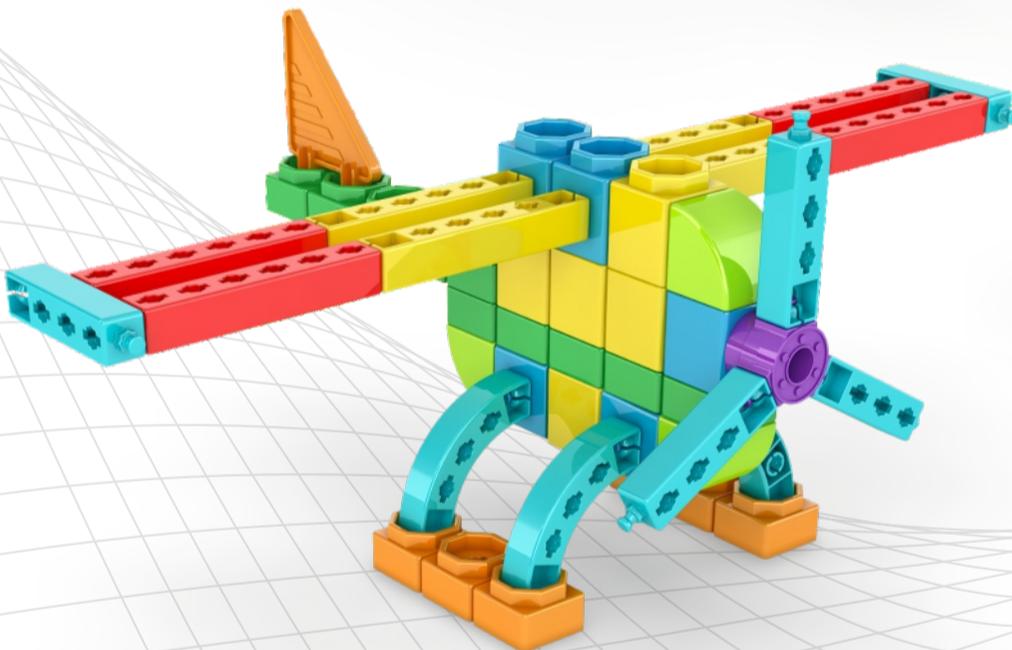
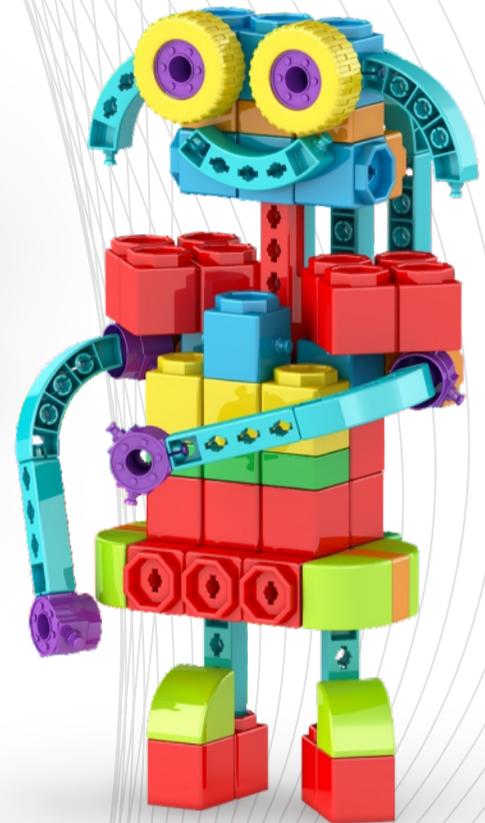


# STEM Qboidz Starter Set

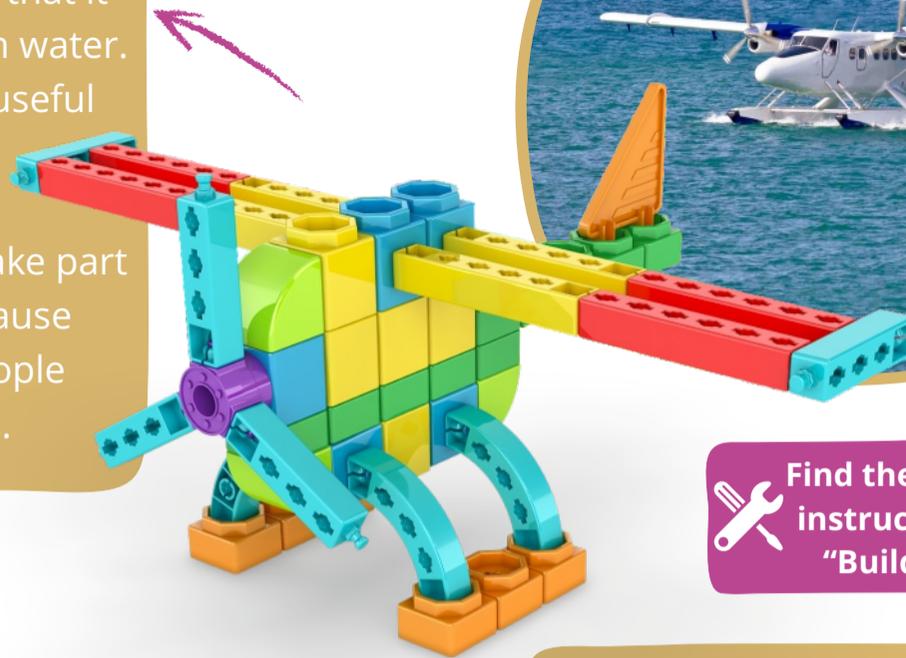
## E05.1 FREE Lessons

The **STEM Qboidz™ starter set** is the ideal set for preschool children to start building with ENGINO®. The QBIDZ™ system combines the award-winning snap-fit connectivity of ENGINO® system with the effortless building feature of stackable blocks! The set encourages preschool children to develop their cognitive, social and motor skills through fun and creative play. This set includes enough parts to build models out of a library of 20 different ideas. The system is designed to allow for four different levels of building complexity, allowing younger children to still be creative while also challenging them as they grow older!



## Lesson: Hydroplane

A hydroplane is an aircraft equipped with floats so that it can take off and land on water. Most hydroplanes are useful in places where there are many islands. Hydroplanes can also take part in rescue missions, because they can carry more people and fly longer distances.



Find the "Hydroplane" building instructions in the respective "Building Models" section.



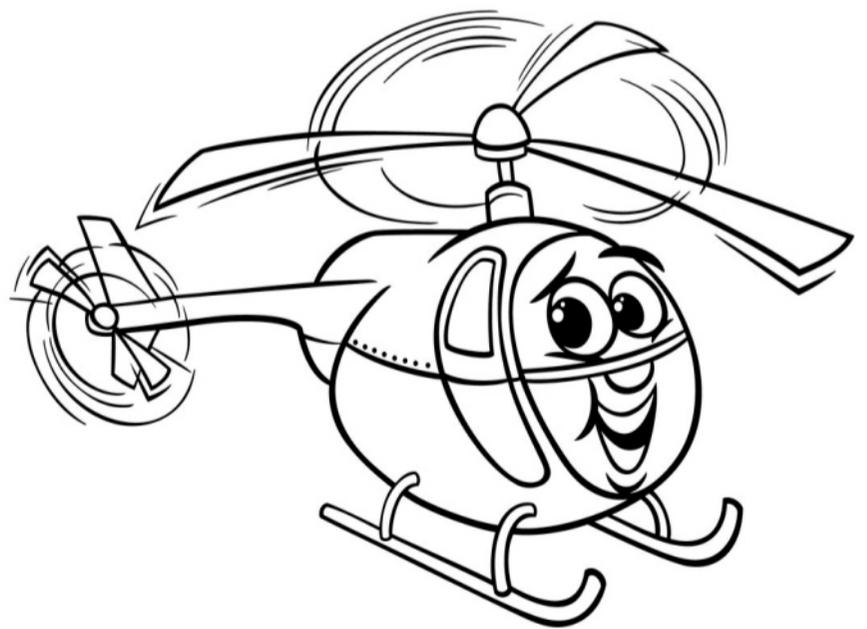
### Did you know?

The Henry Fabre made the first successful take off from water on the 28th March 1910.

On the other hand, hydroplanes cannot fly with bad weather, since big waves make take-off and landing too dangerous.



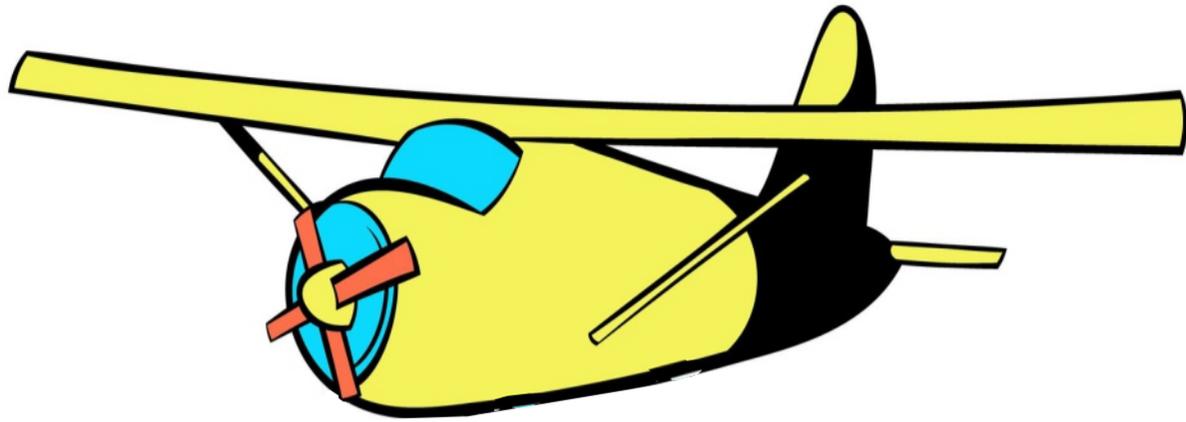
Find and circle 5 differences between the two hydroplanes.



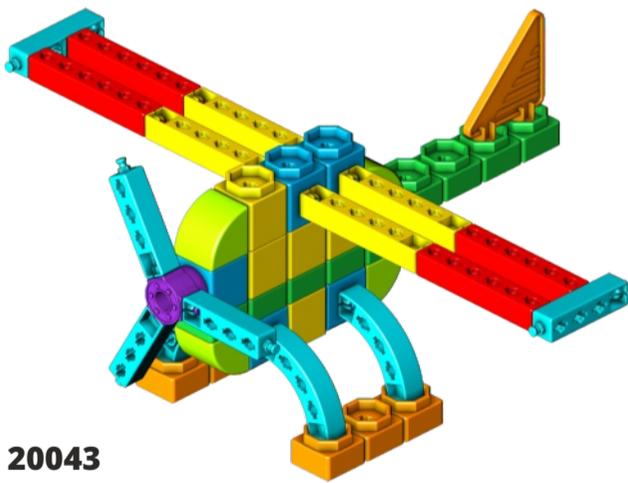
Color the picture.



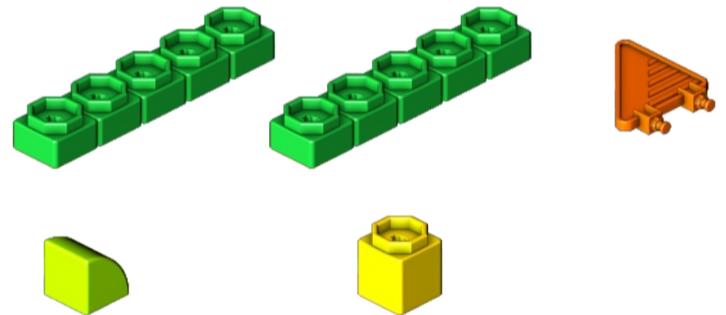
Draw what is missing from the hydroplane.



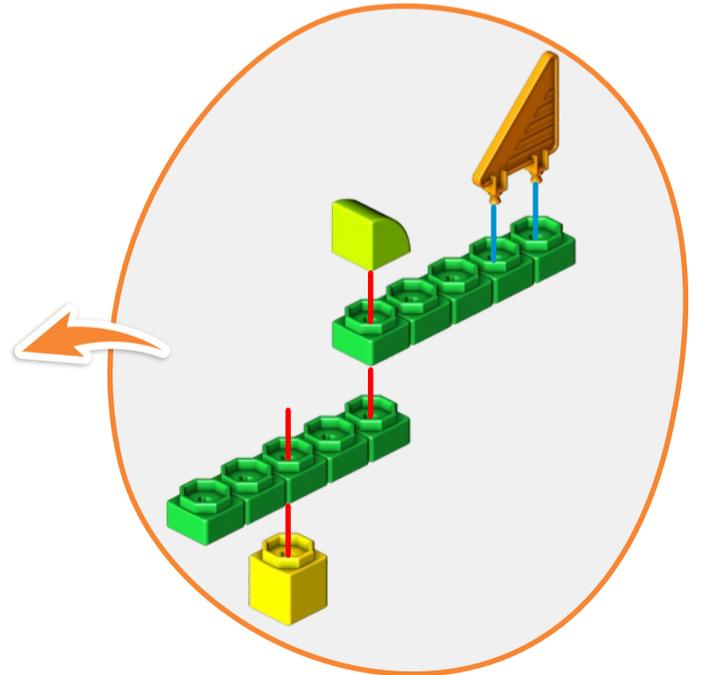
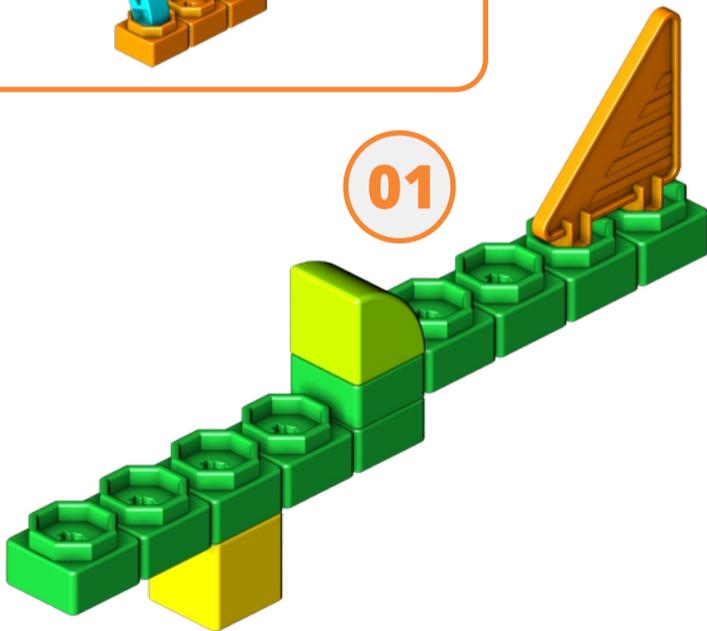
Create the above hydroplane with Engino Qboidz.

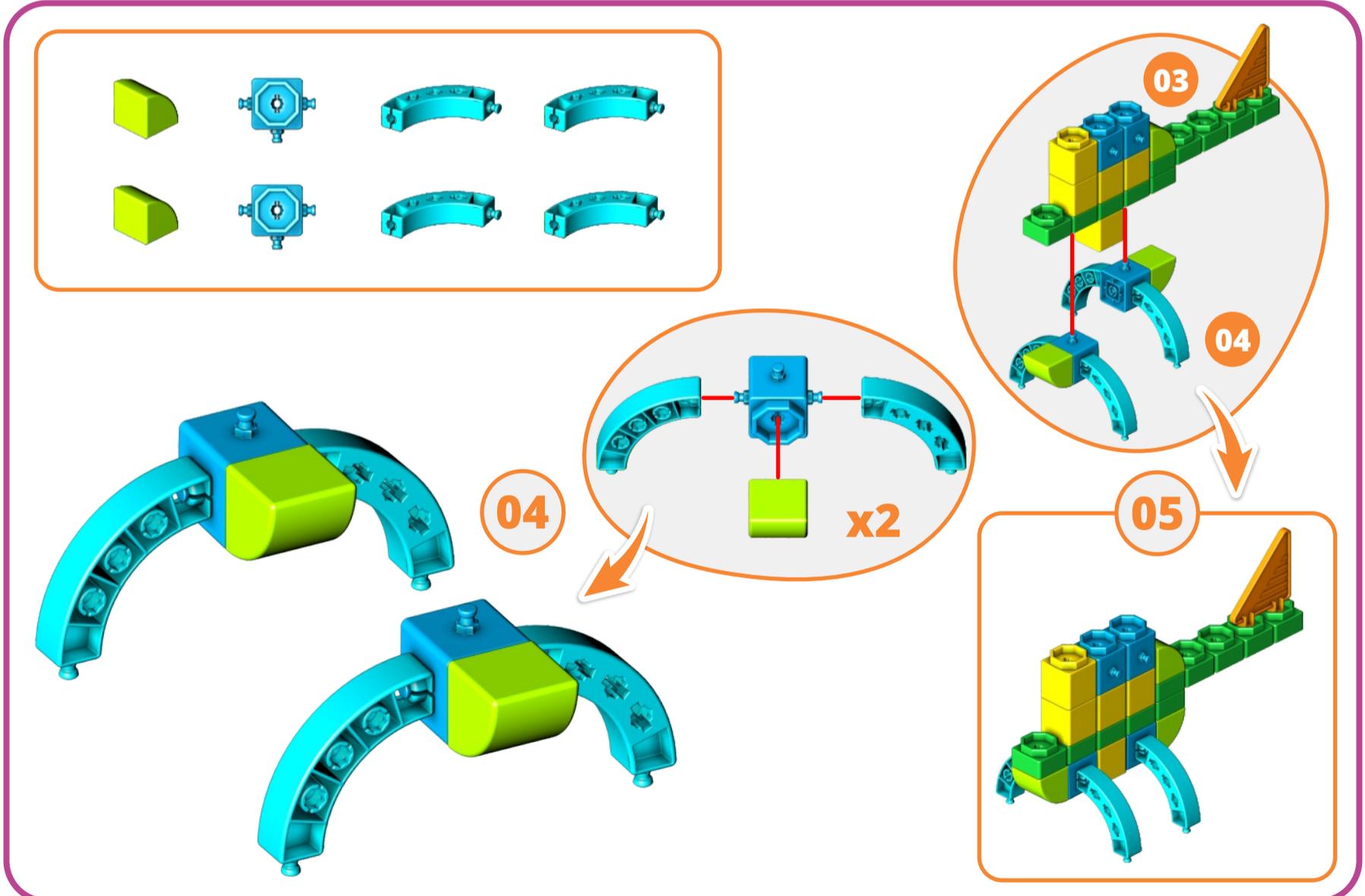
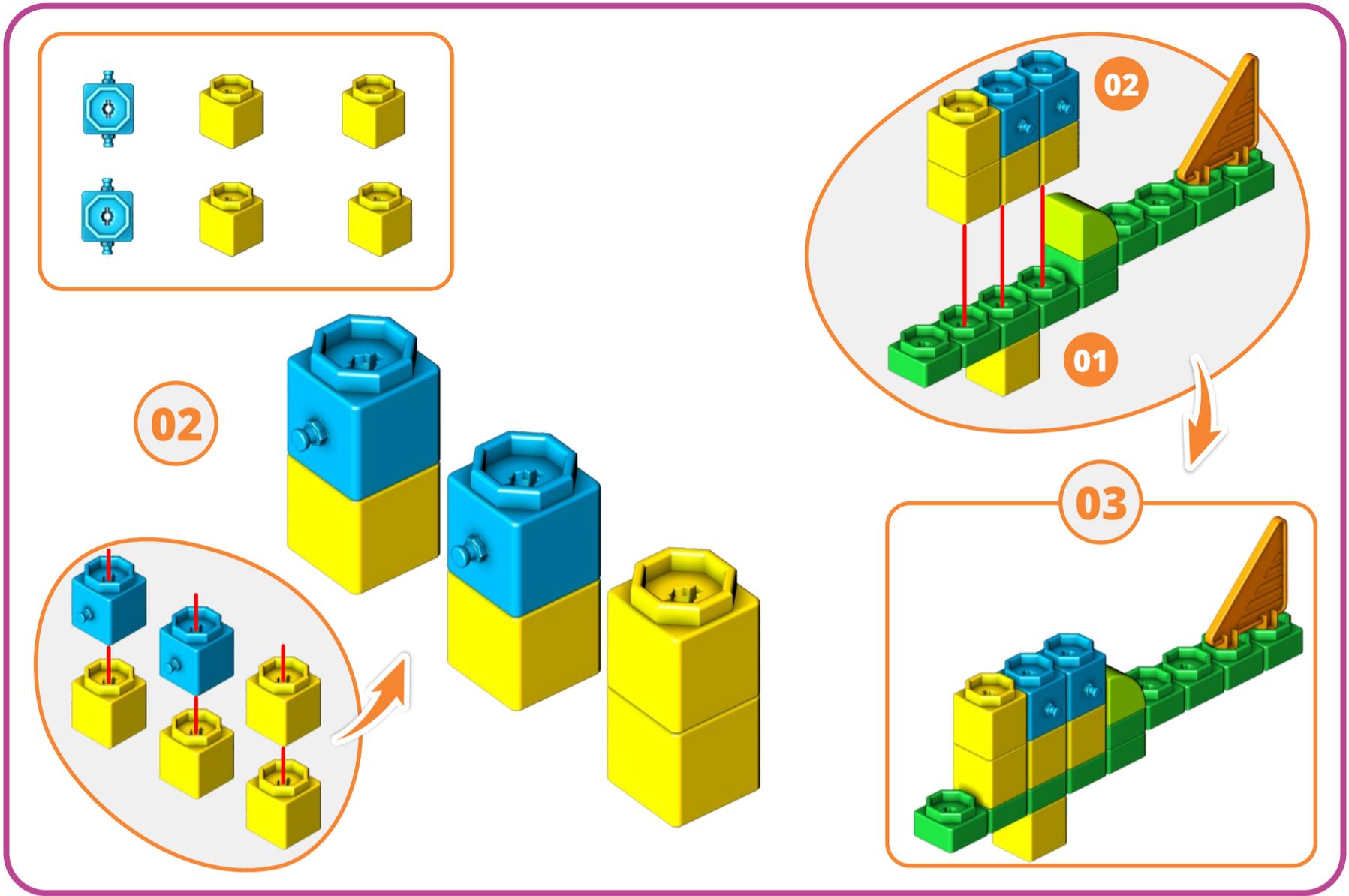


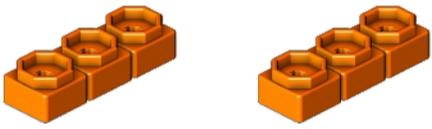
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01

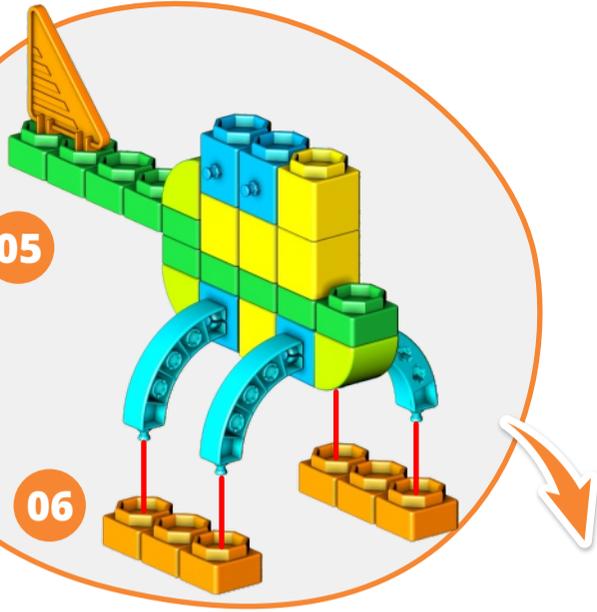




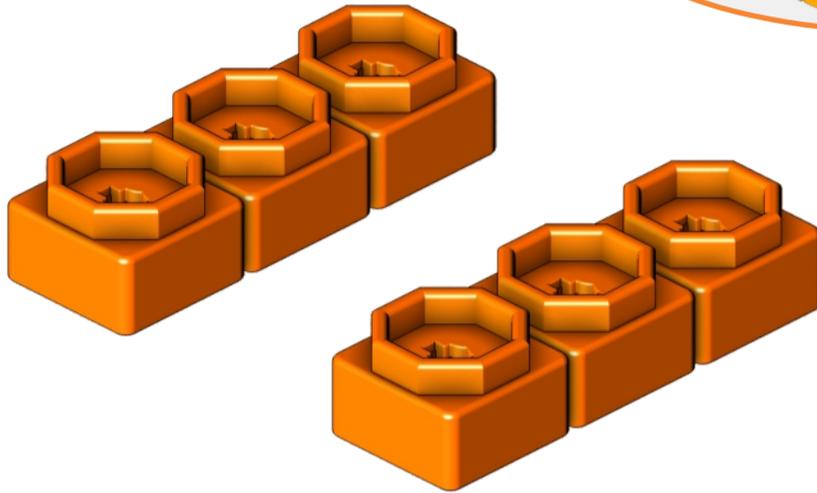


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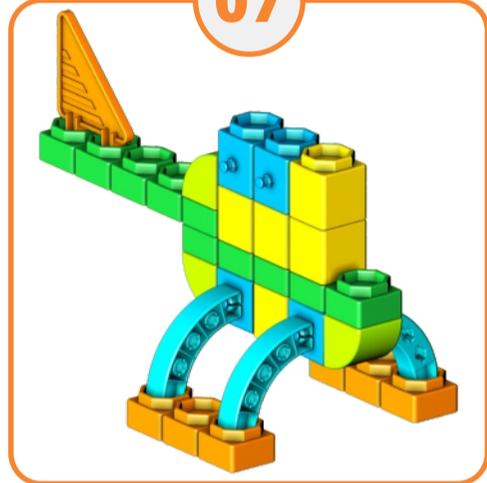
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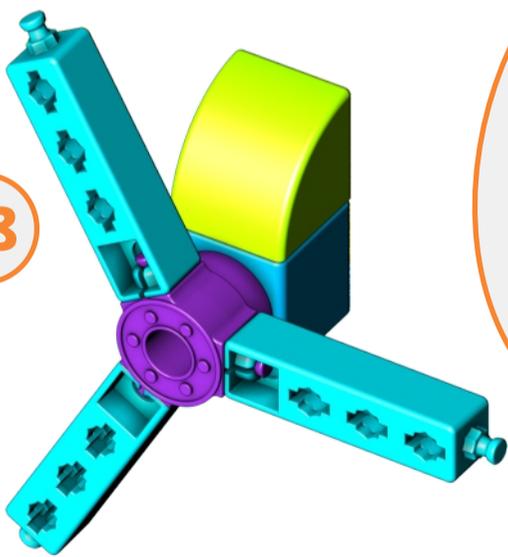
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07

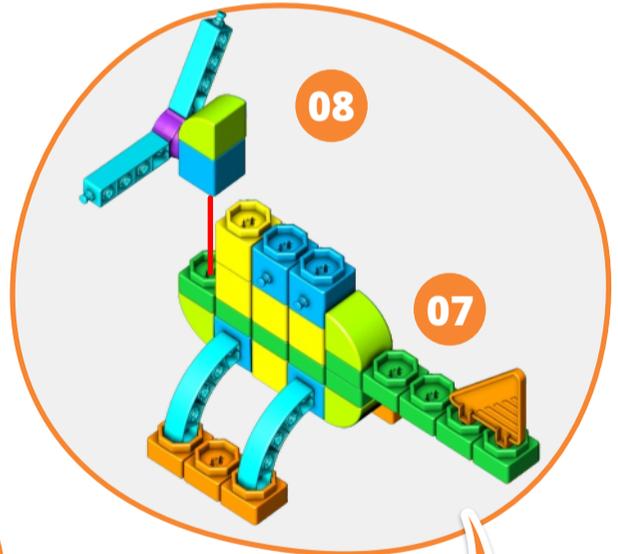


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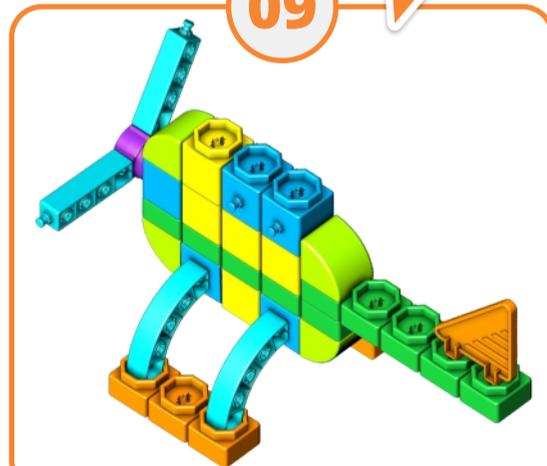


