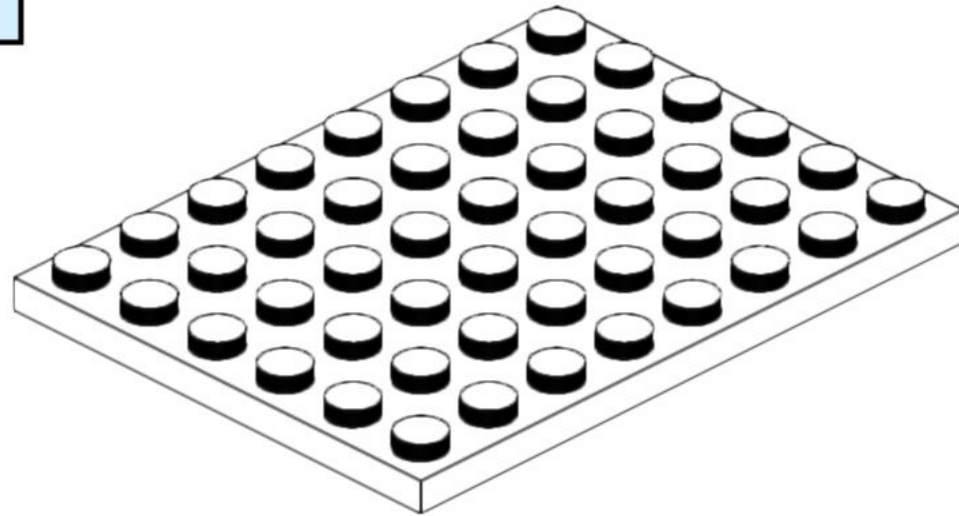
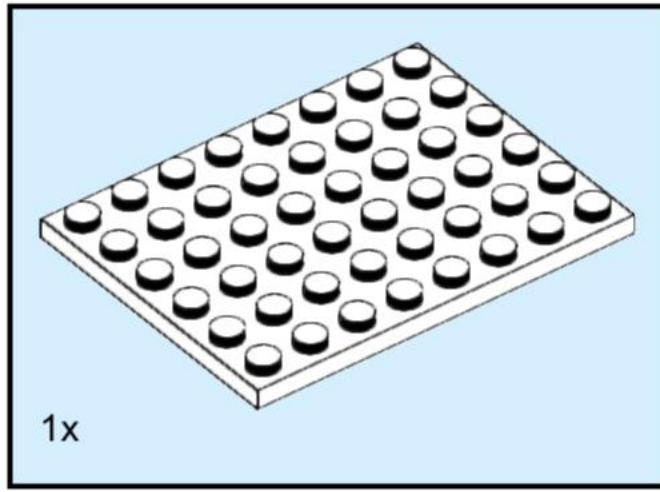


# 1

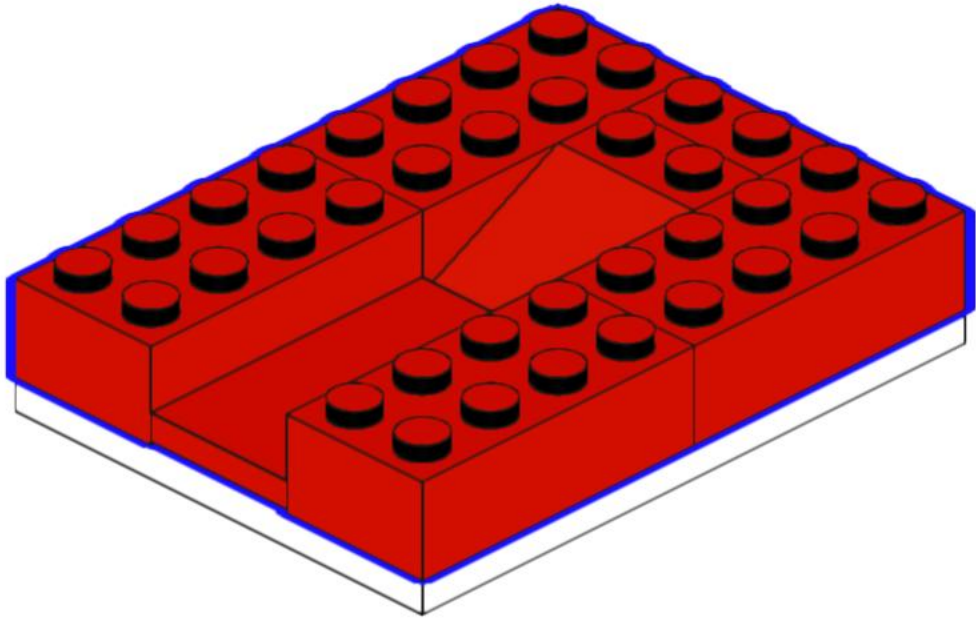
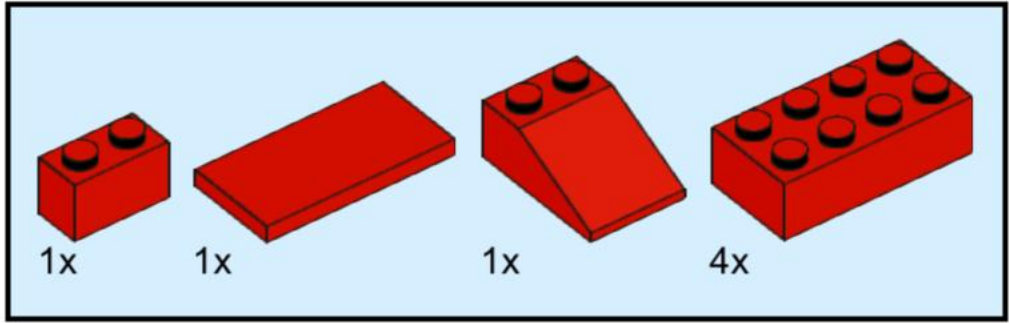


This dispenser is designed for standard LEGO basketballs or soccer balls. If you'd like to adapt the ideas to dispense other objects, you might want to start with step 10 and build the slider based on the size of the object, and then adapt the rest of the dispenser accordingly.

