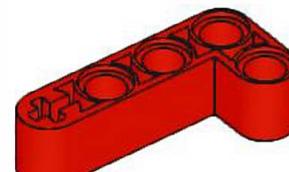
1x  
44375a  
White



2x  
32530  
Red



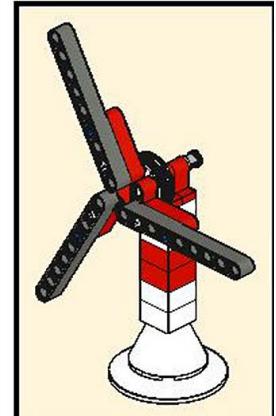
2x  
3003  
Red



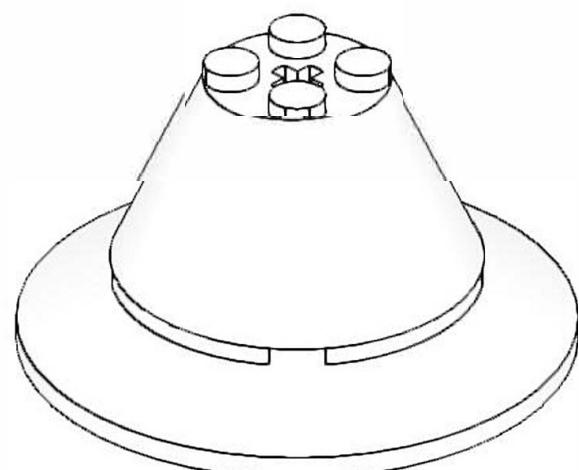
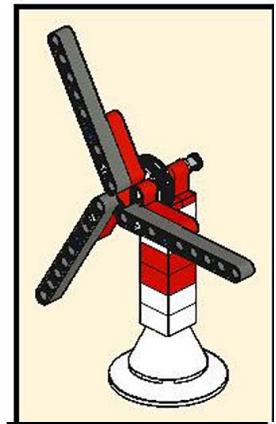
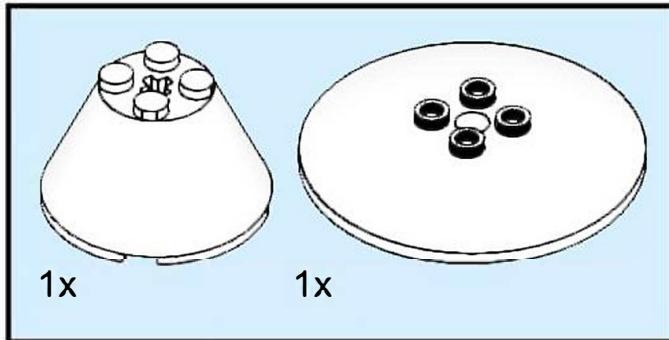
3x  
32140  
Red



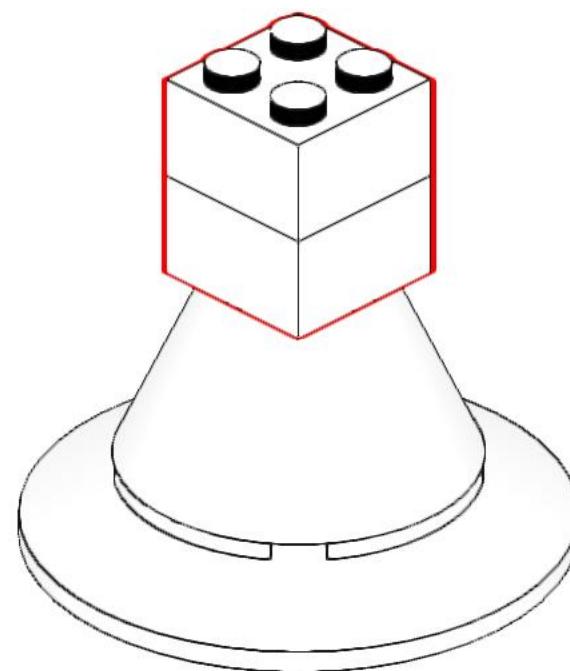
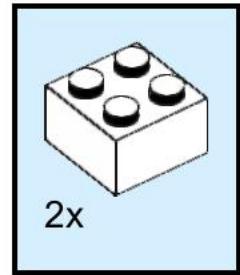
3x  
43093  
Blue



