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Simple machines

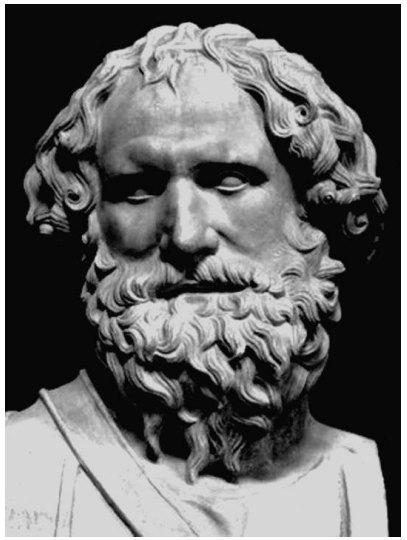


Today's simple machine is the lever.



Archimedes invented in Ancient Greece. He was a scientist from Syracuse in Sicily.

Archimedes did many inventions. He was a great scientist.



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Once they asked him if the lever was useful. He answered “give me a place to stand, and I will move the Earth”.

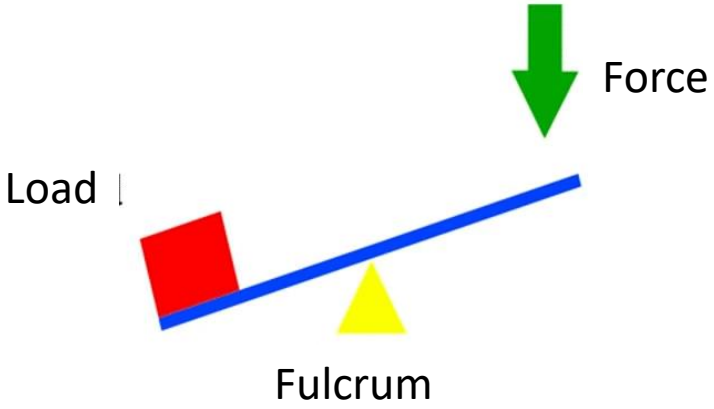
The lever is a stiff object that does not bend. With the help of a fulcrum, it increases the force of an object on another.



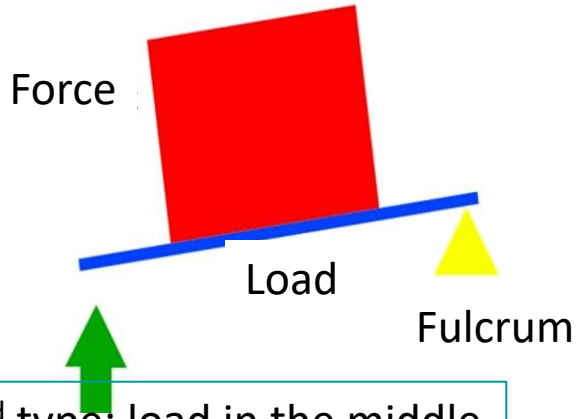
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Levers are rigid bodies that multiply the applied force to another object through a fulcrum .

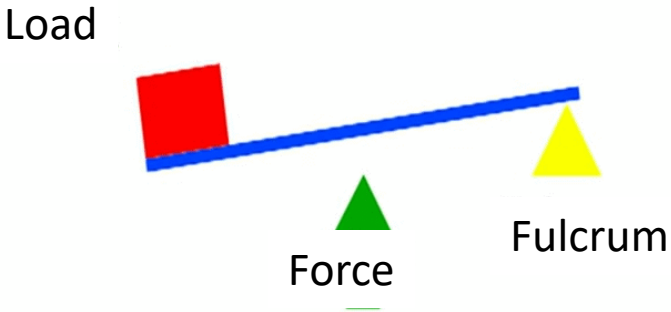
Depending on the position of the fulcrum and the applied force, there are three types of levers.



1st type: fulcrum in the middle



2nd type: load in the middle

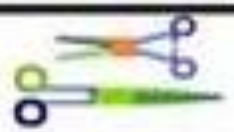


3rd type: force in the middle

Can you think of some examples for each type?

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Here are some examples. Name the objects and find where the fulcrum, the force and the load are

1st Type	2nd Type	3rd Type
		
		
		
		
		

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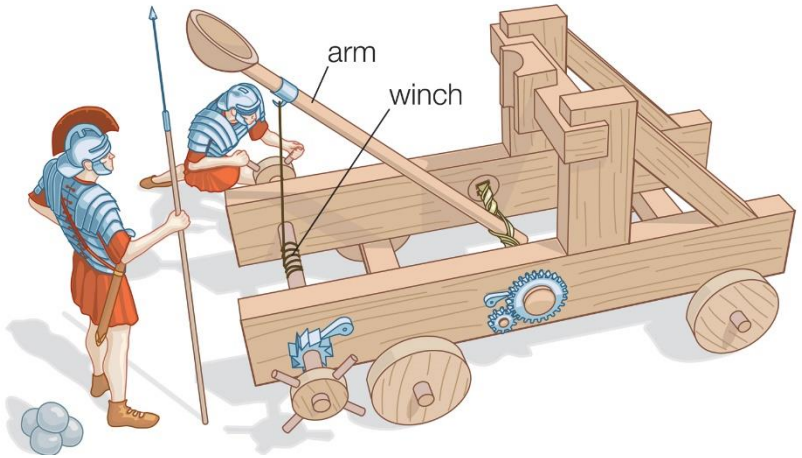
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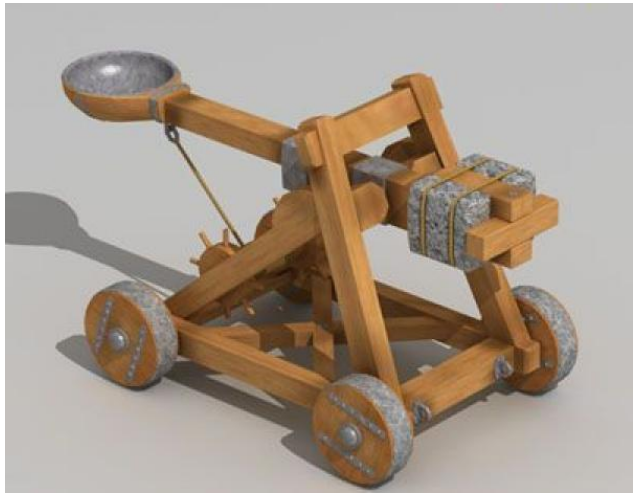
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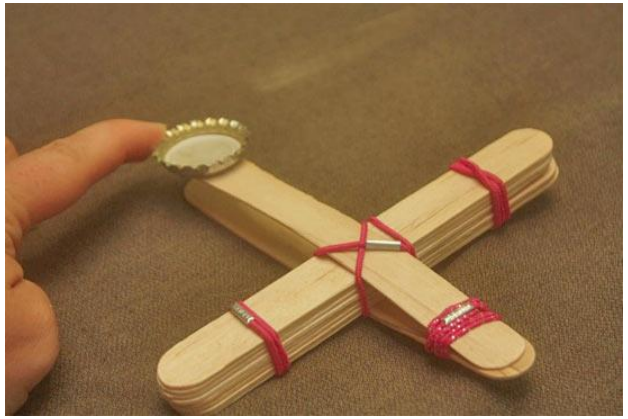


Today we will build catapults. Do you know what they are and where they were used in?









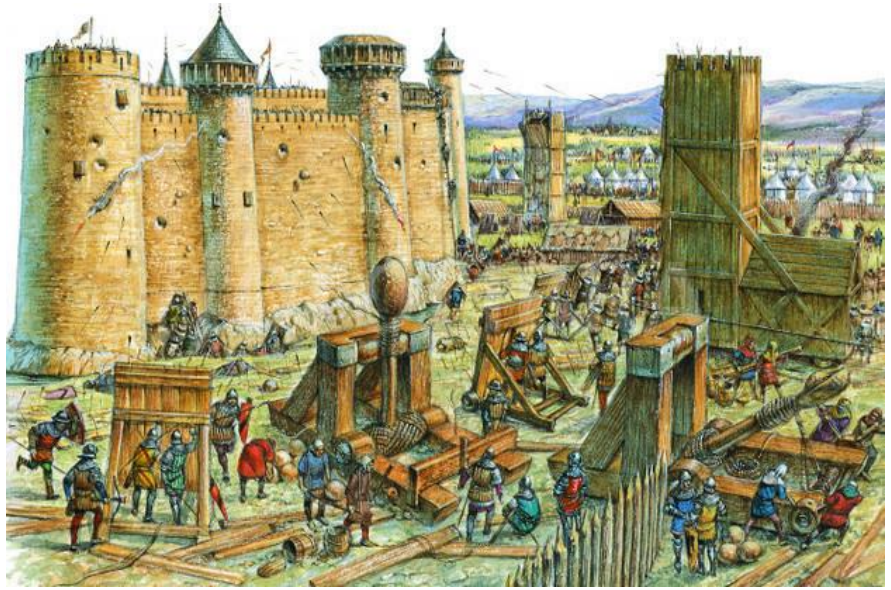
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They were used in Syracuse, in ancient Rome, and in medieval castles.