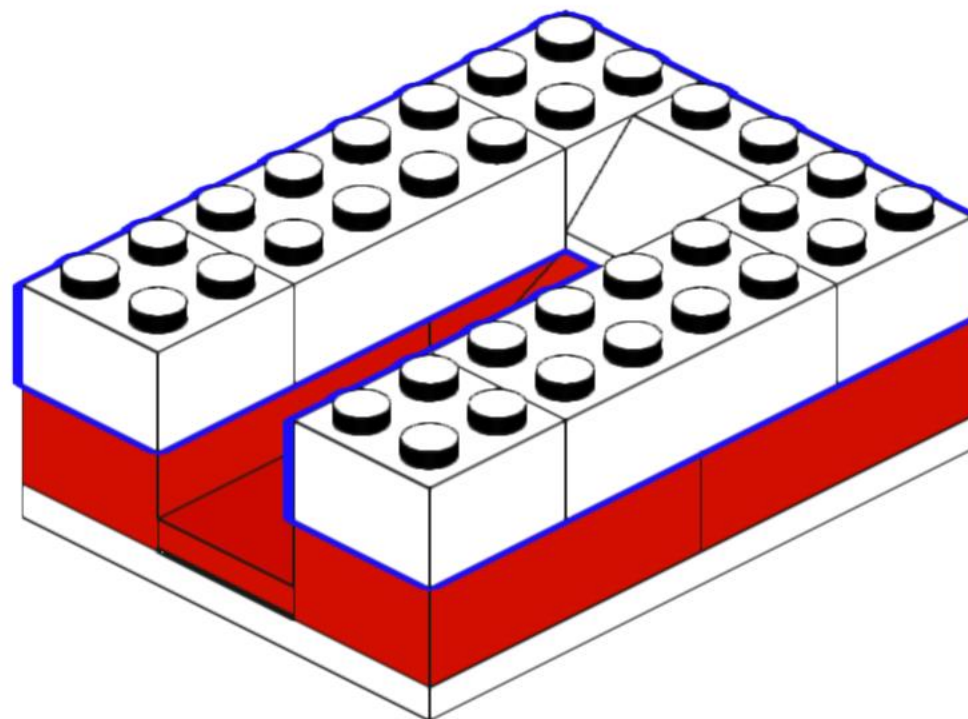
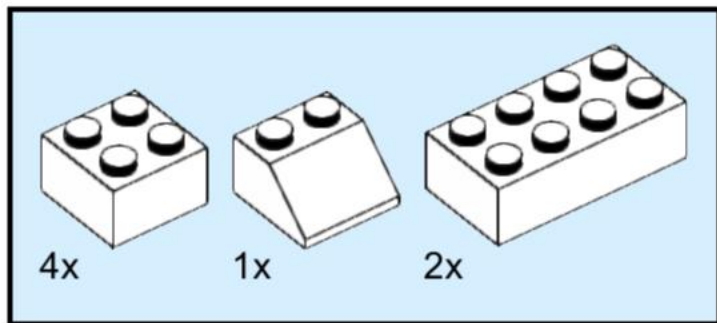
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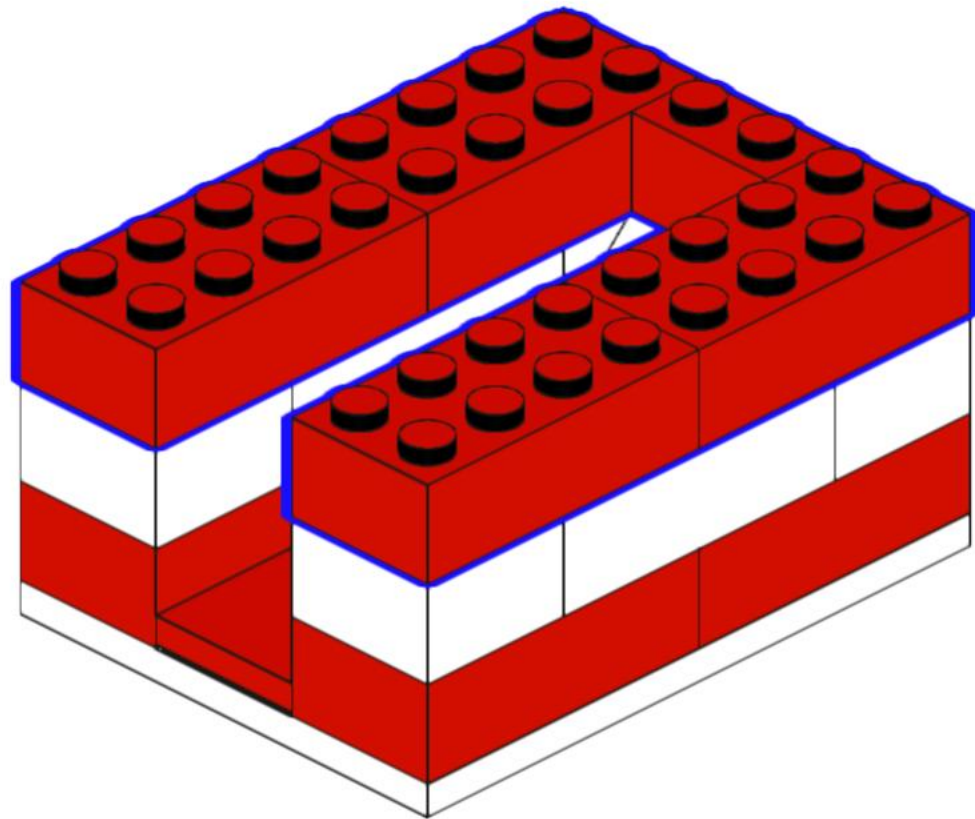
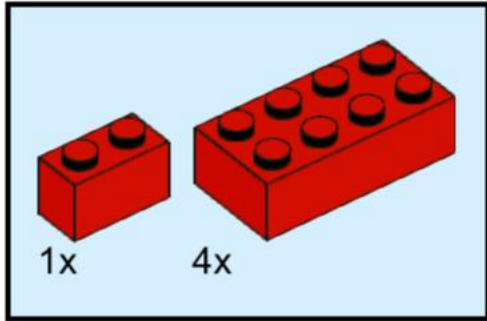
2



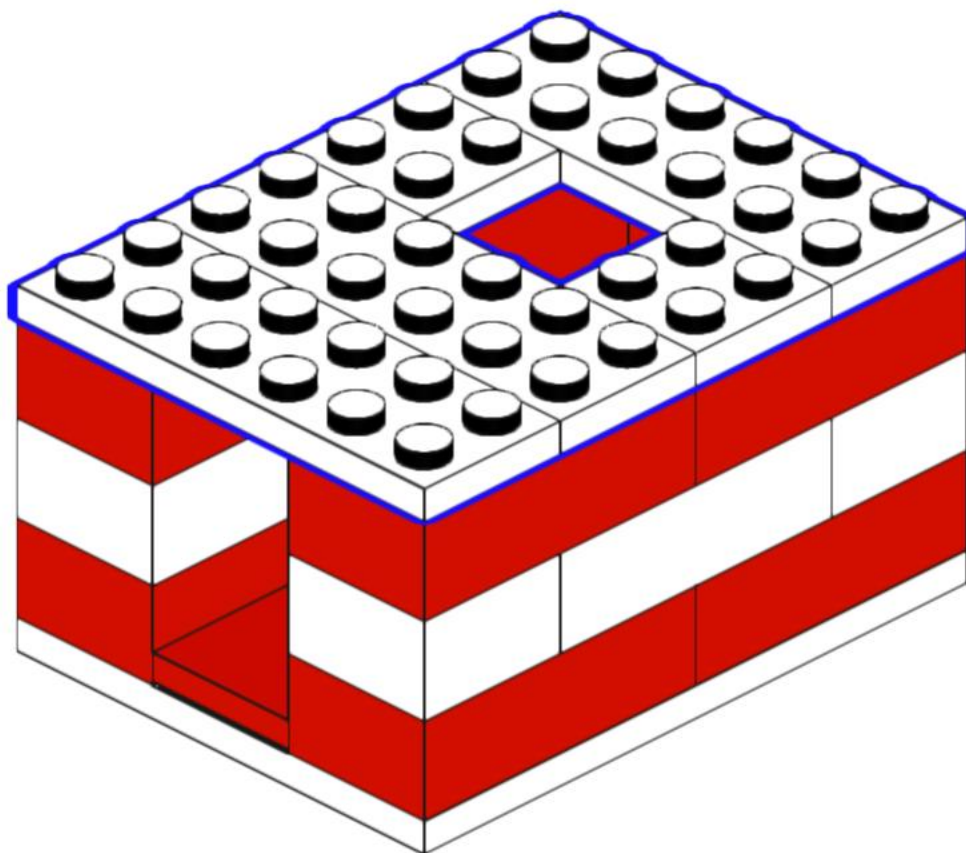
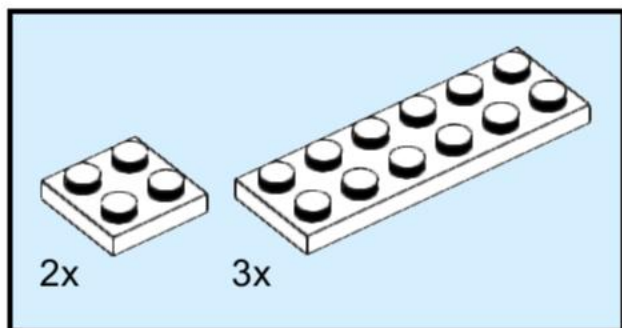
# 3



4

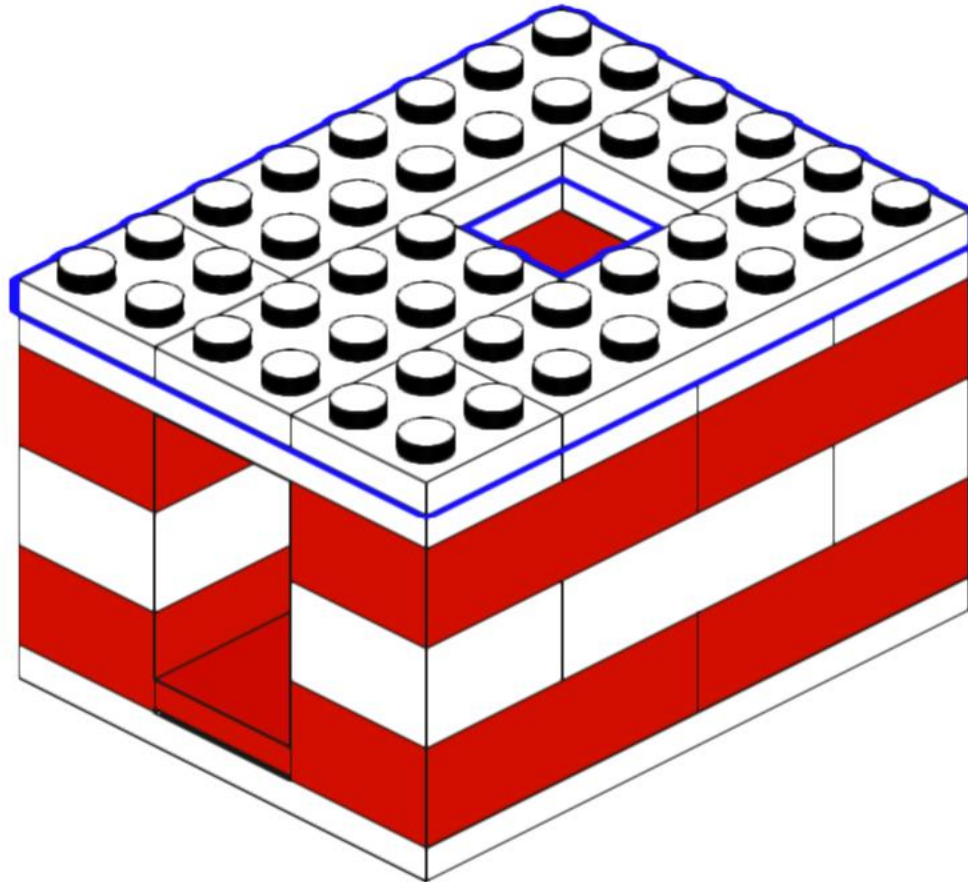
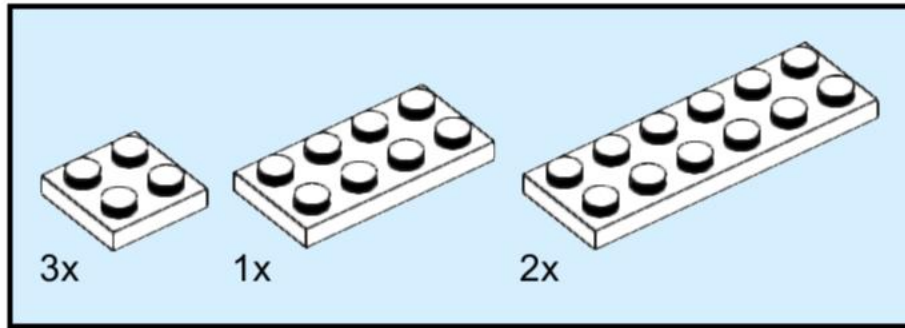