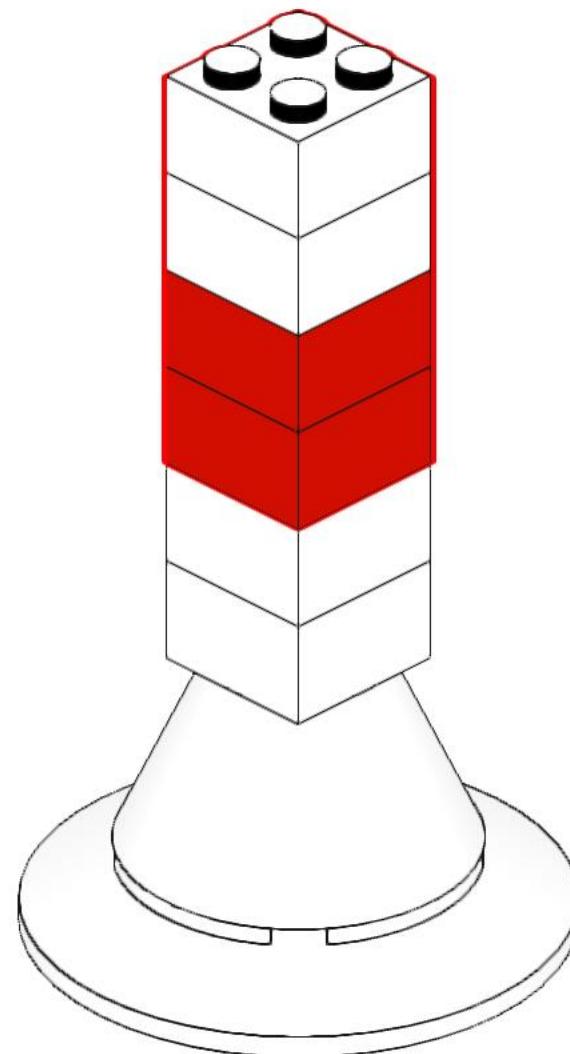
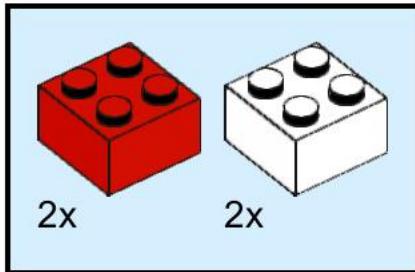
**1**



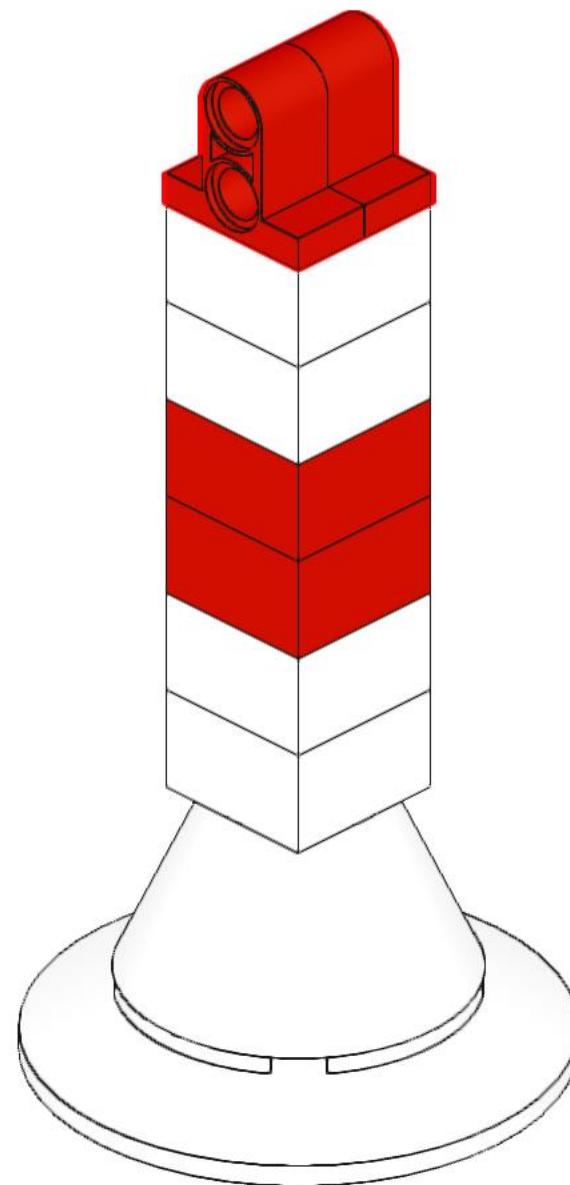
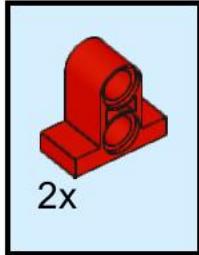
**2**



