



education™

Build  
Solve  
Invent™

45202



3

# How would we stay safe on Mars?



This Physical Science experiment is based on changes that occur when objects collide. Collisions can cause differences we can observe, such as changes to an object's motion, speed, direction or sound. On Mars, the high-speed wind blows dust and rocks around the planet, making collisions a big problem!



**Build**

**Build:** Build a Mars base with special equipment to gather information and conduct experiments.



**Solve**

**Solve:** Create a structure that will keep the equipment safe from flying rocks on Mars.

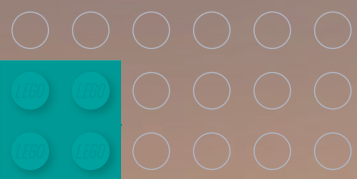


**Invent**

**Invent:** Design and protect a communication tower for the astronaut.

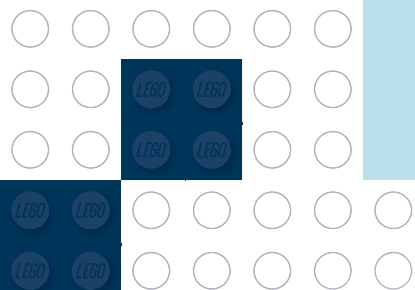
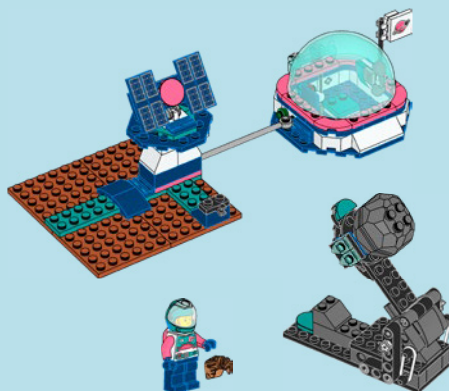
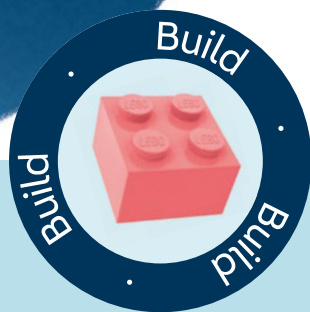
You can support learning and spark curiosity by asking questions such as:

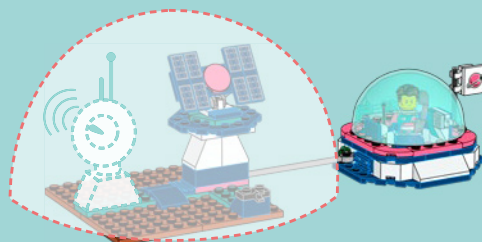
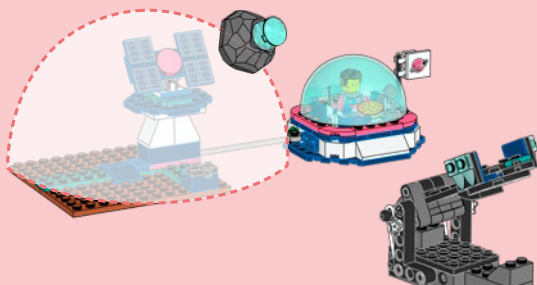
- Did the structure protect the equipment? Why or why not?
- Why do you think the astronaut needs a communication tower?
- Astronauts need to eat, sleep, make food and stay clean in space. What supplies would they need?

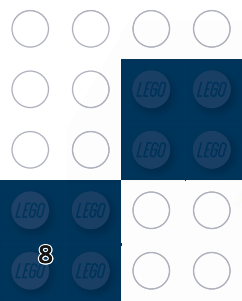
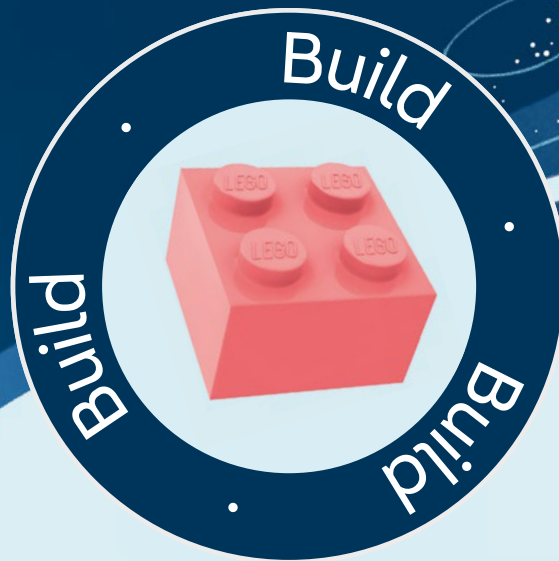




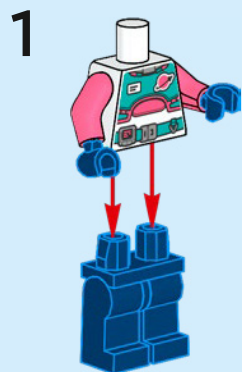
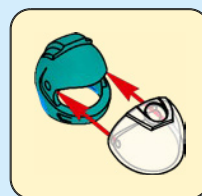
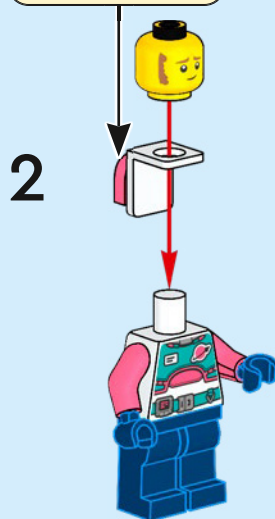
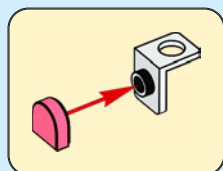
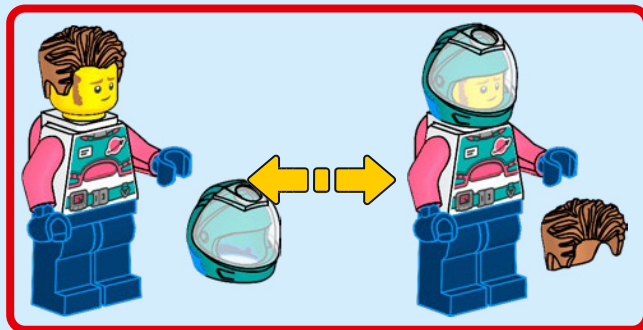


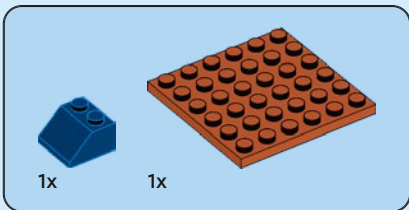
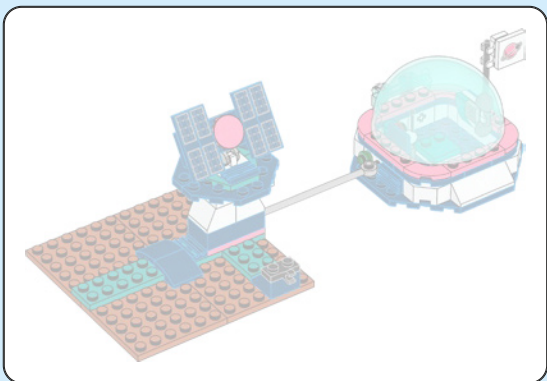




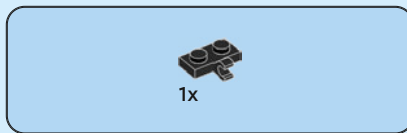
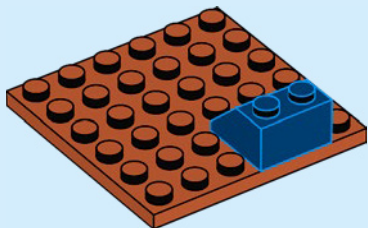




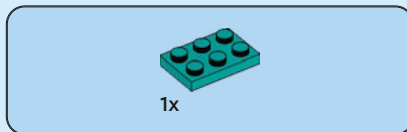
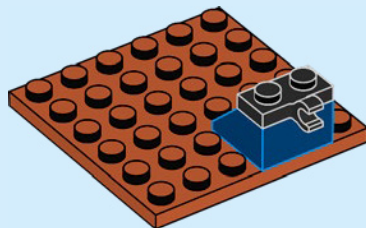




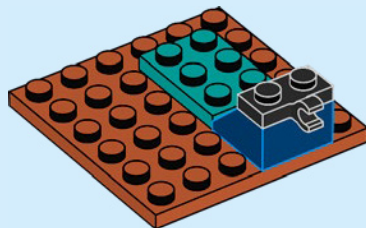
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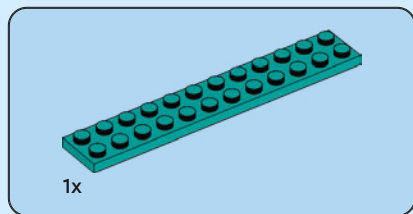


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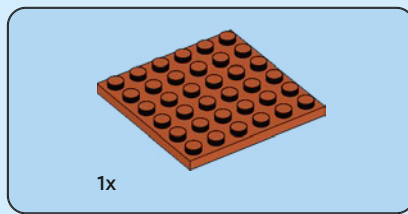
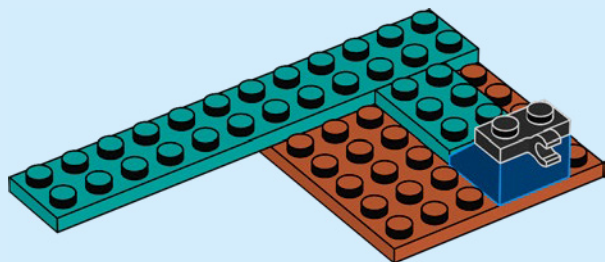


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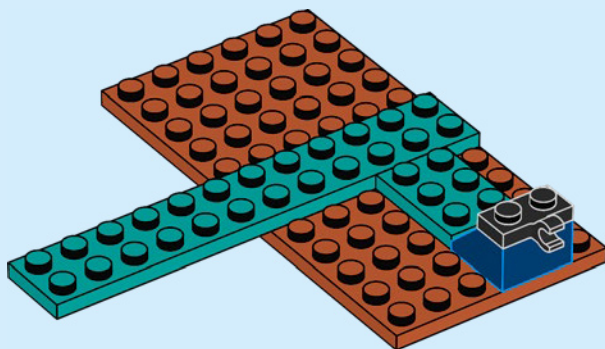


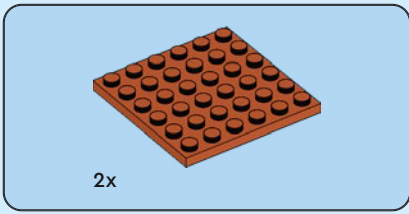


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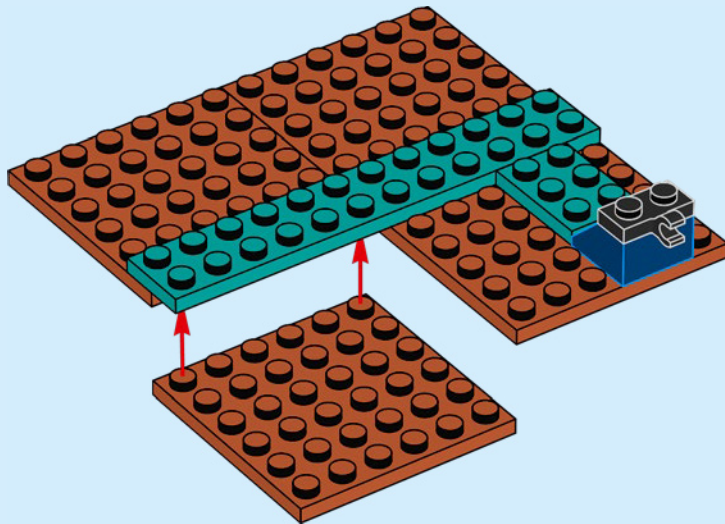