5

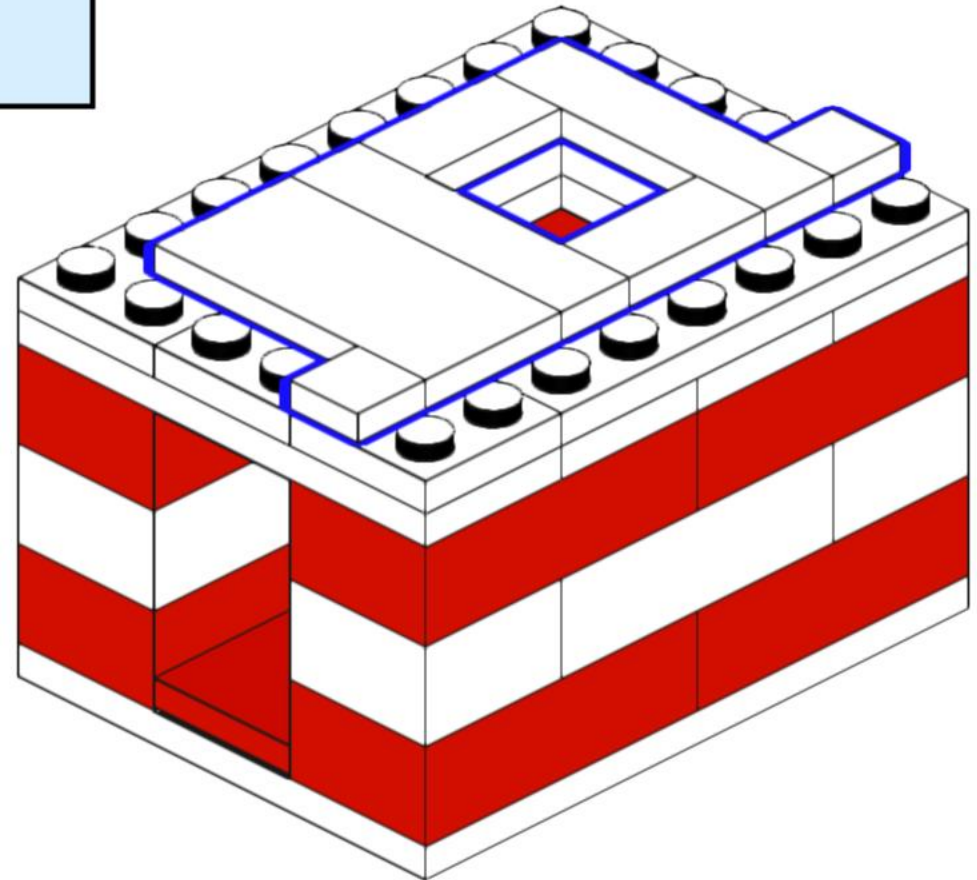
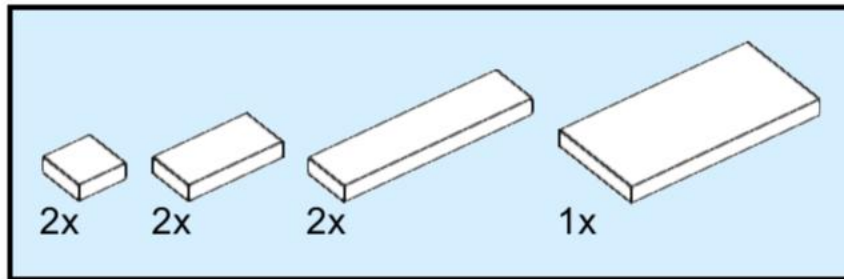




6



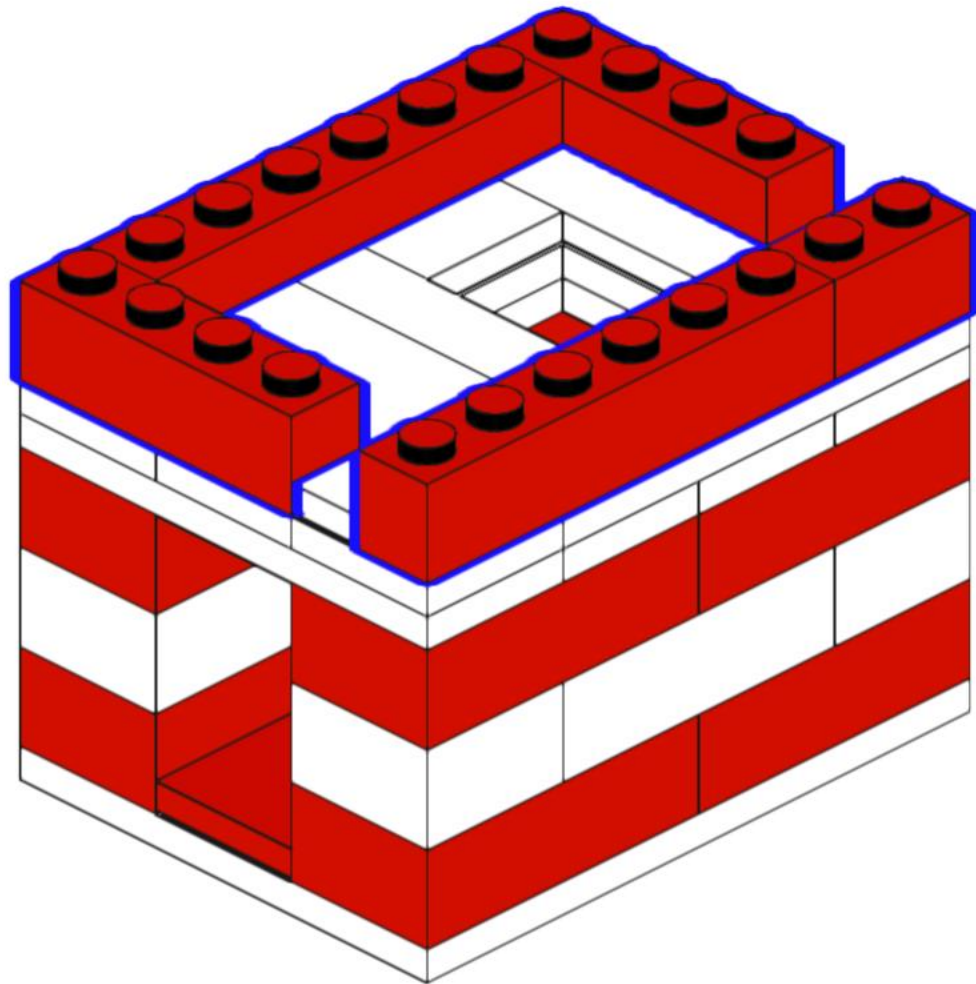
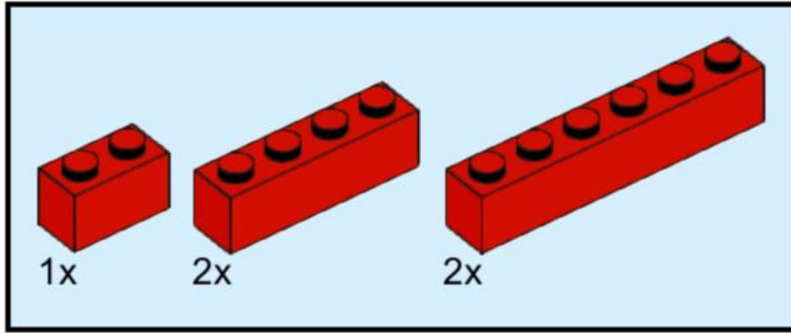
# 7



The basic idea is to use a slider to collect one object from the reservoir, then move it over to the hole near the back so that it can then fall down and roll to the front. You can test if the hole is high enough above the ramp by dropping the object down it. If it gets stuck, you may need to add a layer.