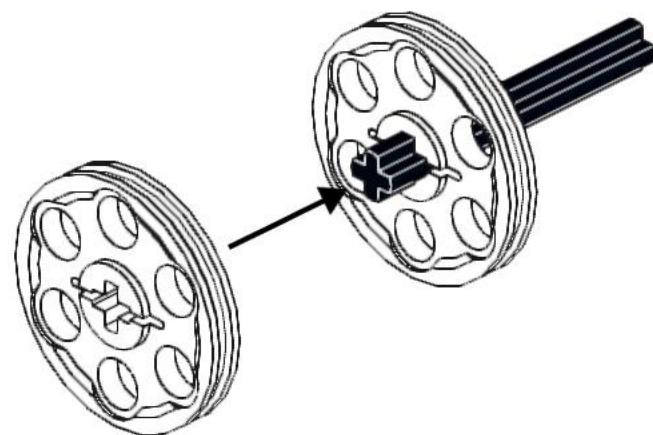
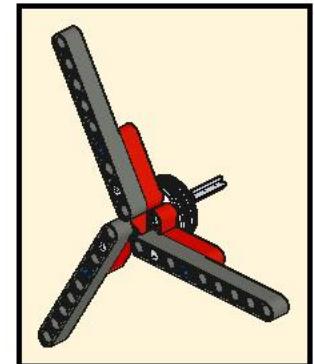
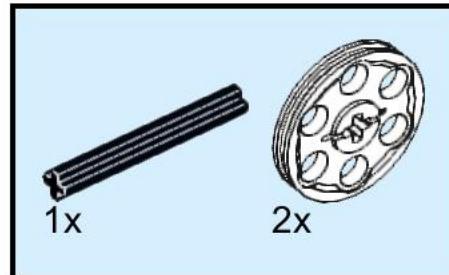
**3**



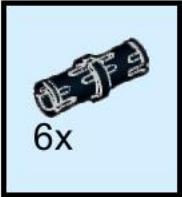
**4**



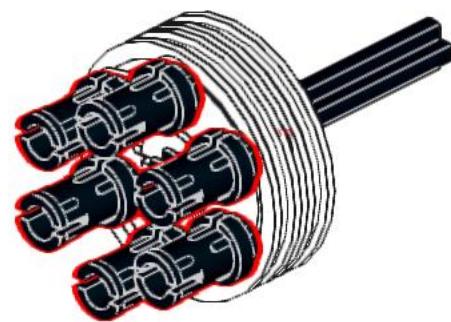
**5**



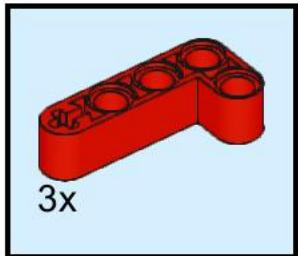
**6**



6x



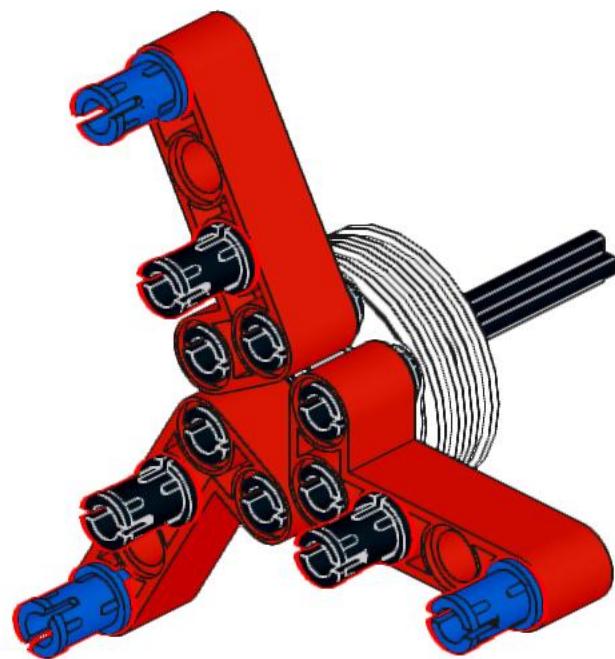
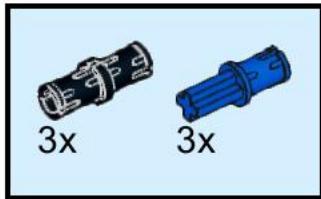
7