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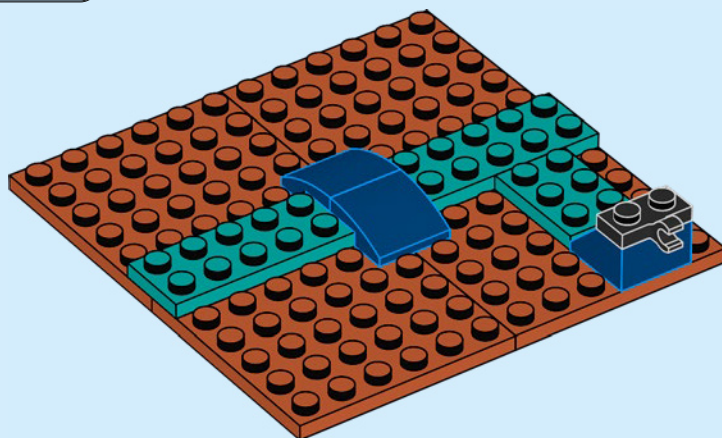
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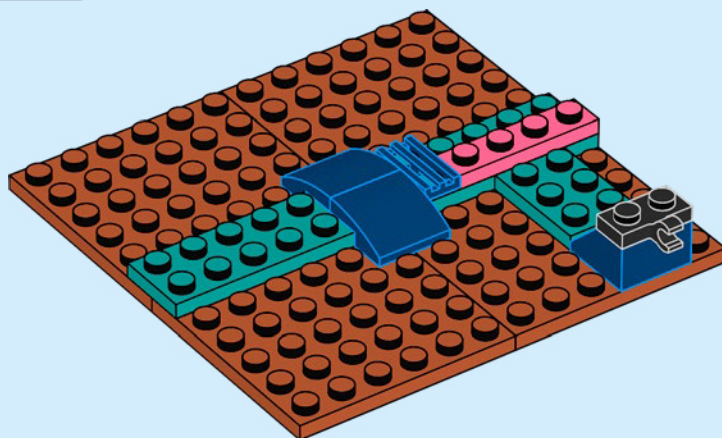


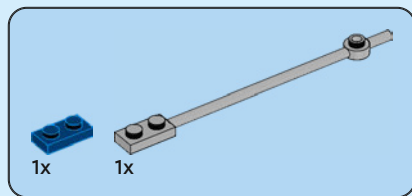
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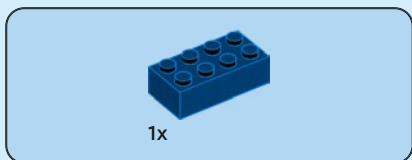
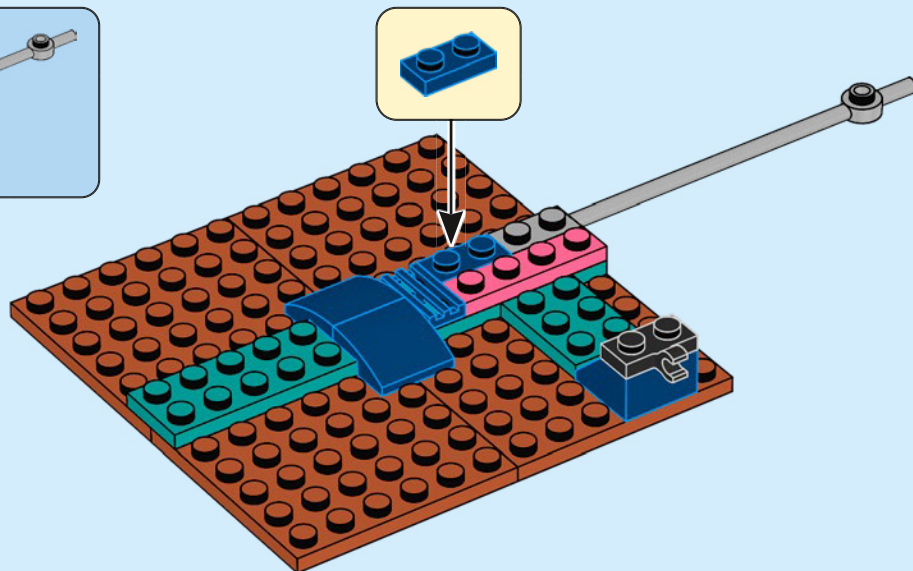
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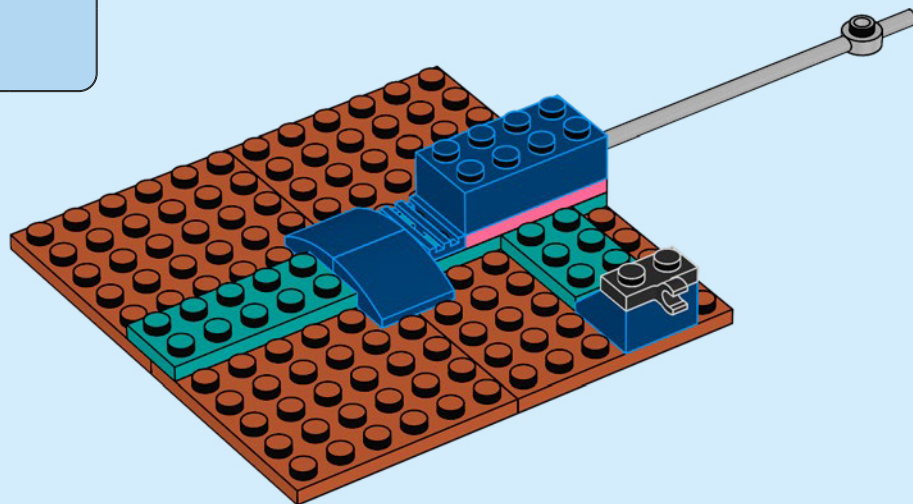




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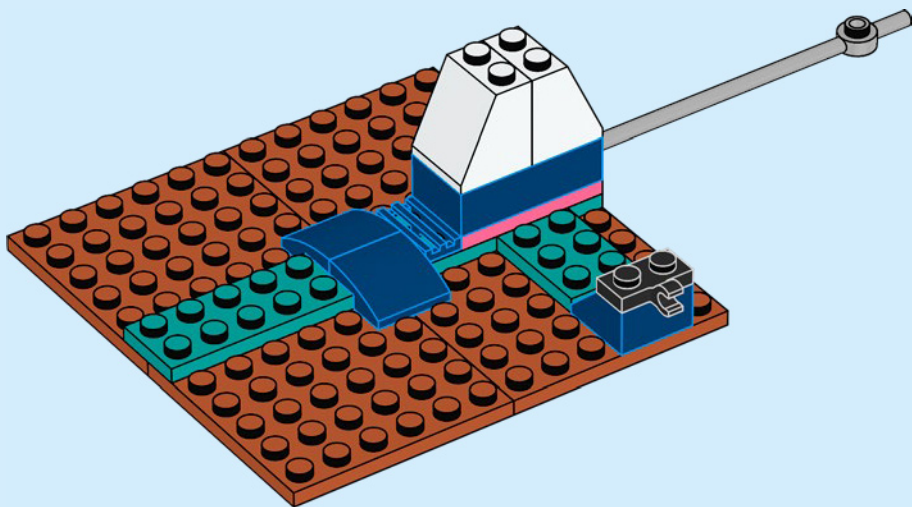


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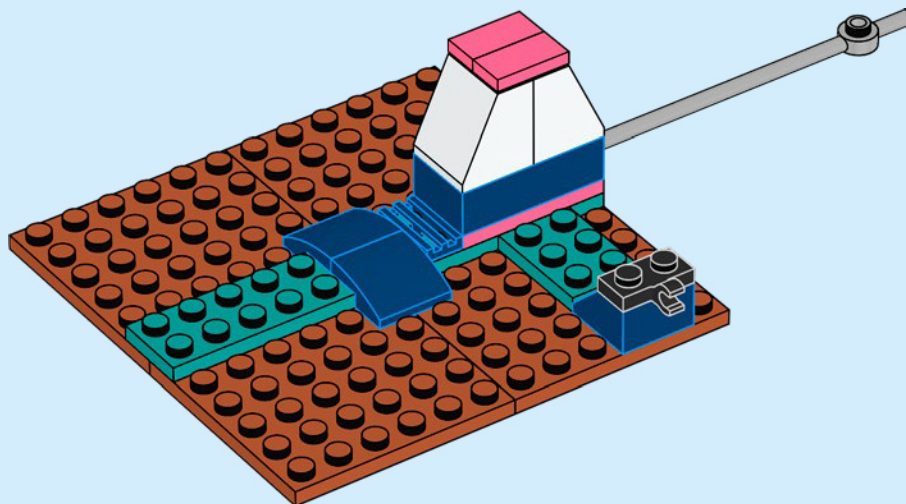


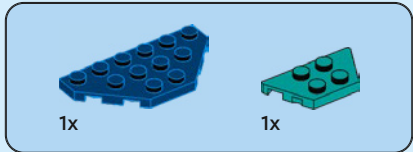
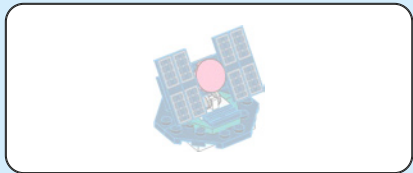
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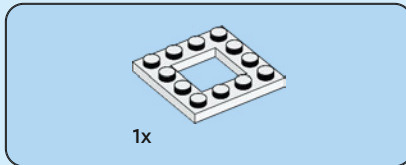
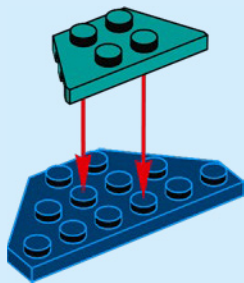


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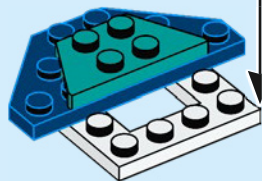
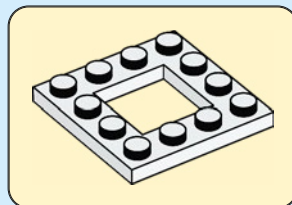


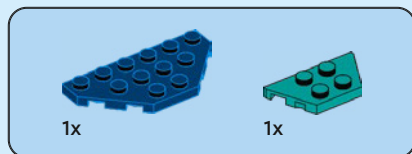


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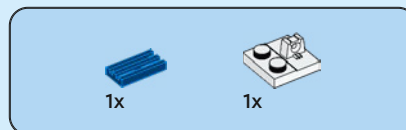
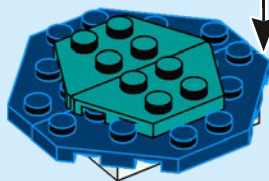
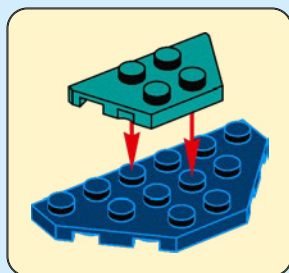