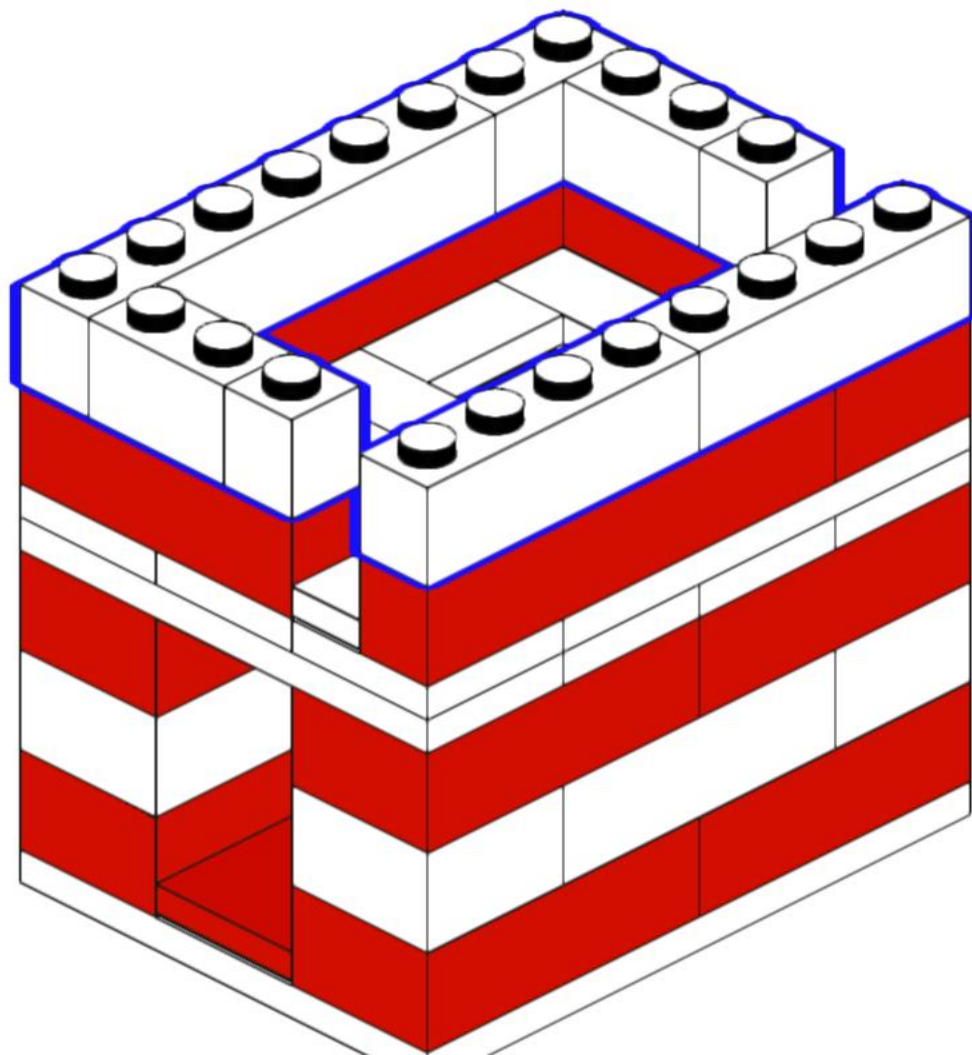
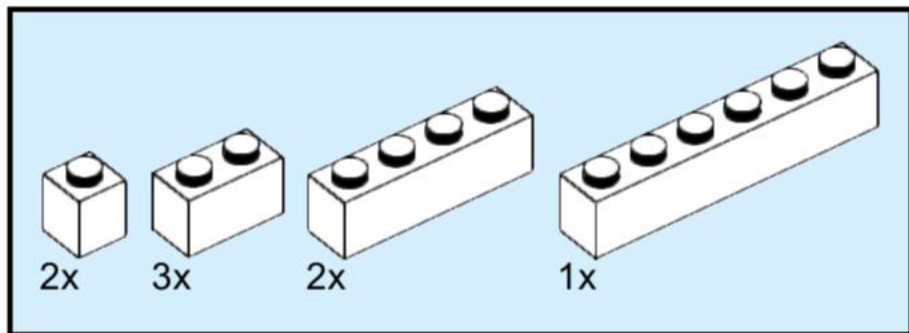
If you have an object that doesn't roll well, you might need a steeper ramp, or you might need to have the output hole near the front. In that case, flip the design so that the reservoir is closer to the back. Then it can pick up an item when you push the slider away and drop it off in the output area when you pull the slider to the front.

8

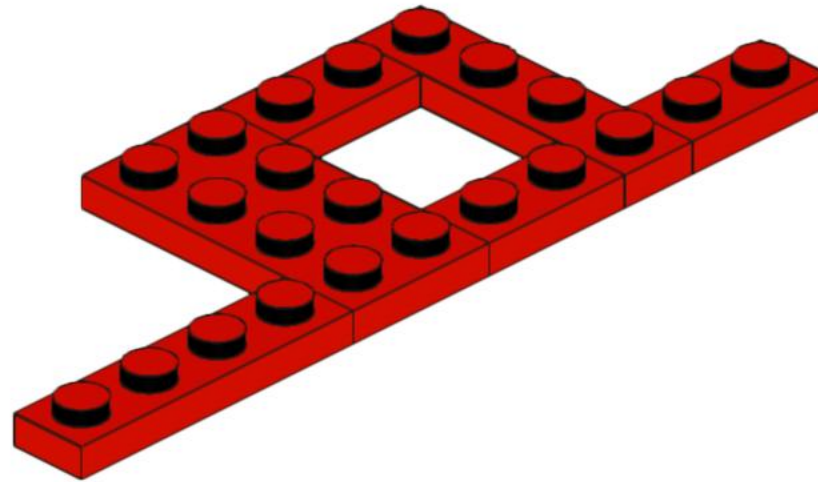
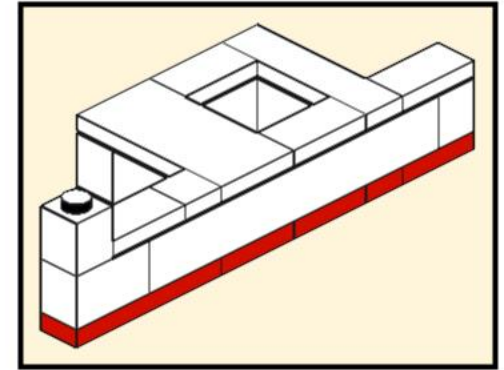
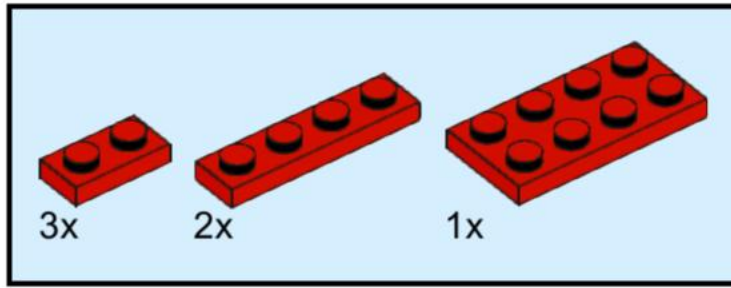




9

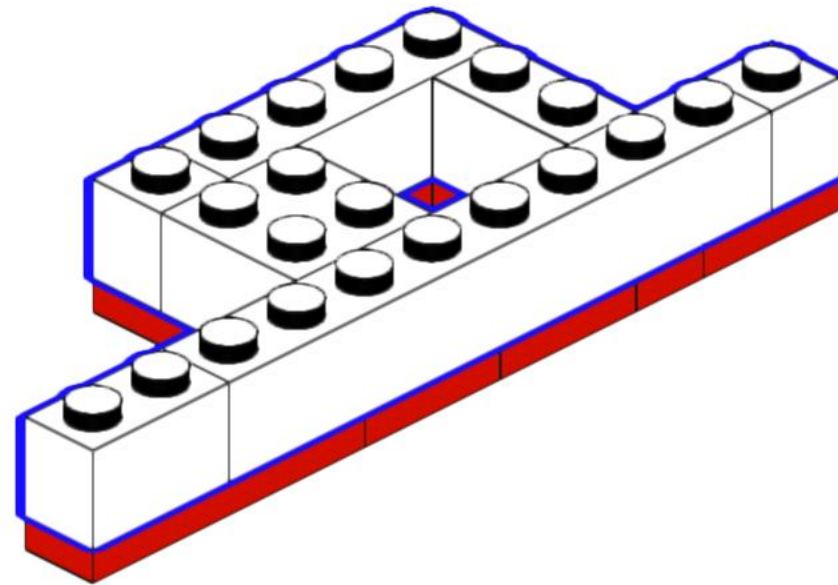
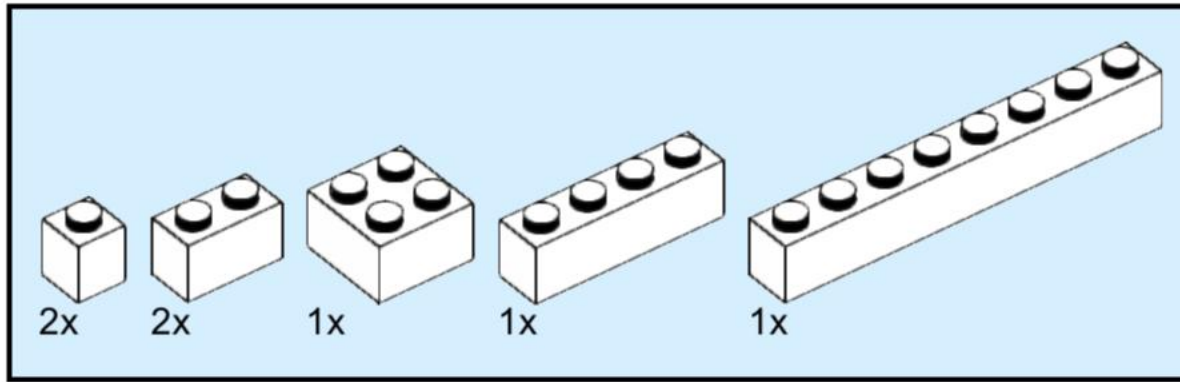