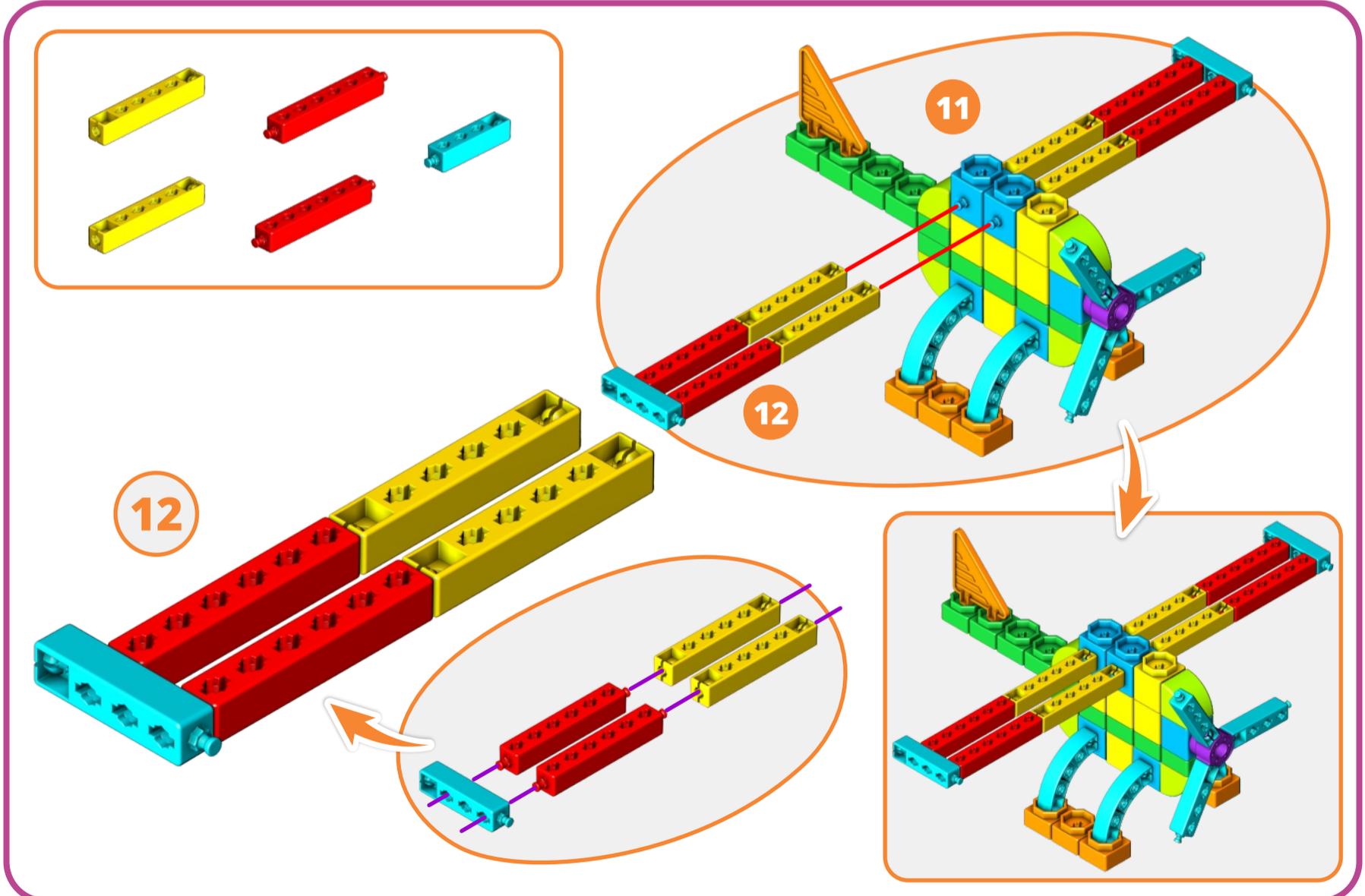
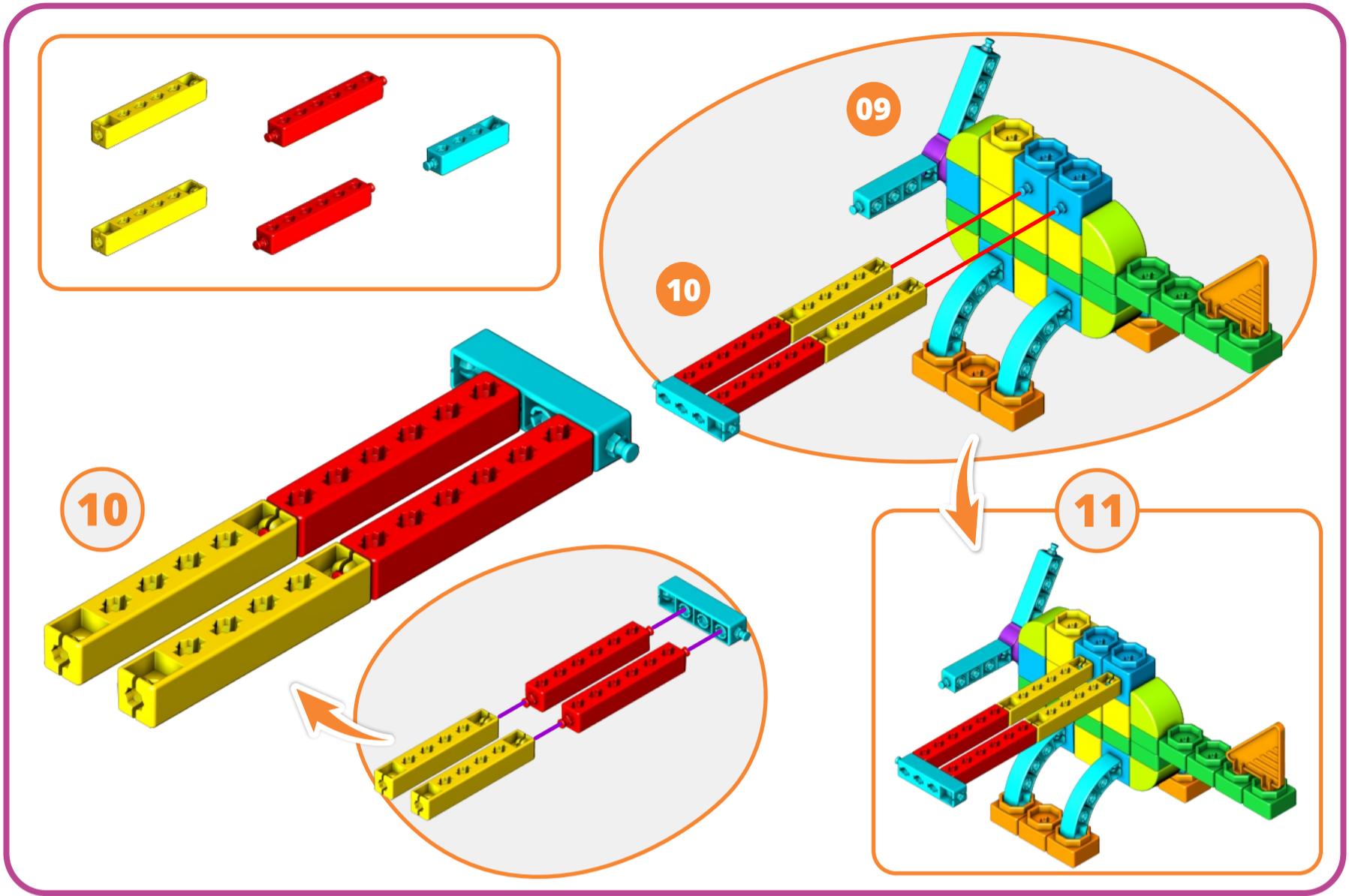
08

07



09





# Lesson: Rocket

A rocket is used to launch satellites and spacecrafts into space. Moreover, the rockets need so much fuel in order to overcome Earth's gravity. However, only when rockets reach a speed of 28000km/h they are traveling fast.



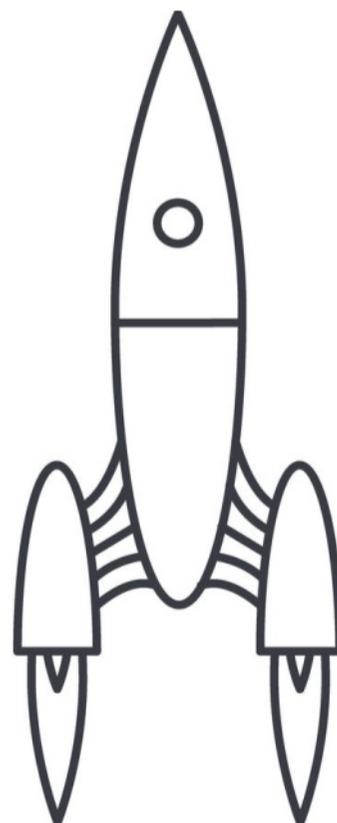
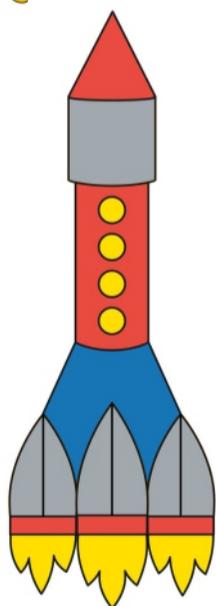
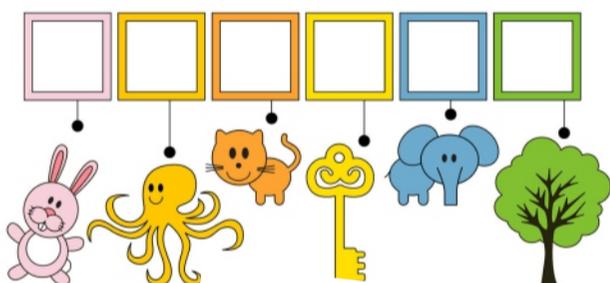
### Did you know?



Find the "Rocket" building instructions in the respective "Building Models" section.

Rockets were invented in China more than 800 years ago and the first rockets were very simple.

For the next few years rockets, were mainly used for military purposes. There are many different types of rockets.



Find the word above and solve the rebus according to the picture under the squares.



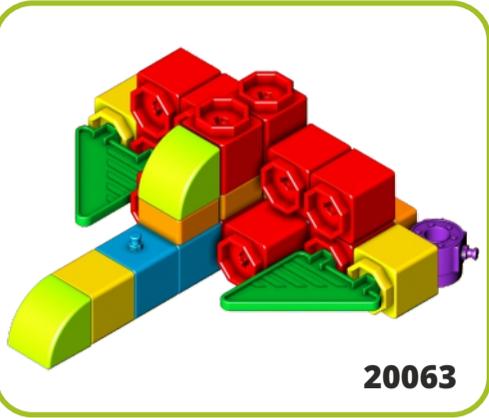
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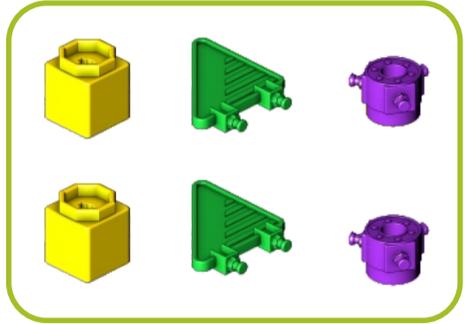
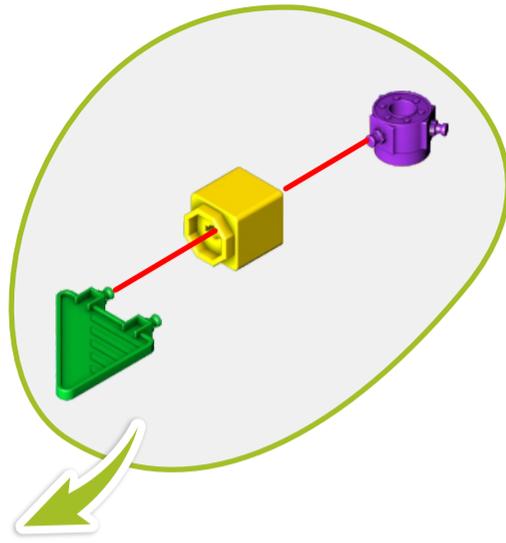
Draw your own rocket.



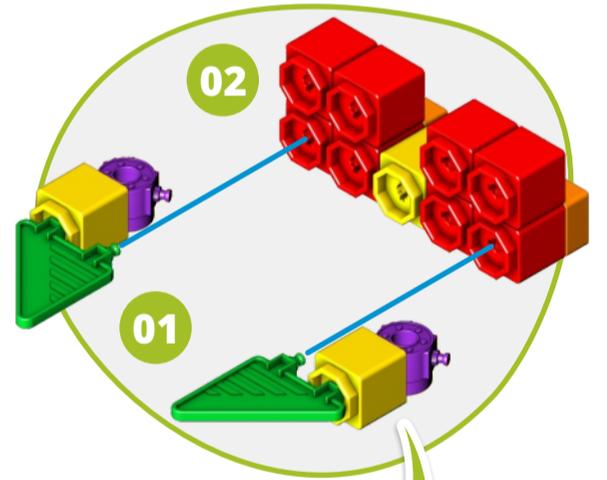
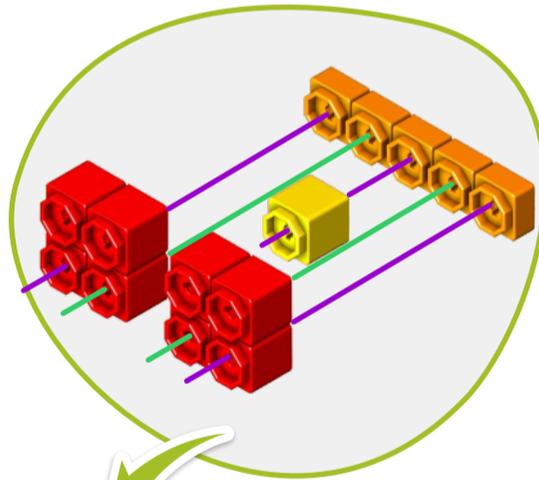
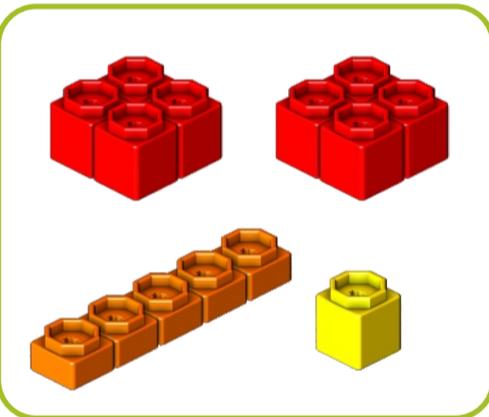
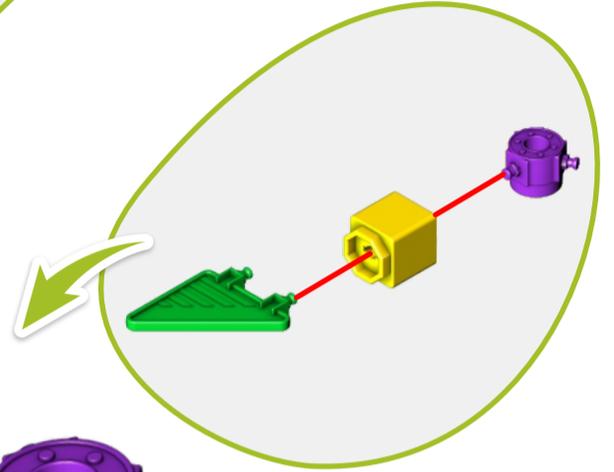
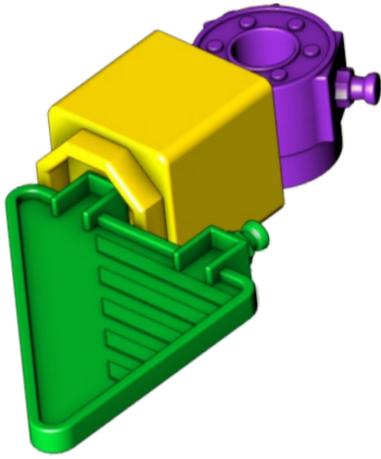
Create the above rocket  
with Engino Qboidz.



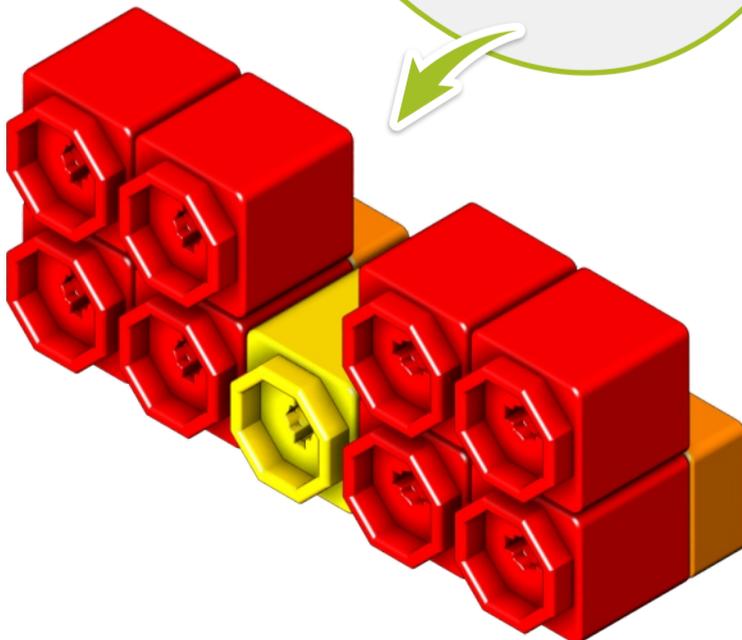
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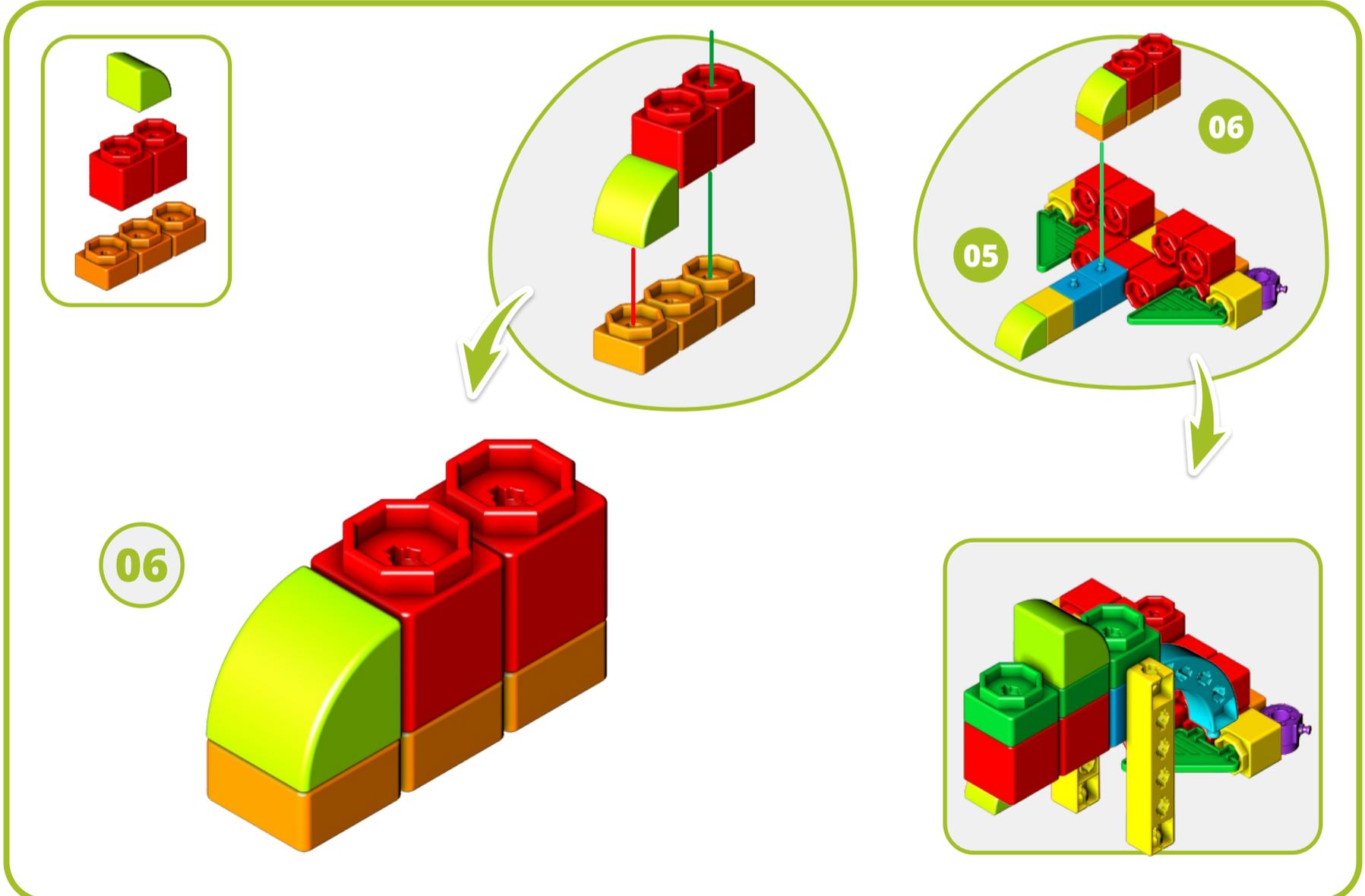
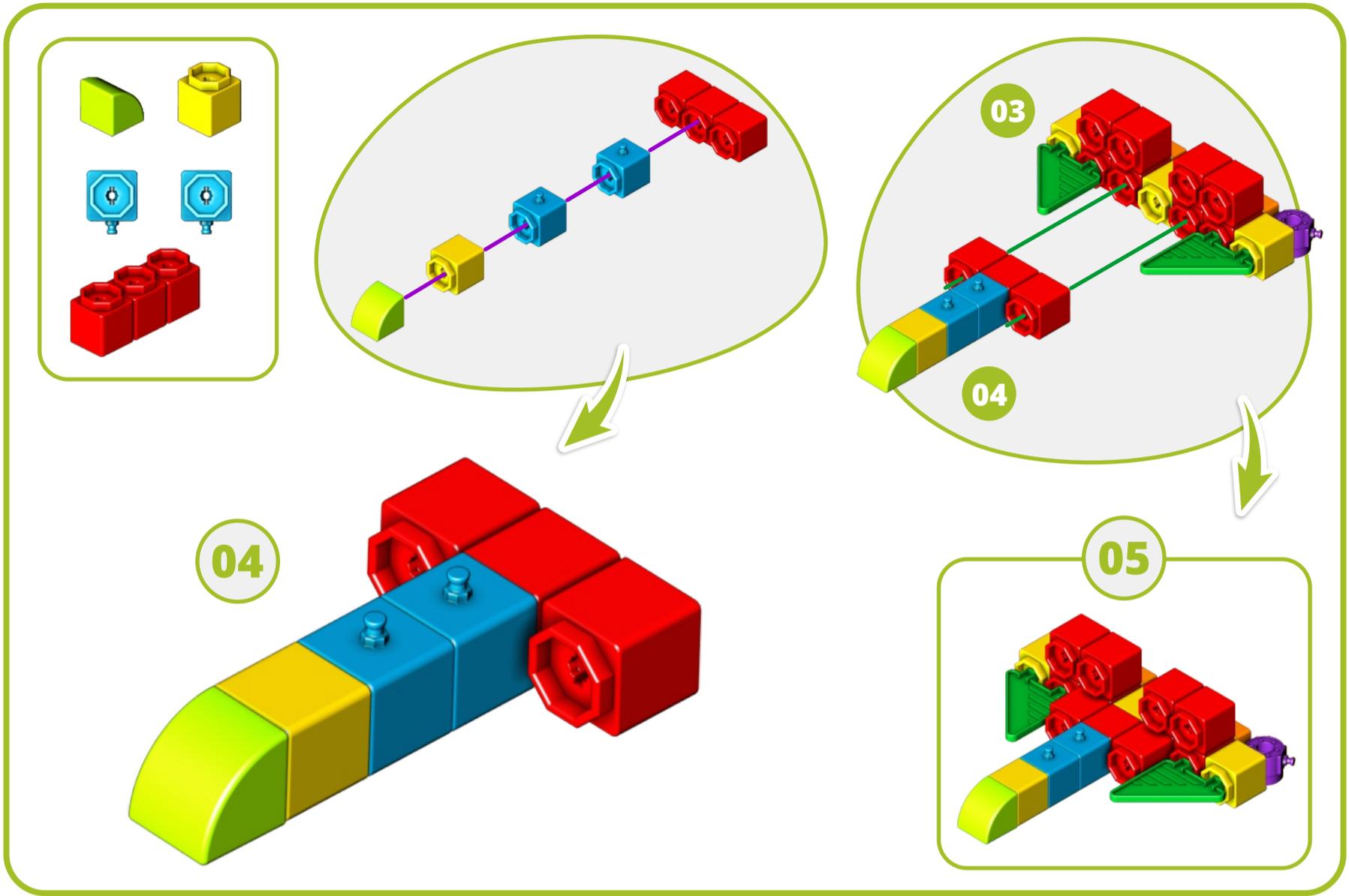


01



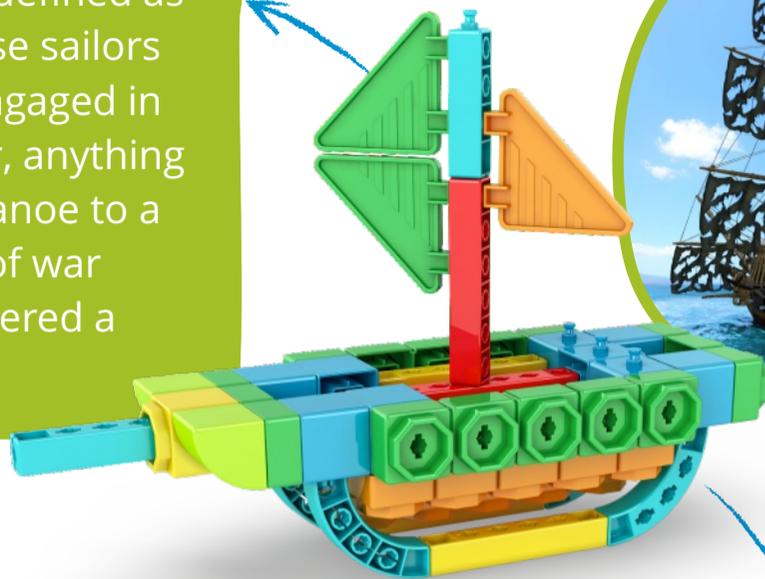
02





# Lesson: Pirates Ship

A pirate ship is defined as any vessel whose sailors and crew are engaged in piracy. However, anything from a raft or canoe to a frigate or man of war could be considered a pirate vessel.