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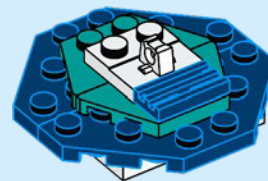




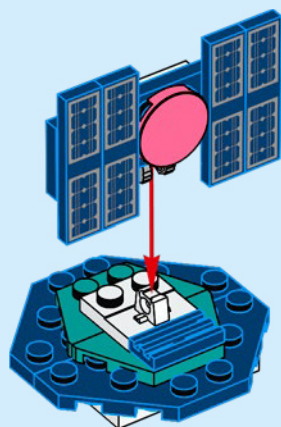
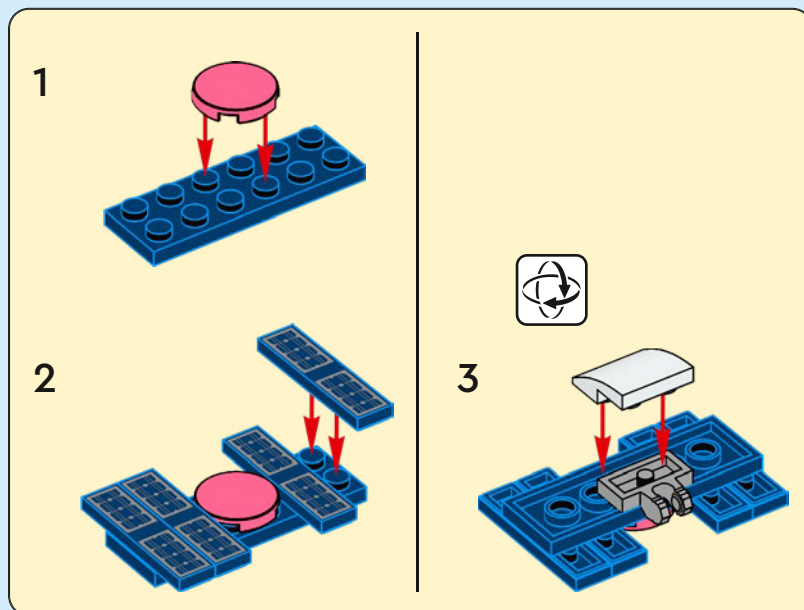
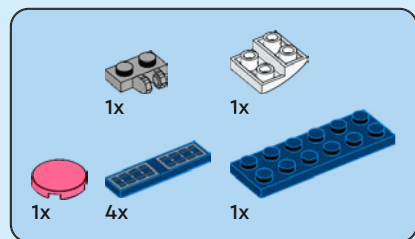
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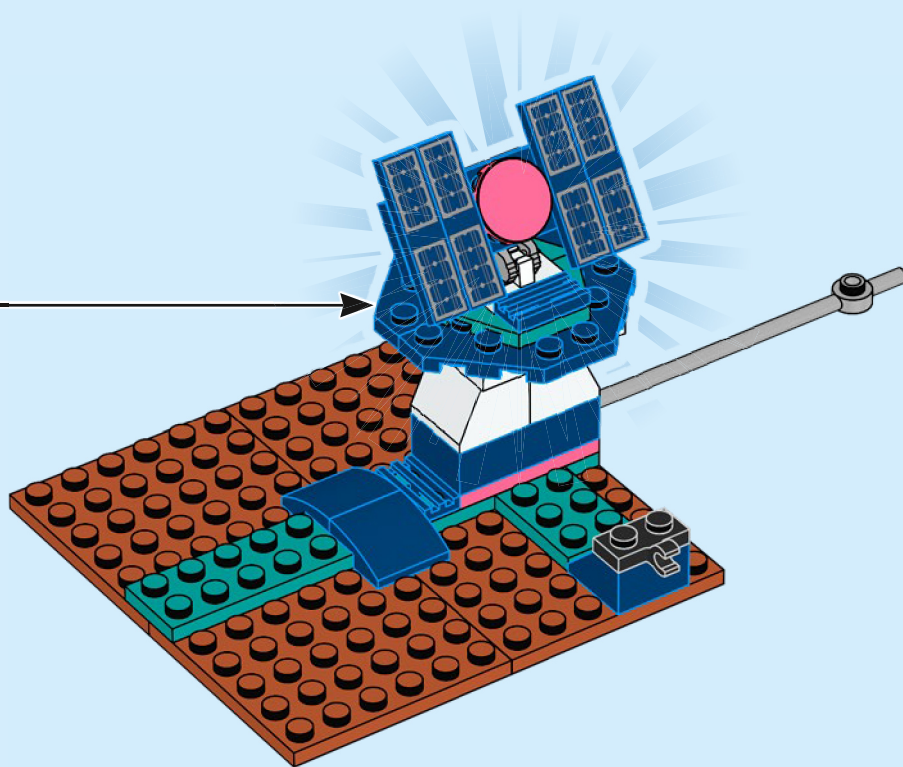
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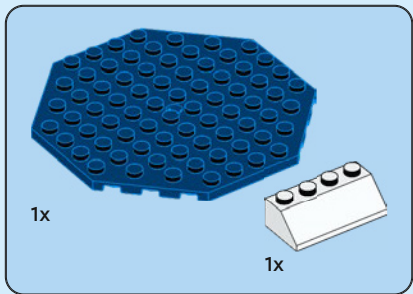
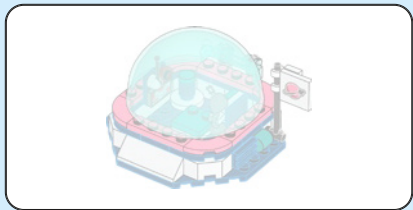


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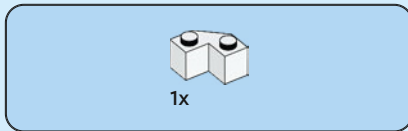
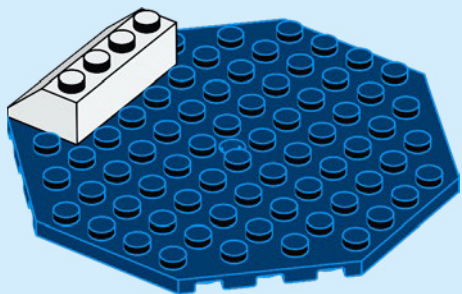


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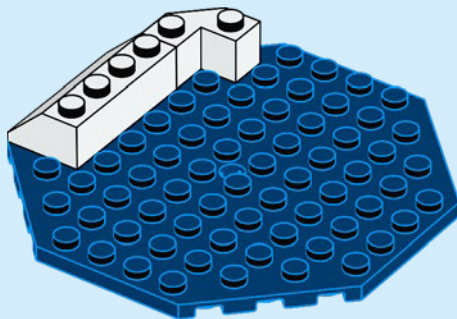


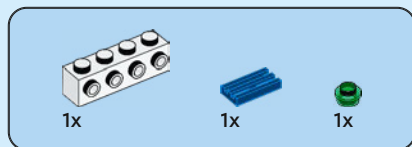


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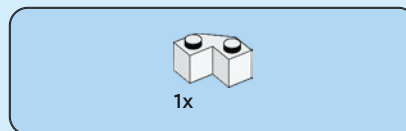
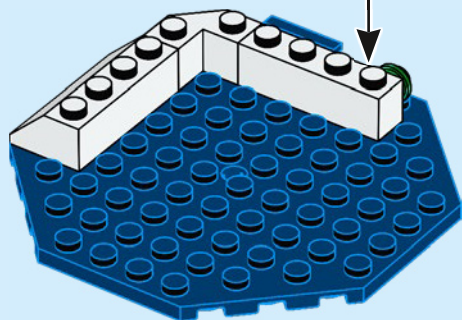
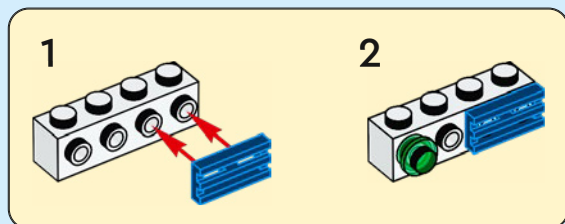


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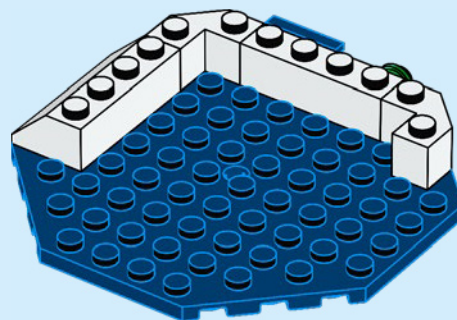




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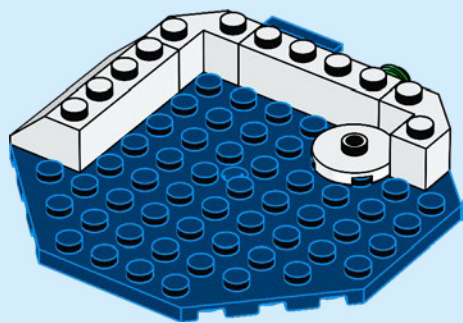
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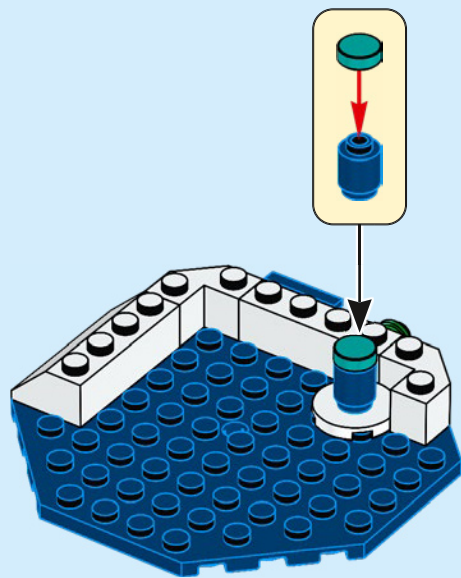


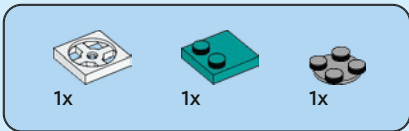
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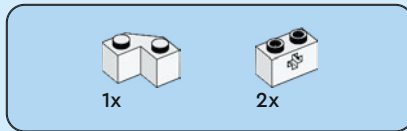
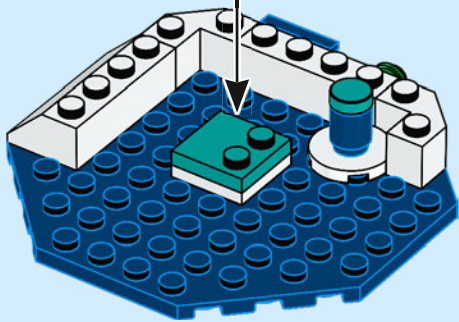
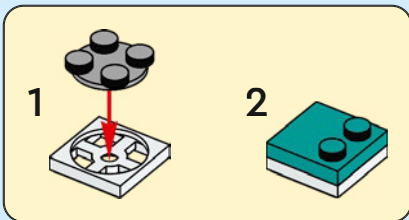
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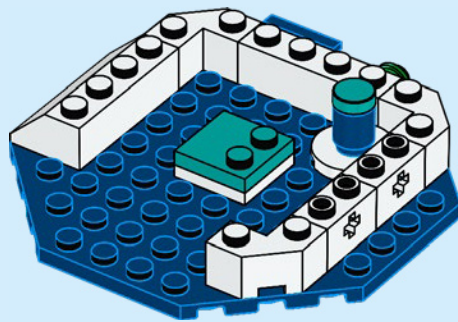