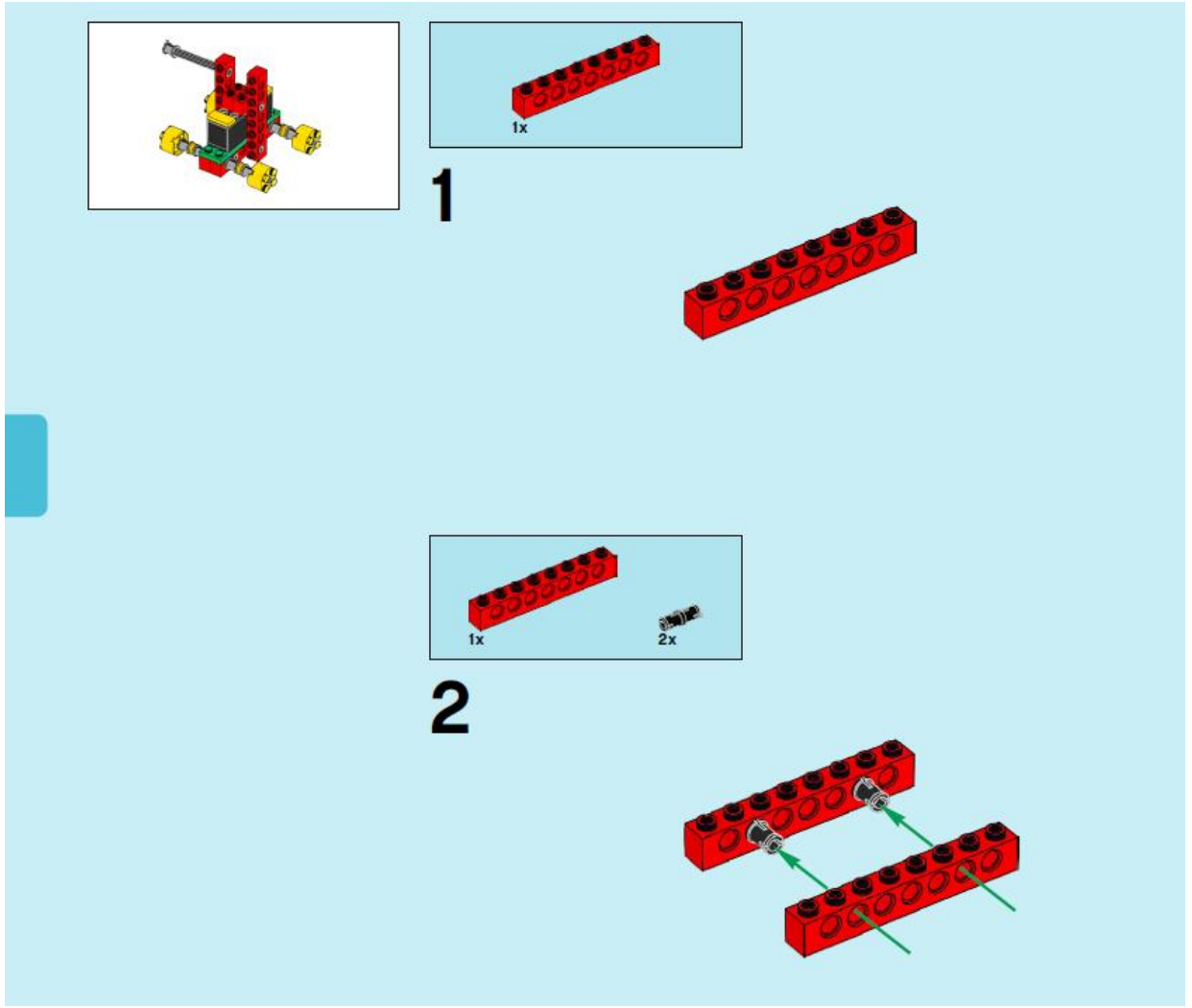




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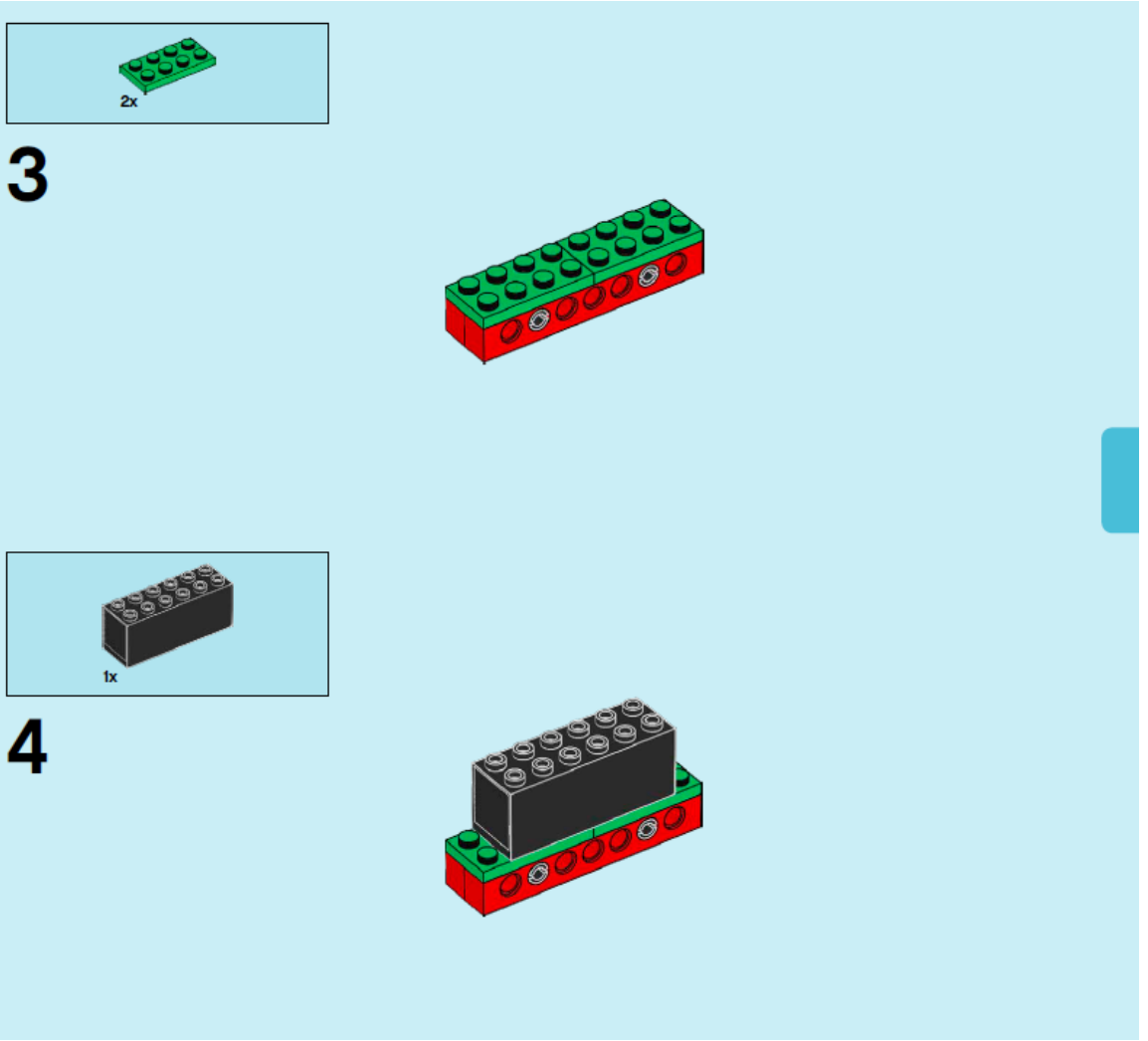
Simple machines