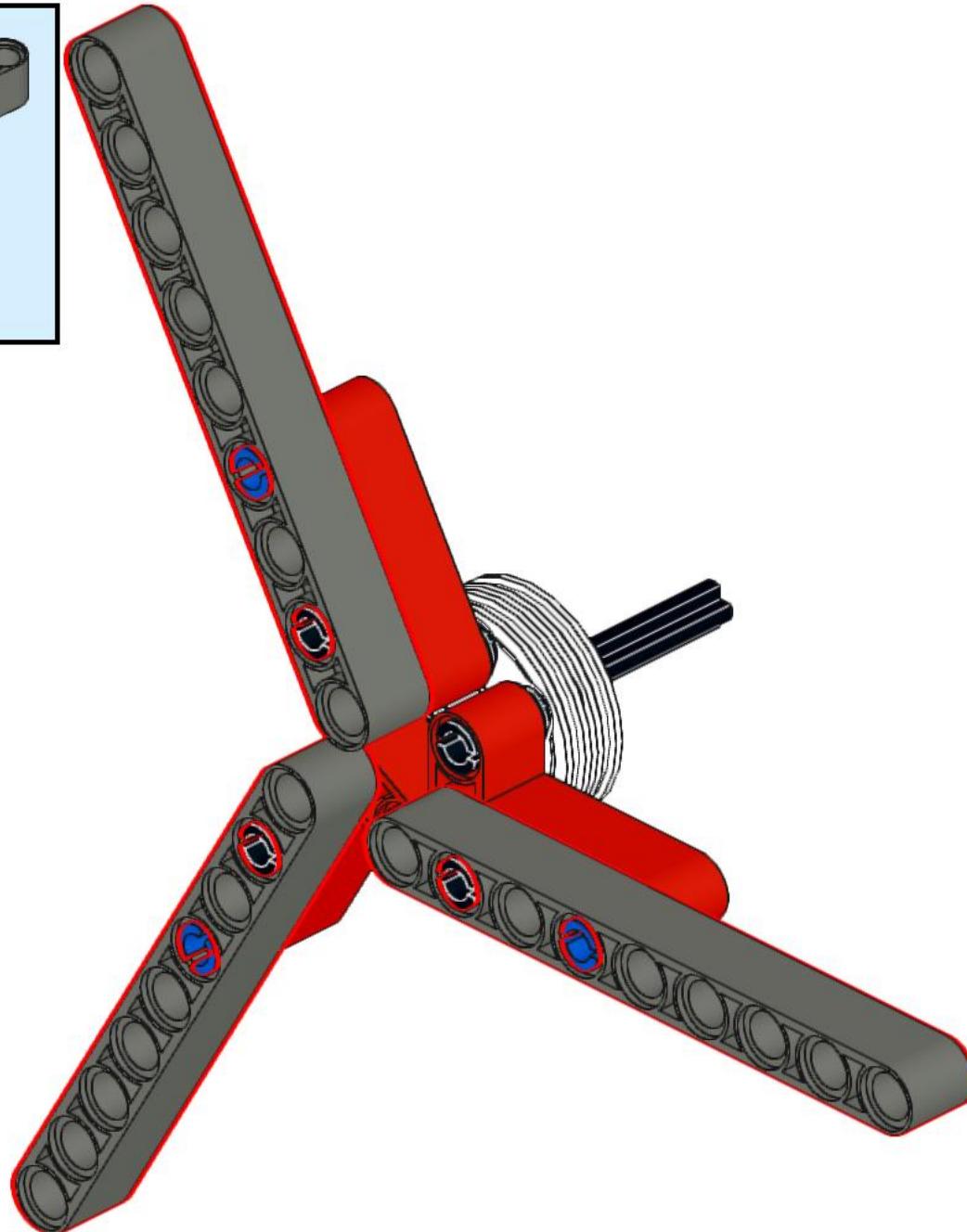
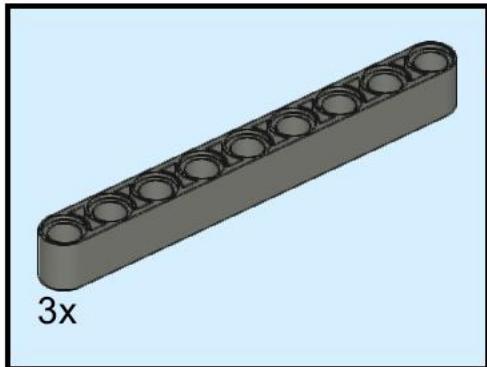
3x