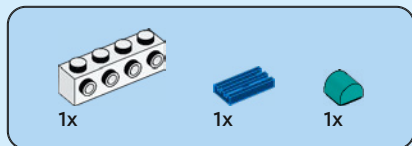


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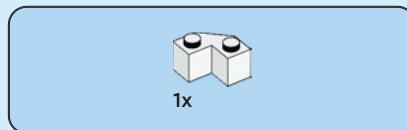
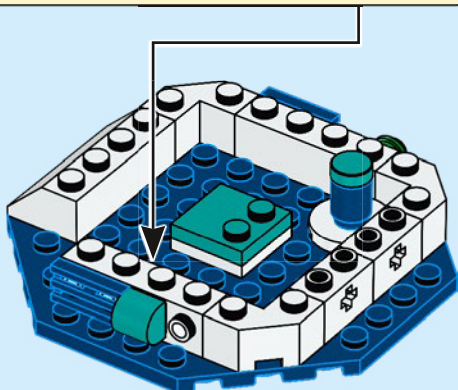
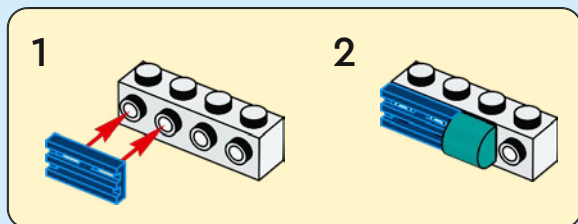


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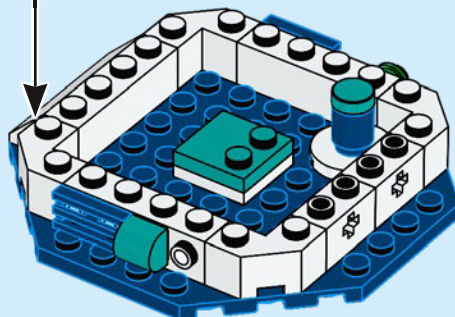
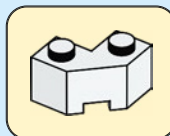




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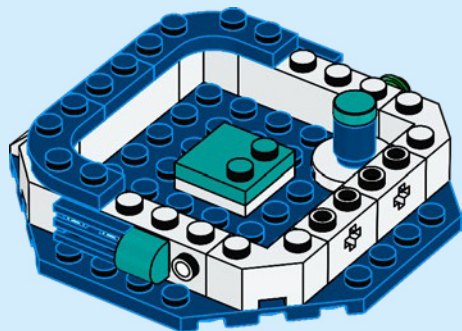


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# 29



1x



1x



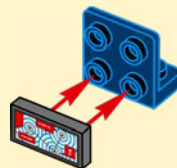
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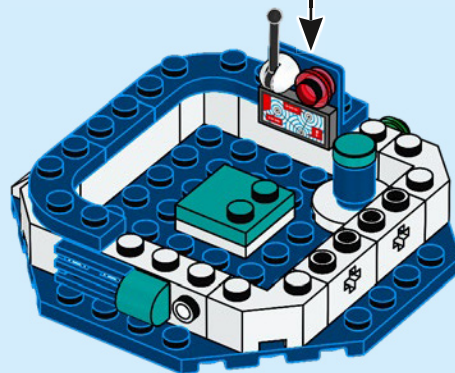
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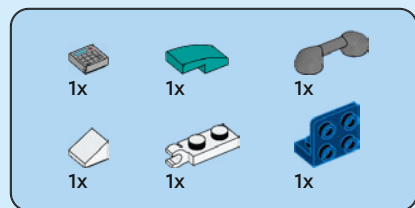
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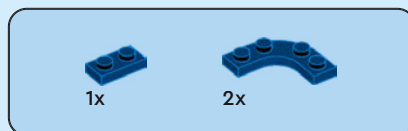
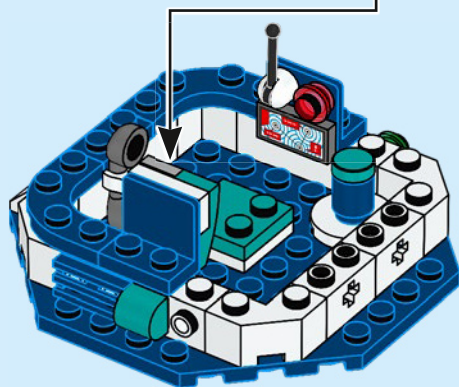
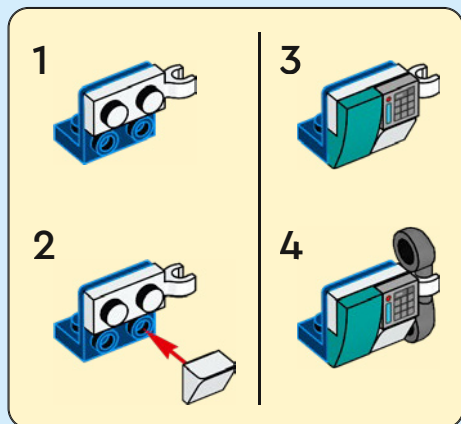


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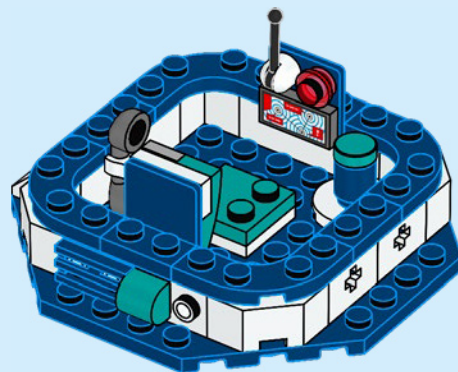


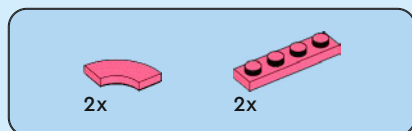


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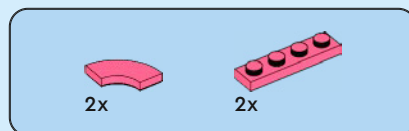
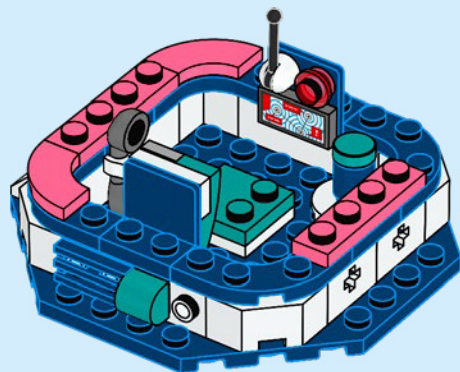


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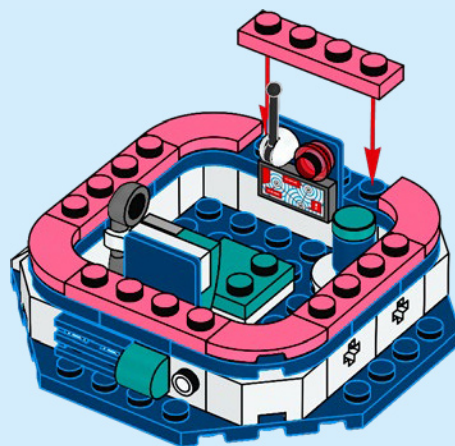




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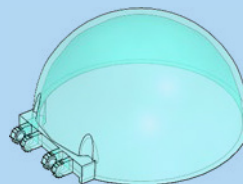
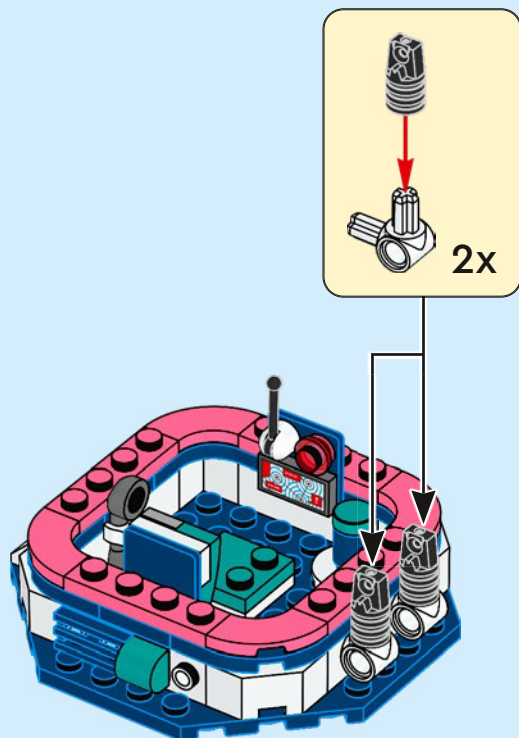


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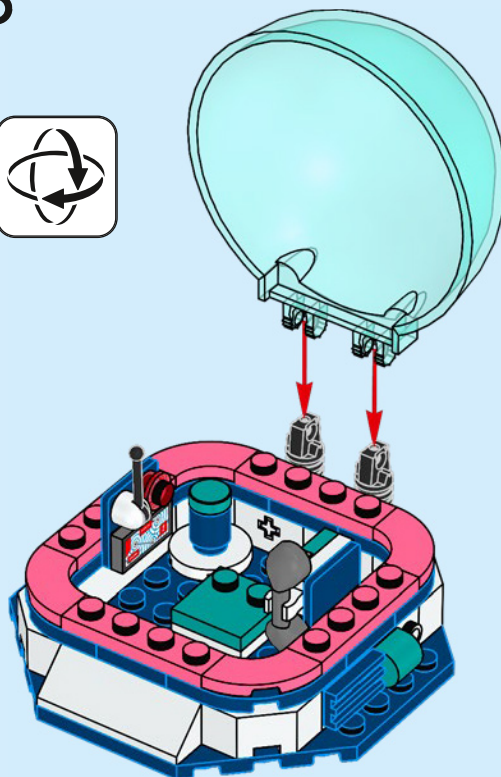




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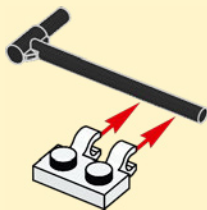


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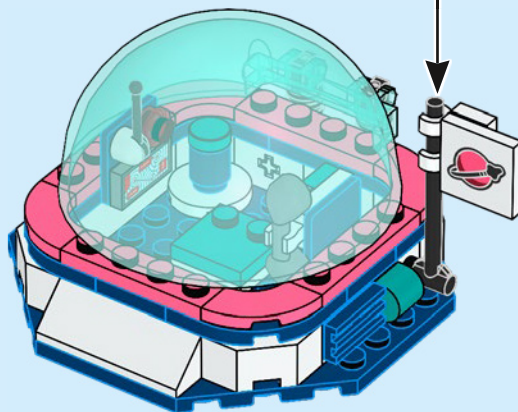
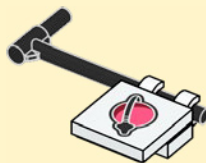