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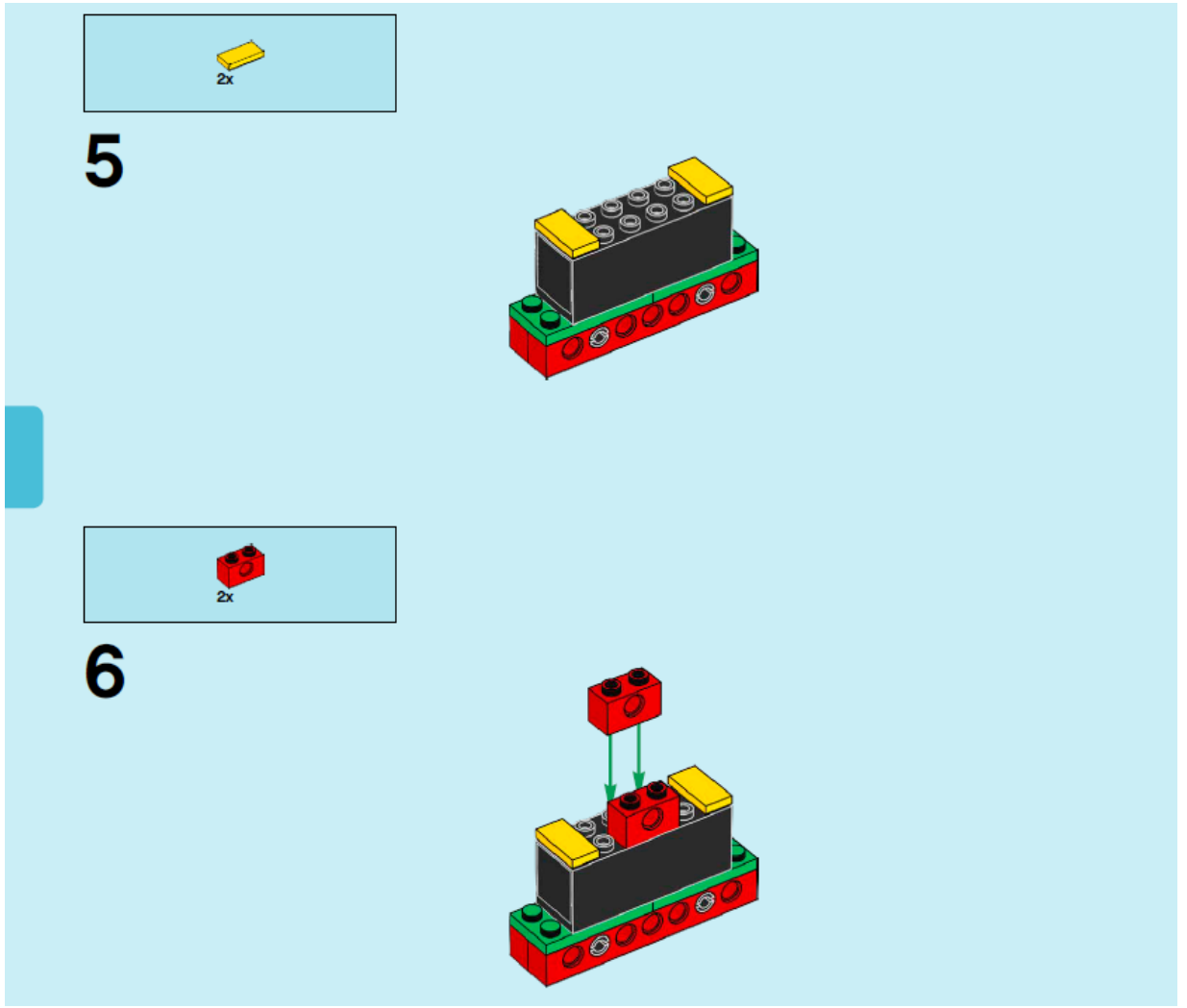
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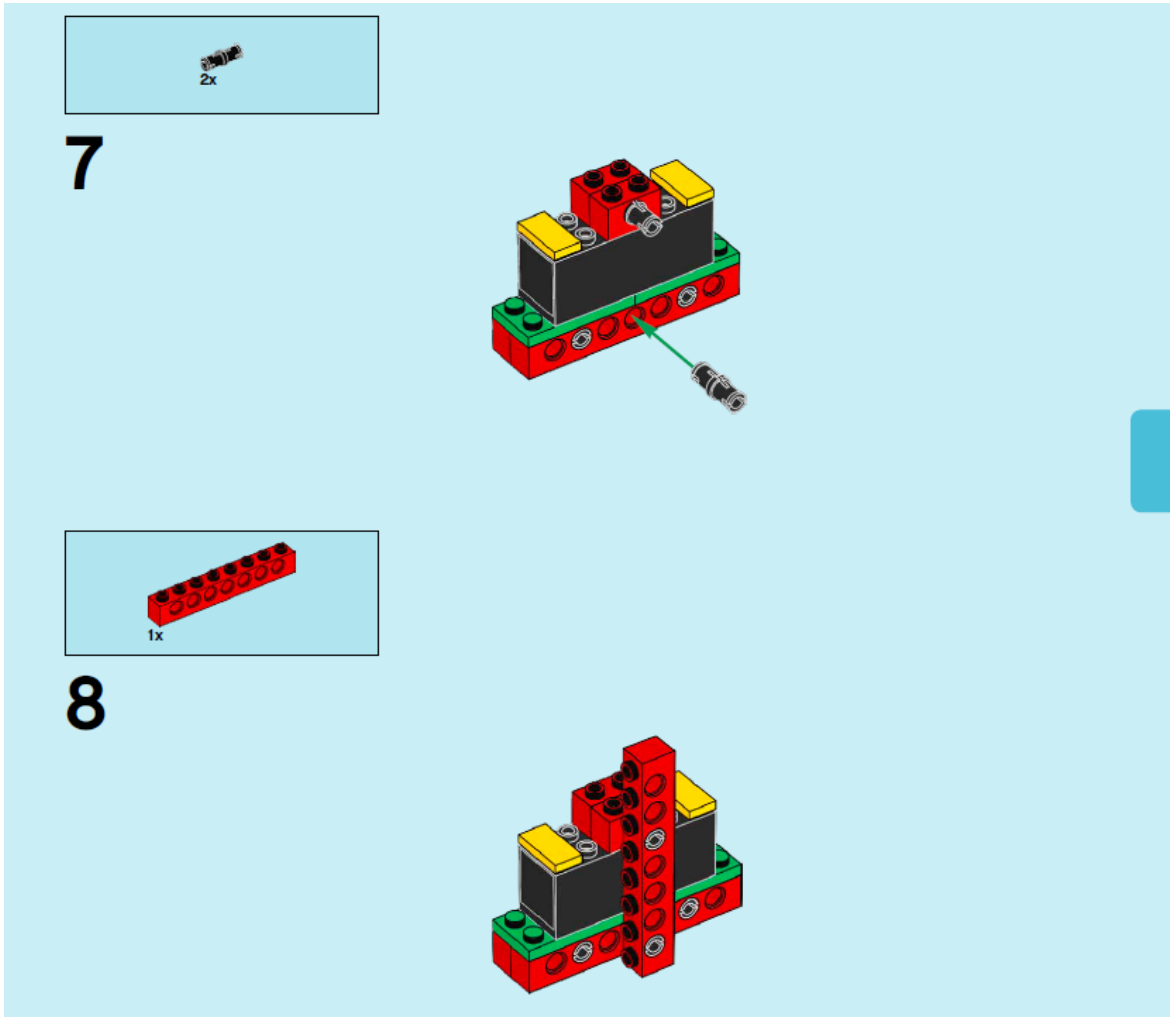
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