# 10

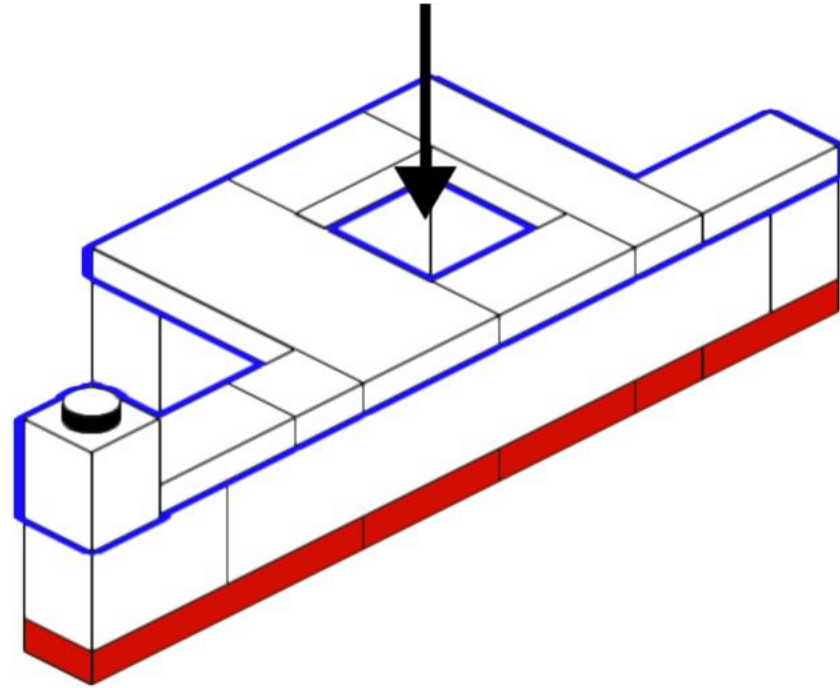
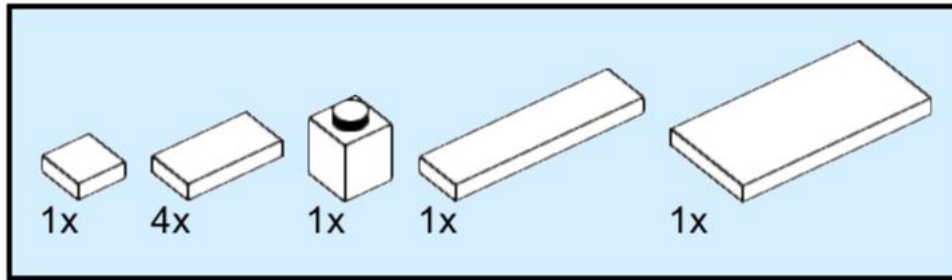


If you want to dispense something other than a standard LEGO soccer ball/basketball, it's probably a good idea to start with this step and then build everything else to fit around it. You'll want to build something around a hole that is just a little bigger than your object. Replace the 2x4 with whatever you need in order to block the next object from falling down when you move the slider towards the back. If you want to dispense something that falls through if only half of the space is covered, you might need to make this dispenser longer so that you can fully block the opening when the slider is pushed.

# 11

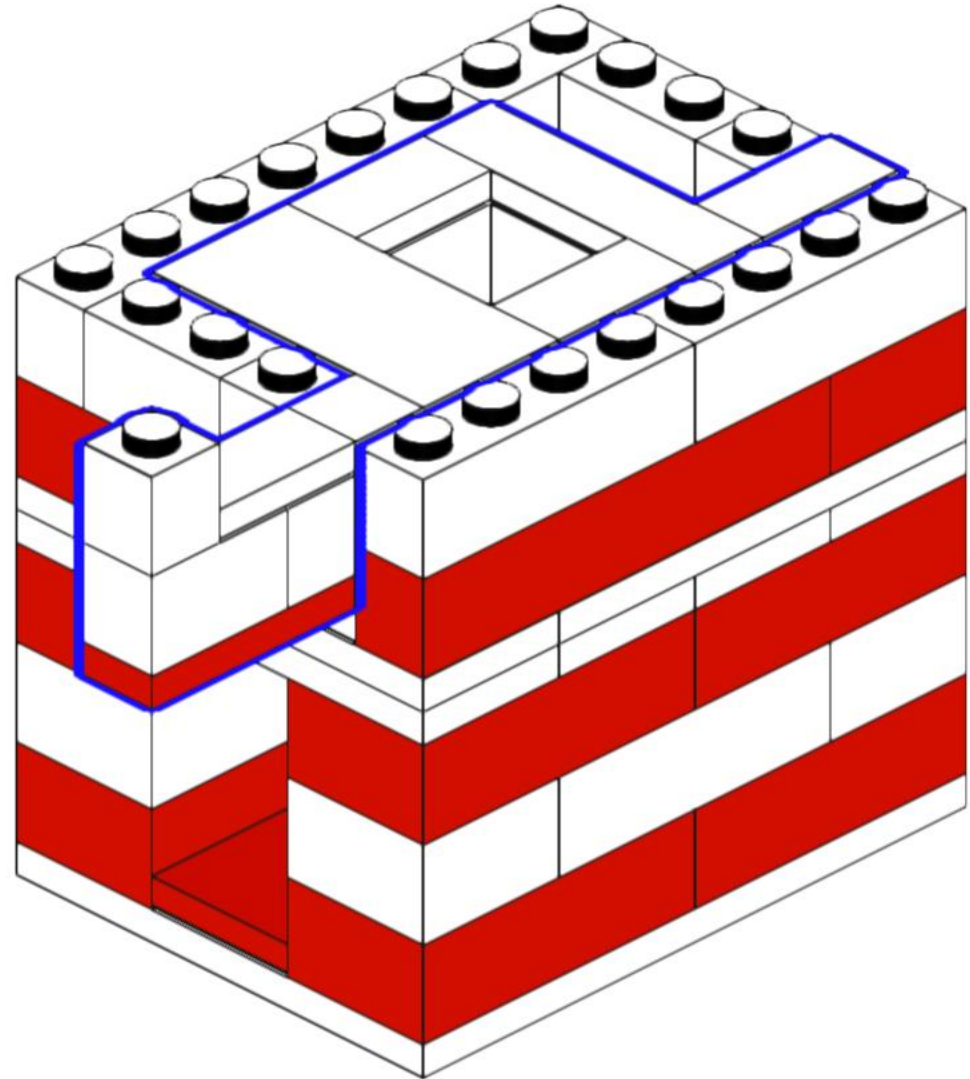


# 12



If you're adapting this to dispense a different object, build up as many layers as needed so that the object fits neatly within the hole.

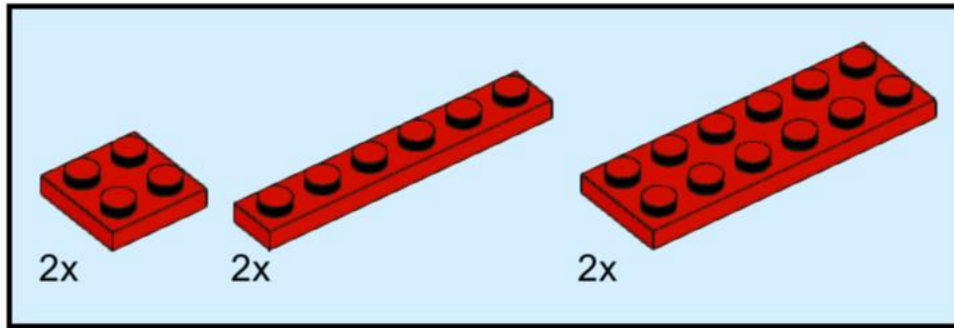
# 13



The slider should fit neatly over the tiled area. If you push it forward, the hole in the slider should line up with the hole over the output ramp.