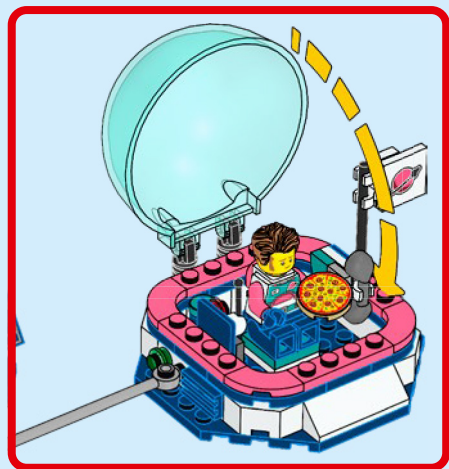
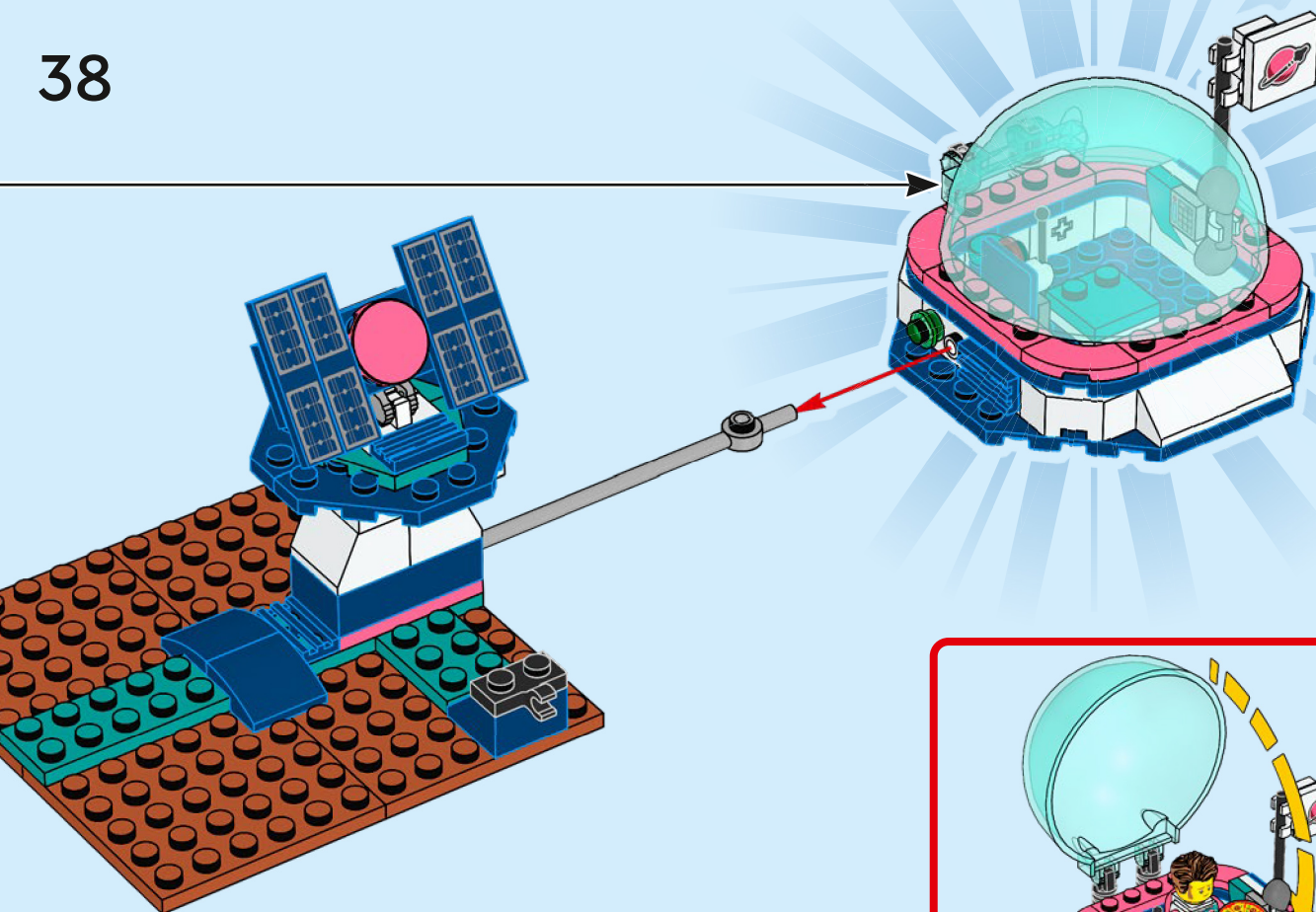
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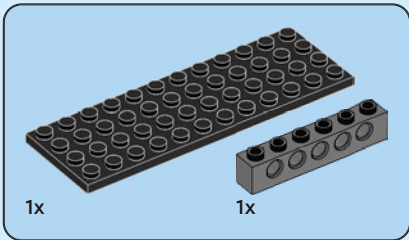
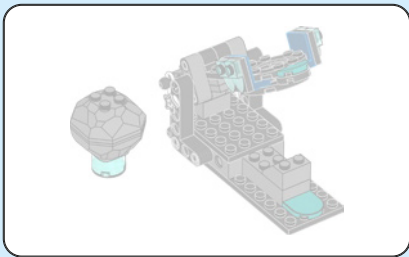


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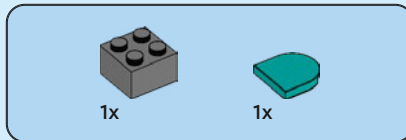
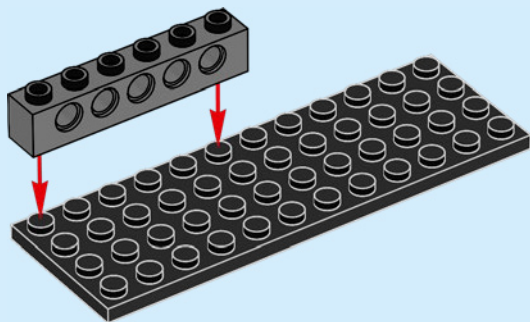


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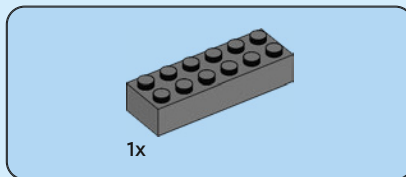
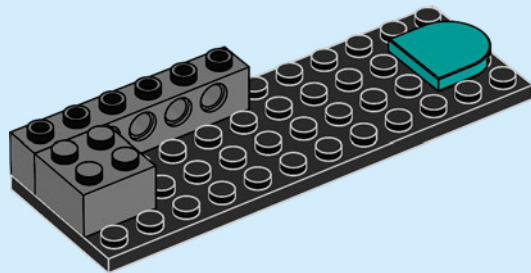




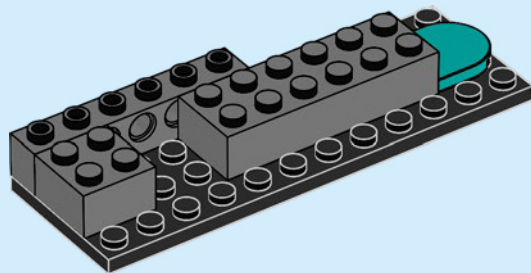
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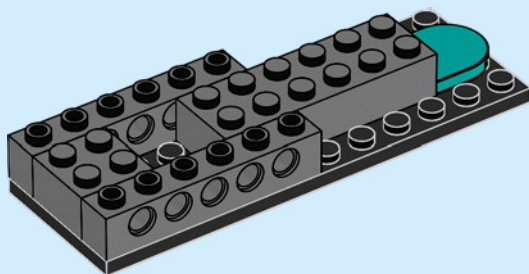
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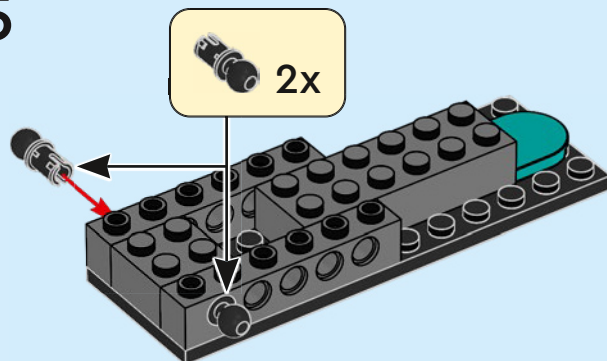
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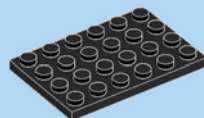


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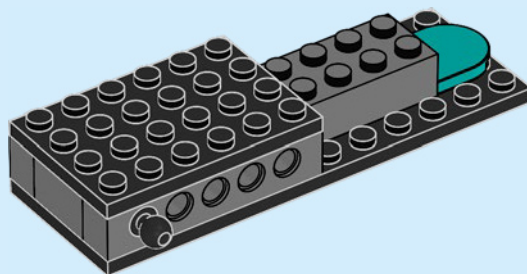


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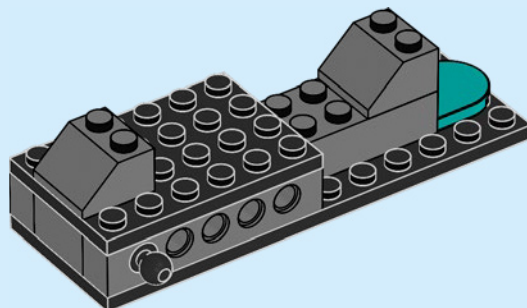
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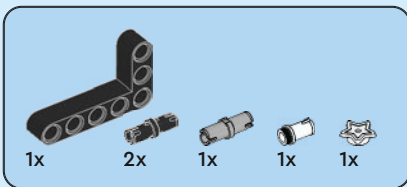
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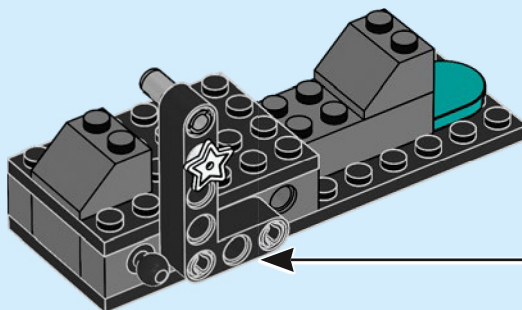
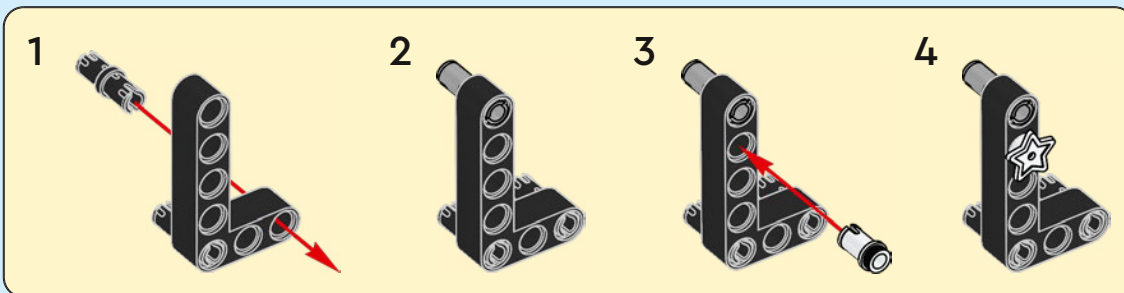
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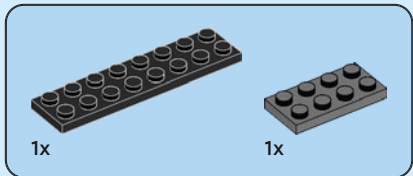
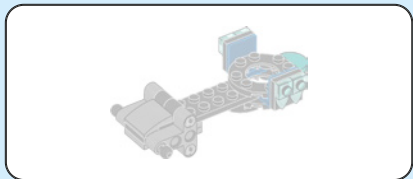
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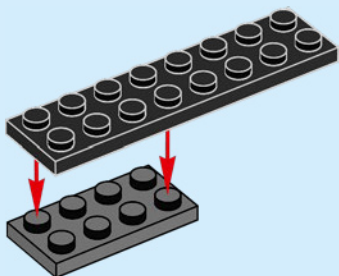