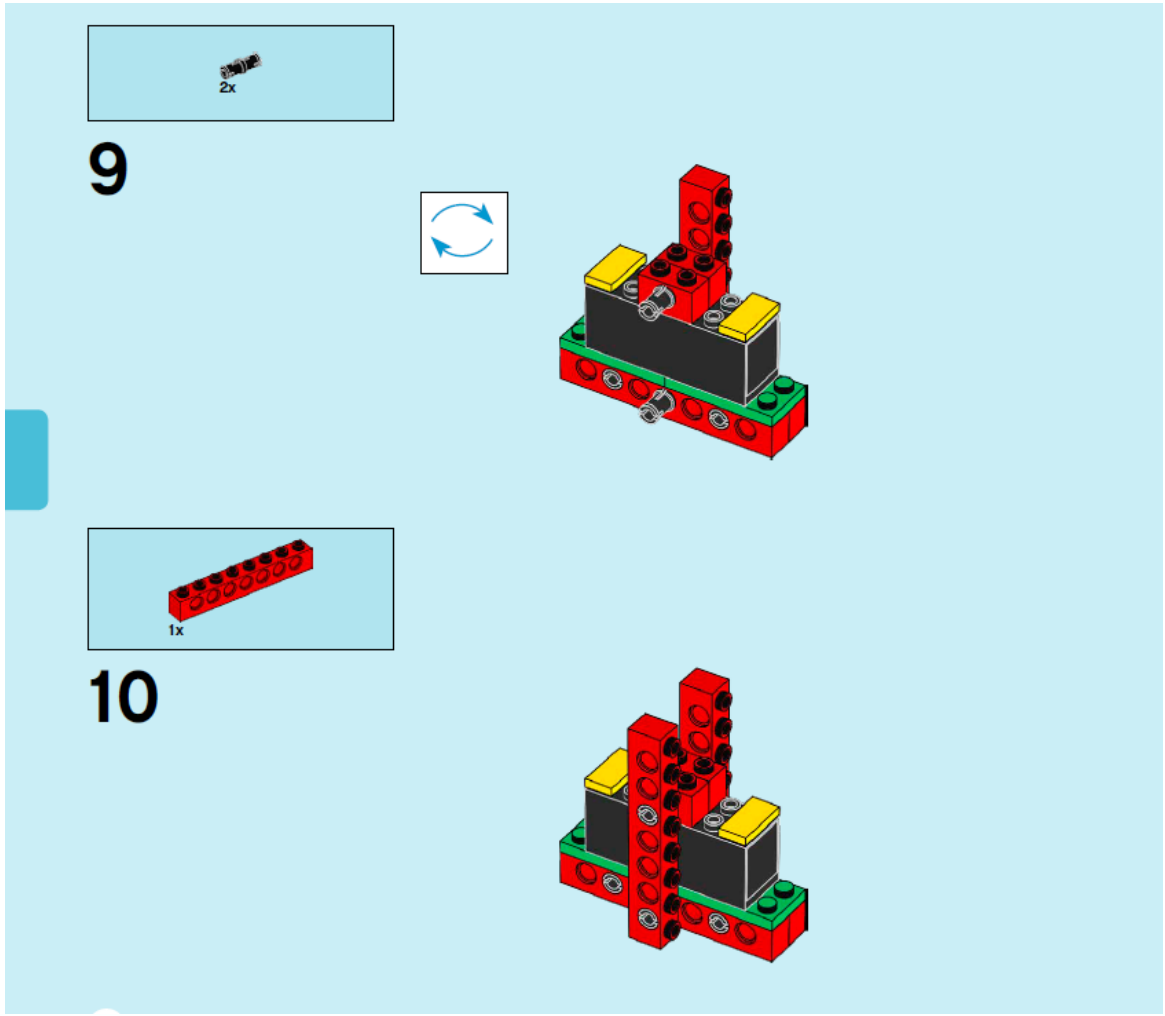
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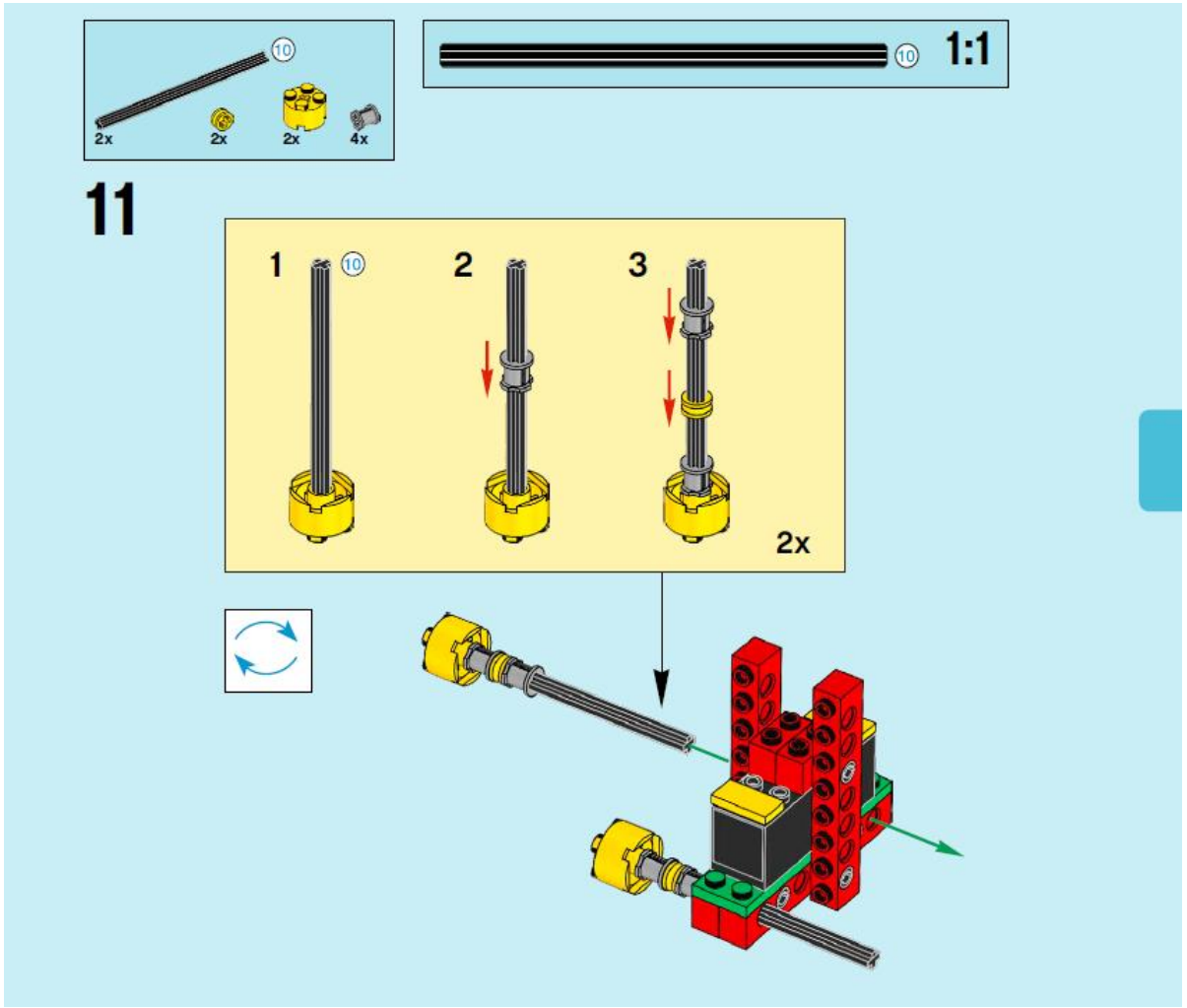
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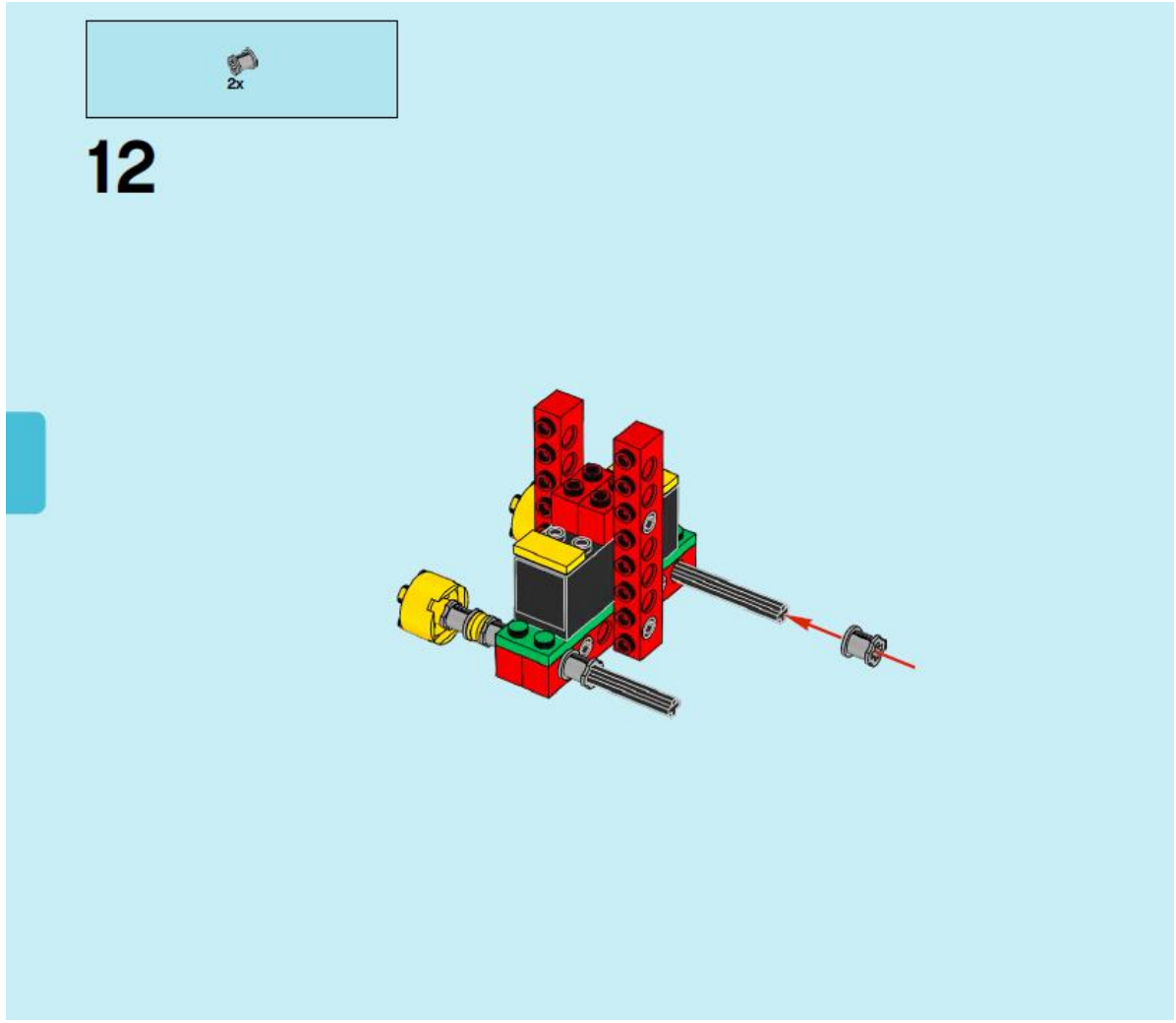