Find the "Pirates Ship" building instructions in the respective "Building Models" section.



## Did you know?

One of the most famous pirates ship was "Adventure Galley" captained by William Kidd.

Pirates could and did use very small boats, even canoes when nothing else was at hand. Sometimes braves pirates could steal ships.



Find the correct route for the treasure.



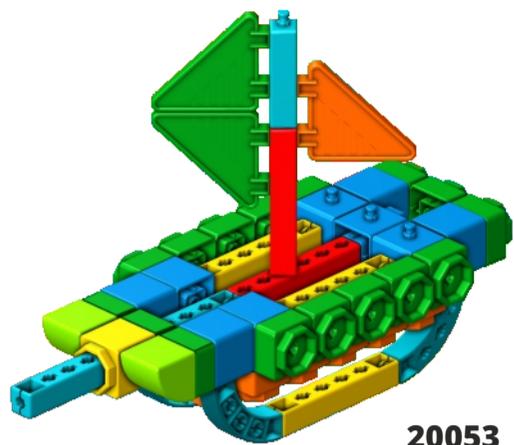
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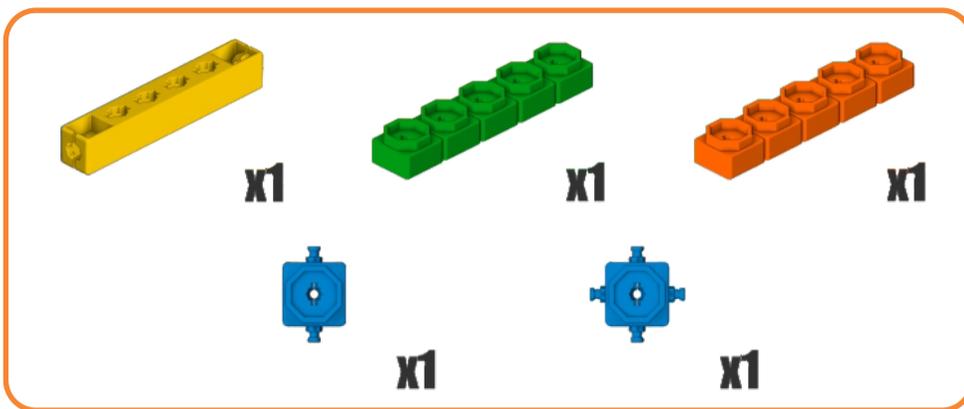
Draw your own pirates ship.



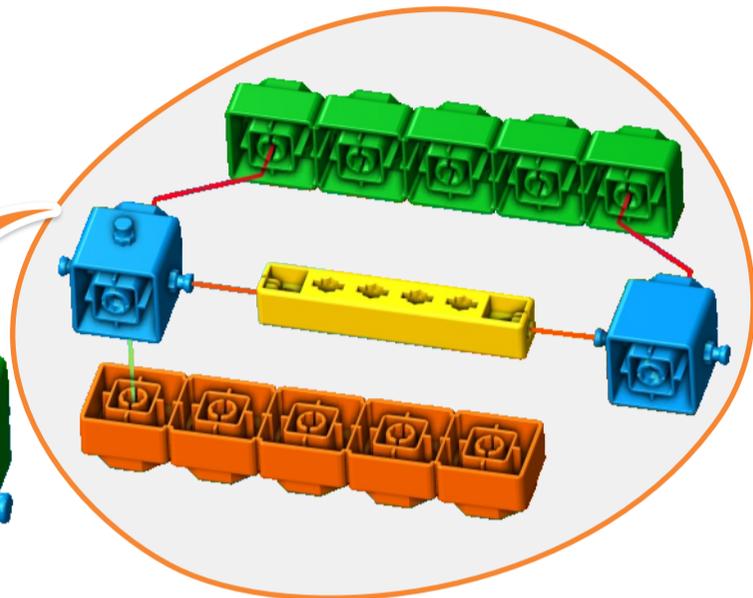
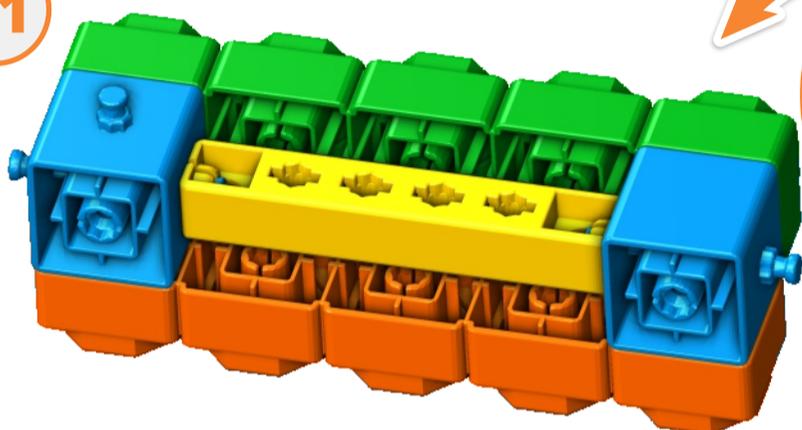
Create the above pirates ship  
with Engino Qboidz.



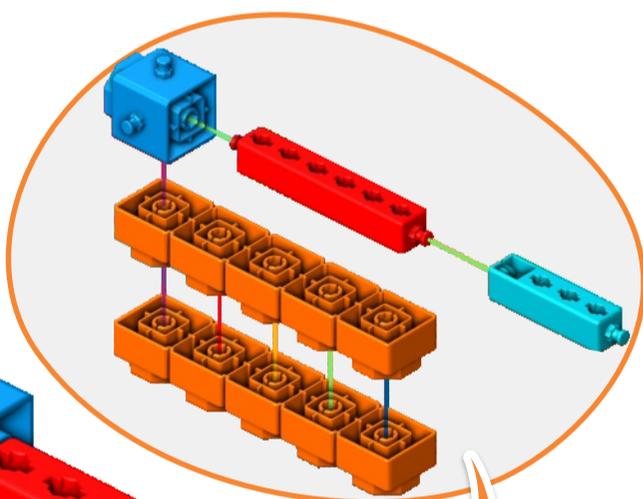
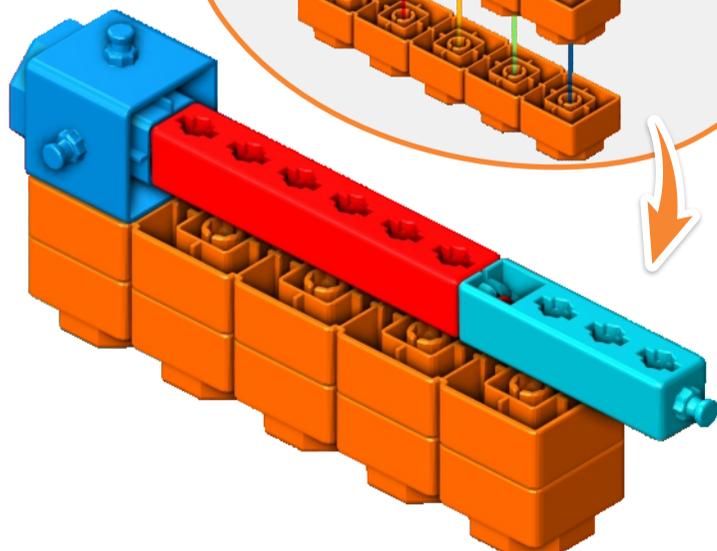
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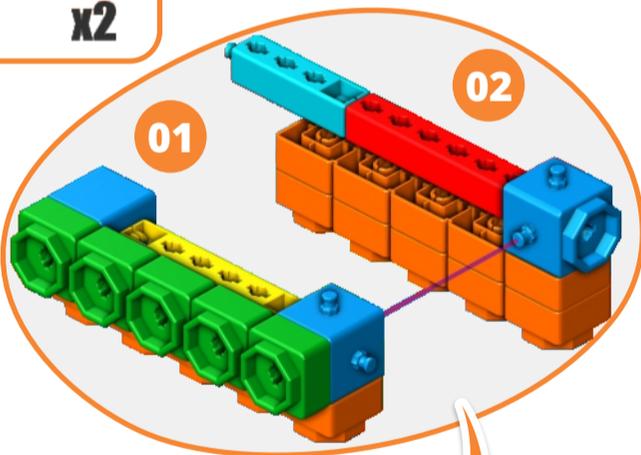


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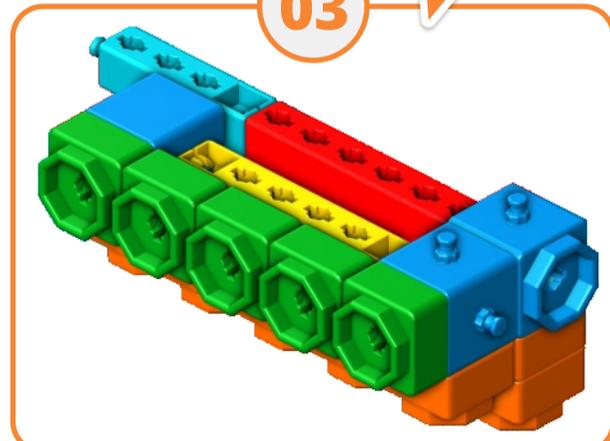


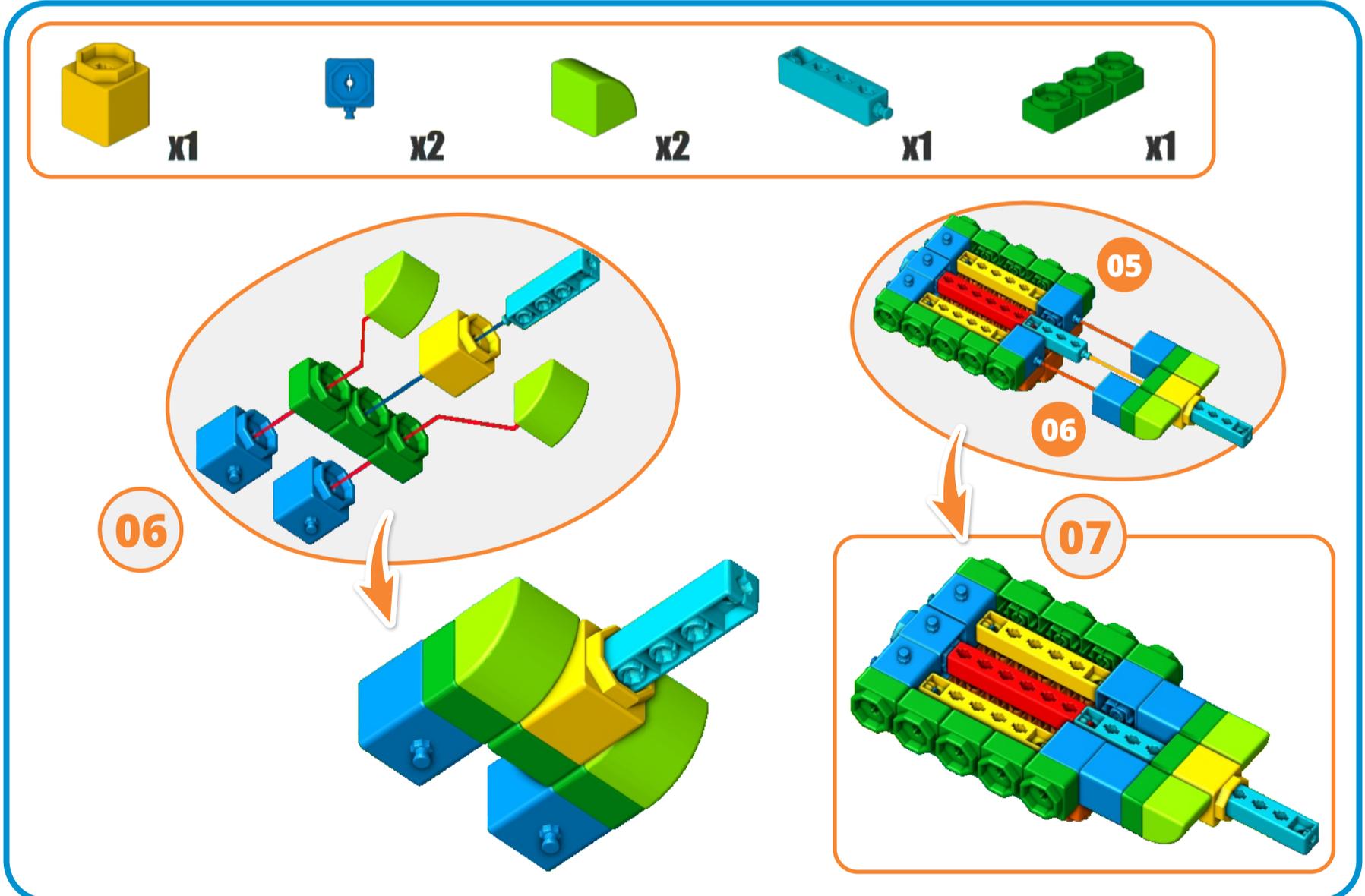
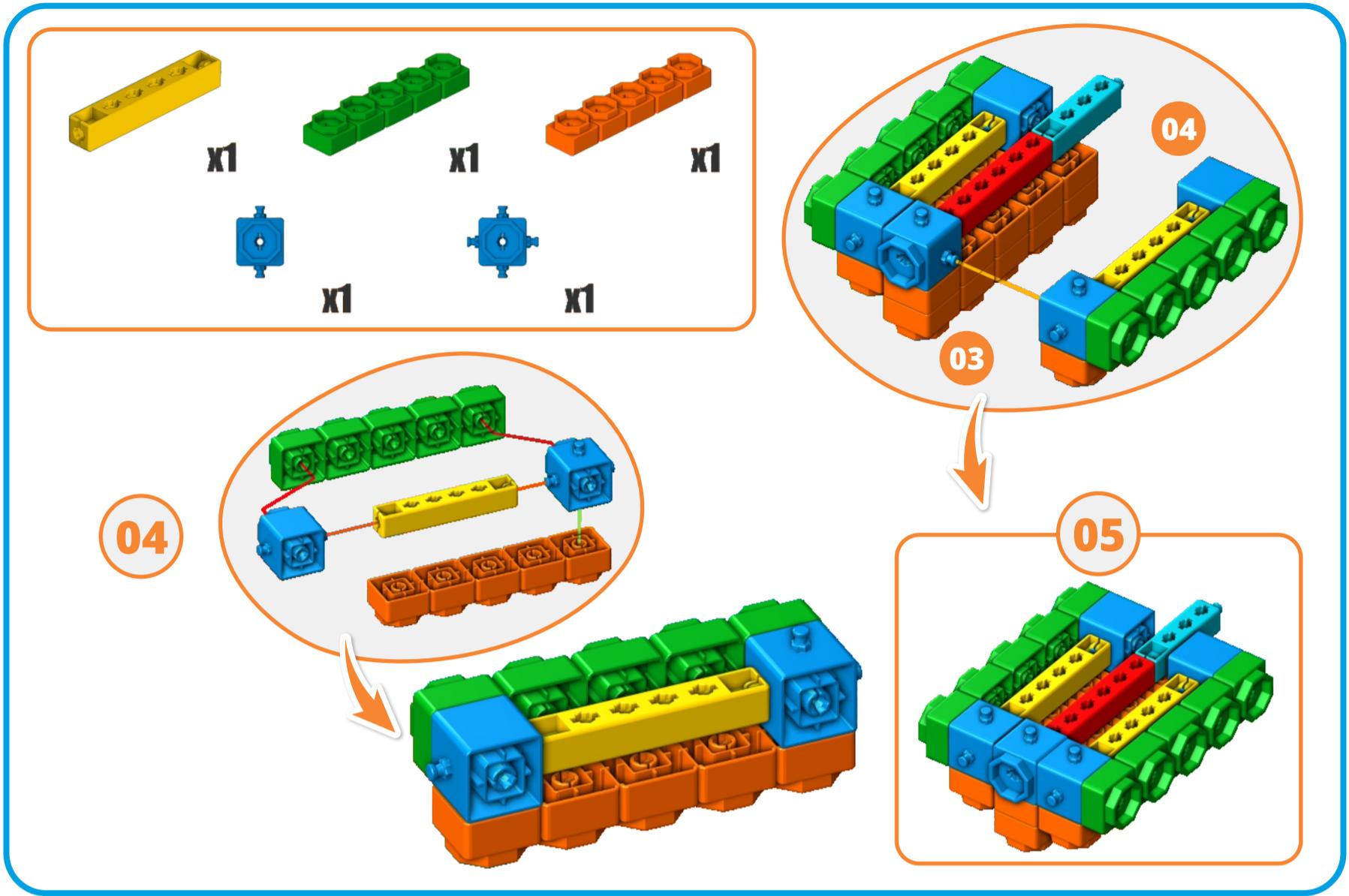
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03



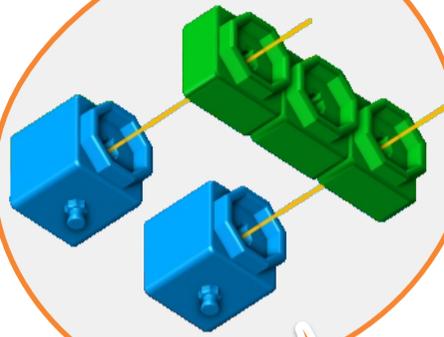




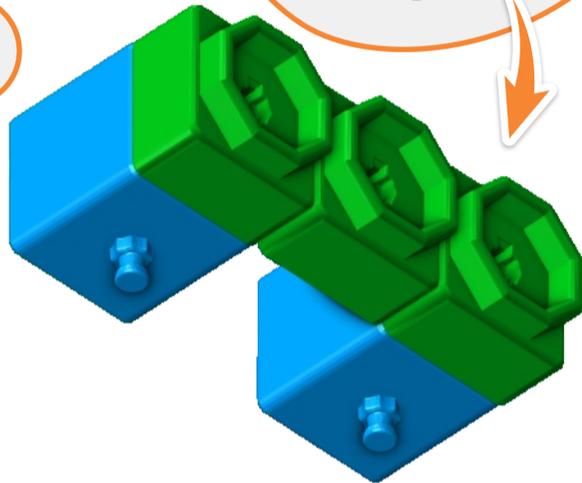
x2



x1



08



08

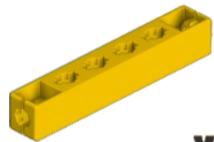


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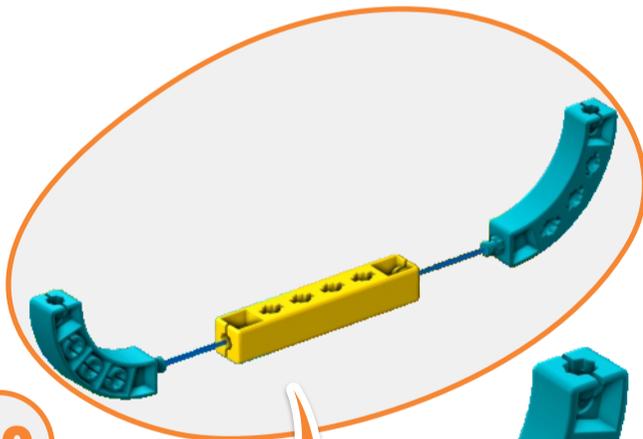
09



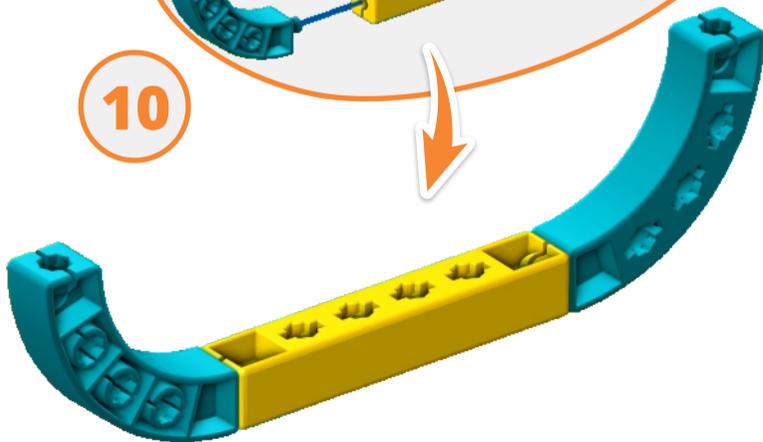
x2



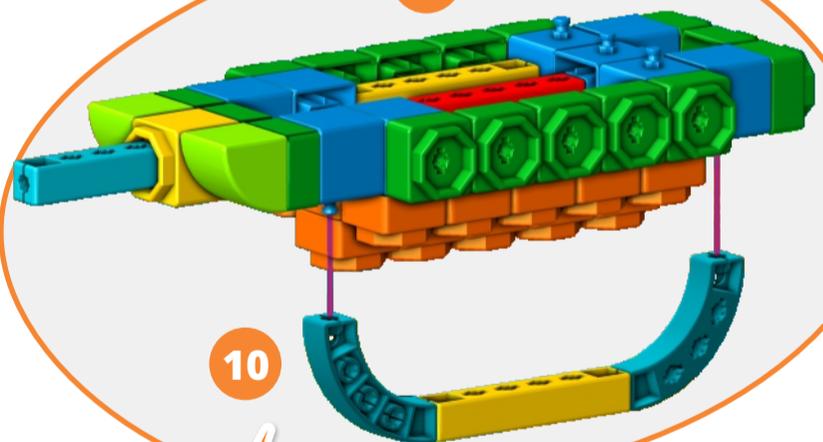
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10

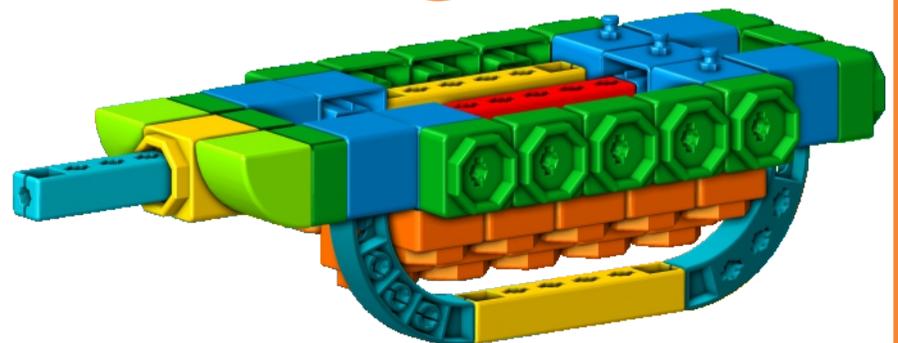


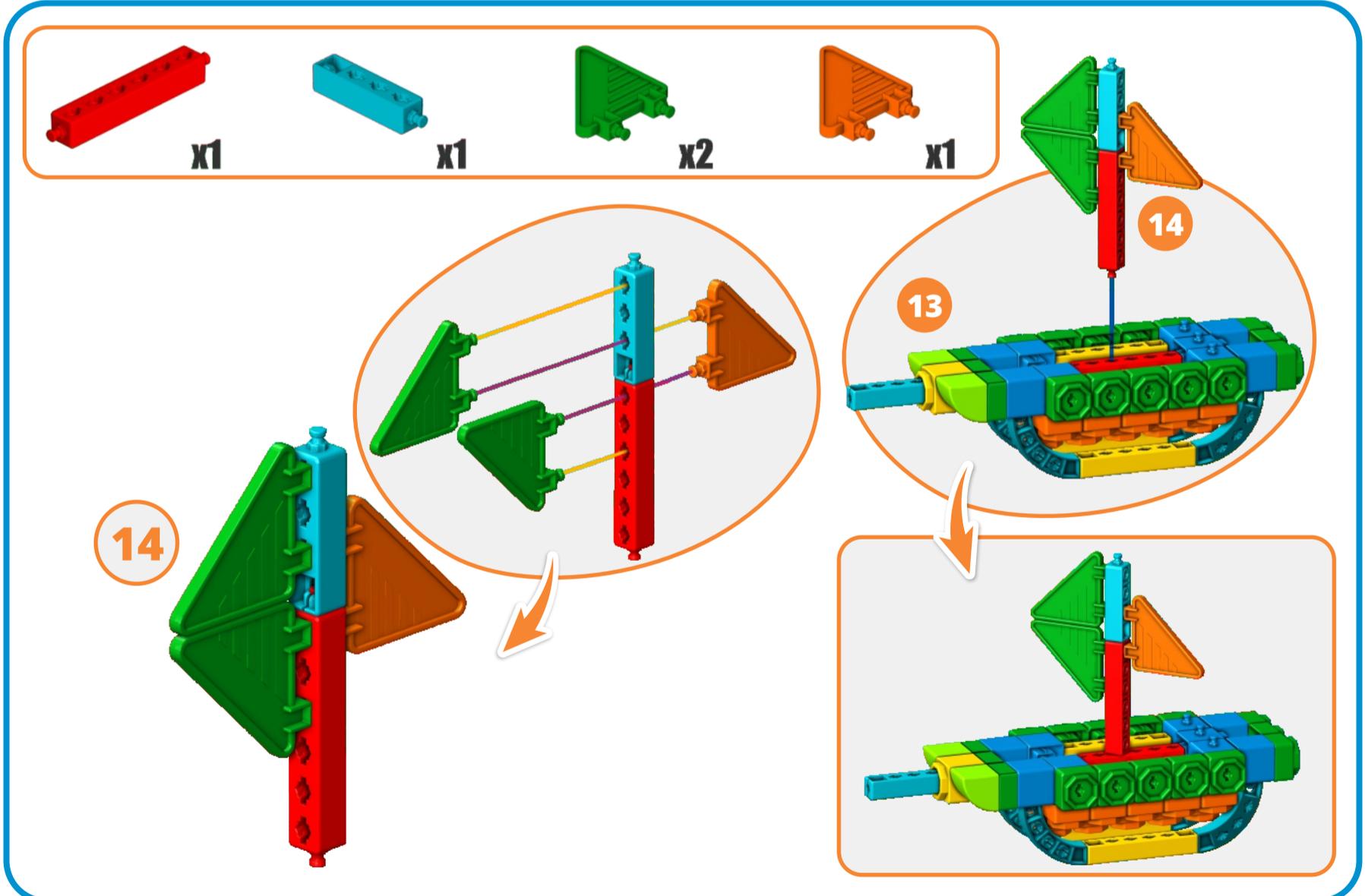
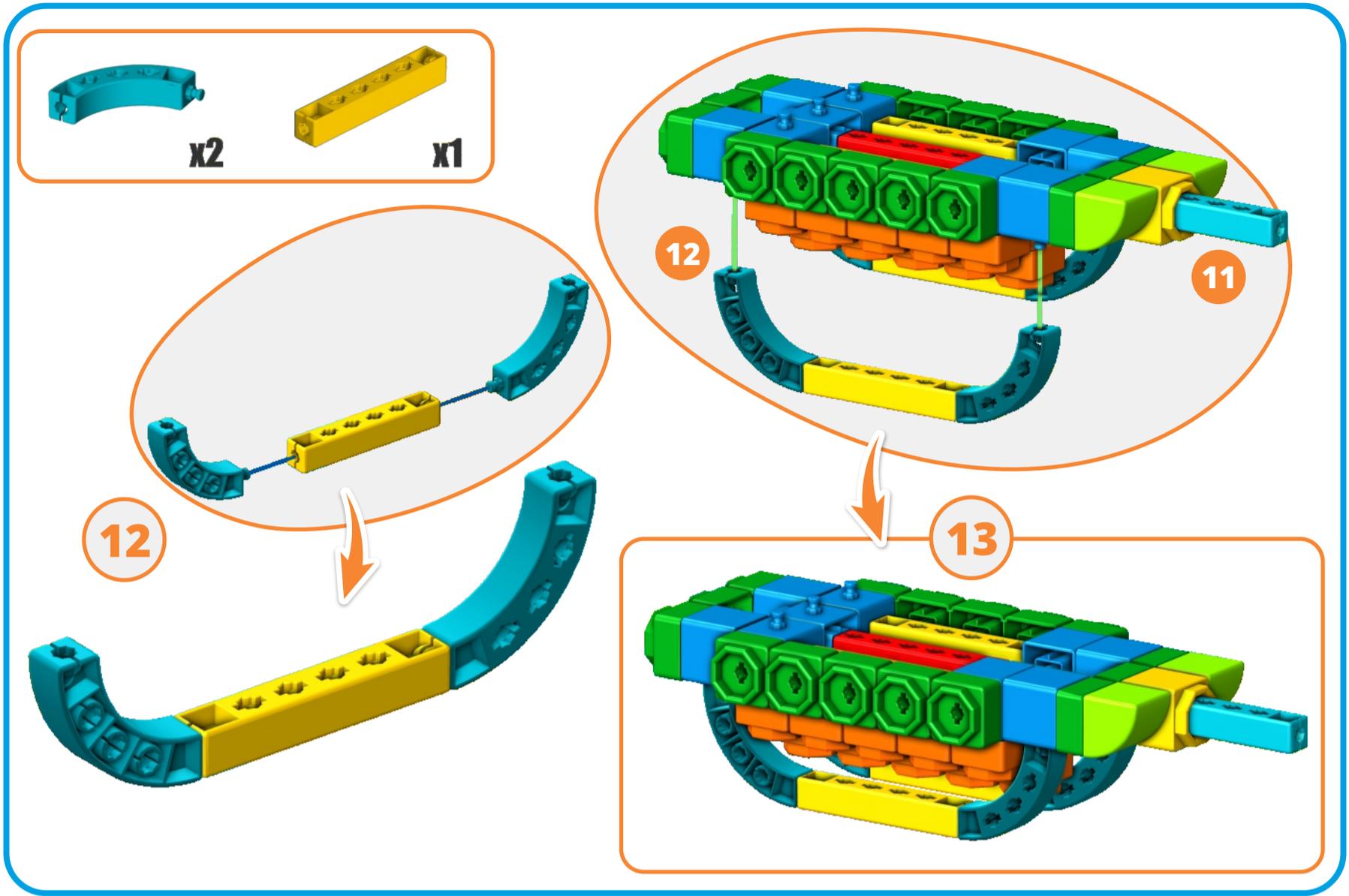
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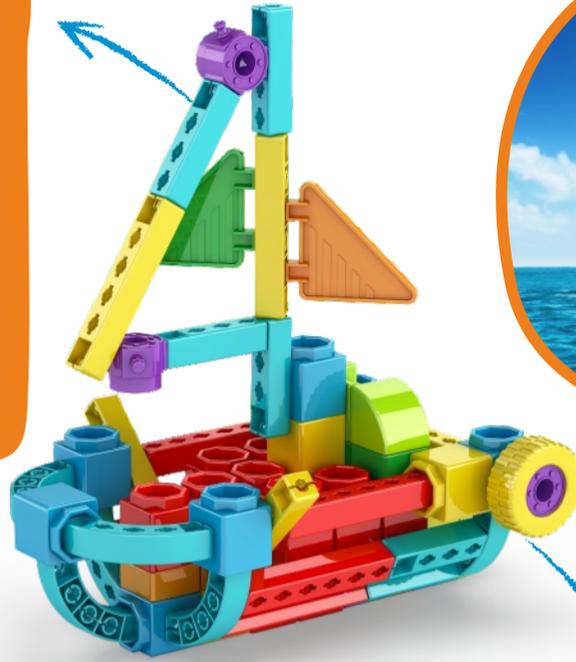
11





# Lesson: Yacht

A yacht is a type of boat which is mainly used for entertainment or sports. It usually has a cabin, so it does not need to return to the harbour overnight. There are two different kinds of yachts: sailing and power boats.