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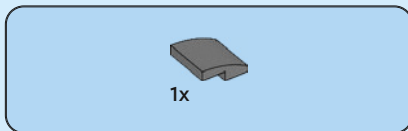
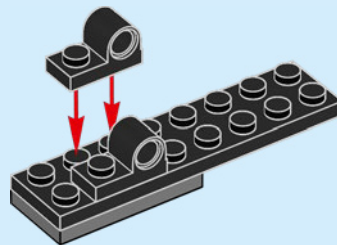




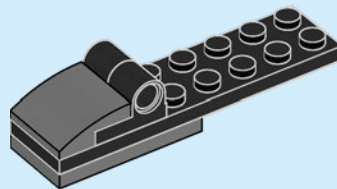
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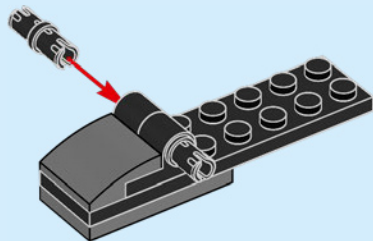


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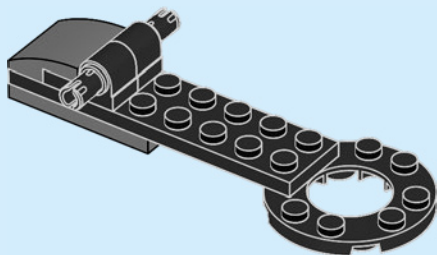




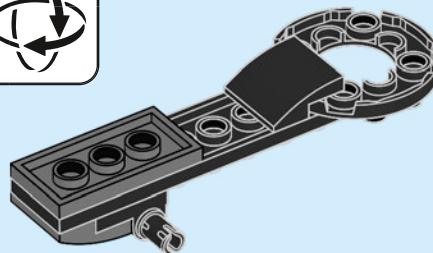
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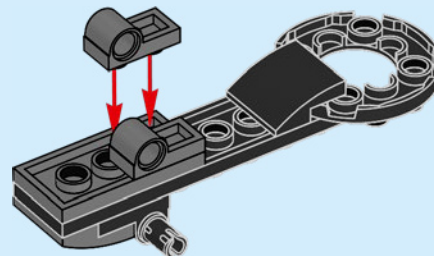
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14

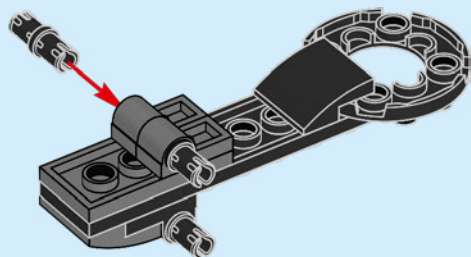


15



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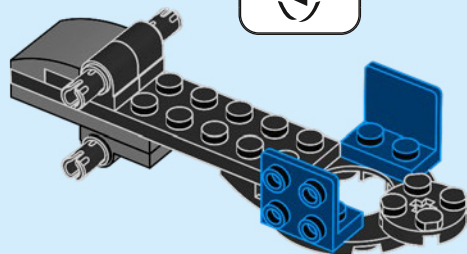
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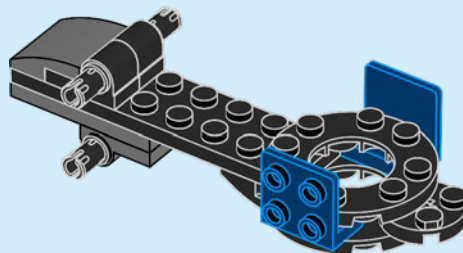
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17



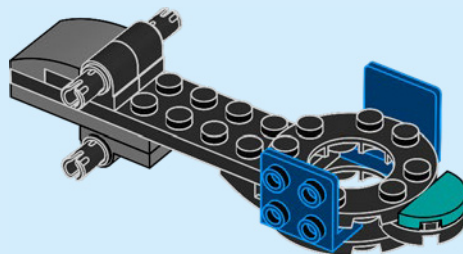
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18



1x

19



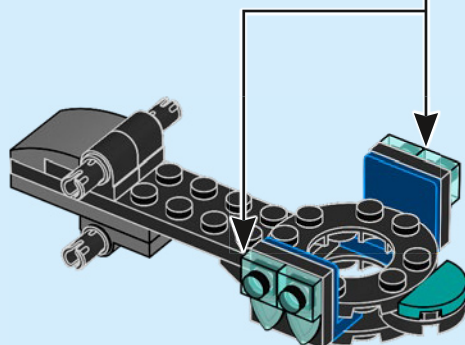
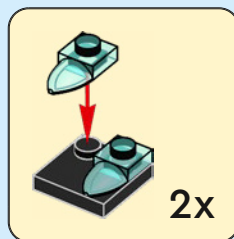


2x



4x

# 20

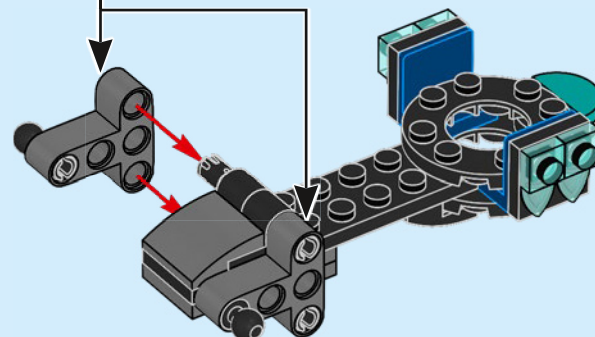
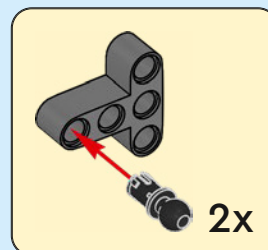


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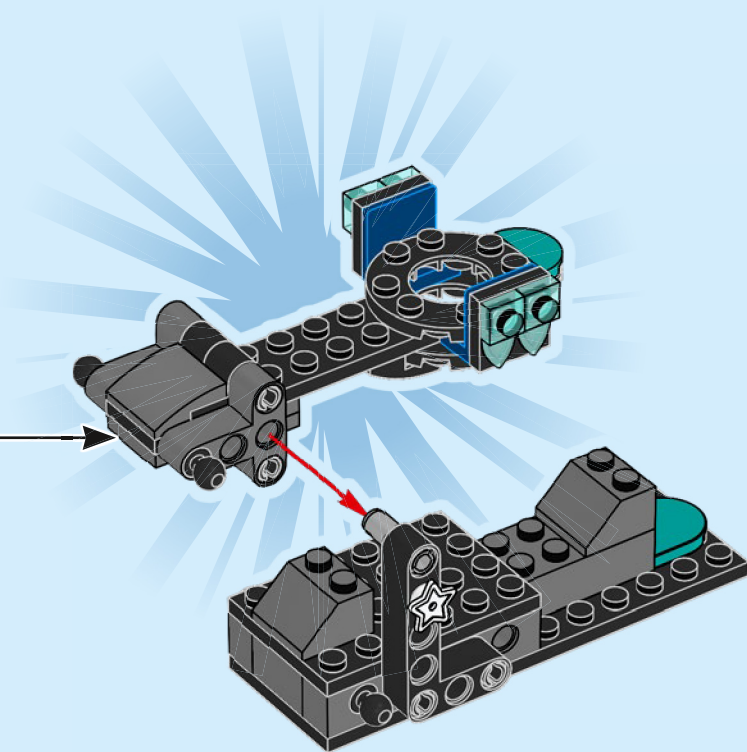


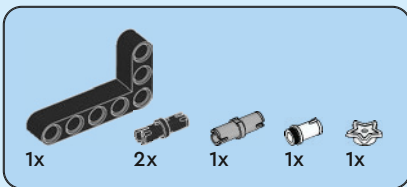
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# 21

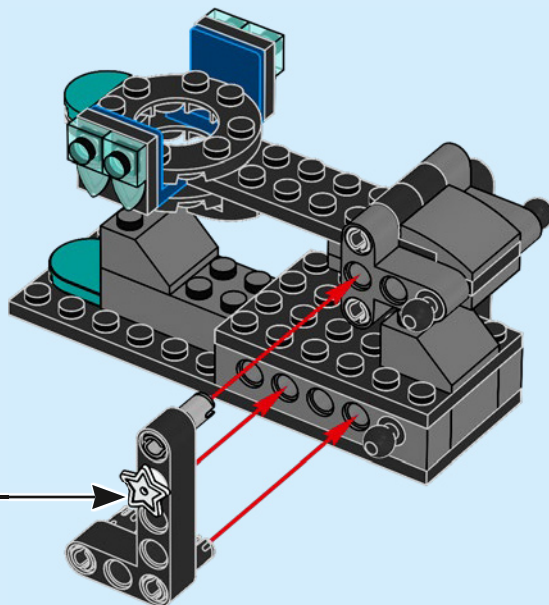
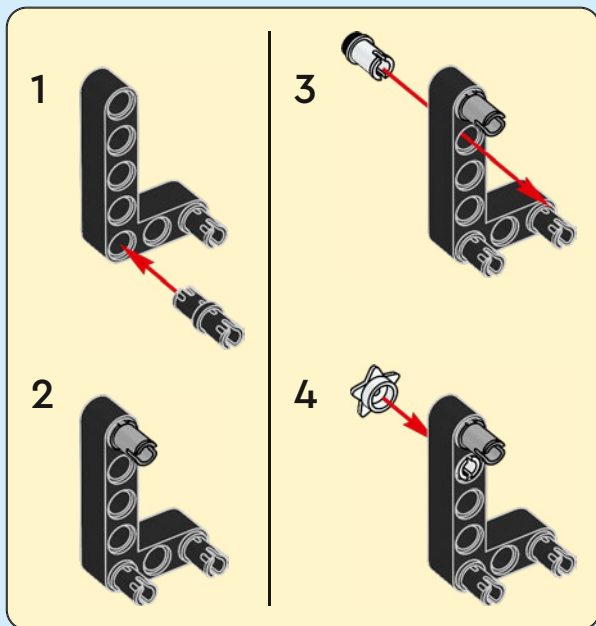


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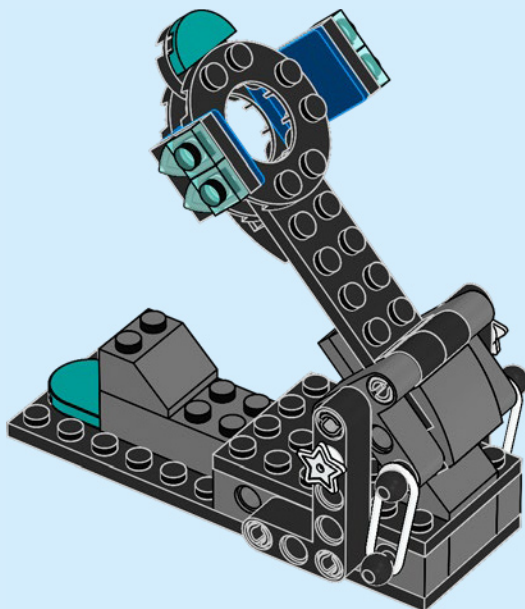
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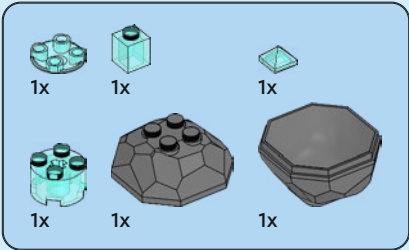