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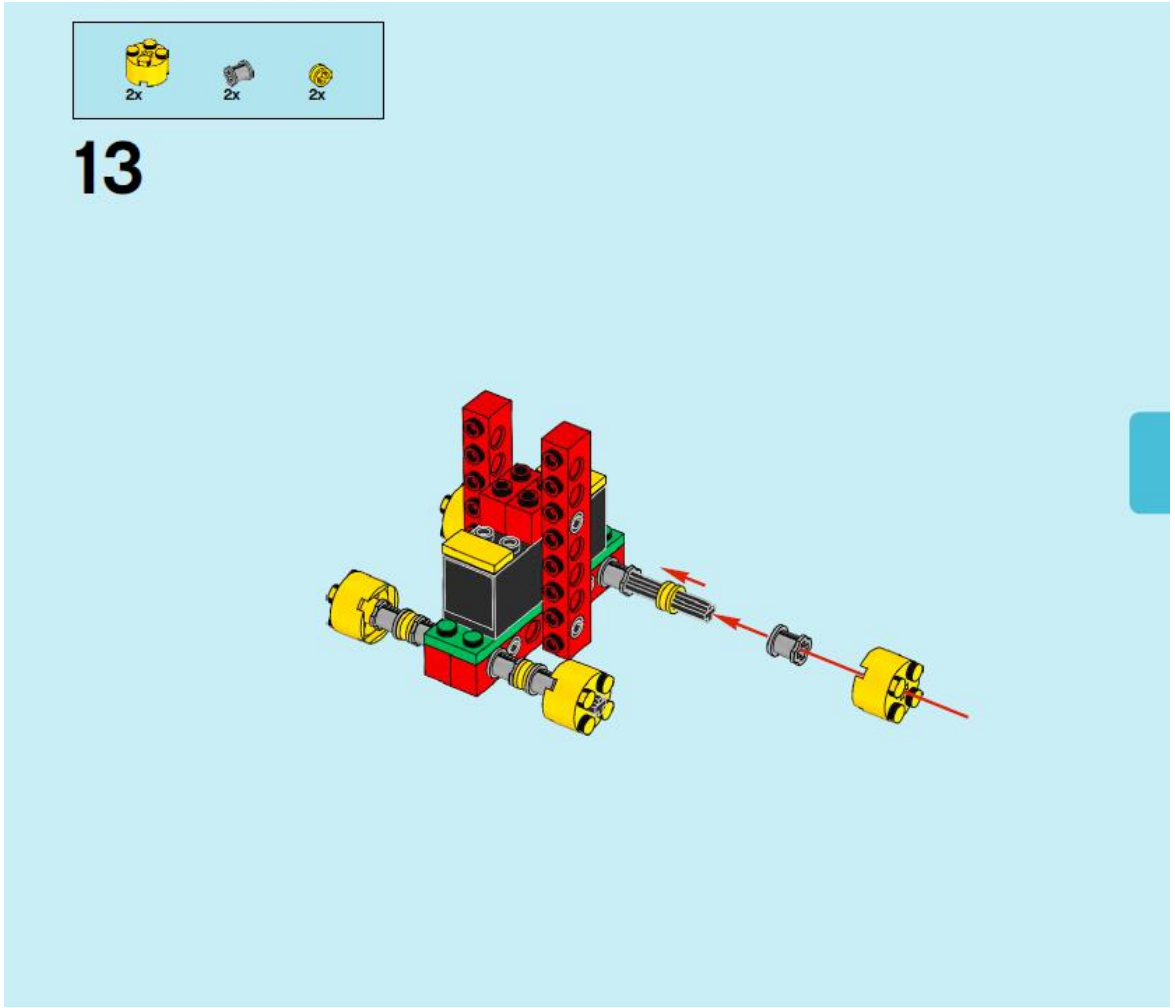
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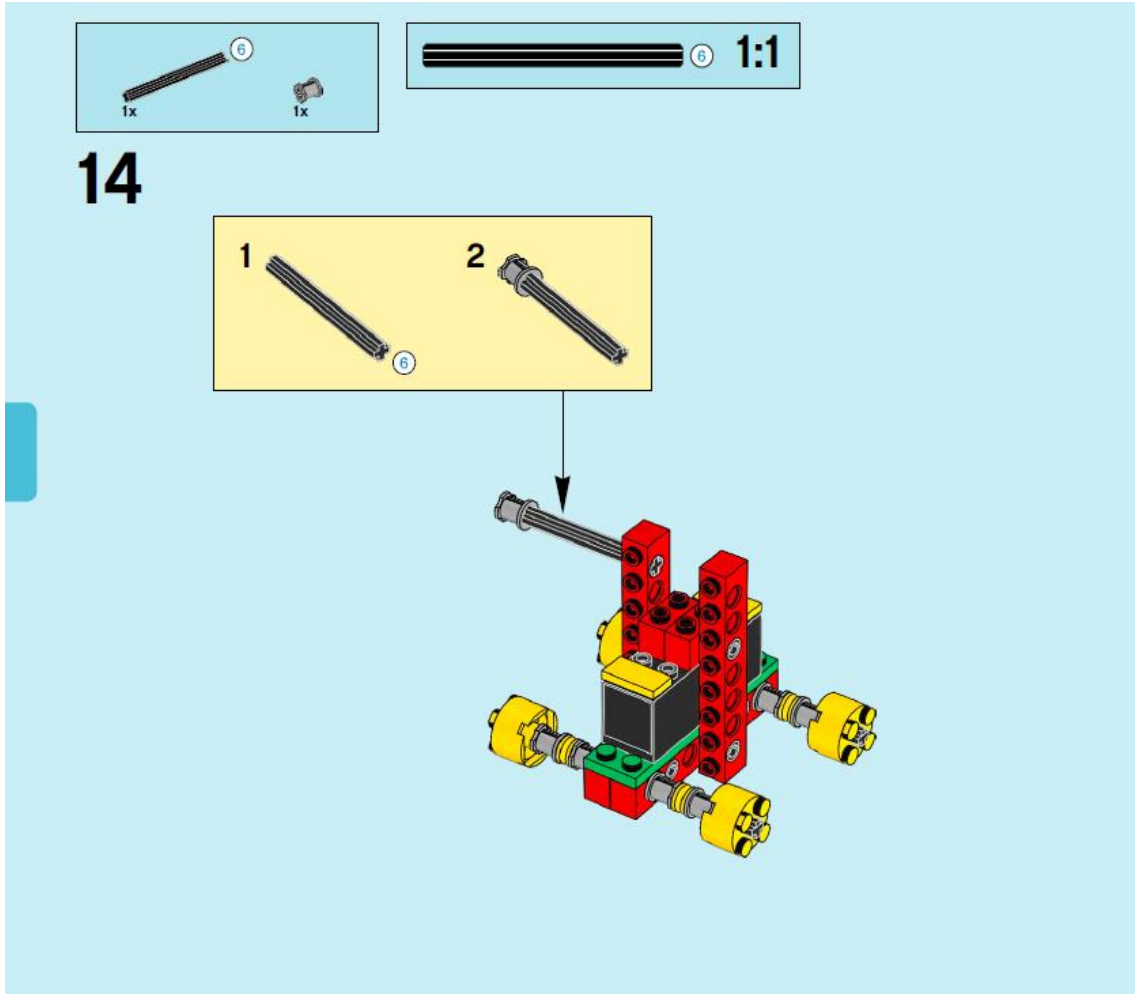
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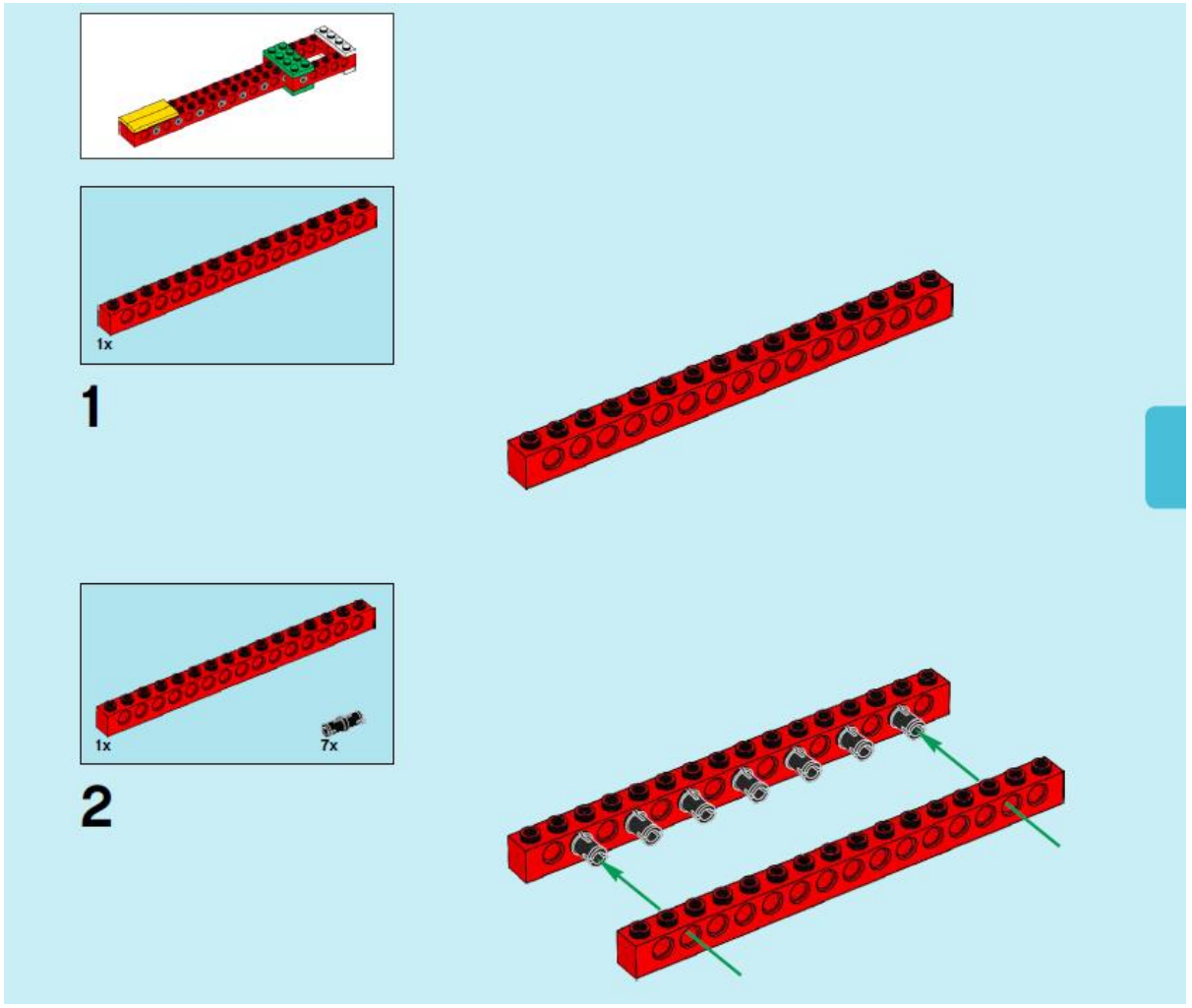