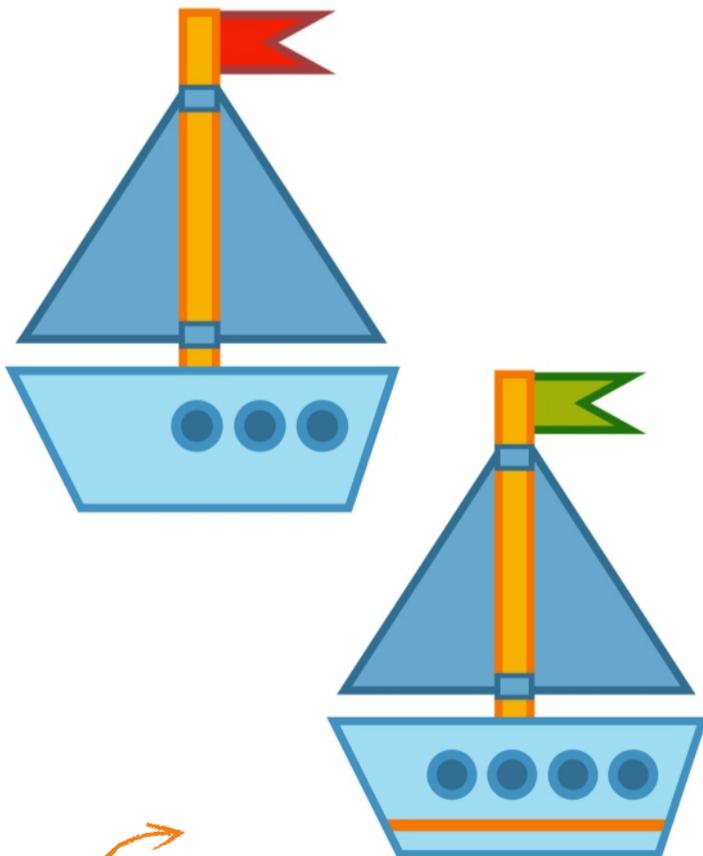
Find the "Yacht" building instructions in the respective "Building Models" section.



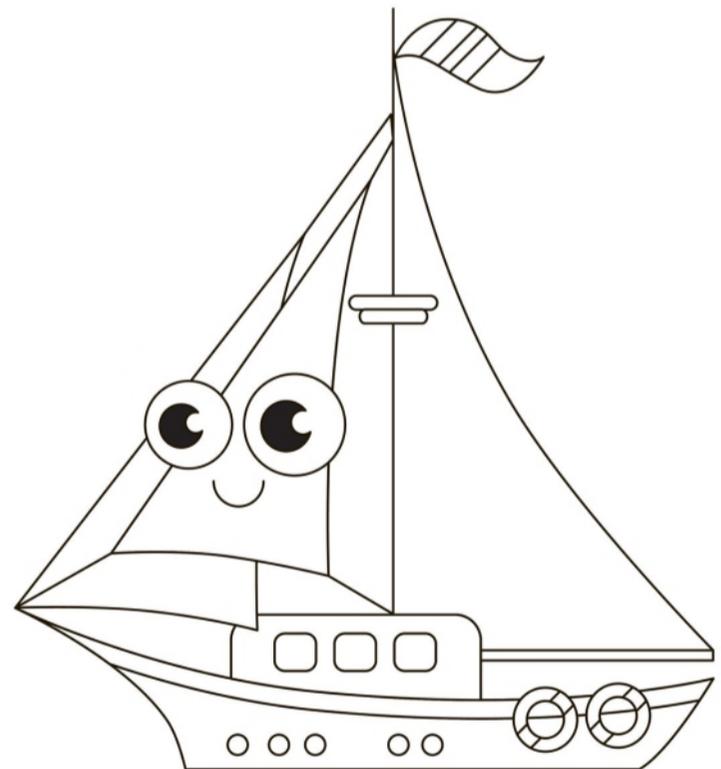
## Did you know?

The yacht is an invention of the 14th century, coming from the Netherlands. The Dutch used small, fast boats for hunting pirates and criminals.

Sailing yachts move with the power of the wind. Power yachts move technologically, with the help of a machine. Yacht lengths normally range from 10m up to 12m.



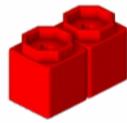
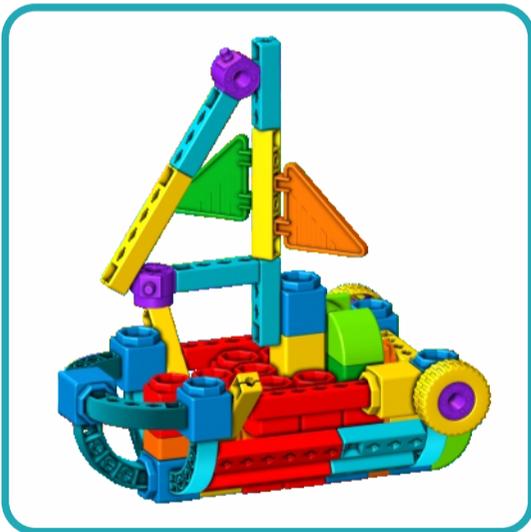
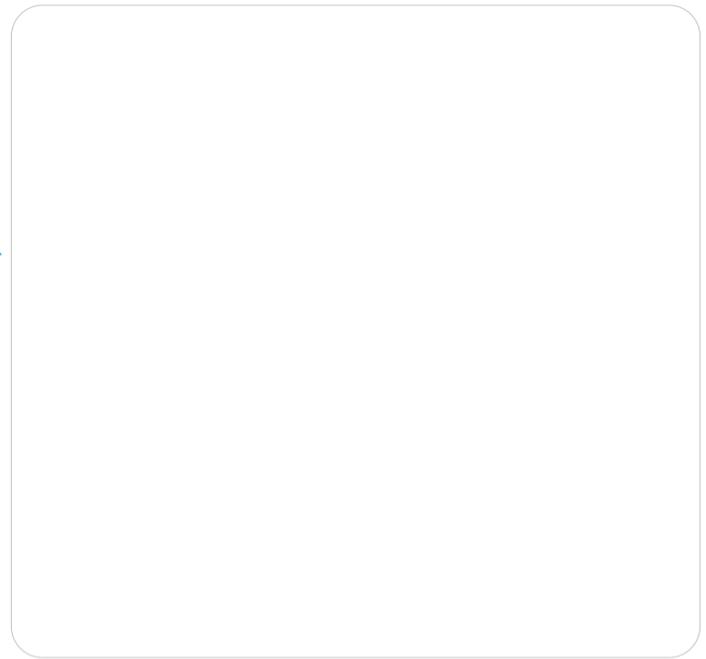
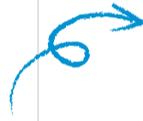
Spot the 3 differences.



Color the picture.



Look at the picture below and try to draw the same sailboat.



x2

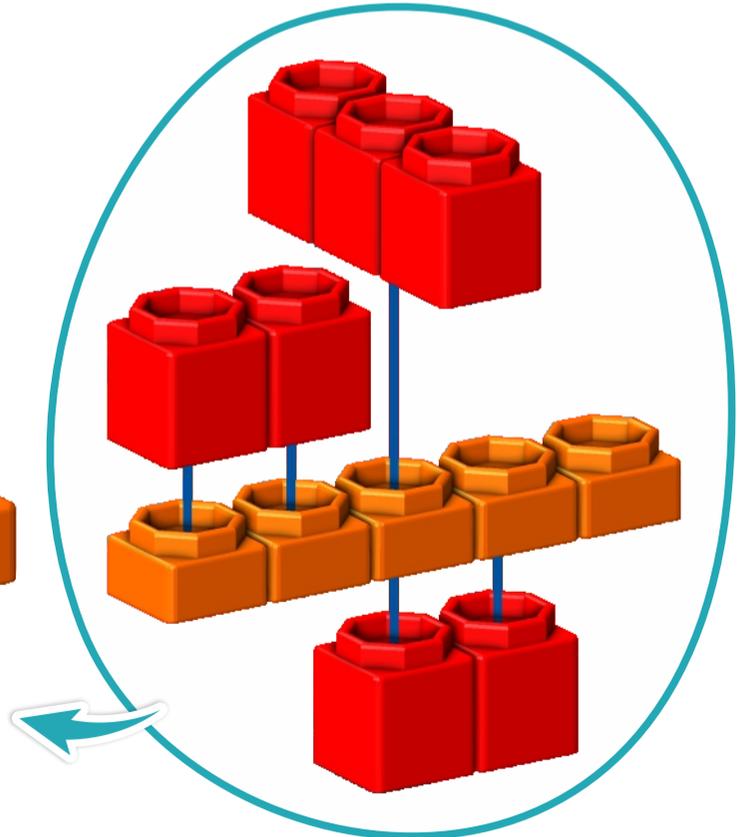
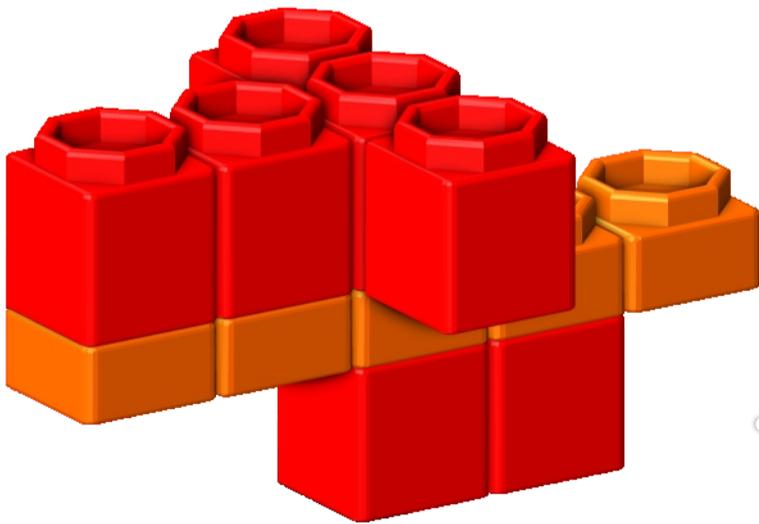


x1



x1

01





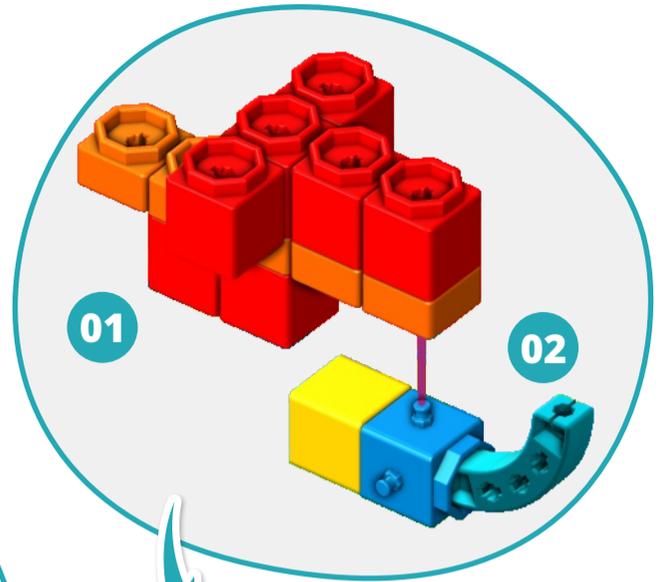
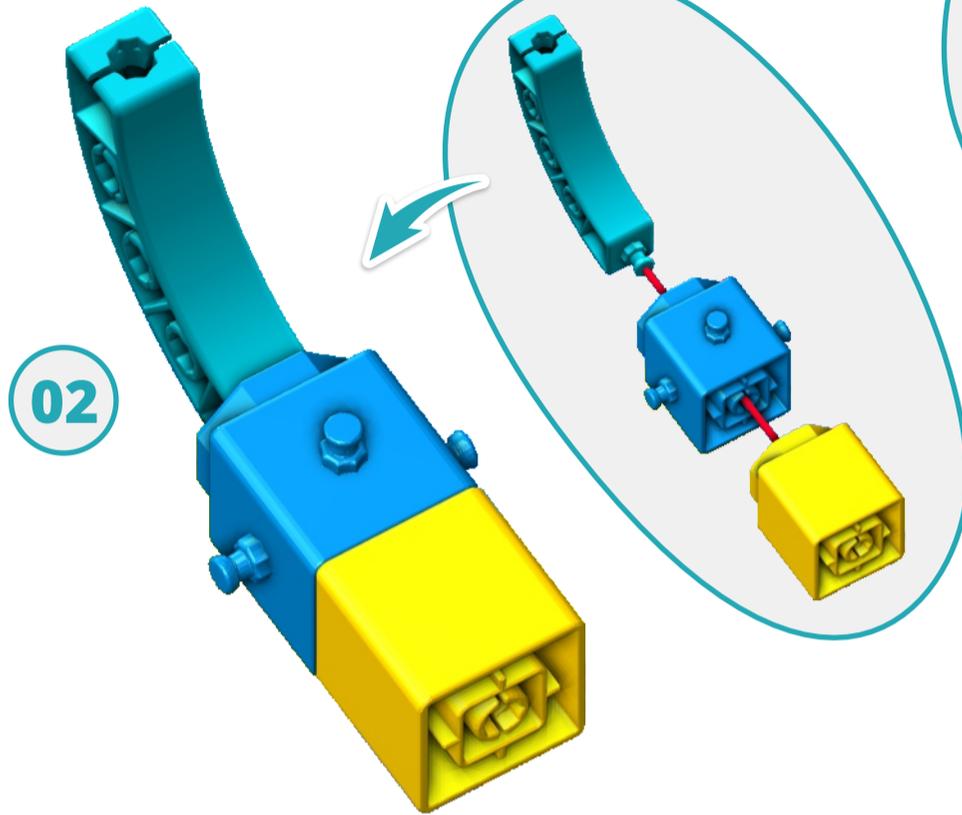
x1



x1



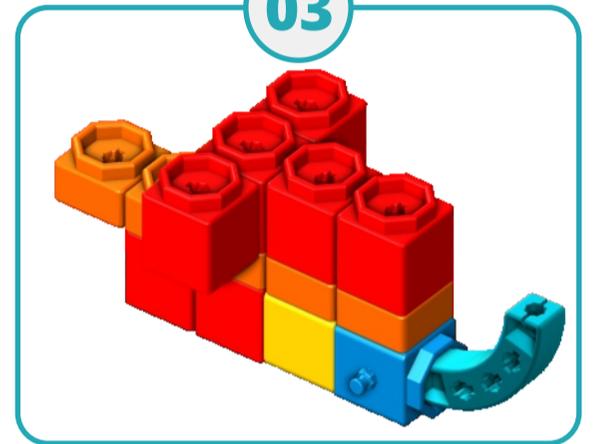
x1



01

02

02



03



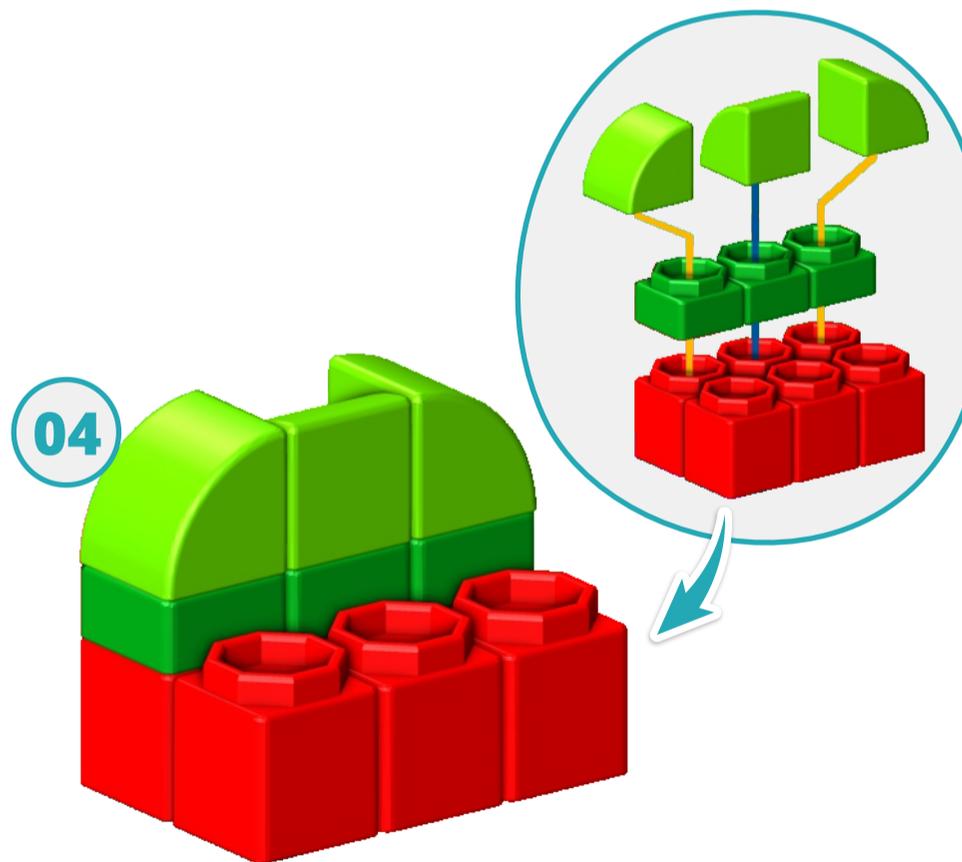
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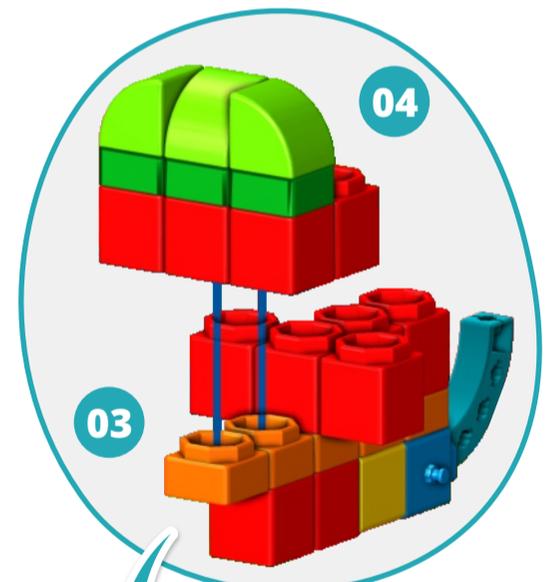
x1



x1



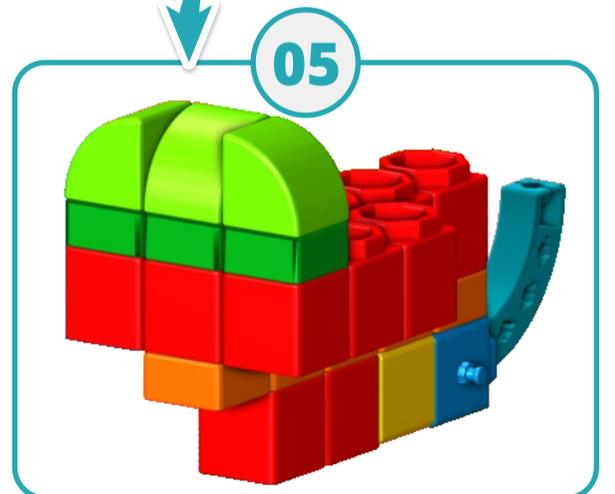
04



03

04

04



05



x1



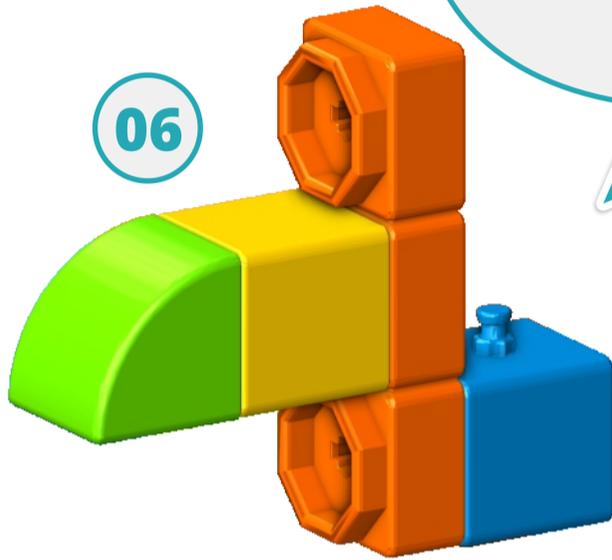
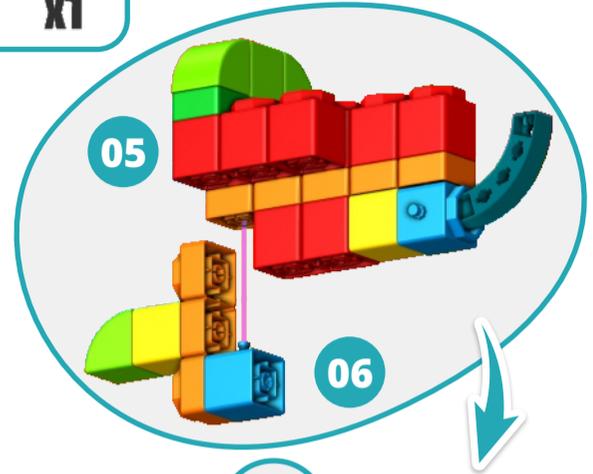
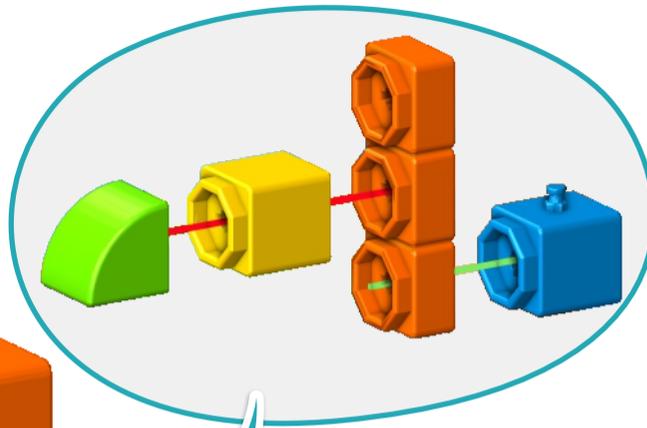
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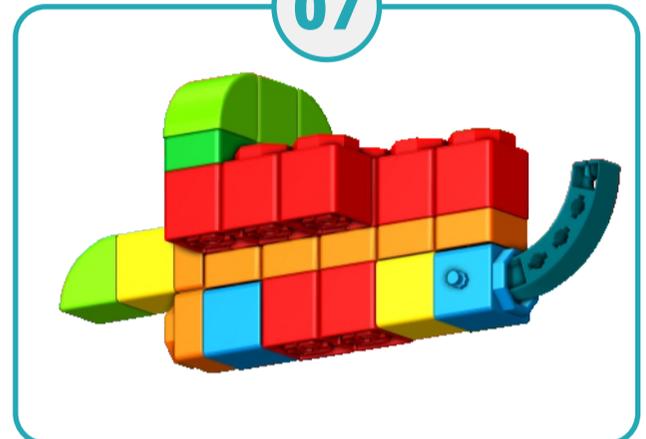
x1



x1



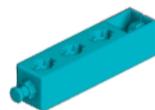
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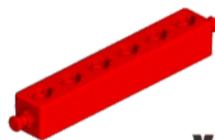
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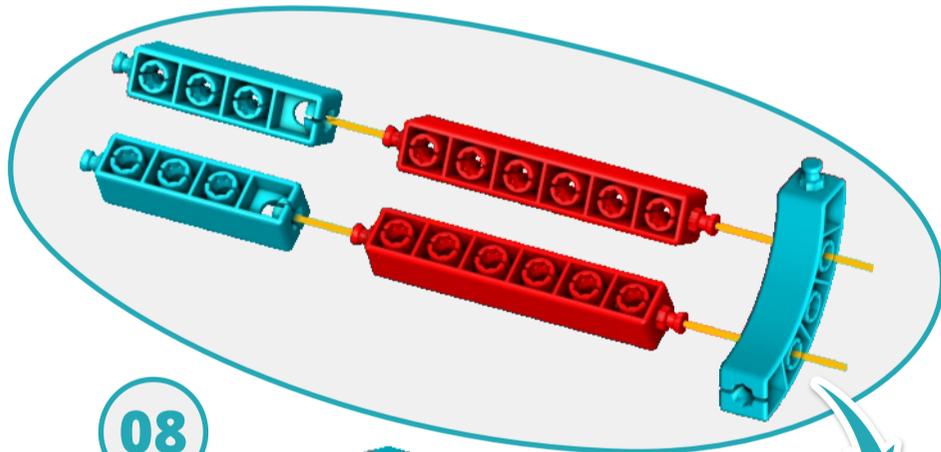
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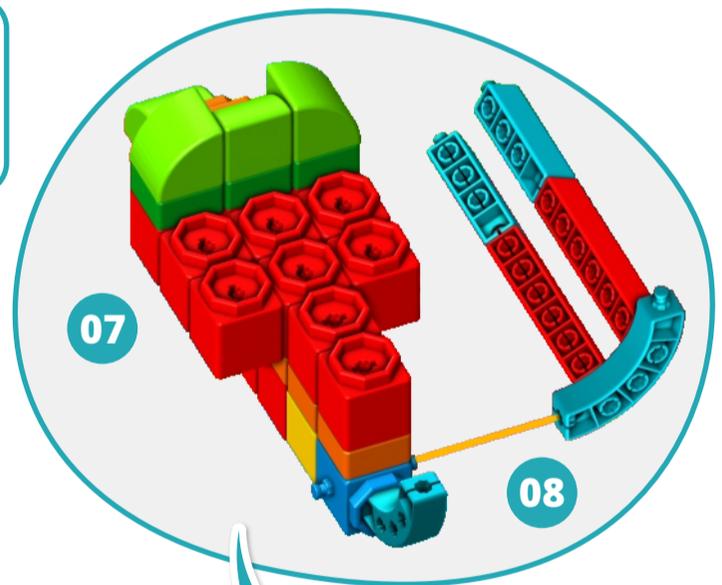
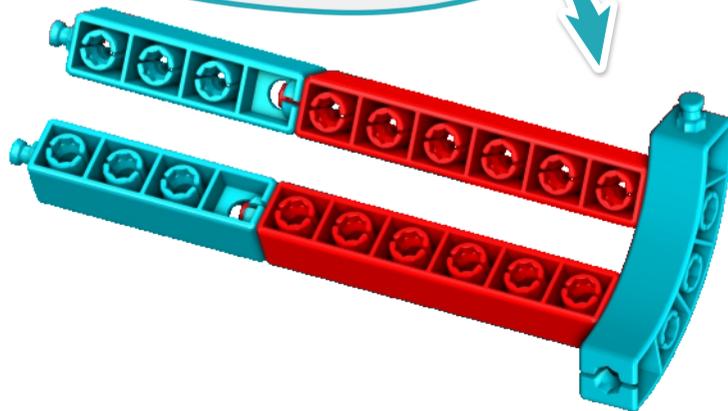
x2