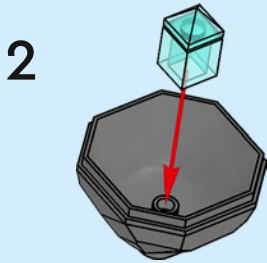
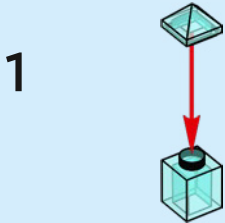
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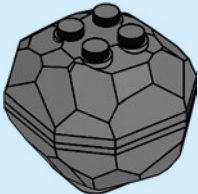




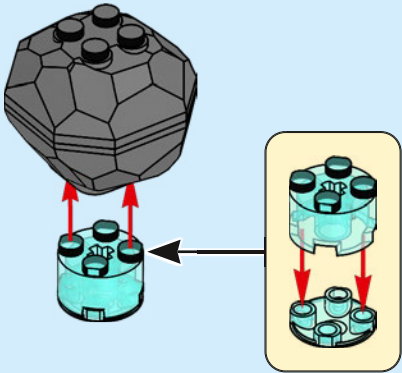
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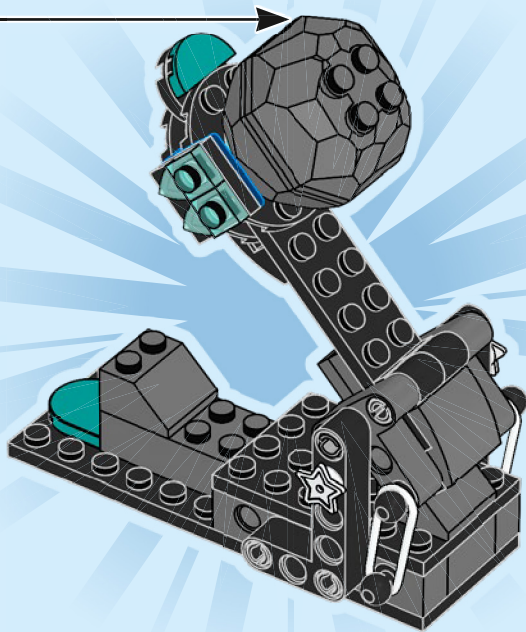


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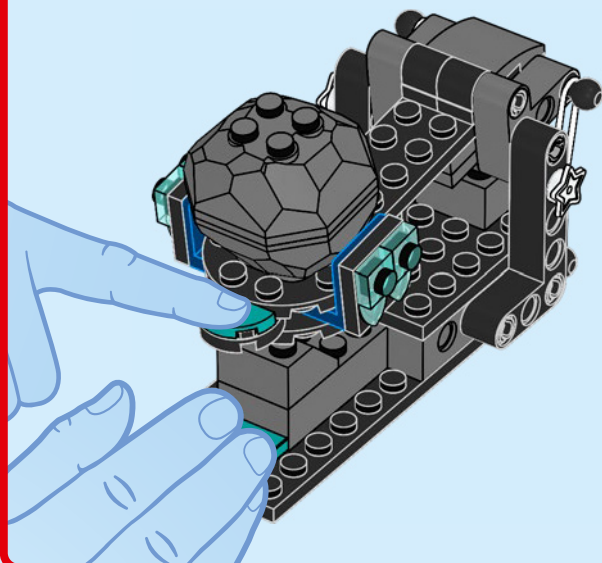
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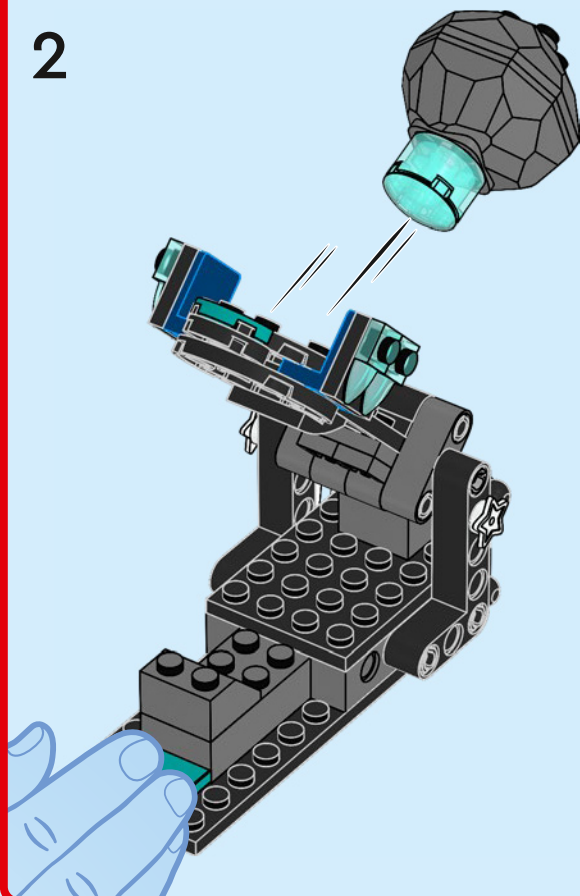




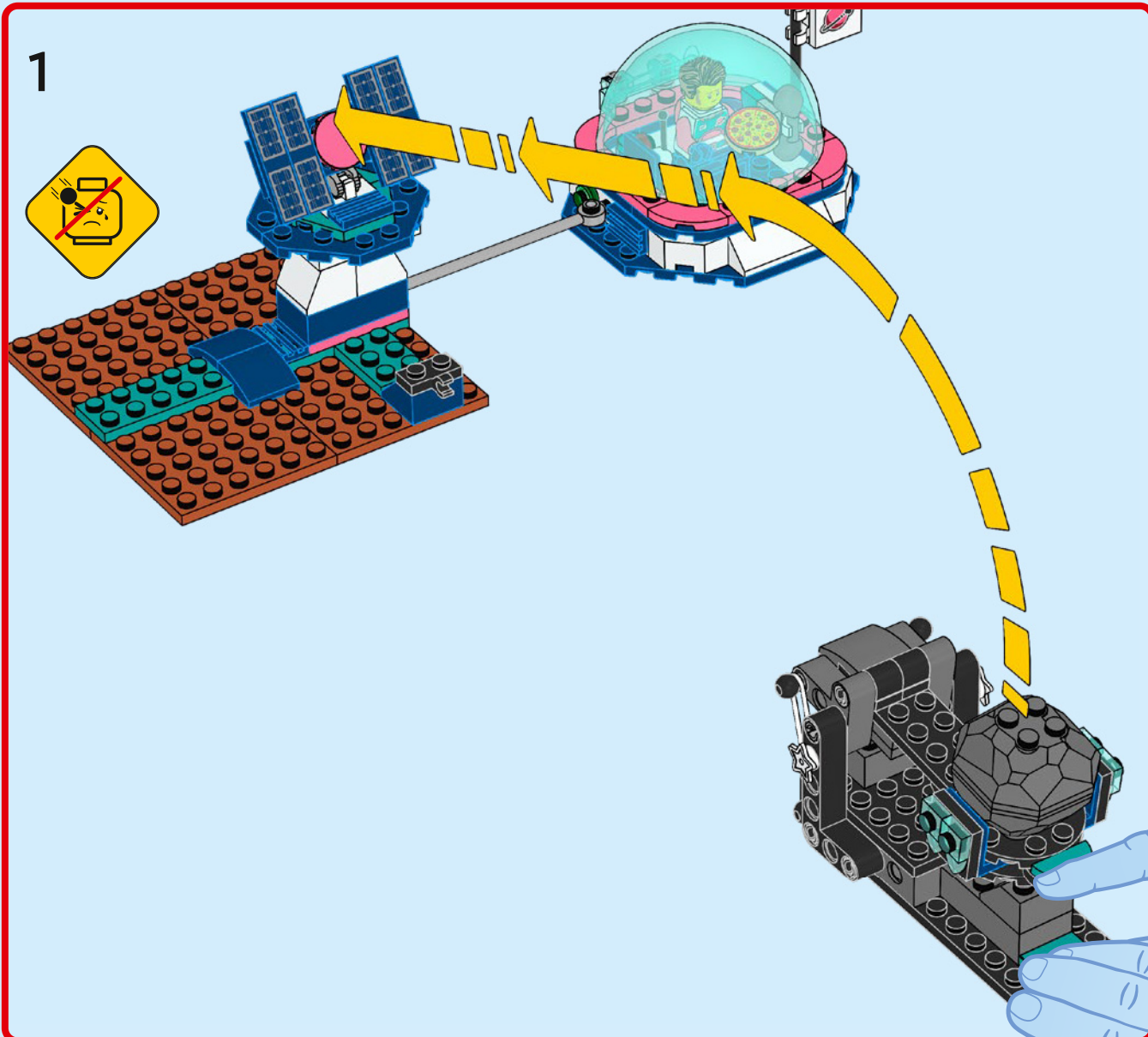
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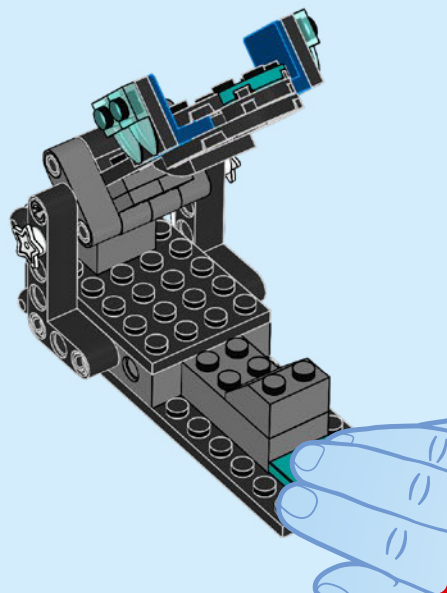
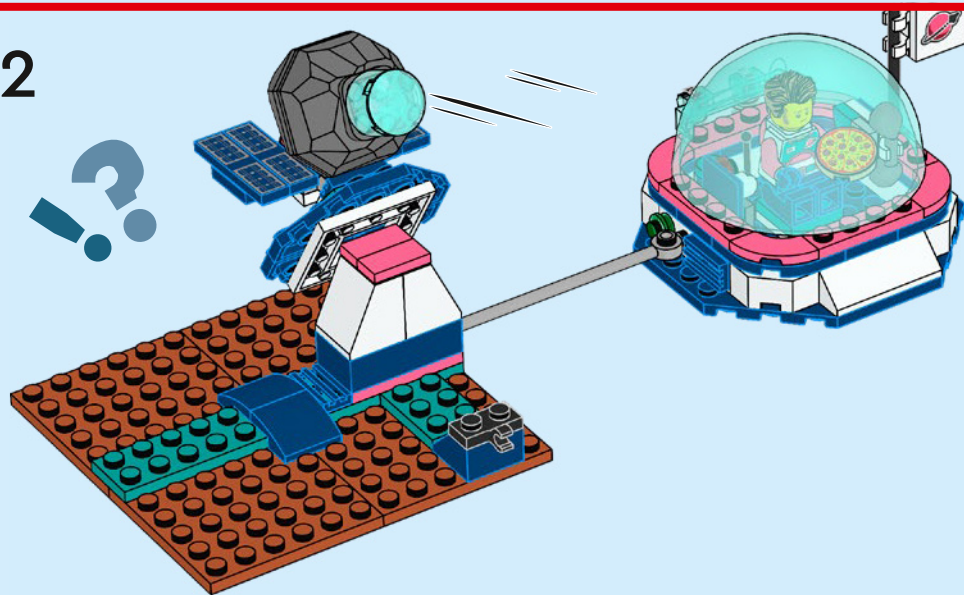
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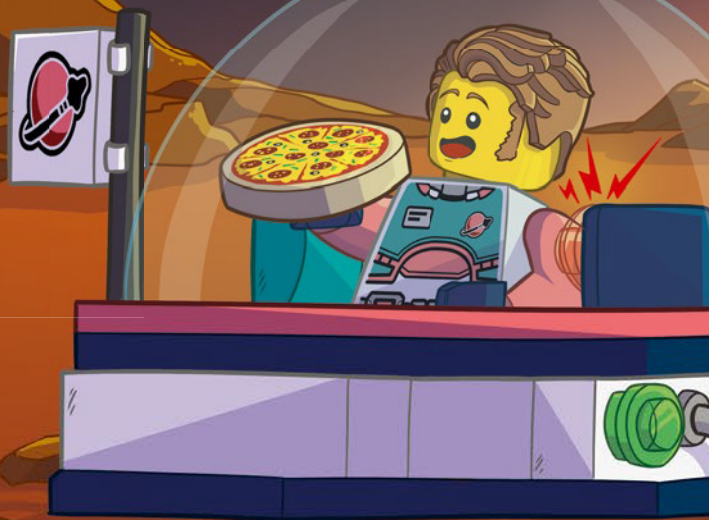
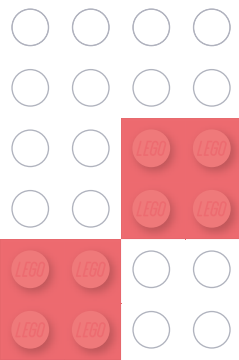