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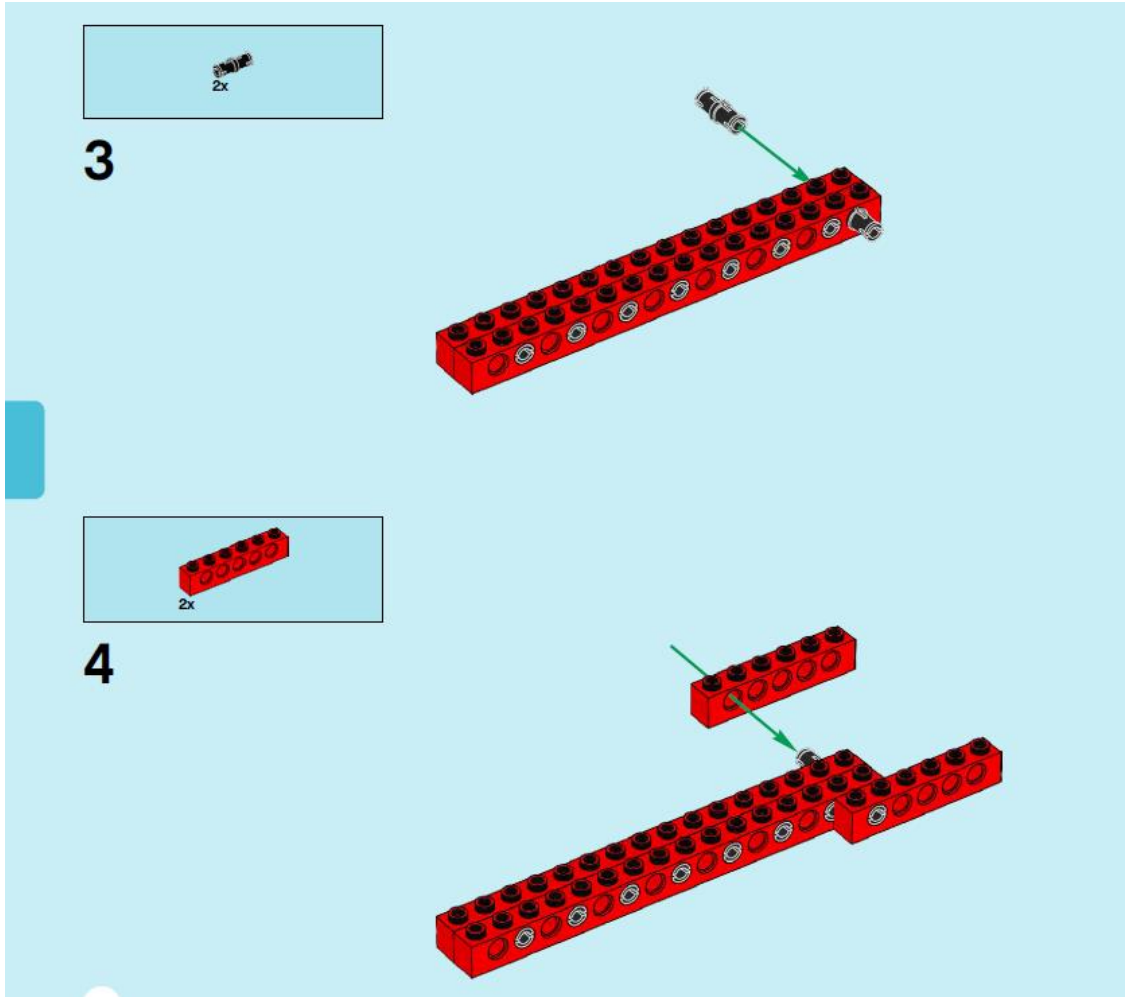
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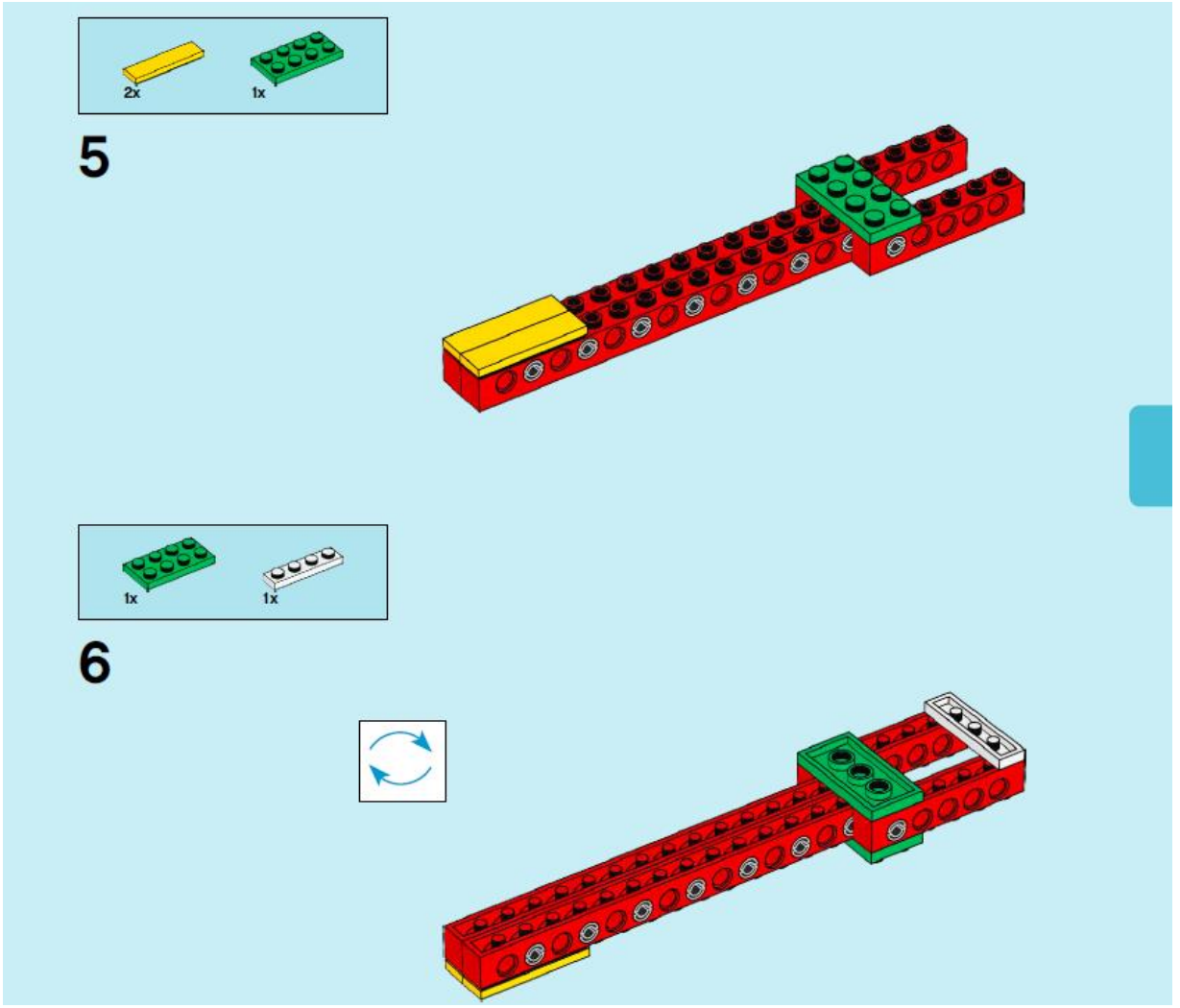