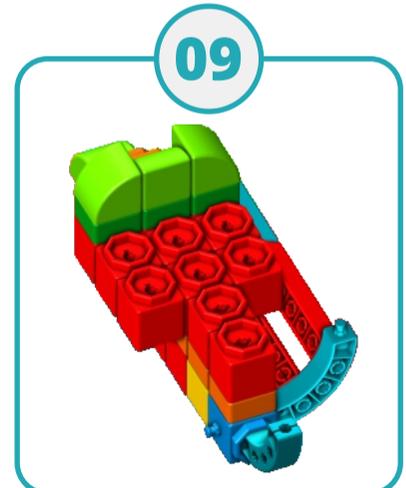
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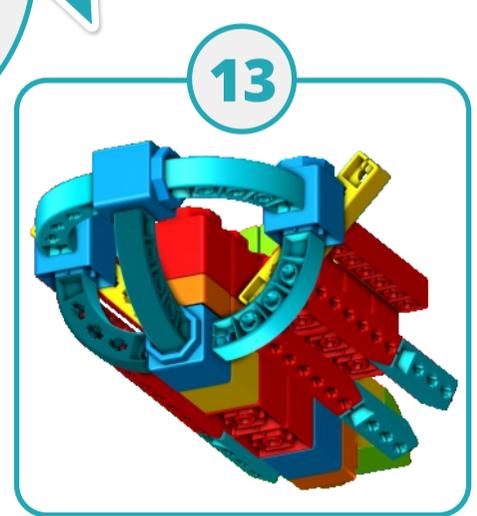
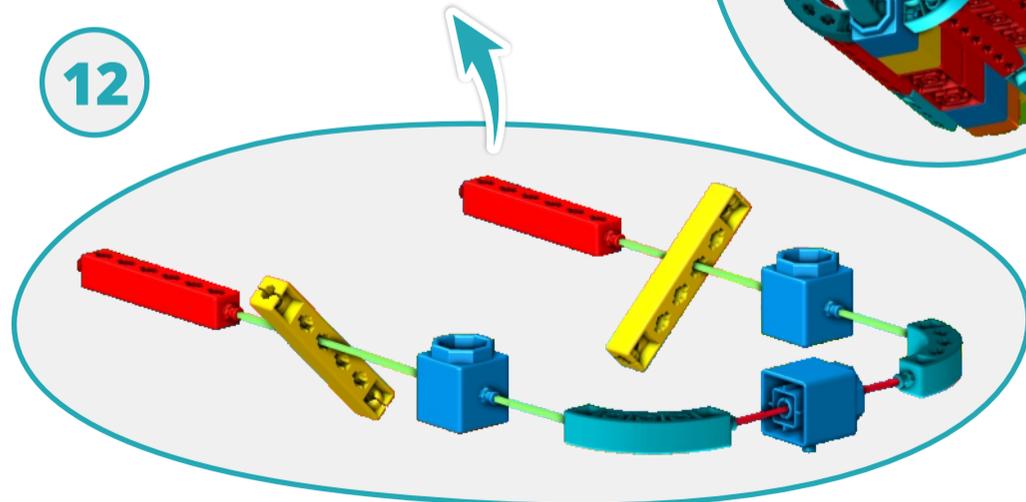
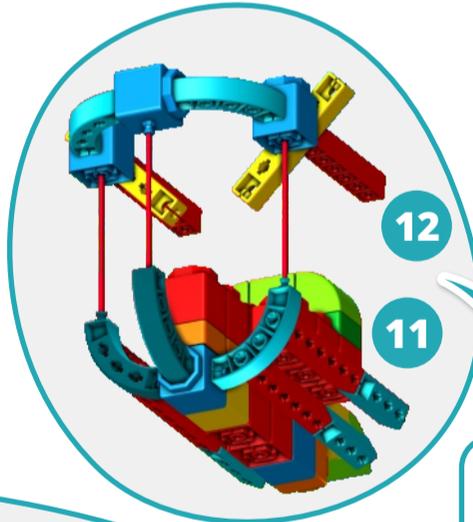
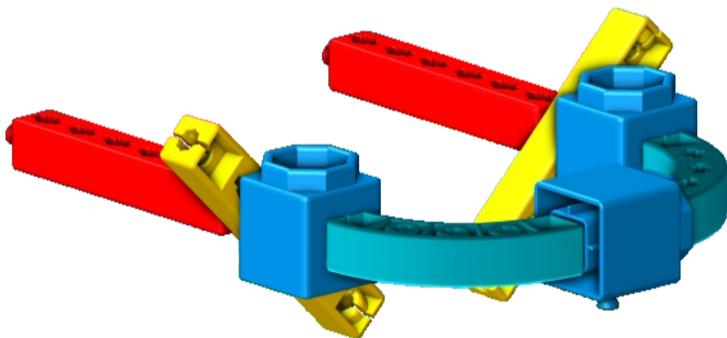
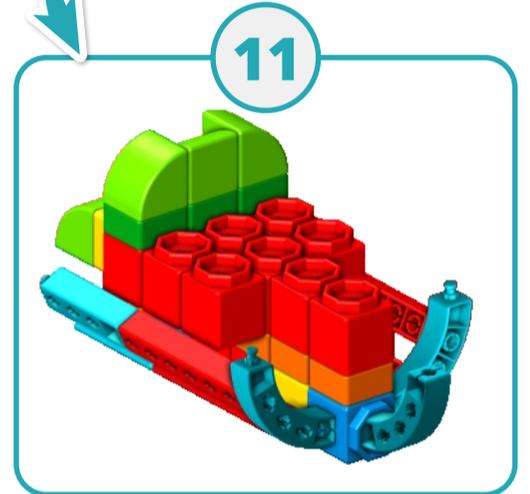
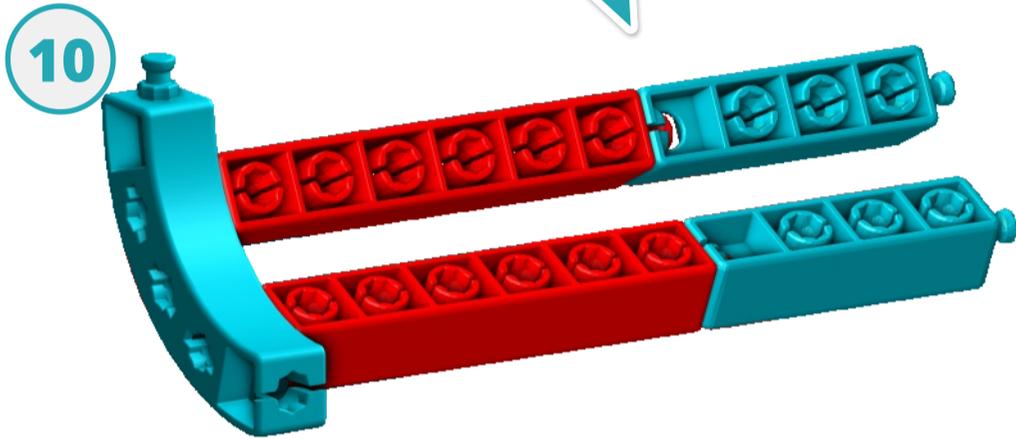
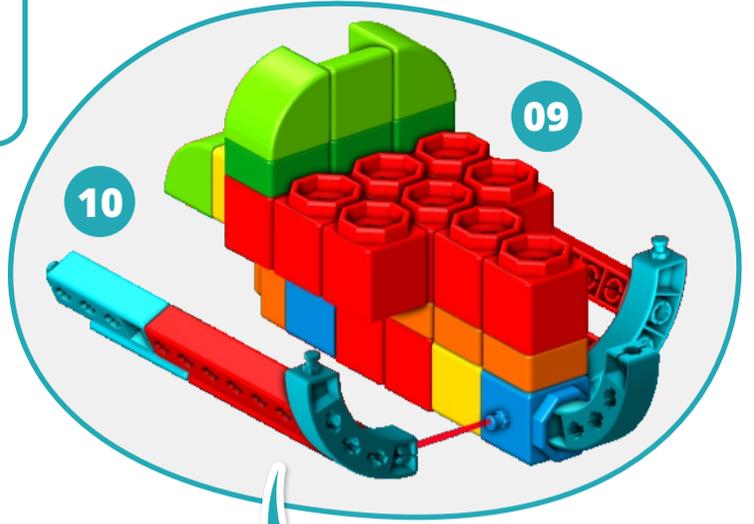
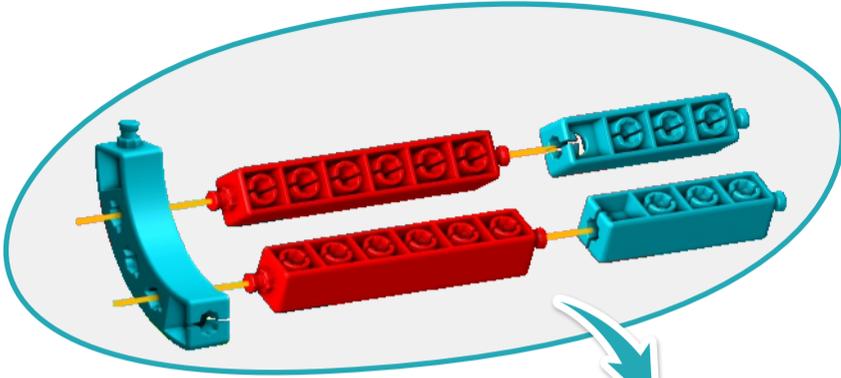
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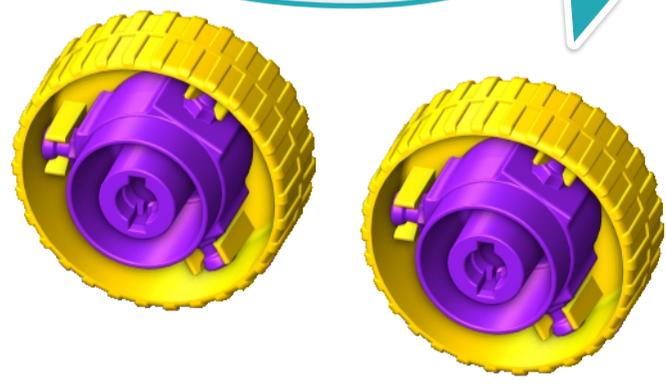
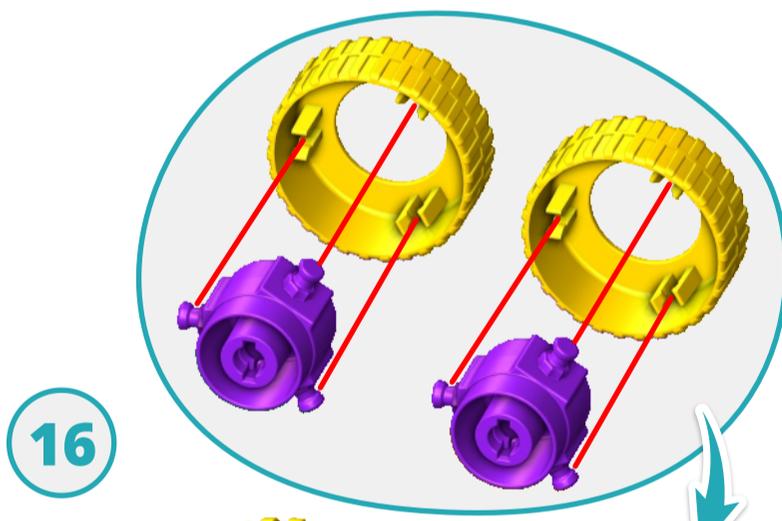
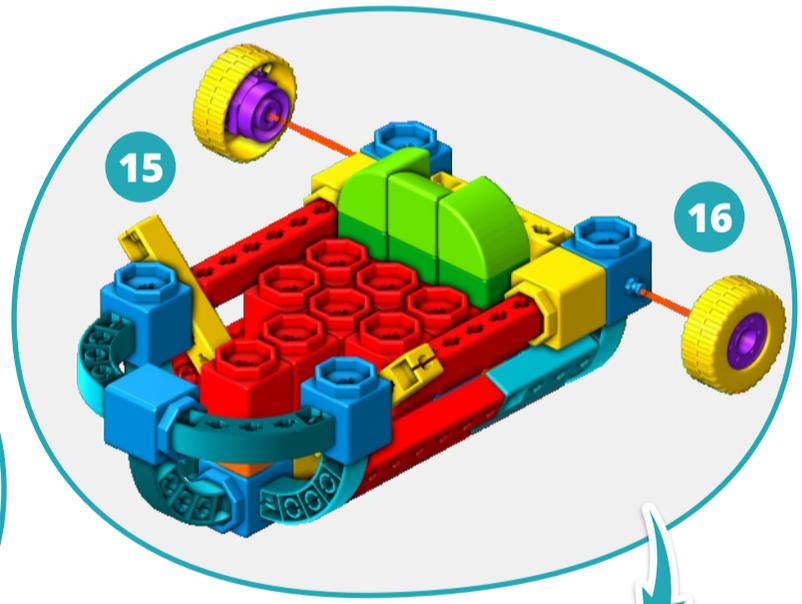
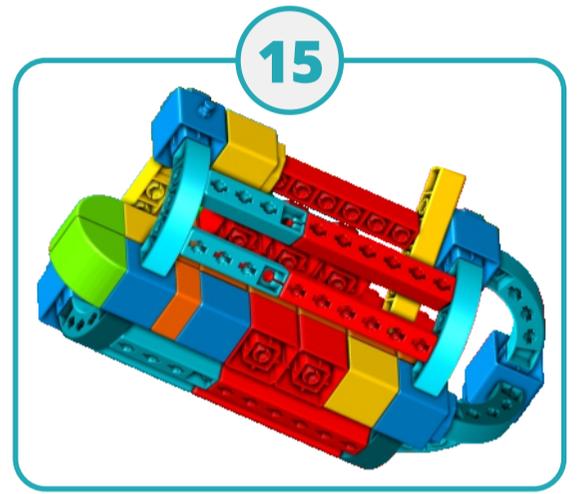
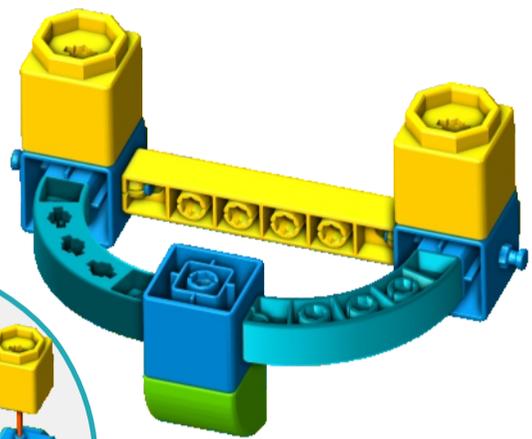
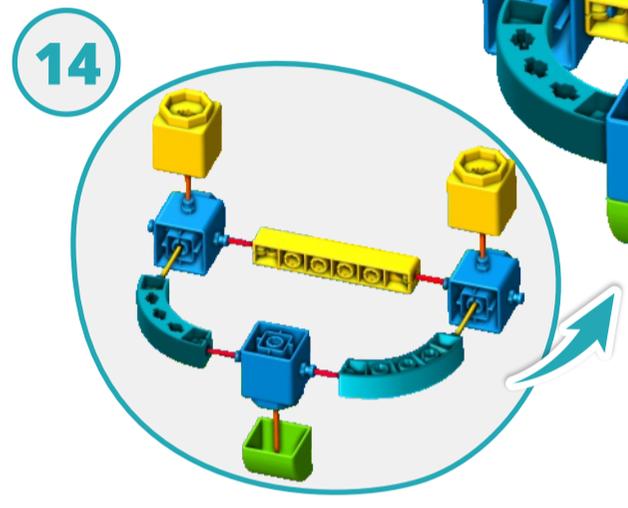
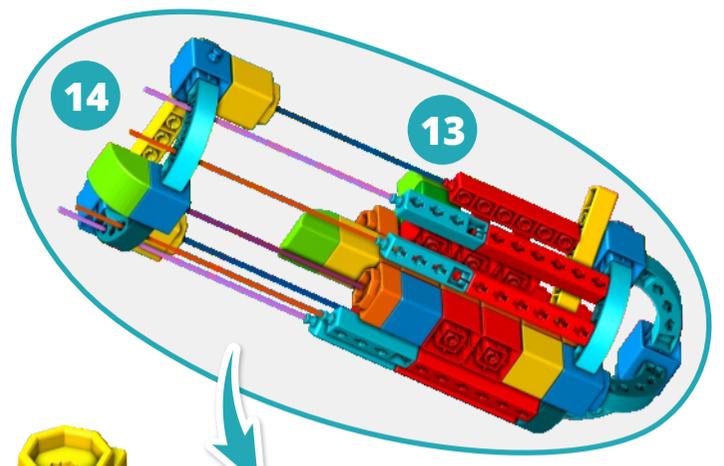
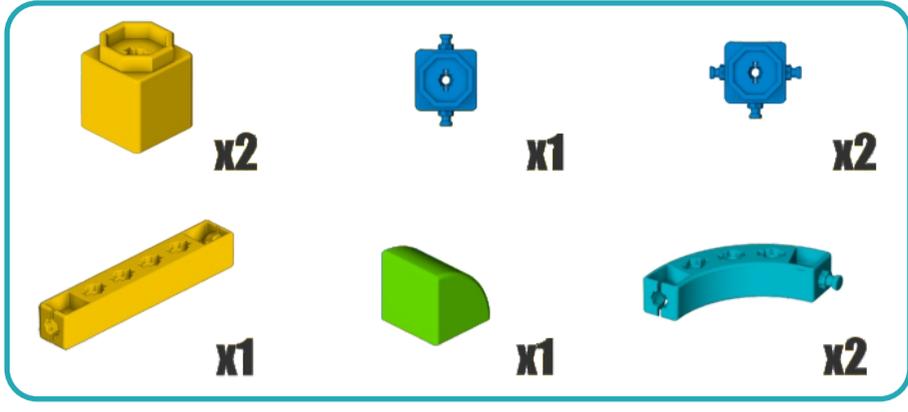


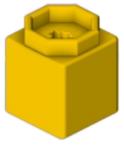
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09







x1



x1

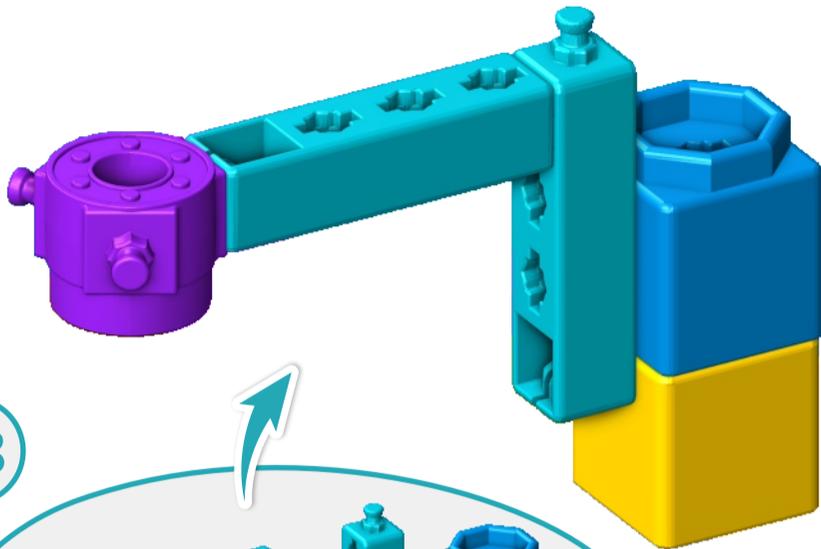
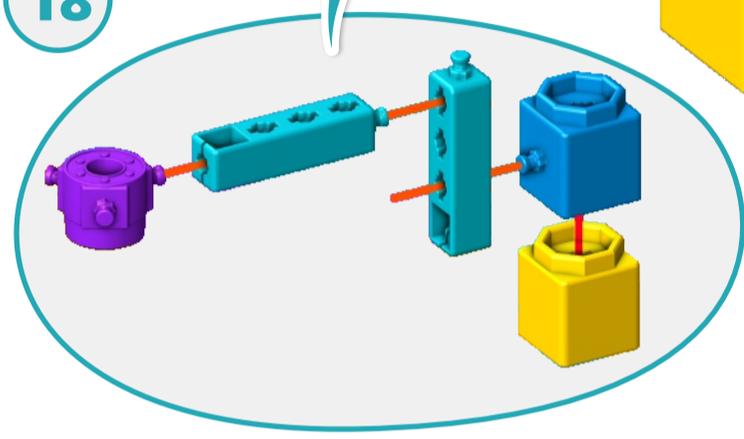


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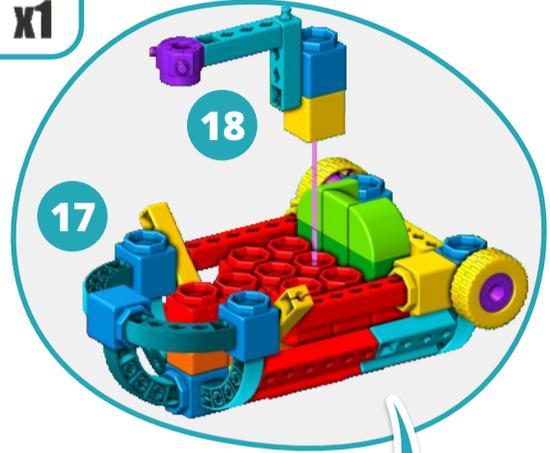


x1

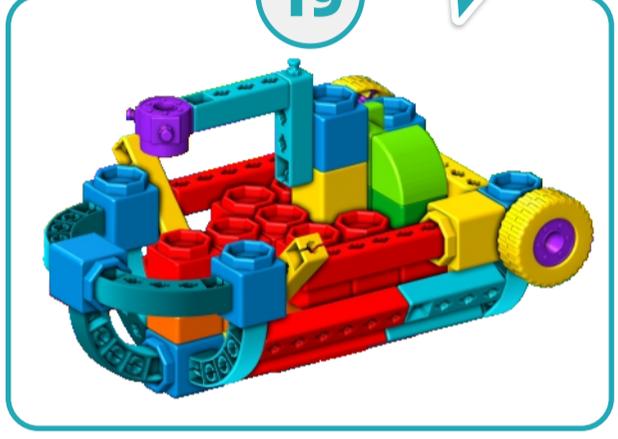
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17



19



x2



x2



x1

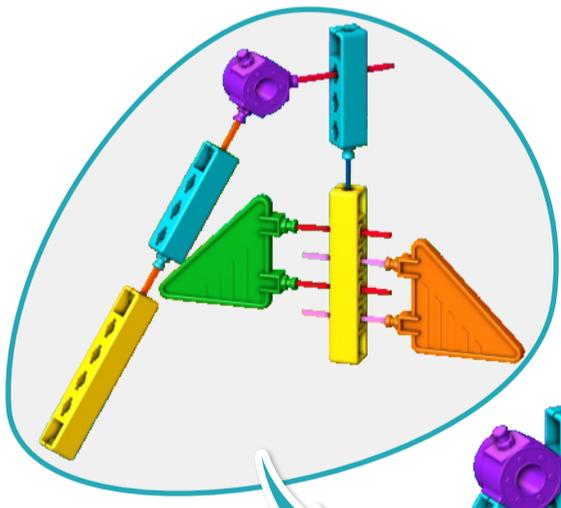


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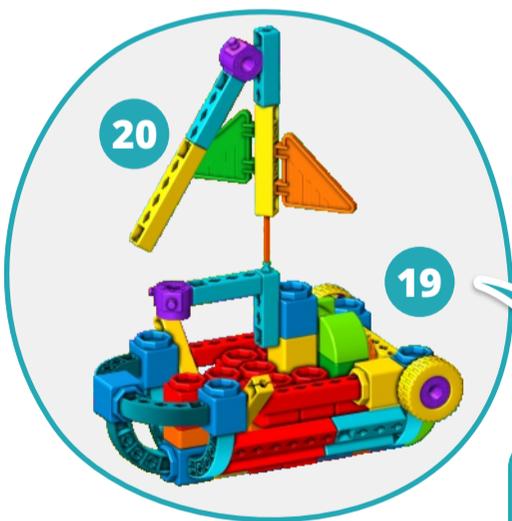


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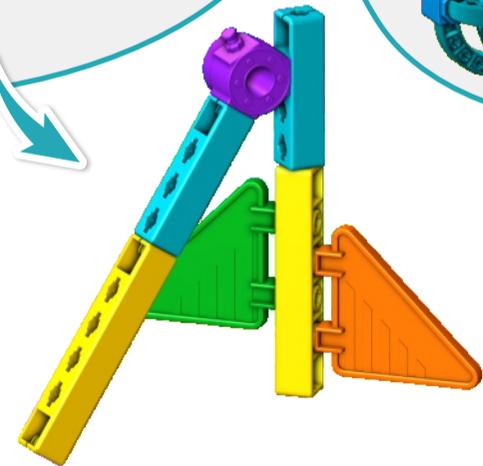
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20

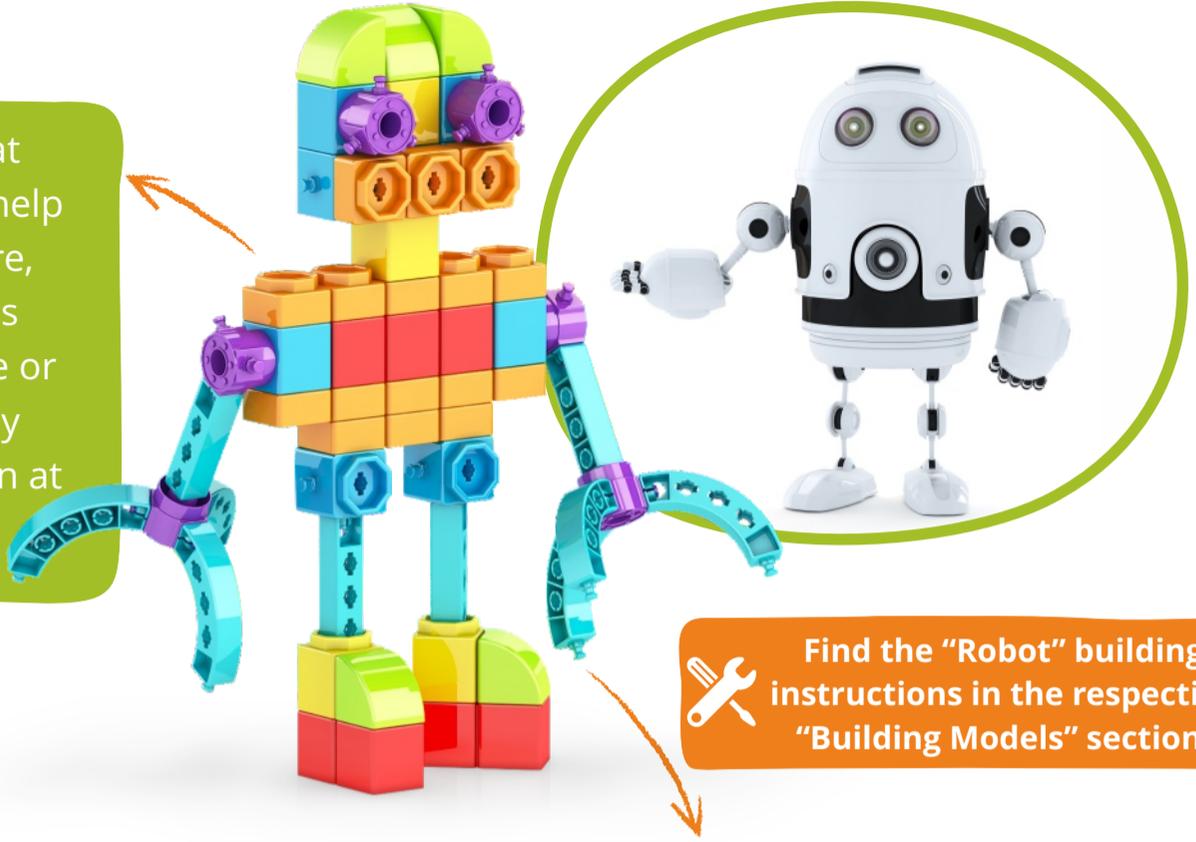


19



## Lesson: Robot

A robot is a machine that does tasks without the help of a person. Furthermore, the machine of a robot is designed to execute one or more tasks automatically with speed and precision at the same time.