# 14



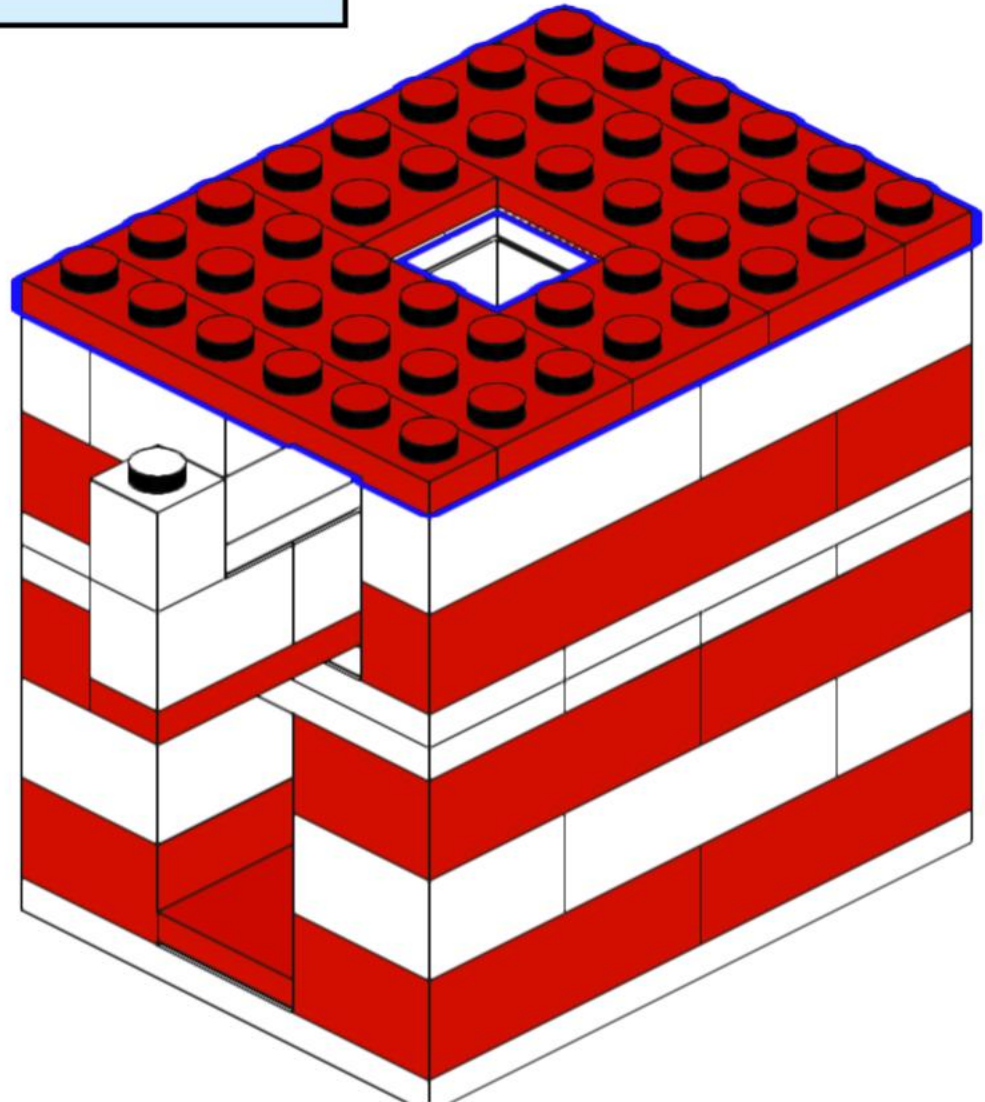
When you pull the slider towards you, the hole should line up with the hole under the reservoir.

This is a good time to test if this will dispense an object. These instructions are for dispensing LEGO basketballs or soccer balls, which are 14mm in diameter. They will probably also work with objects of similar size and shape, and they can be adapted to fit other things (see notes in step 10).

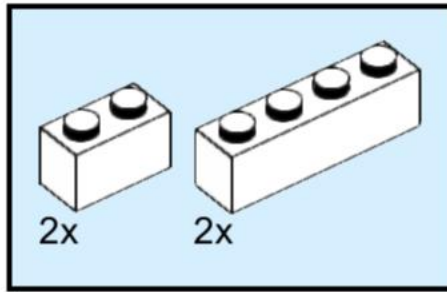
Testing notes: Put an object in the square hole. It shouldn't fall through to the bottom.

Push the slider to the back. The slider shouldn't get stuck. If it does get stuck, you might need to add more layers to the slider and the casing around it.

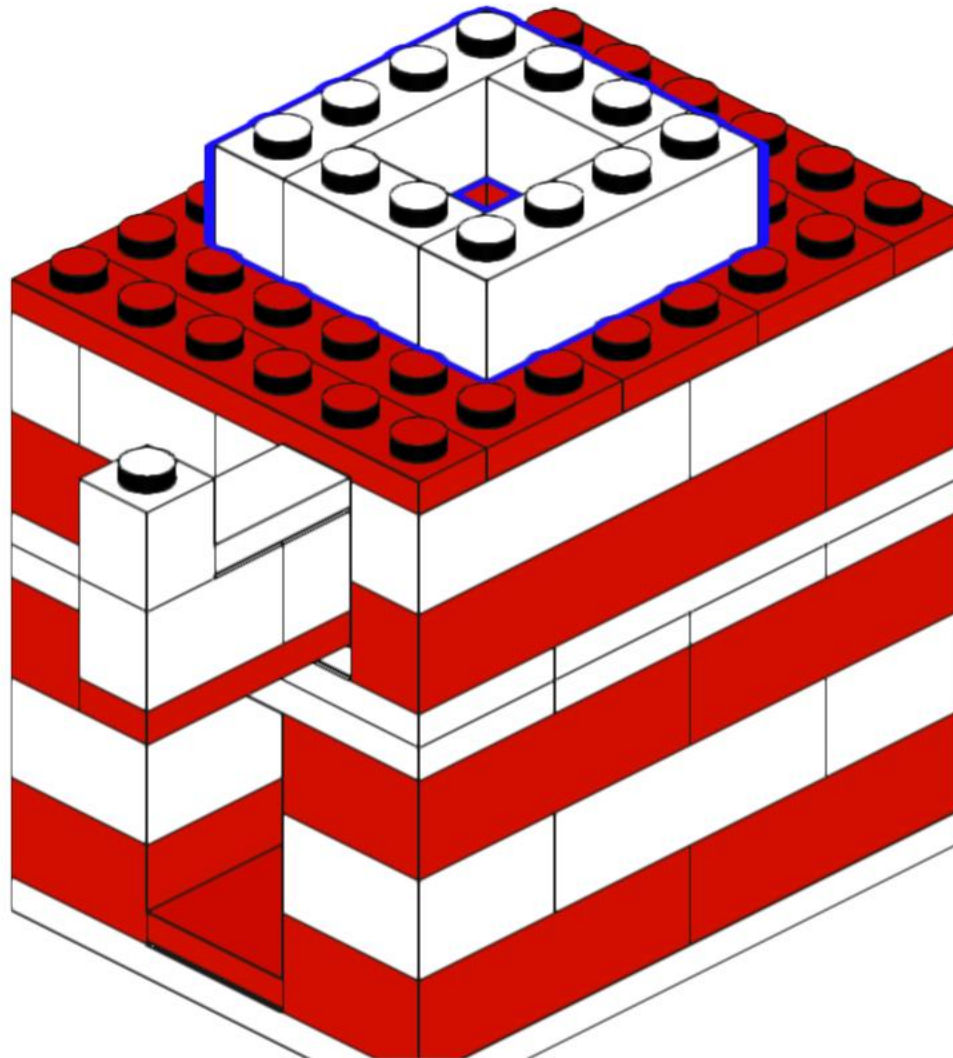
When you push the slider to the back, the object should fall down the second hole and roll out the front.