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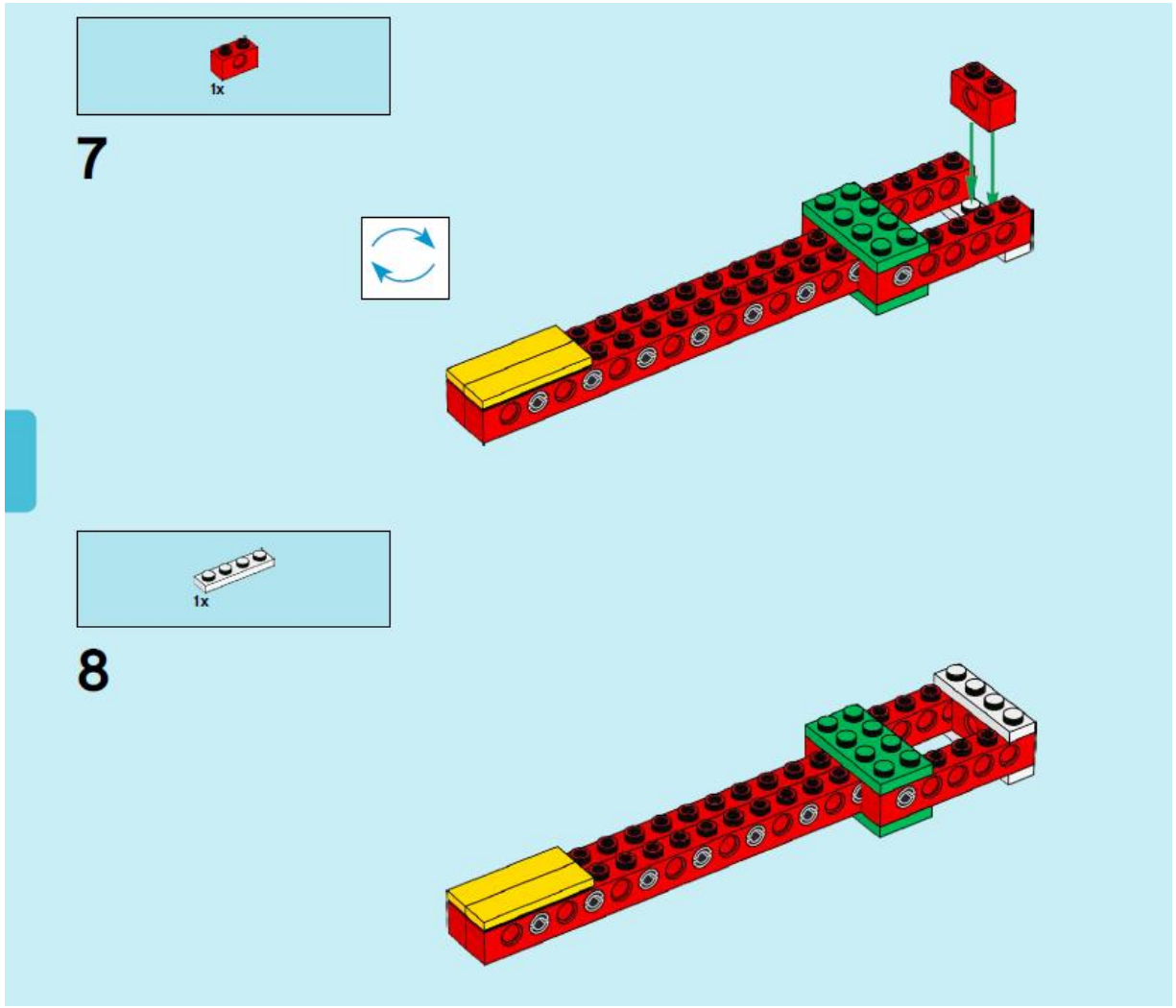
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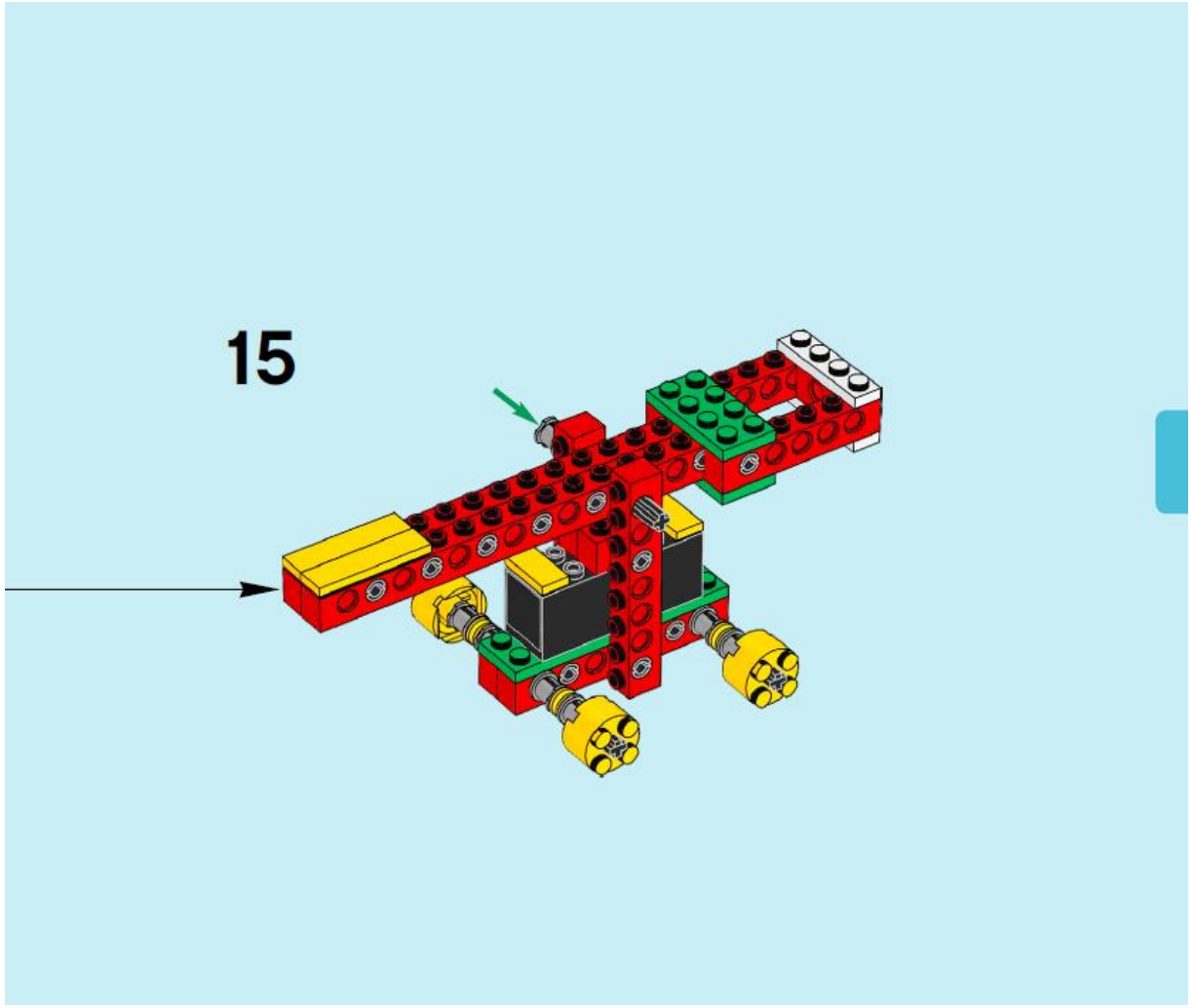
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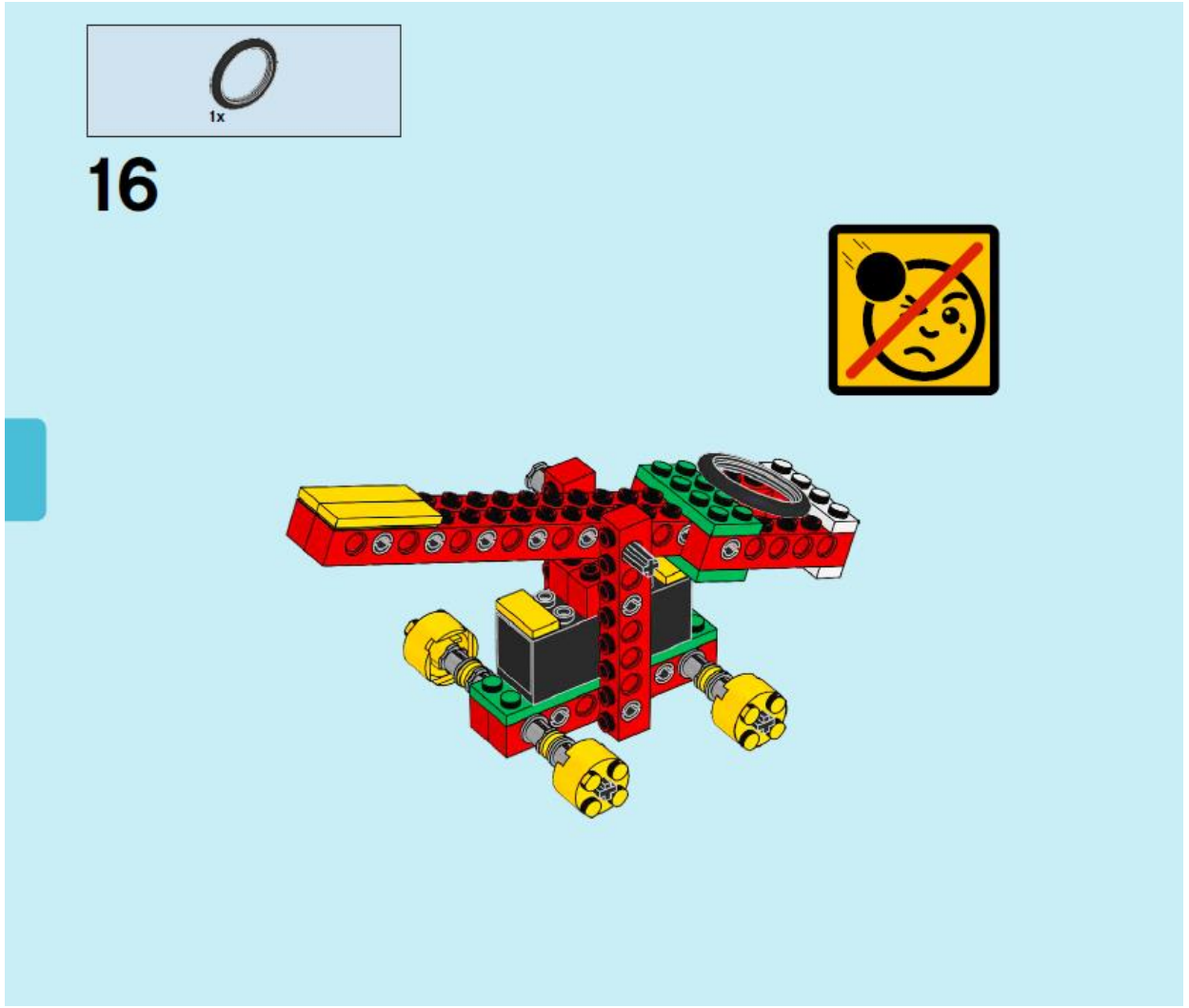