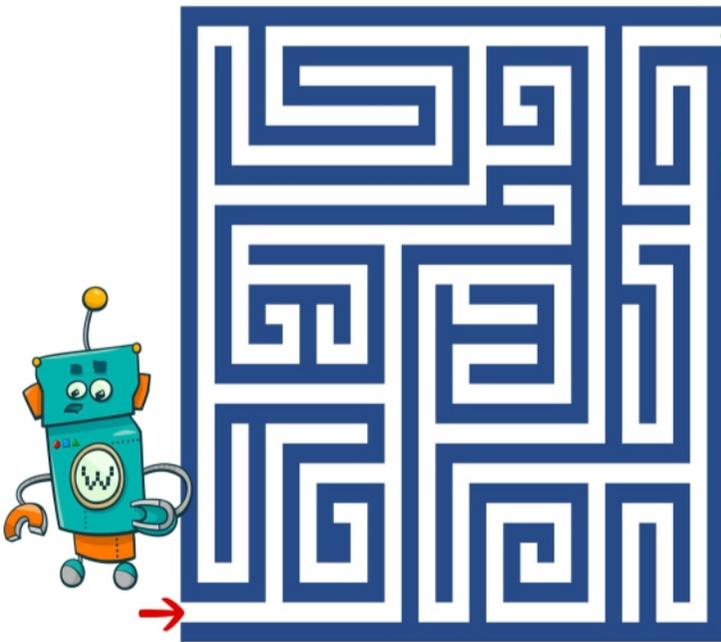
Find the "Robot" building instructions in the respective "Building Models" section.



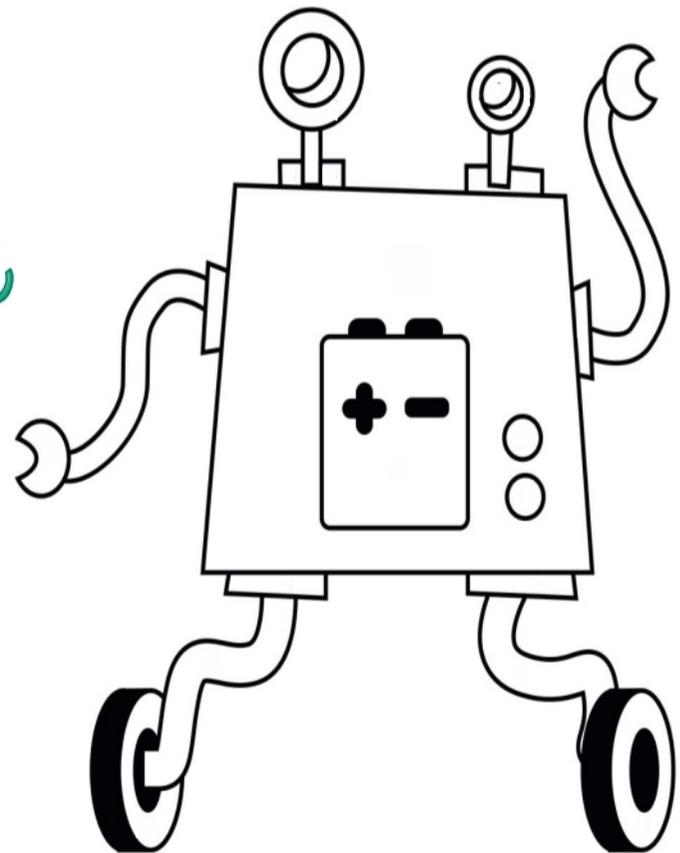
### Did you know?

The first true robot toy was produced in Japan around 1939 and it was called "Lilliput". It was just 15cm.

There are many kinds of robots in a variety of forms, shapes and they can perform single or many tasks in different situations.



Find the correct route from the red arrow to green.



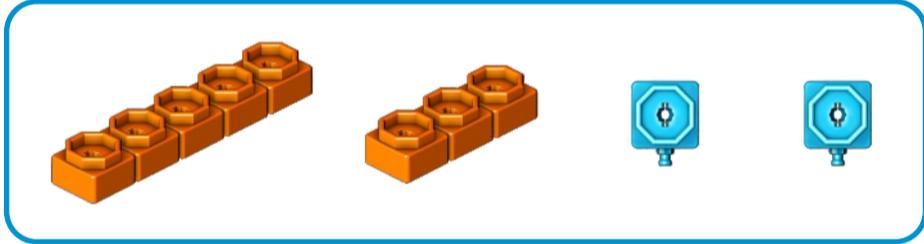
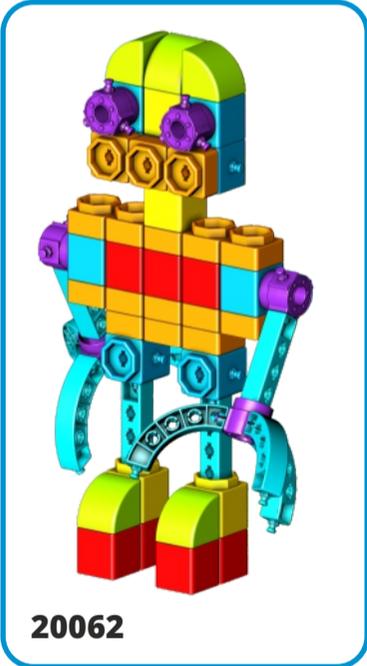
Color the picture.



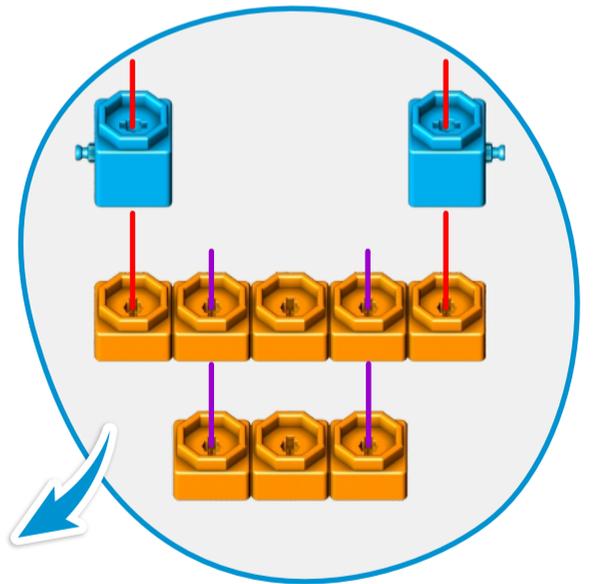
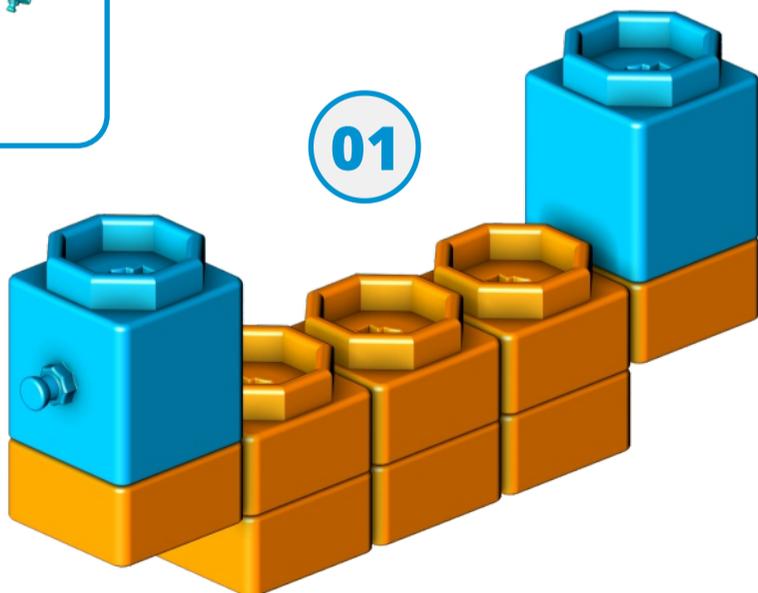
Draw your own robot.

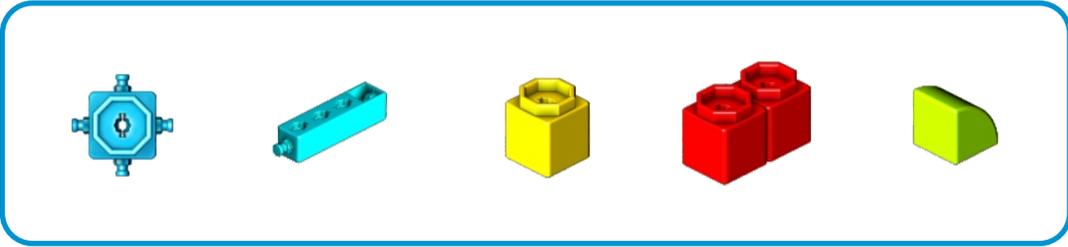


Create the above robot with Engino Qboidz.

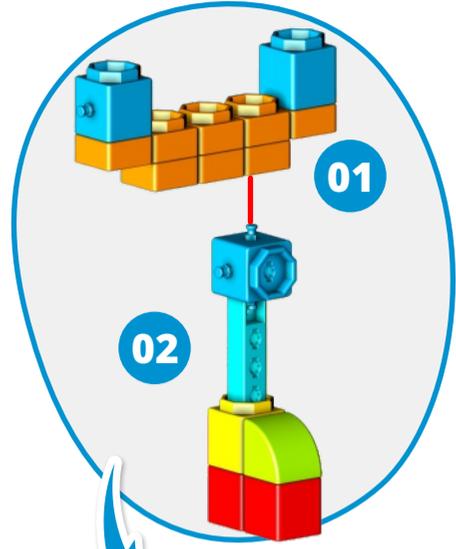
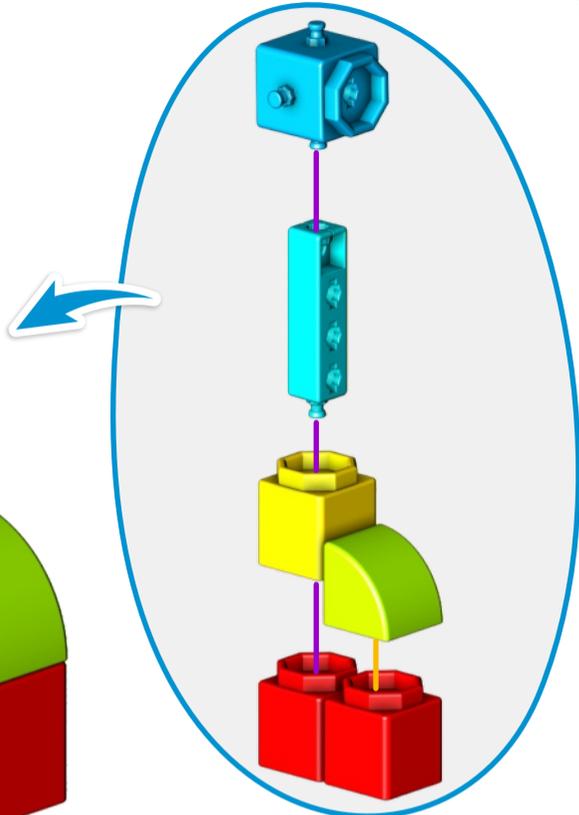


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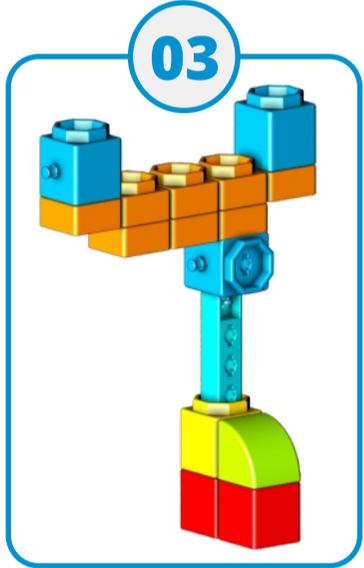


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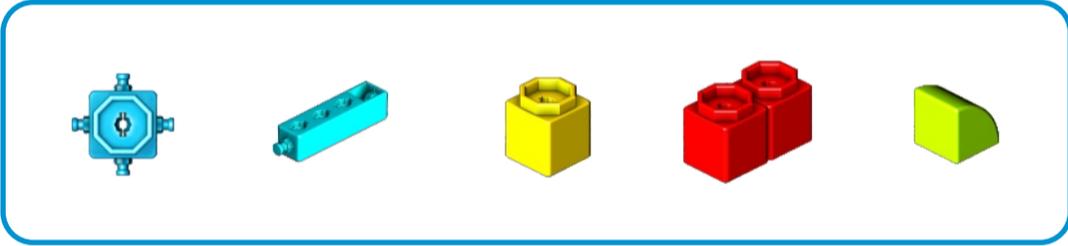


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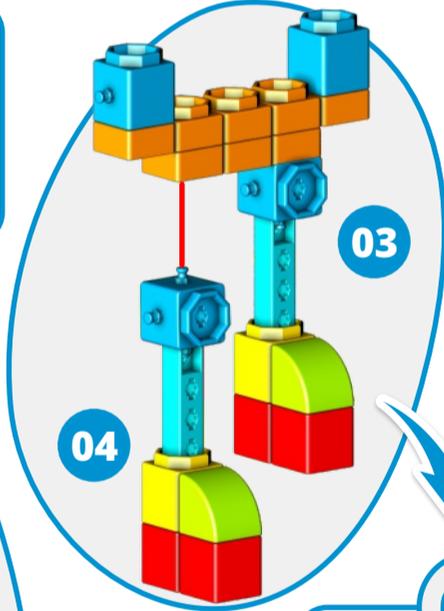
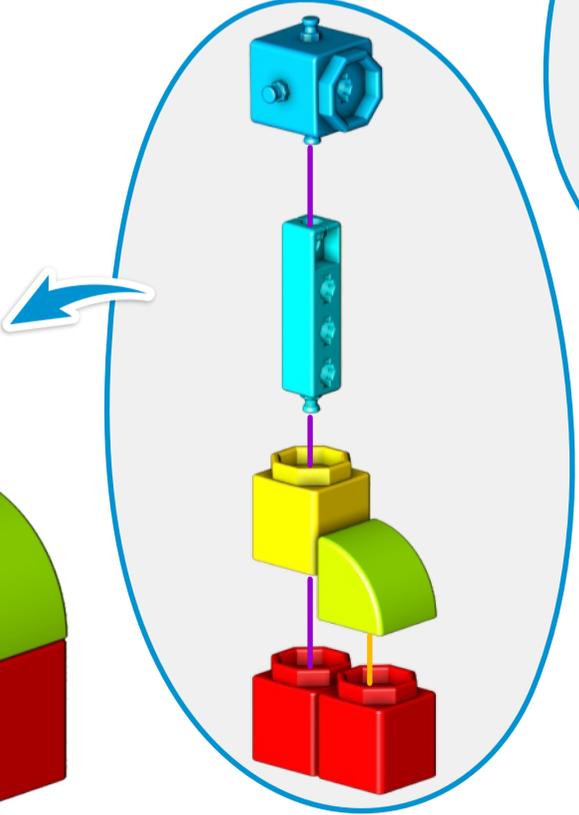
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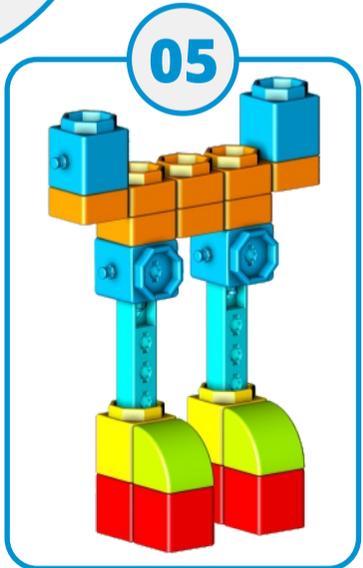


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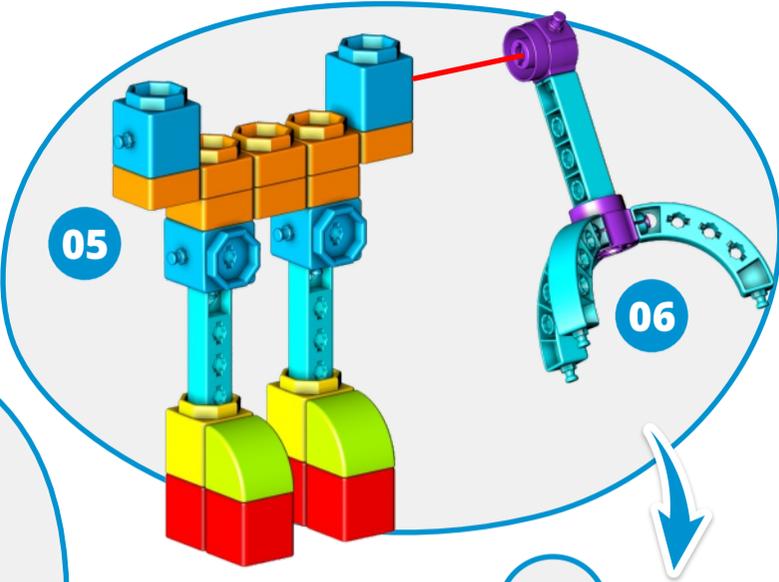
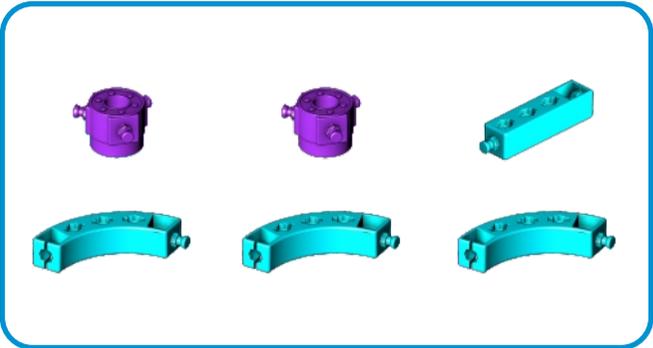