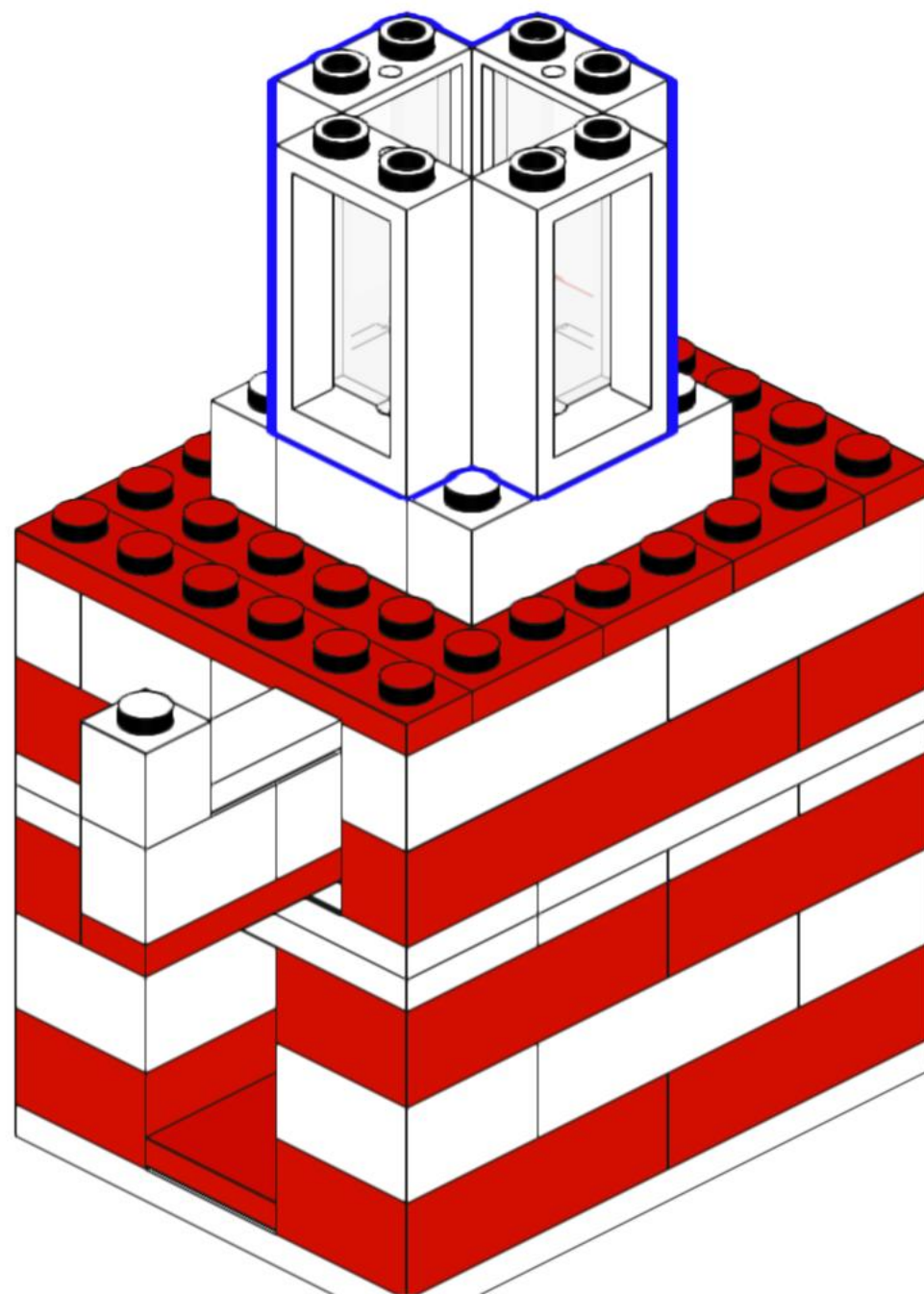
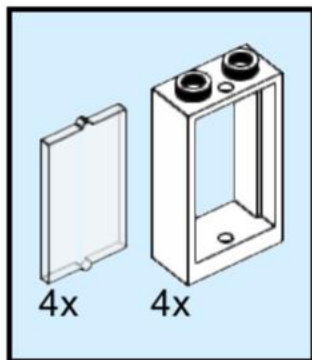
# 15



This is the beginning of the reservoir. You can make one column of objects as tall as you like. If you want to store objects more efficiently, you can use slopes or curved slopes to guide them into the hole, but there is some risk of jamming. If it jams, you can shake the dispenser a little to try to knock one object into the home.

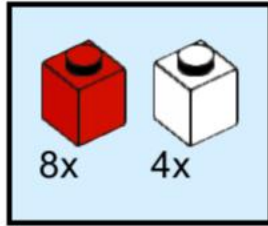


# 16

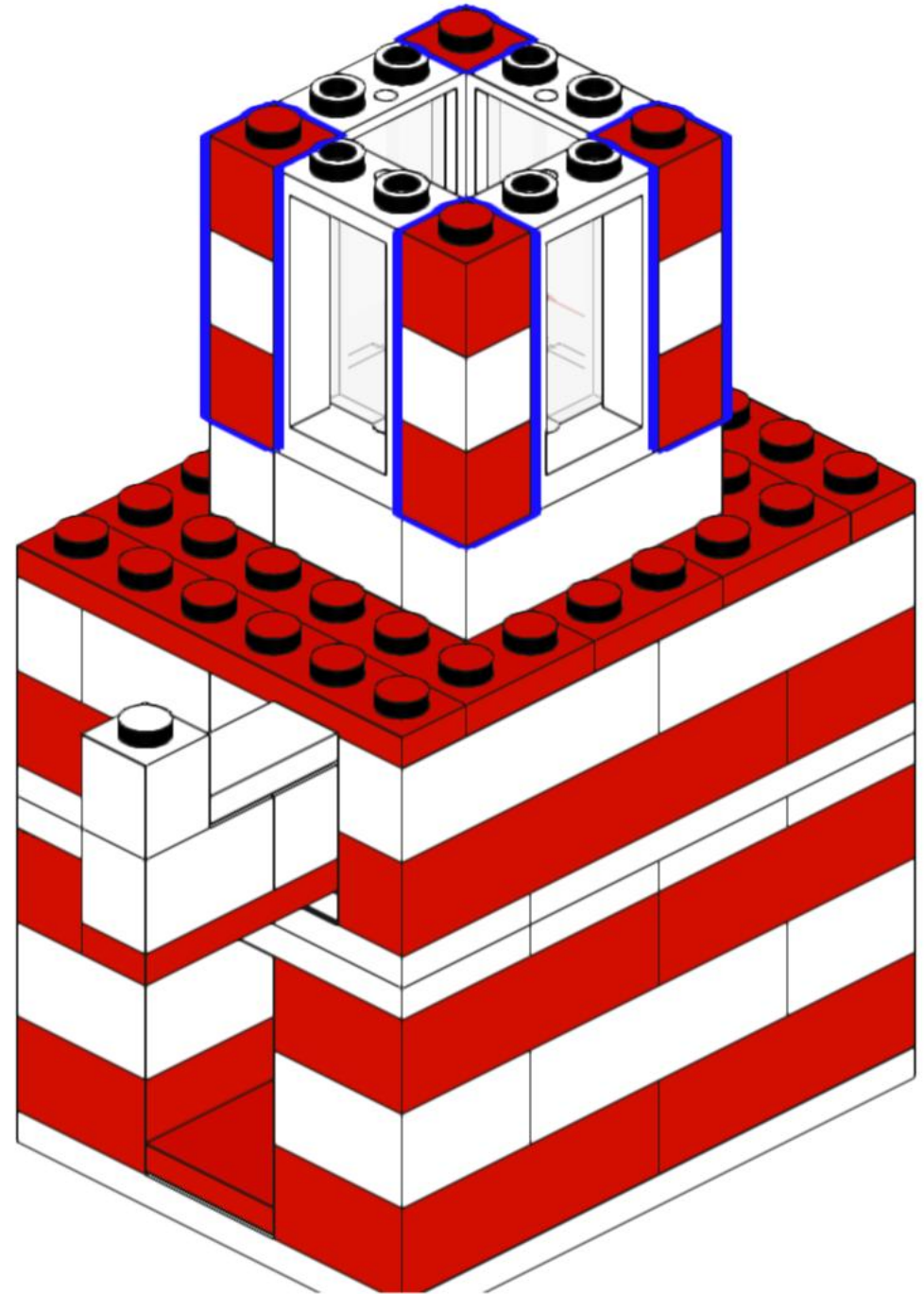




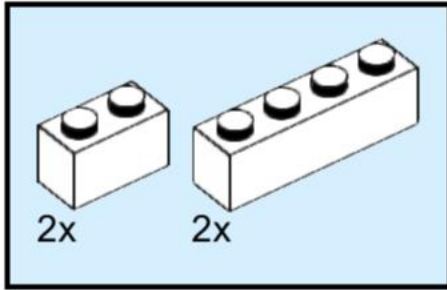
# 17



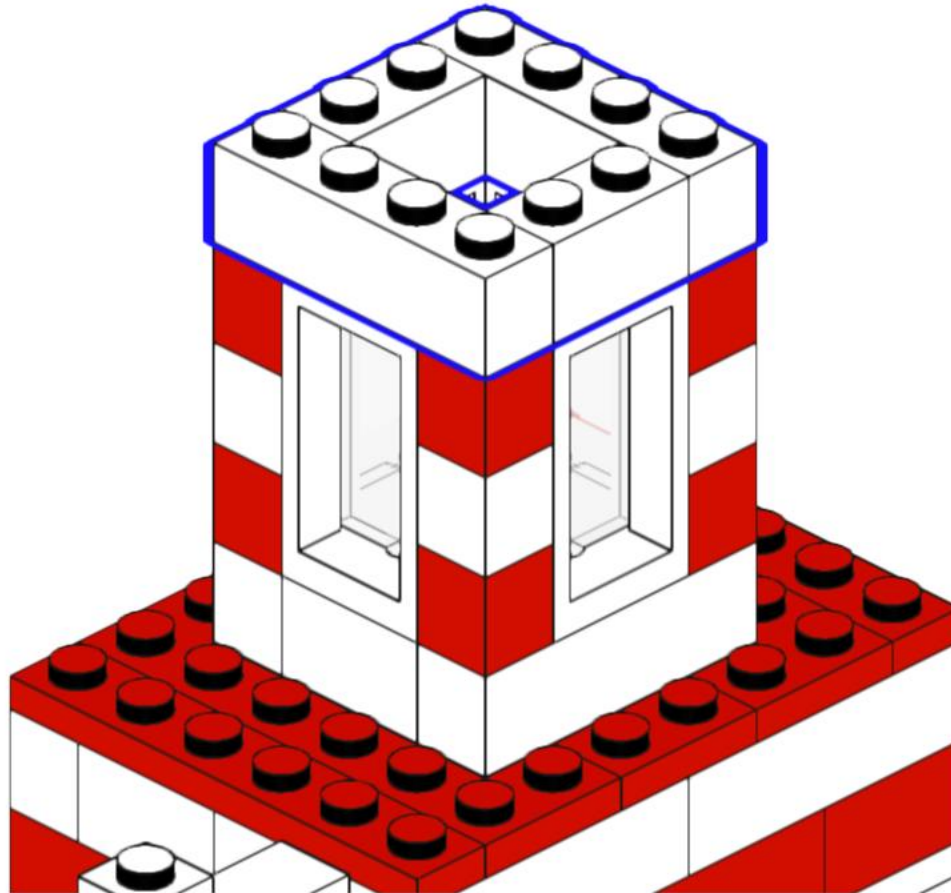
Windows are totally optional. You can use regular bricks or transparent bricks. If you do use windows, it can be helpful to put the flat side of the windows inside to keep all the objects aligned.