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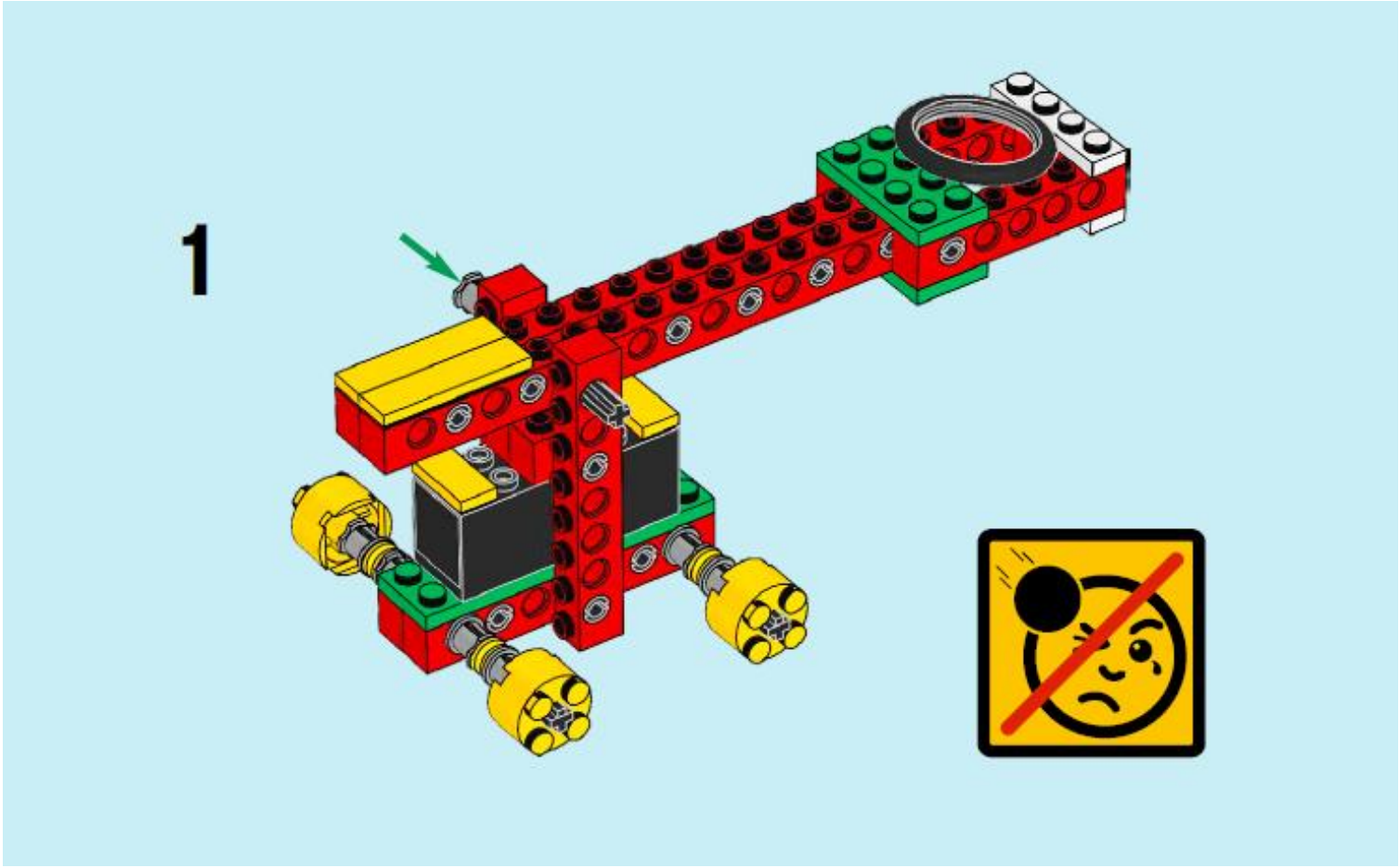
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Modification



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