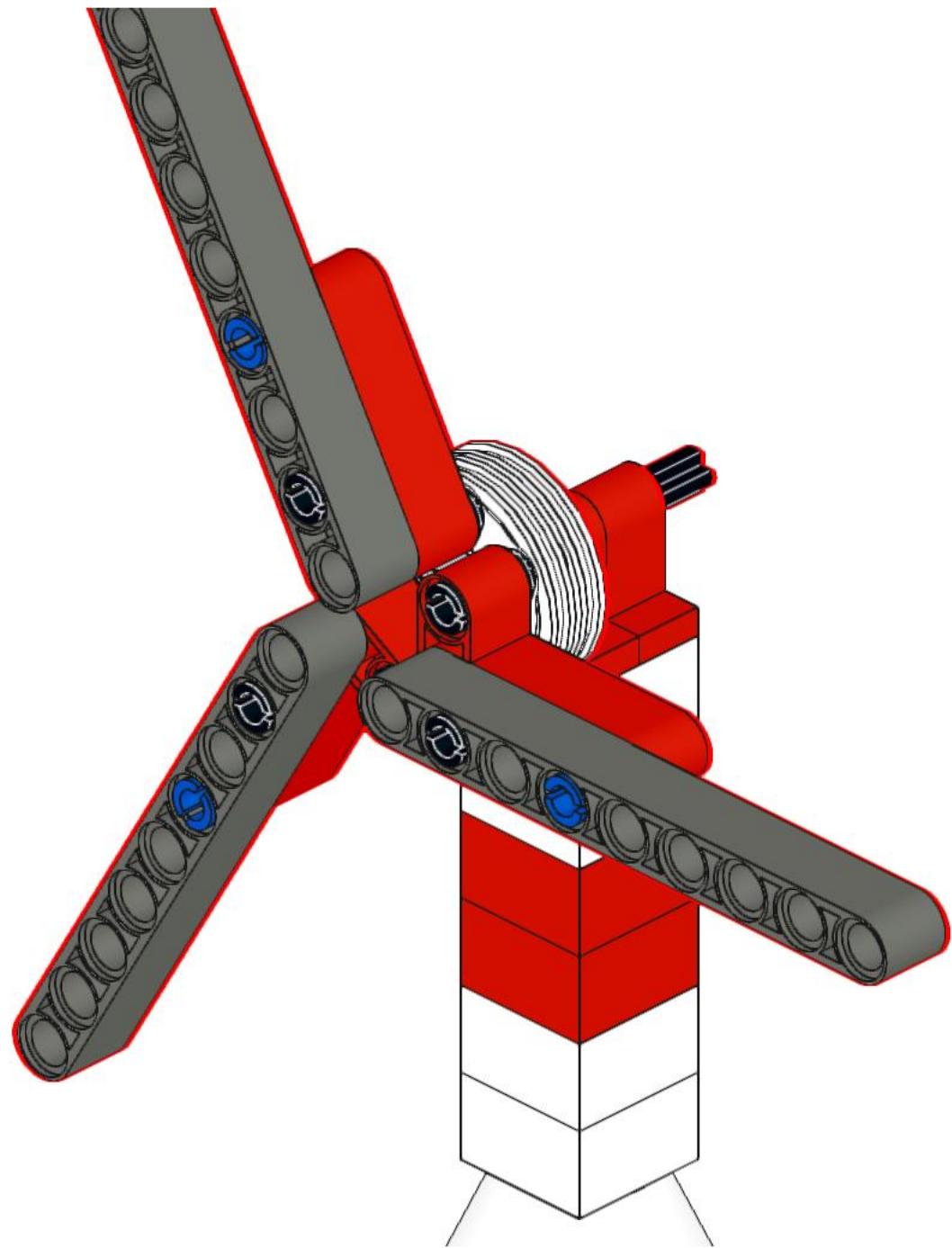
**8**



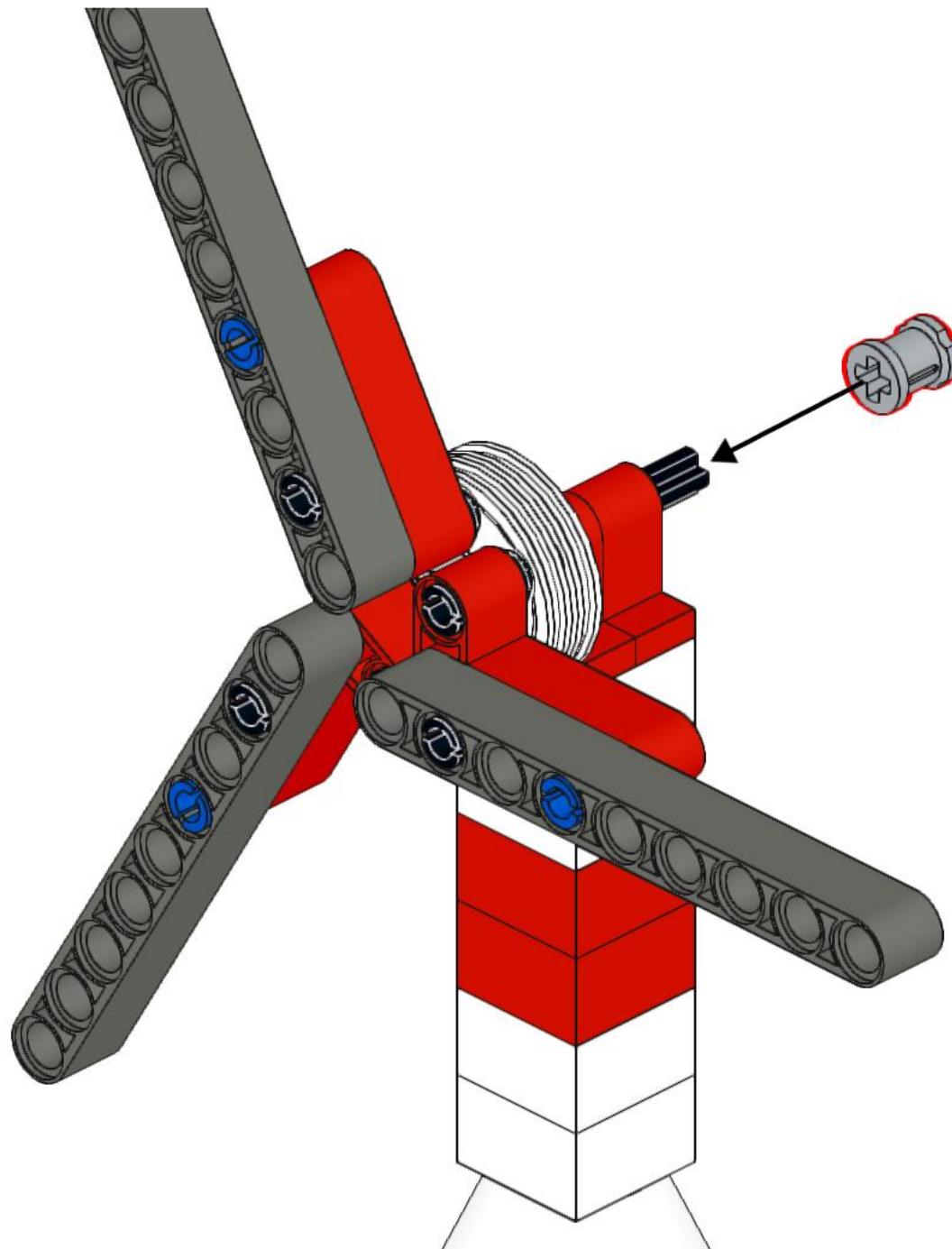
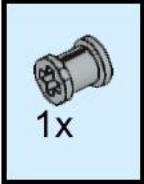
**9**



10



**11**



12