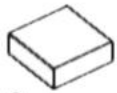
# 18



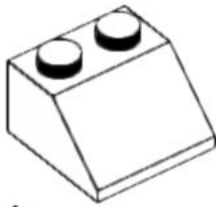
You can make the reservoir as tall as you'd like.



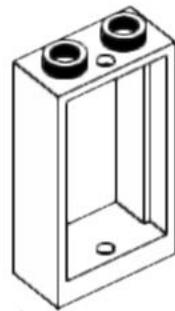




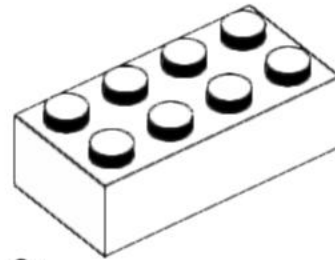
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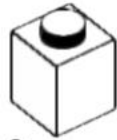
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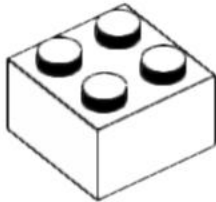
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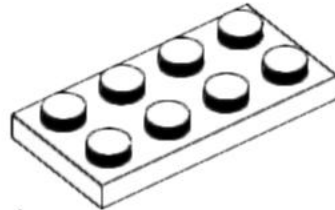
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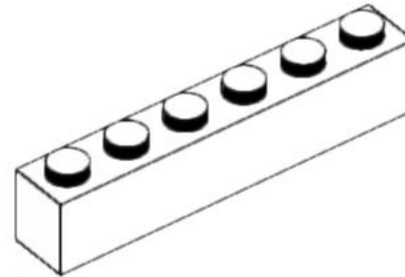
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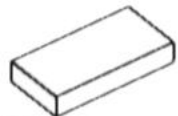
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1x  
3020  
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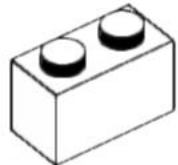
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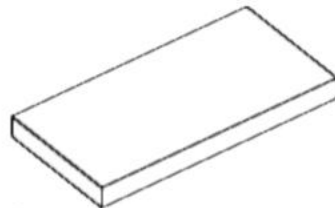
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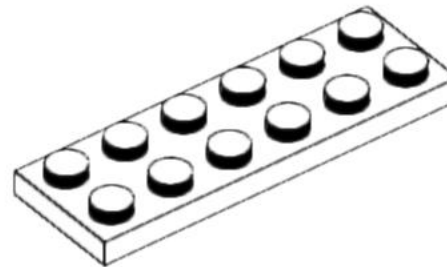
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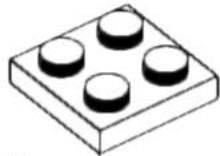
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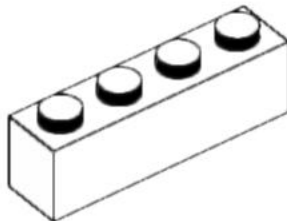
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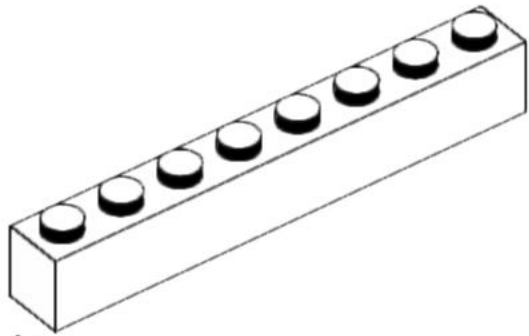
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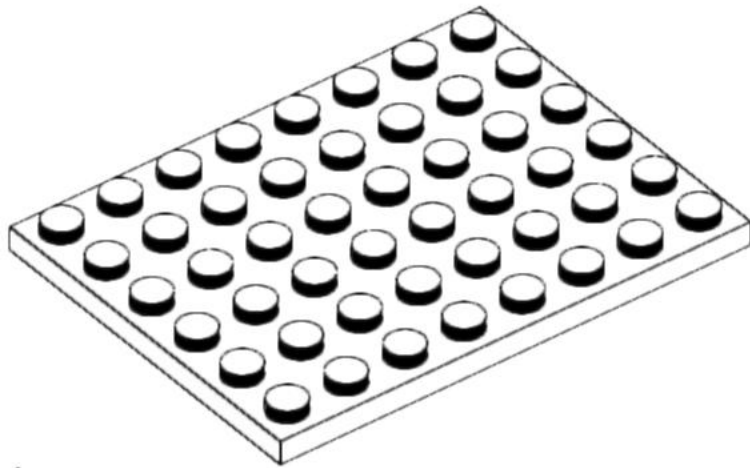
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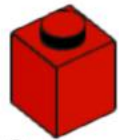
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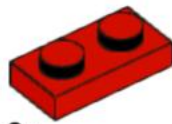
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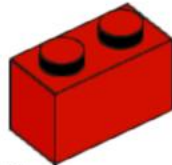
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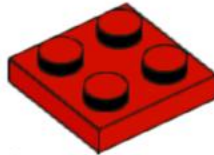
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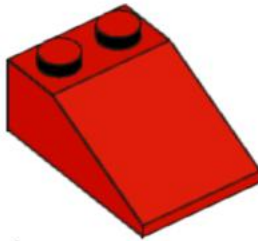
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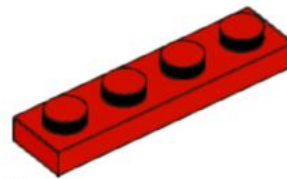
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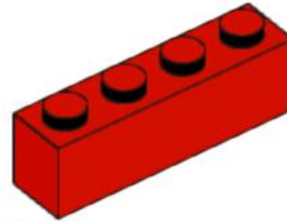
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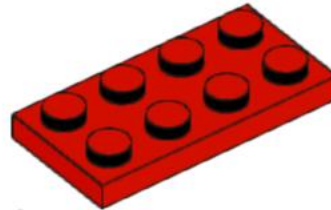
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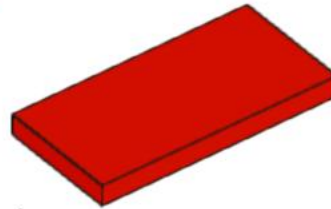
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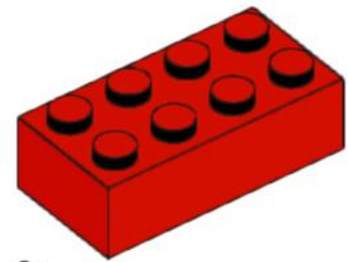
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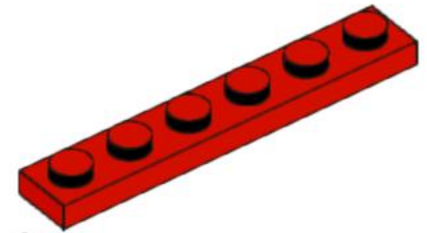
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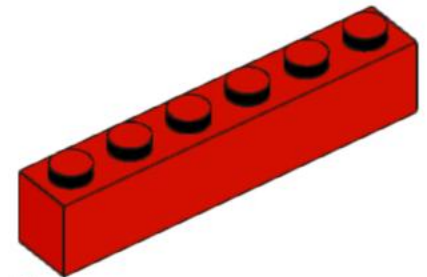
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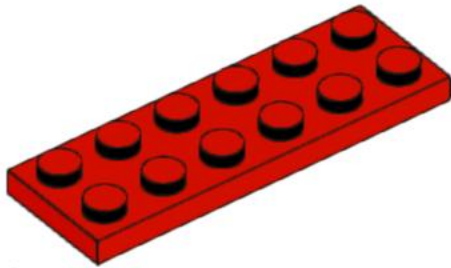
8x  
3001  
Red



2x  
3666  
Red



2x  
3009  
Red



2x  
3795  
Red



4x  
6062  
Trans-Clear

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