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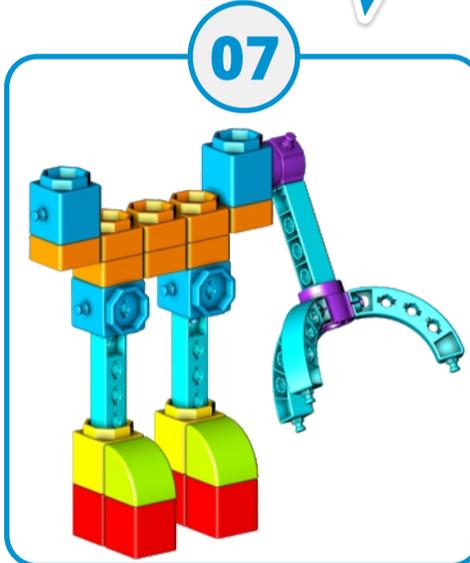
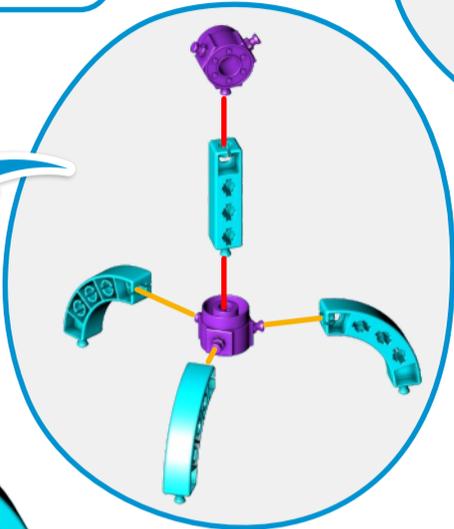
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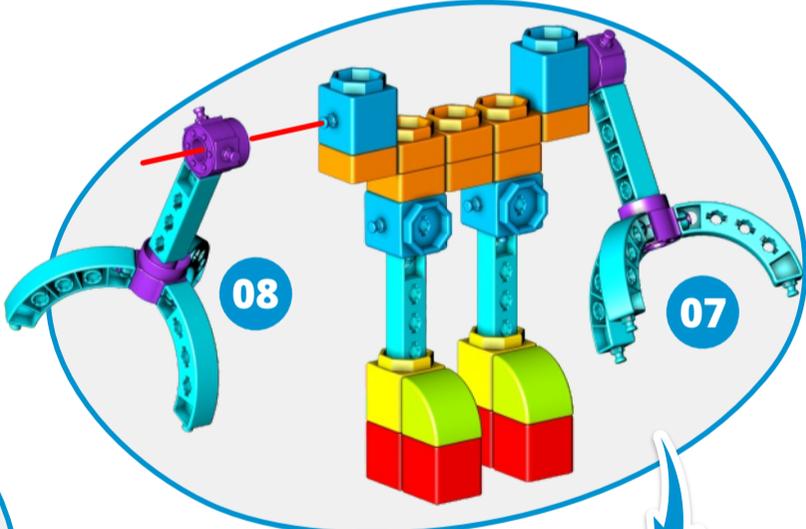
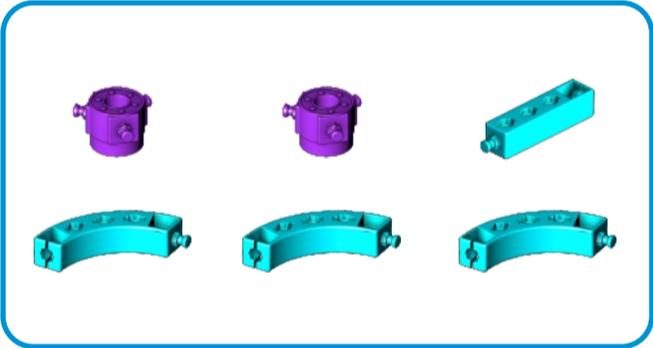
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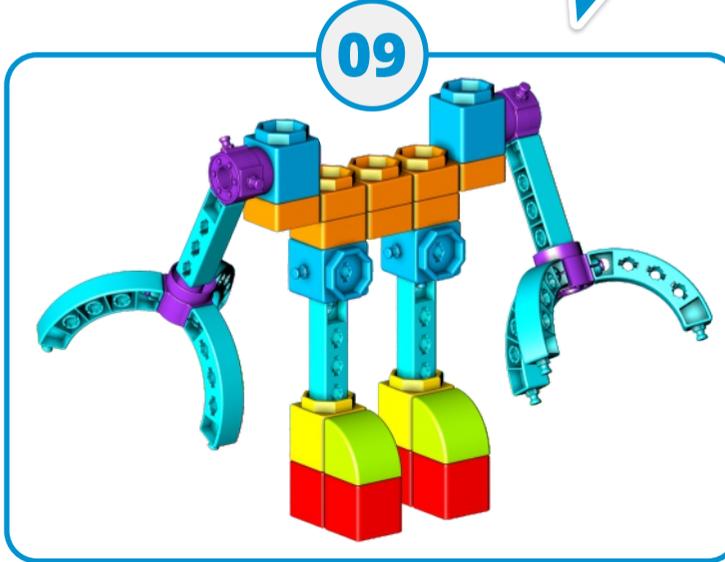
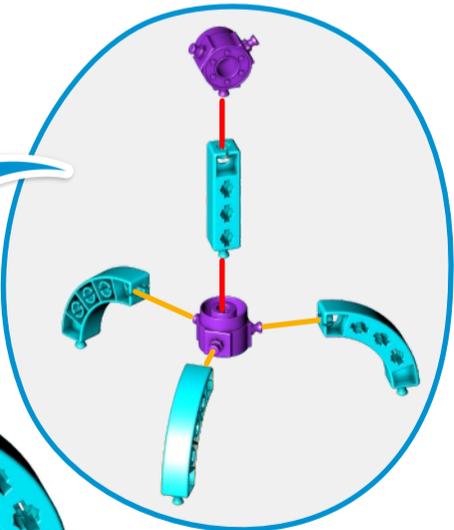
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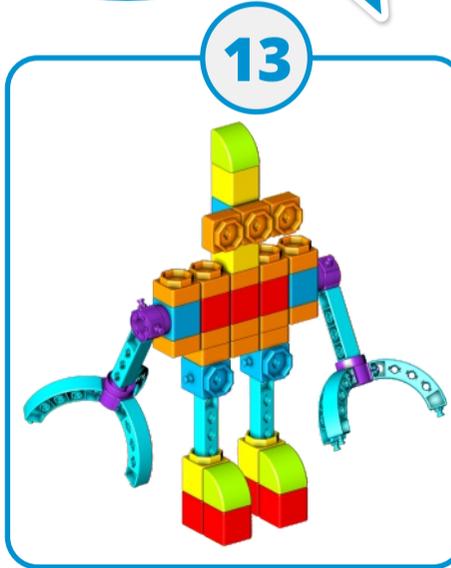
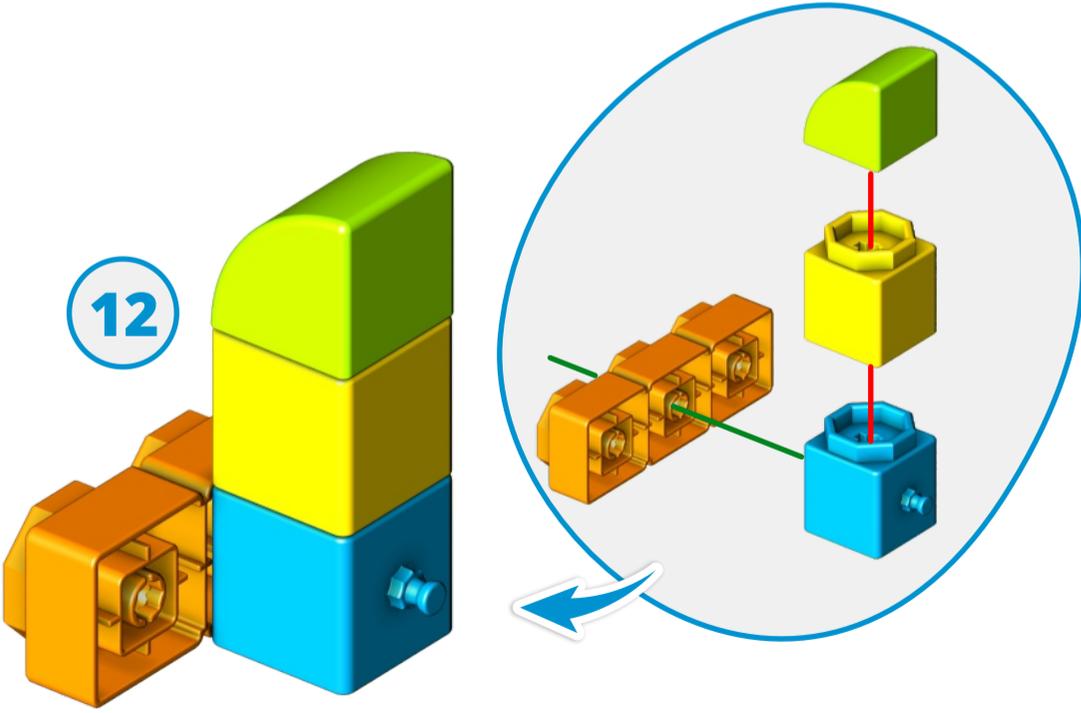
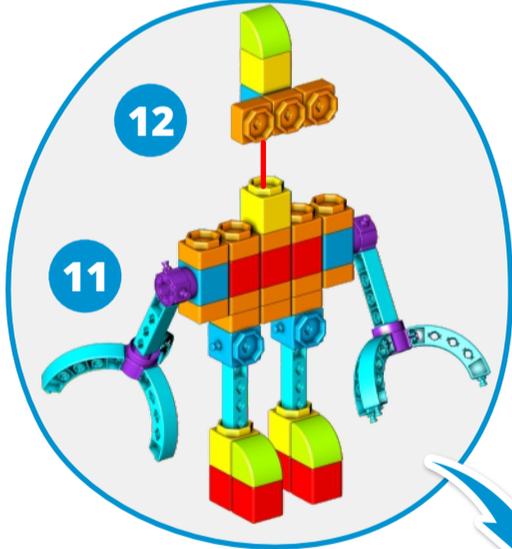
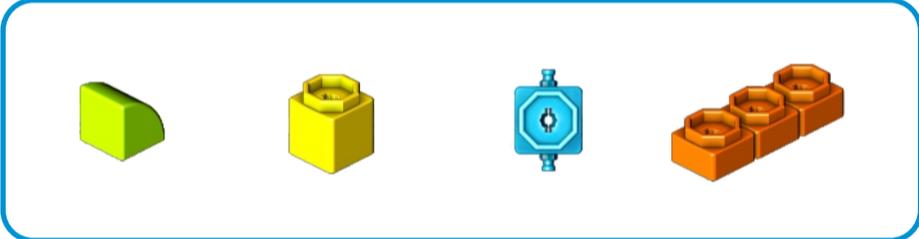
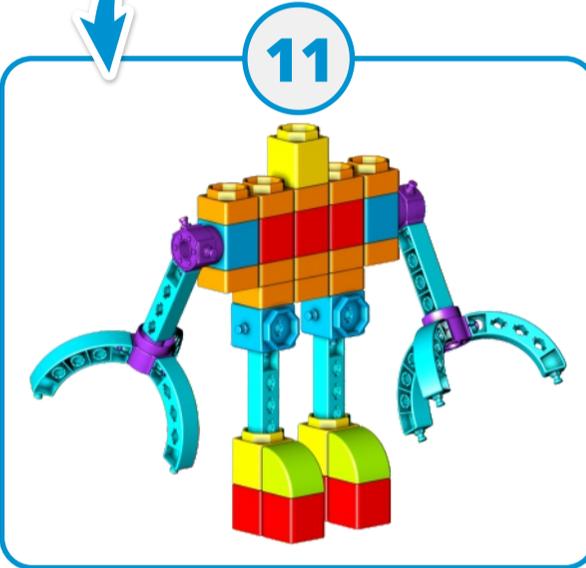
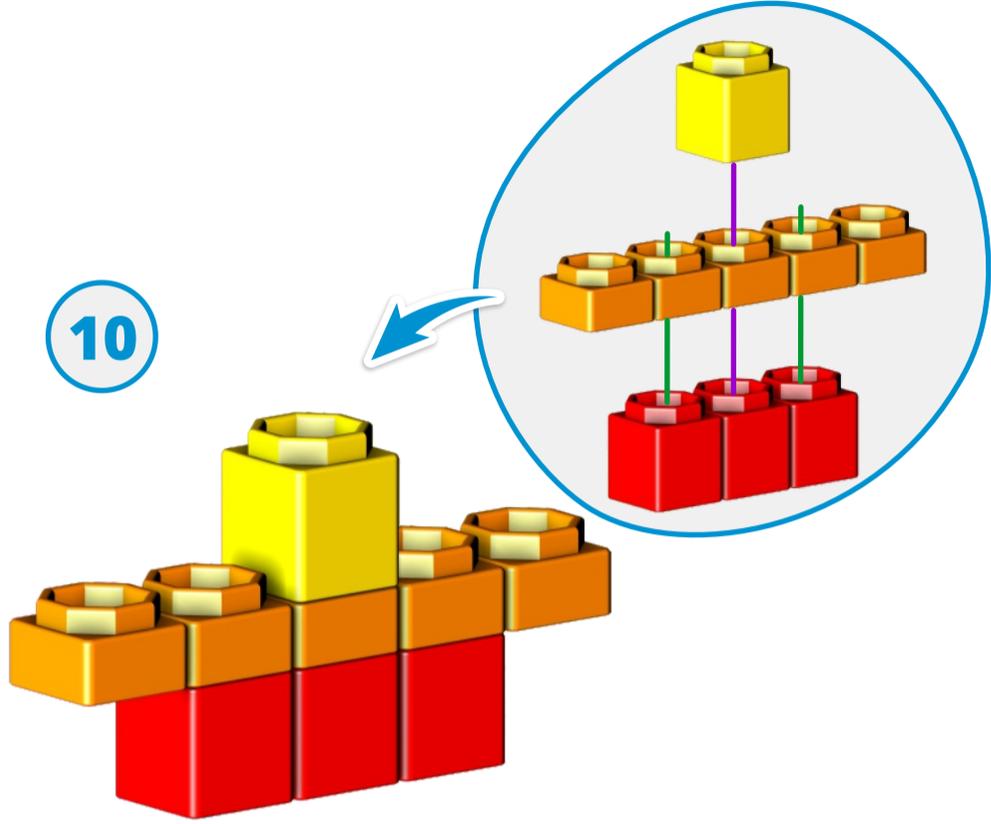
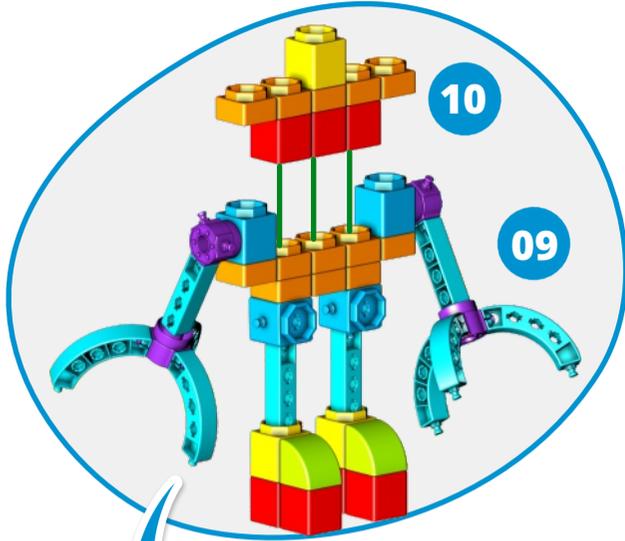
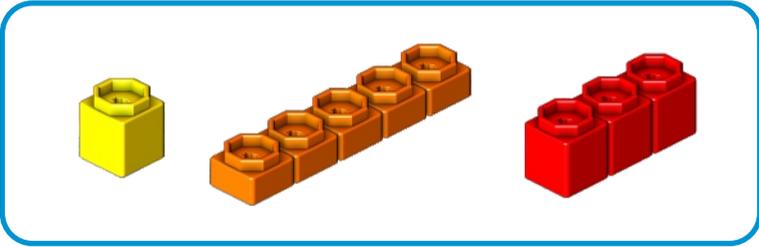
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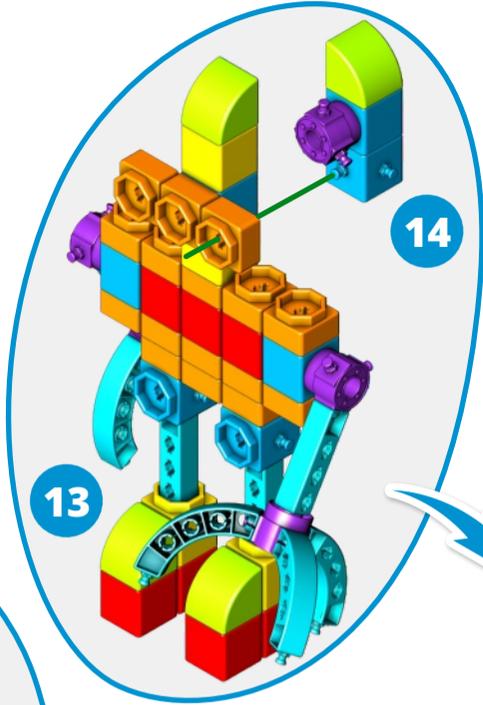
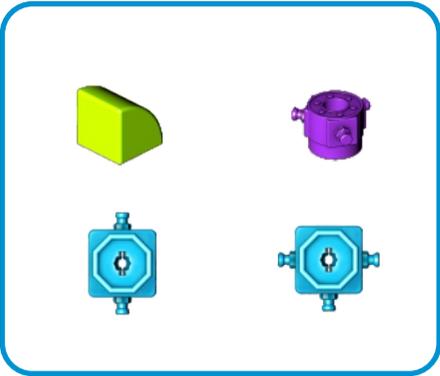


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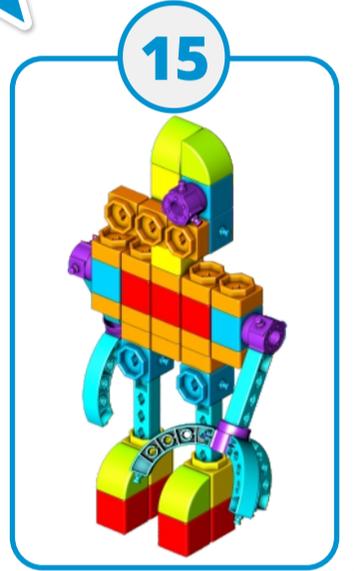
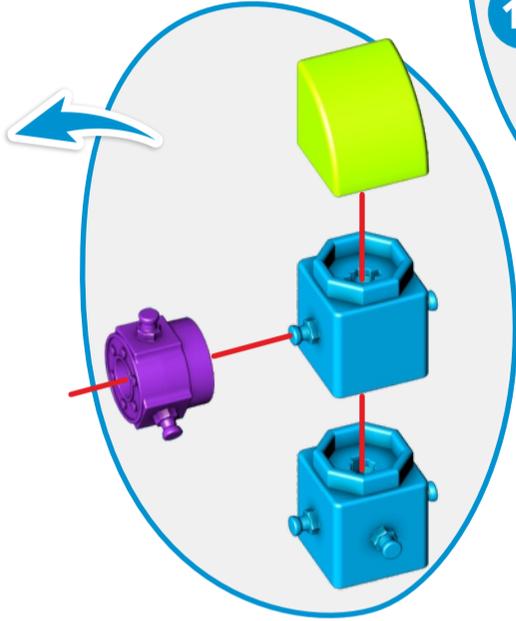


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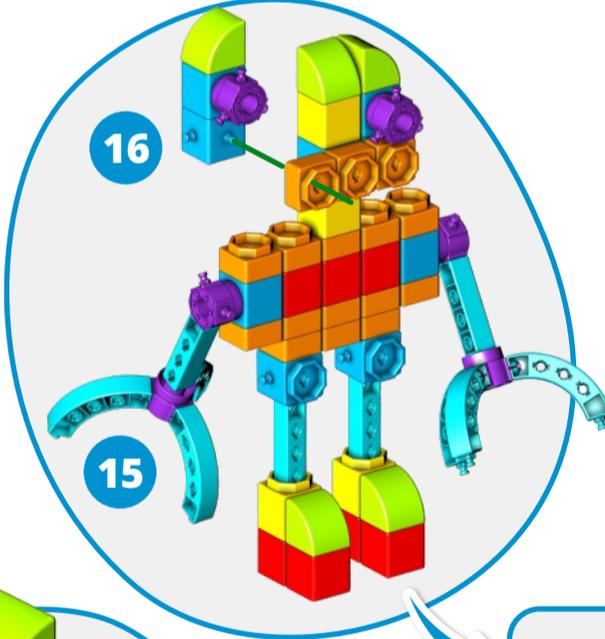
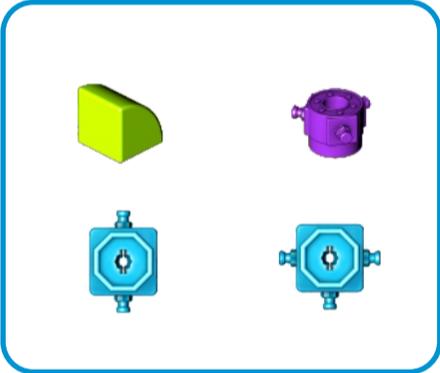




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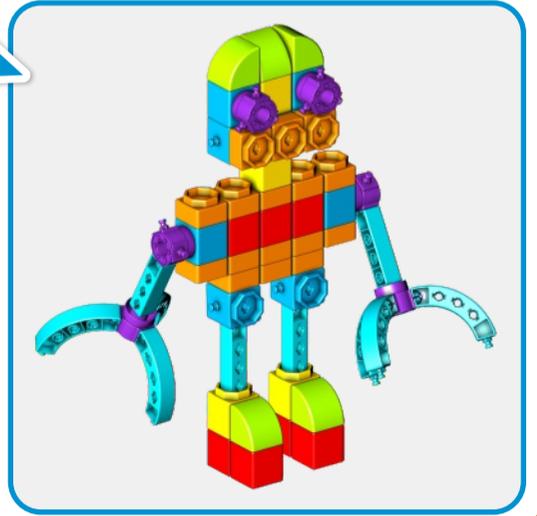
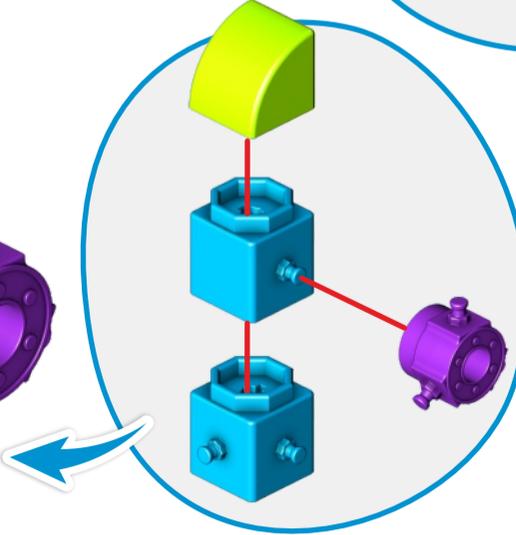
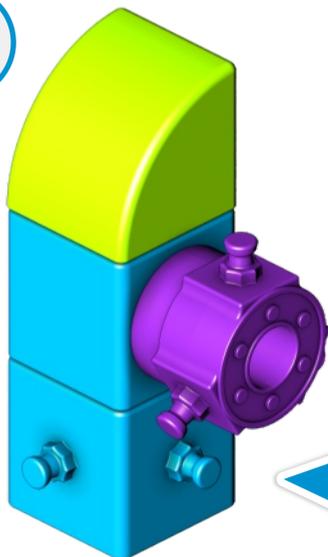
15



16

15

16



## Lesson: Formula car

A formula racing car is one of the fastest cars in the world. Its engine is placed behind the driver. Formula cars are driven only by professional drivers called "pilots".



Find the "Formula car" building instructions in the respective "Building Models" section.



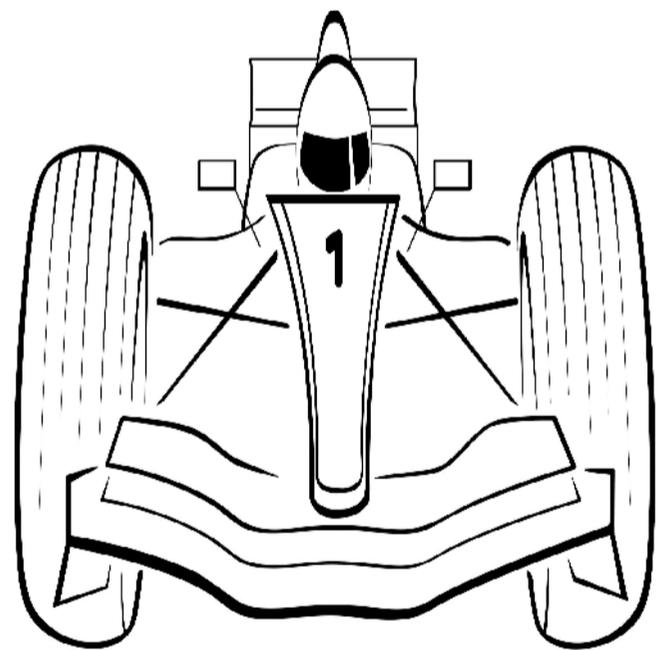
### Did you know?

The first helicopter was designed by Igor Sikorsky. The helicopter was the first vehicle with a large single main and a small tail rotor.

These cars are full of technology equipment and they also offer maximum safety to their drivers.



Help the formula car to win the prize.



Color the image.



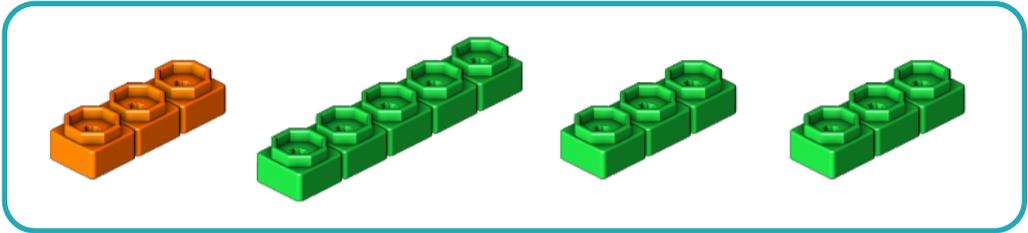
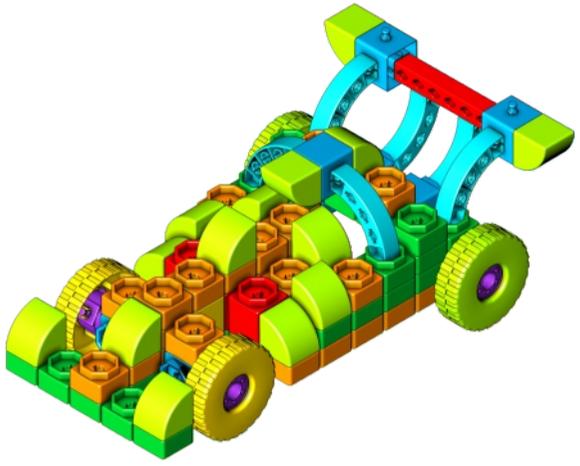
Circle the correct number  
of cars in each box

3

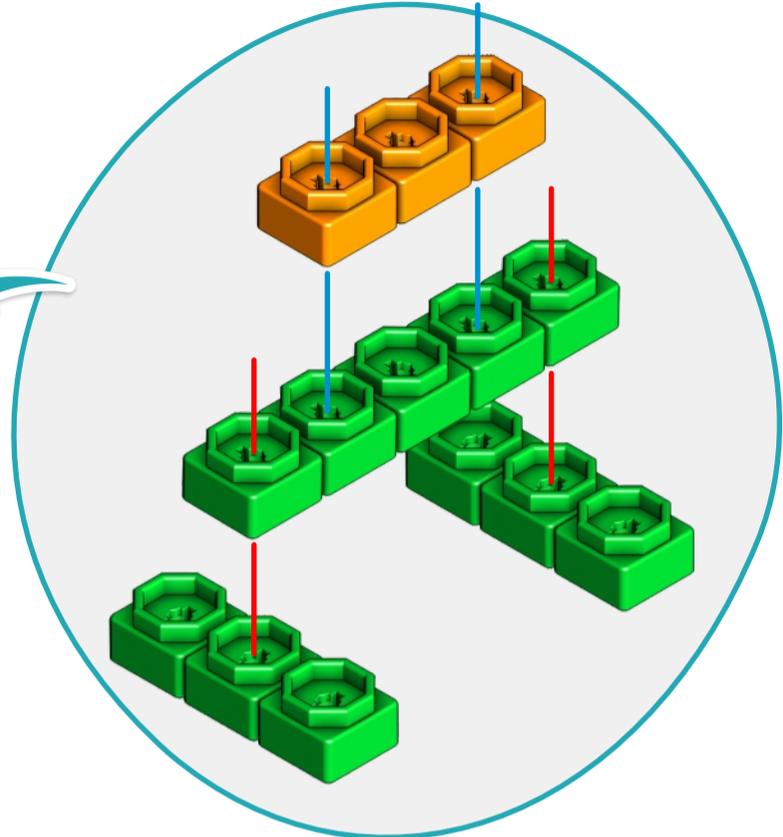
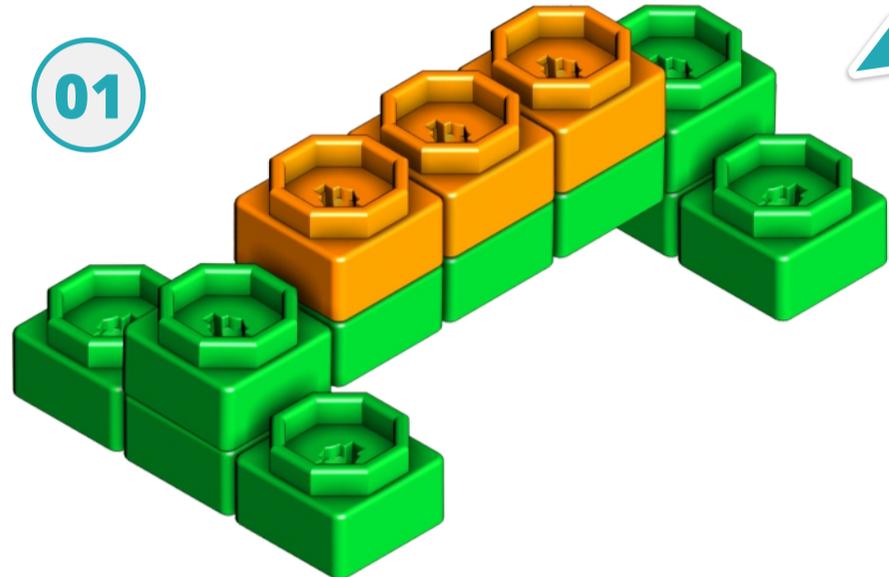


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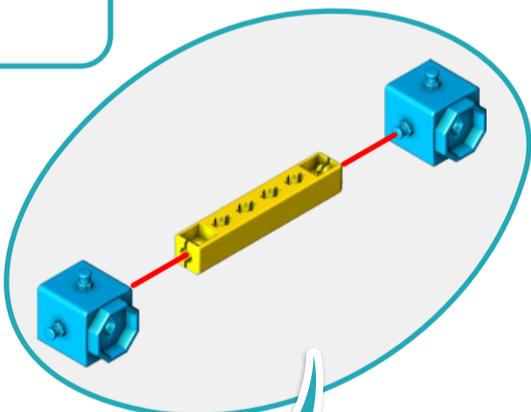
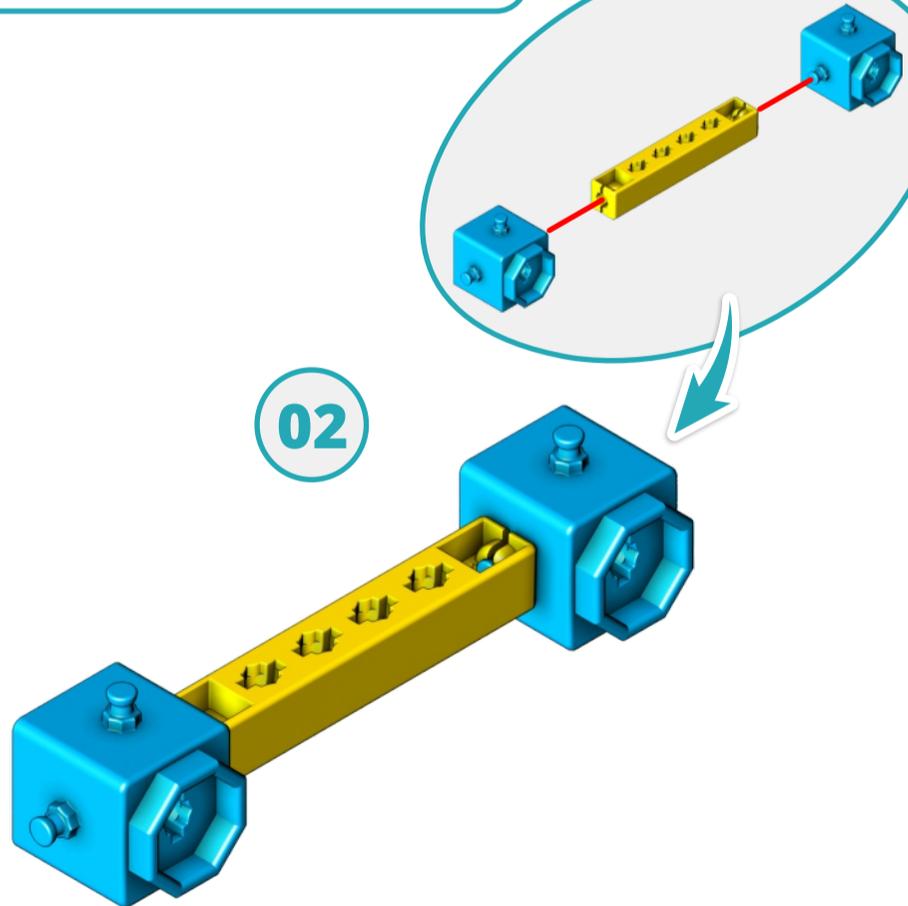