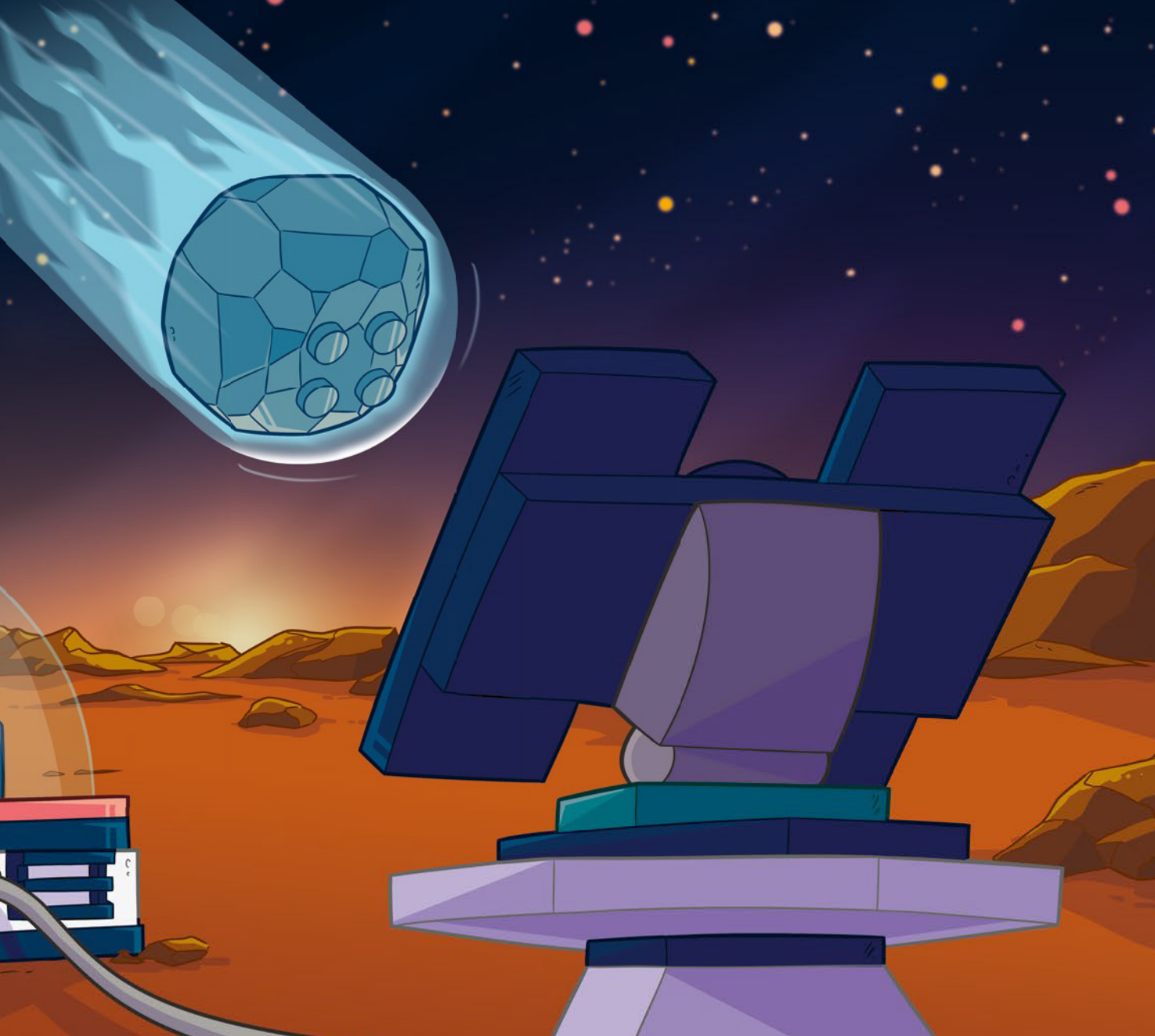
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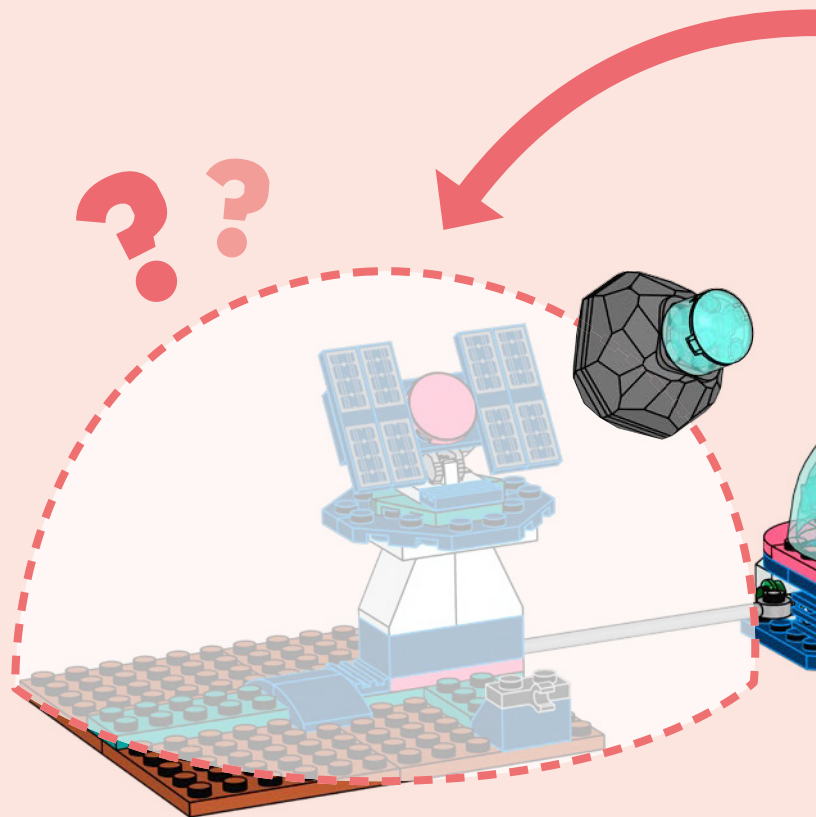


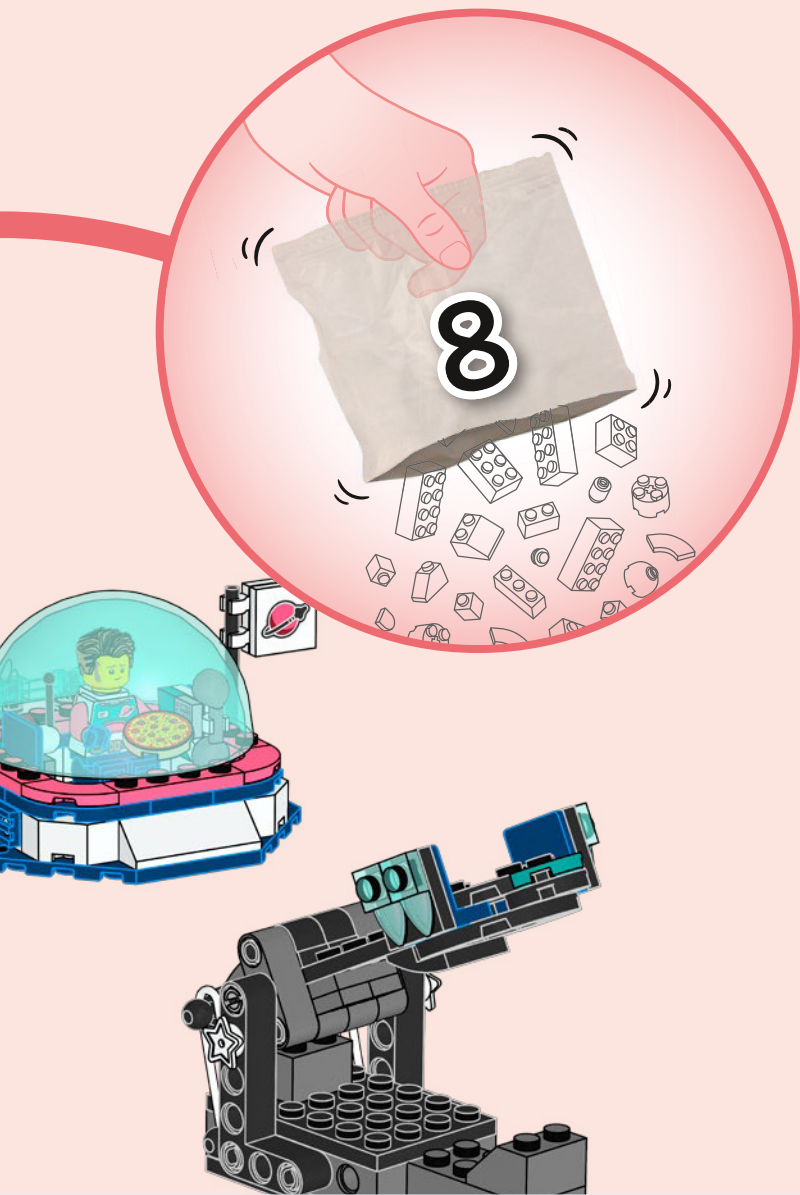


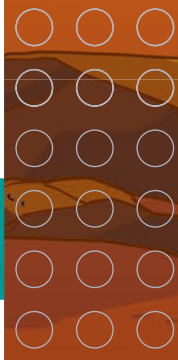
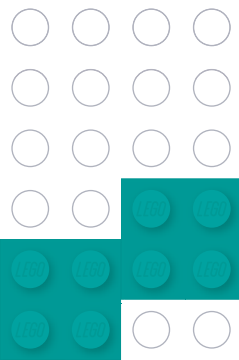




1











2