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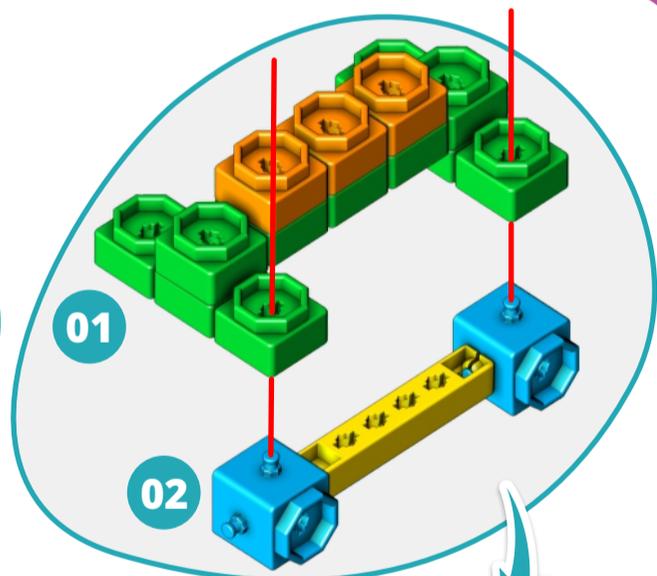


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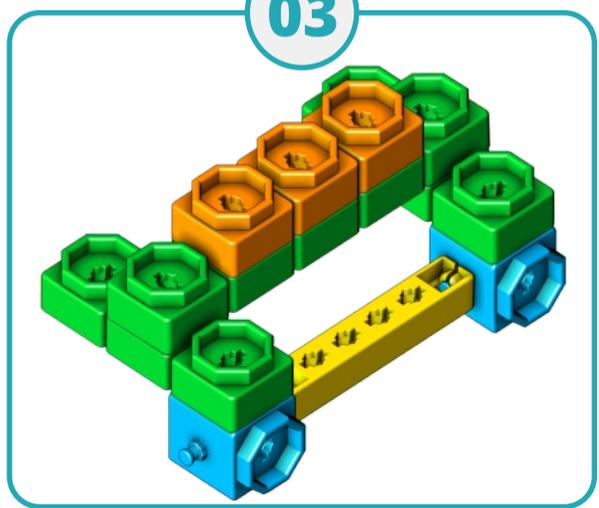


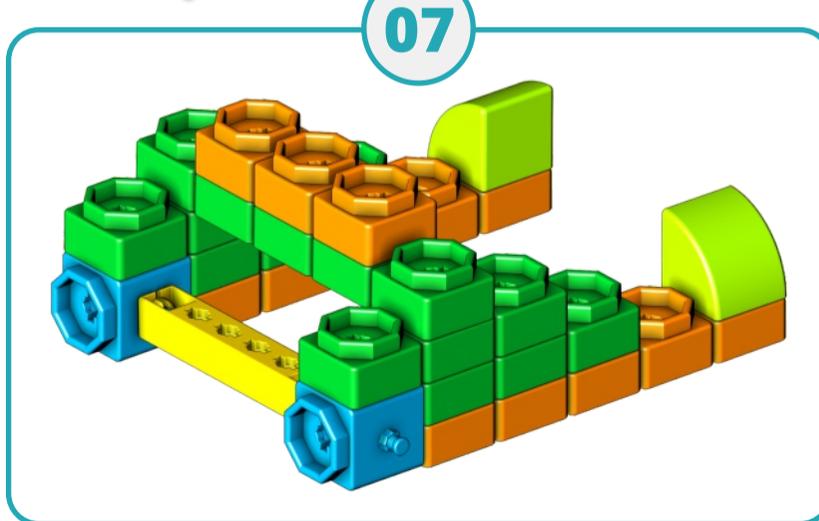
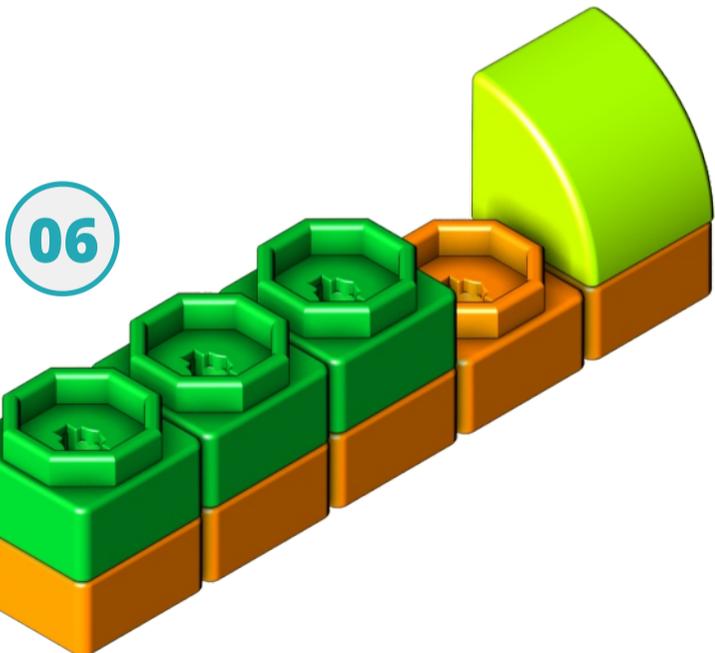
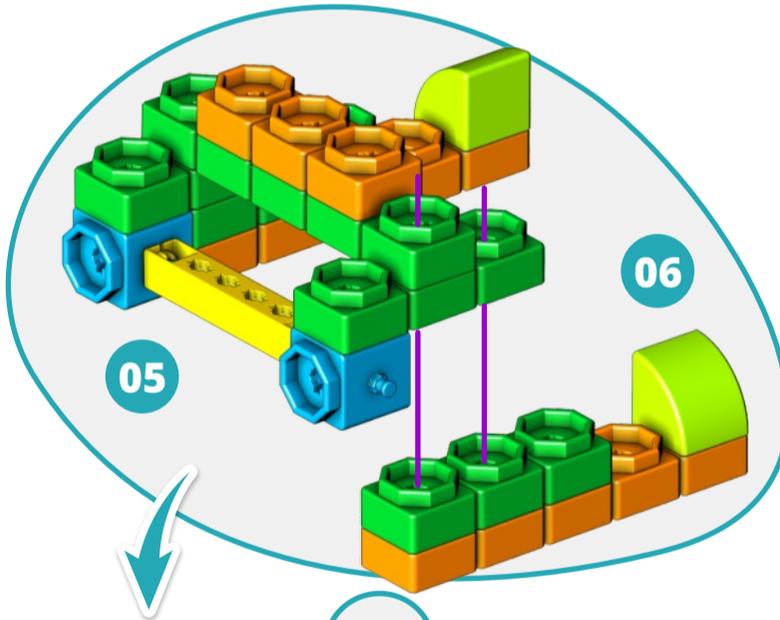
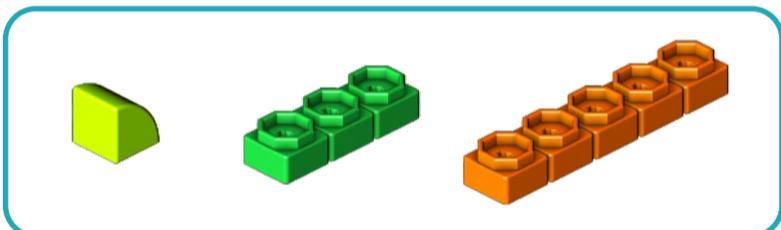
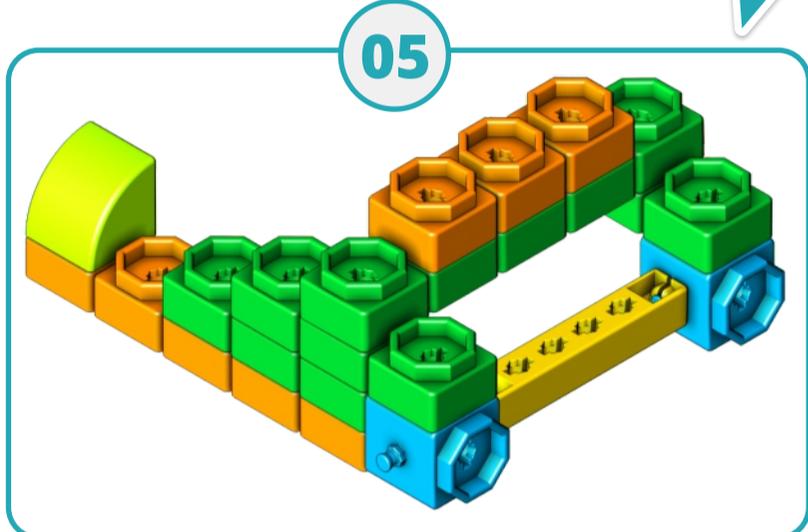
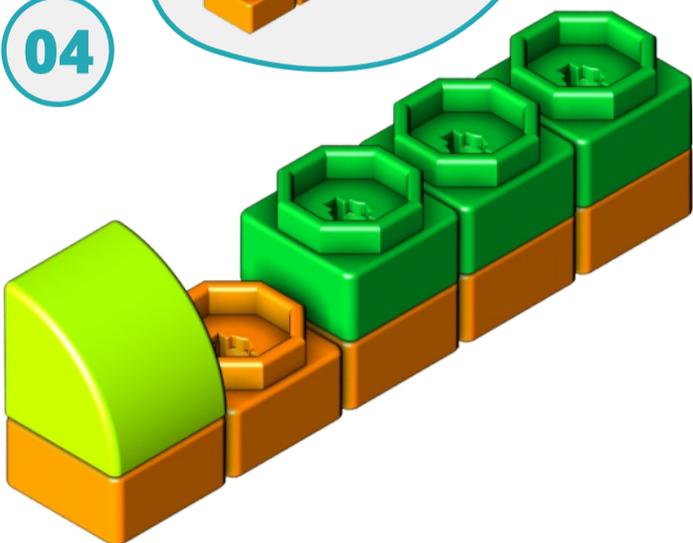
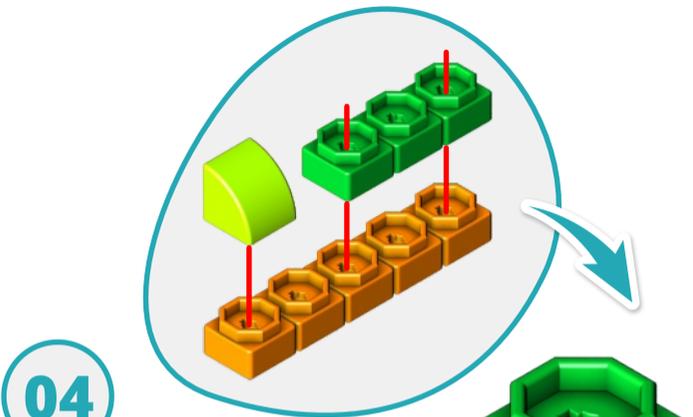
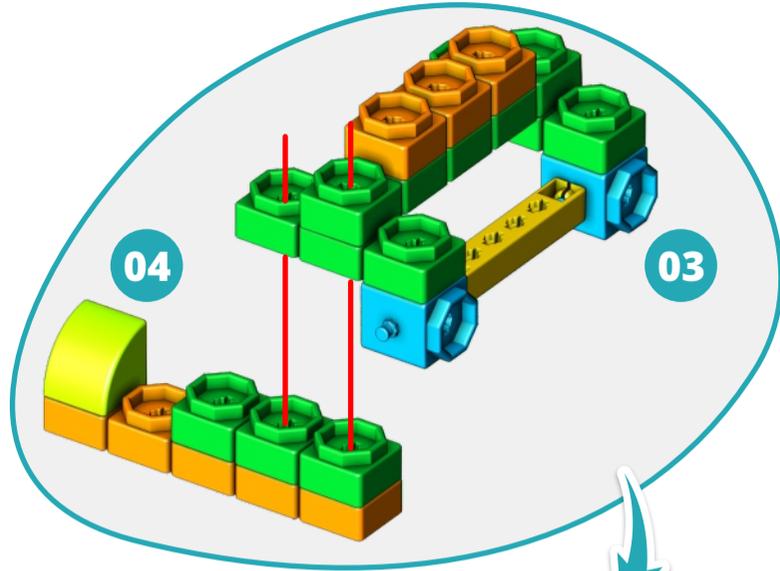
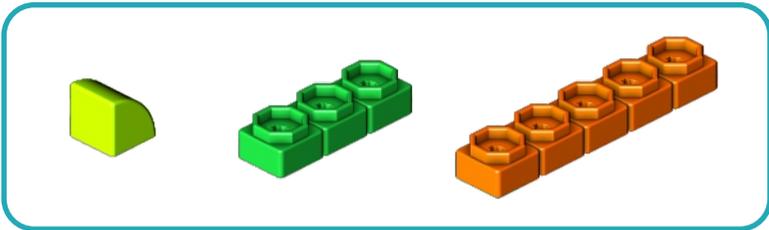
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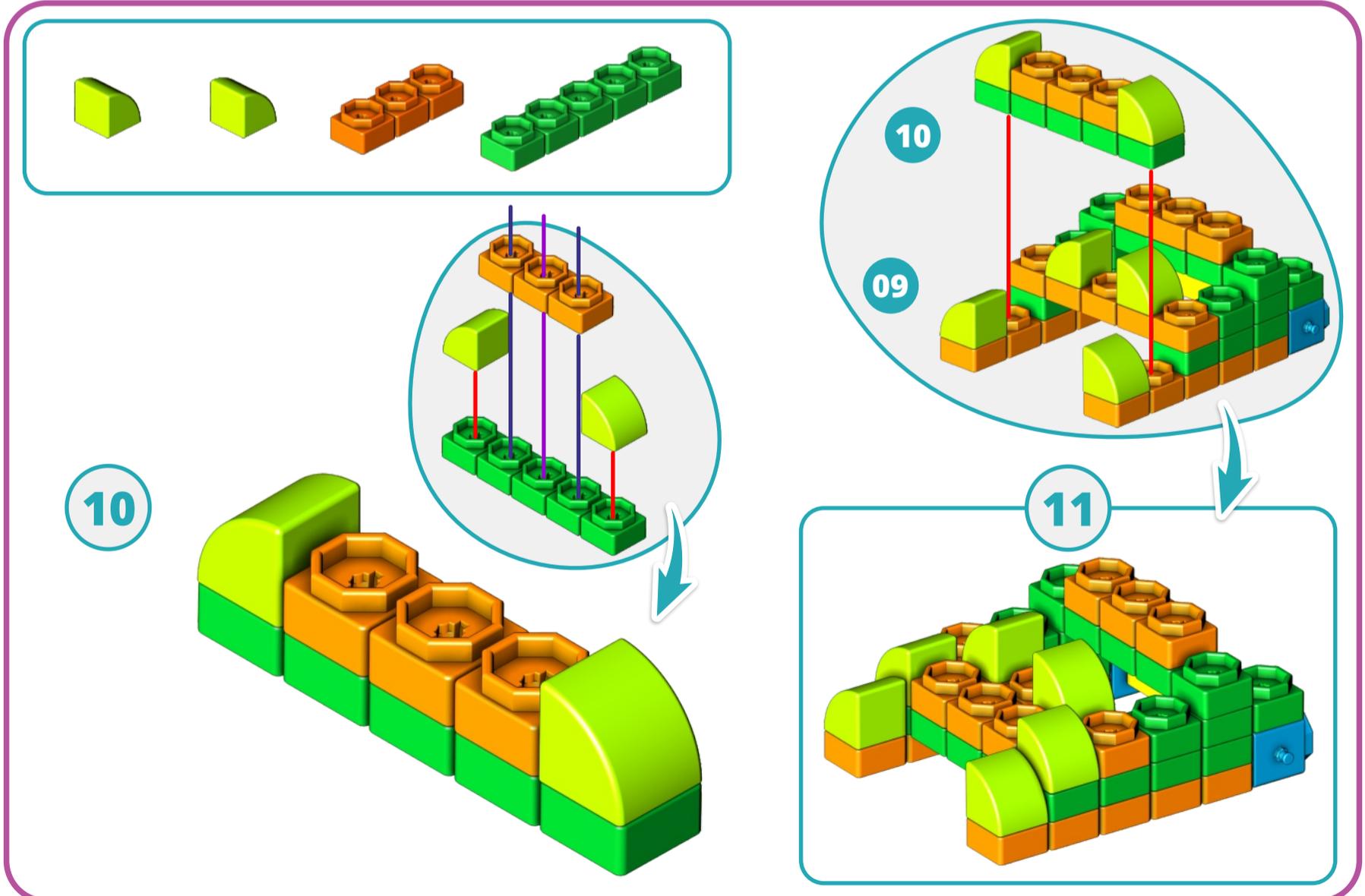
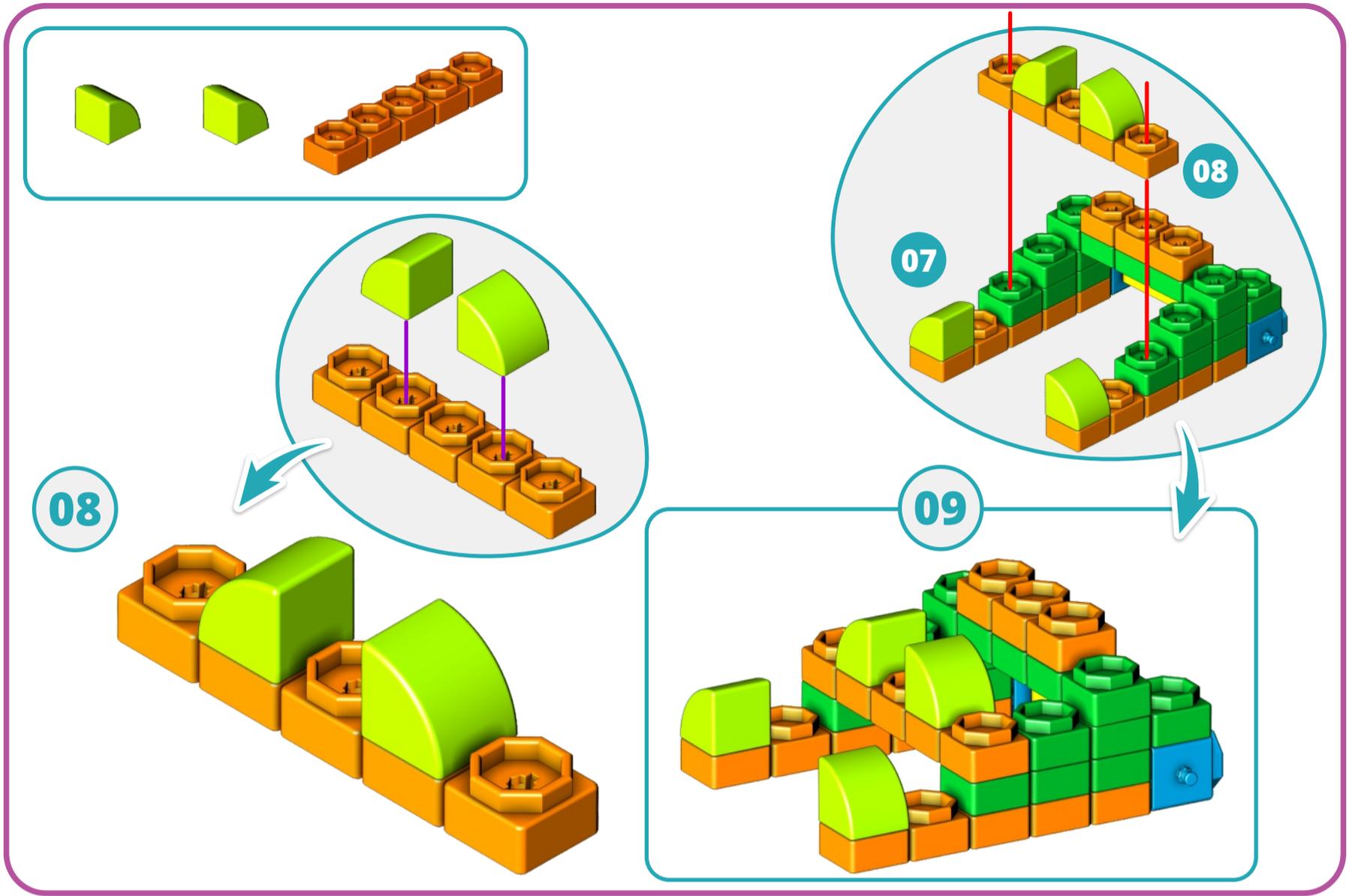
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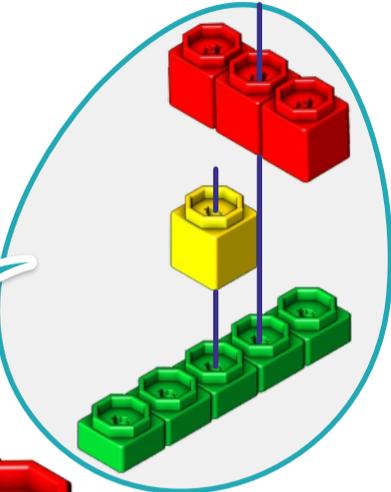
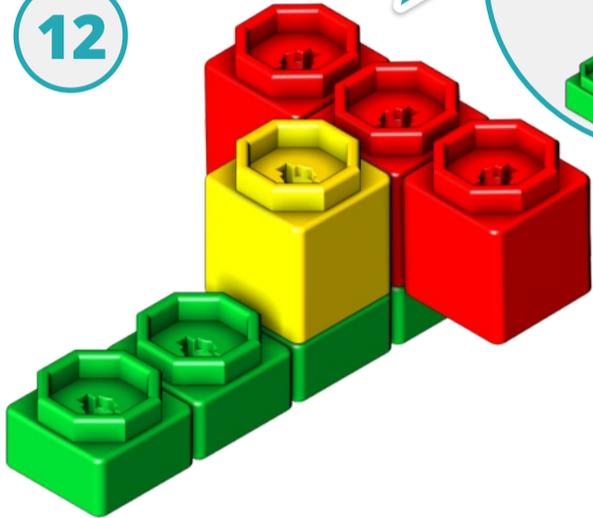






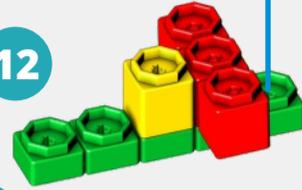


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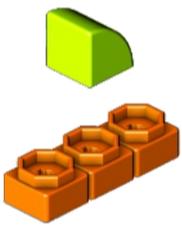


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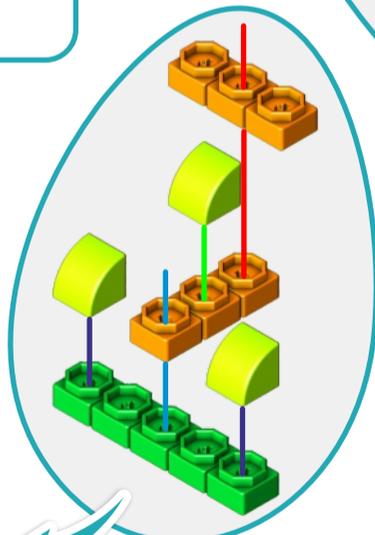
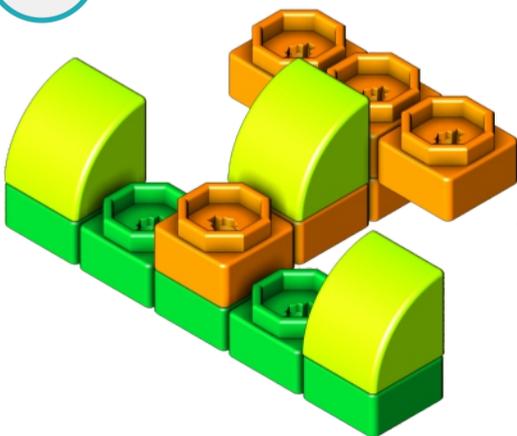
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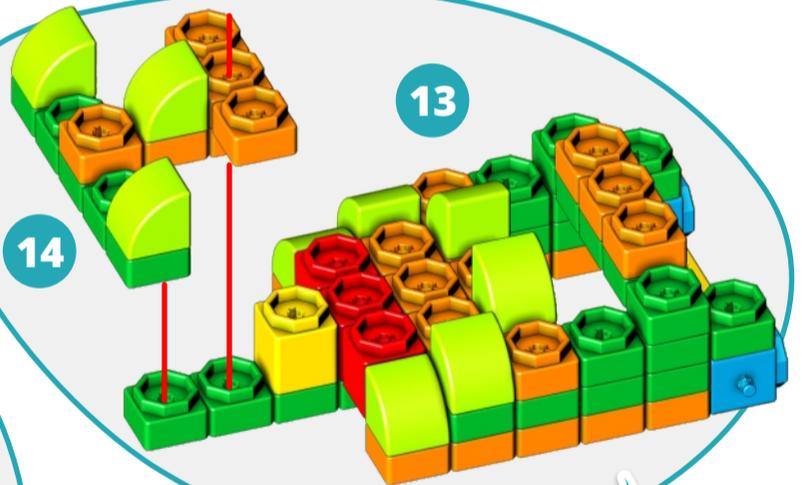


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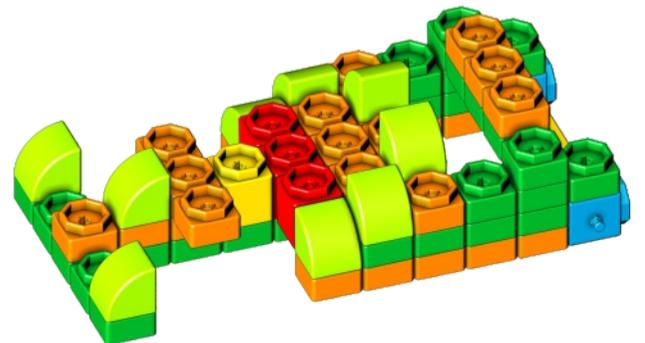


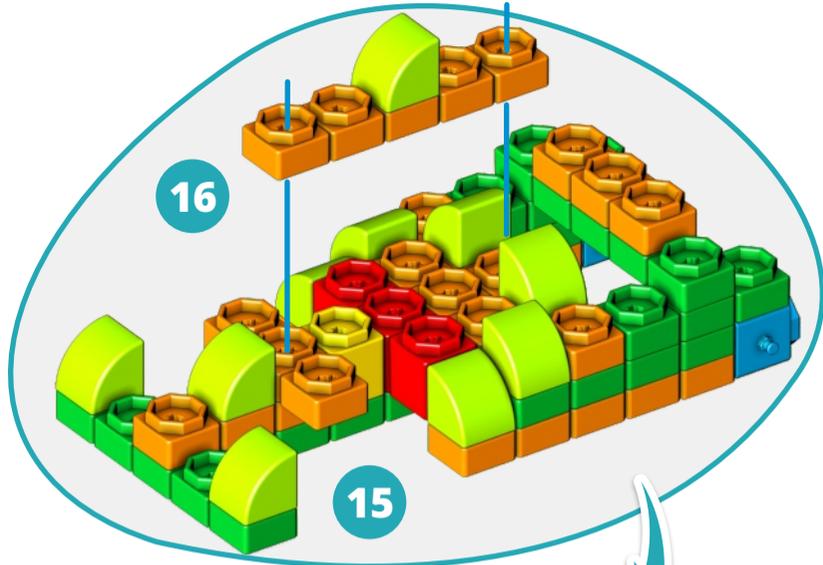
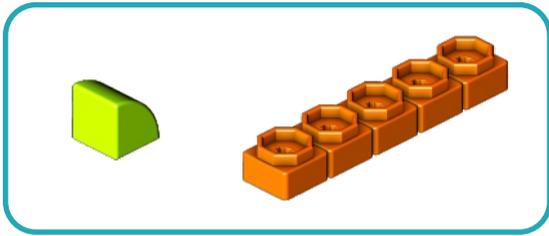
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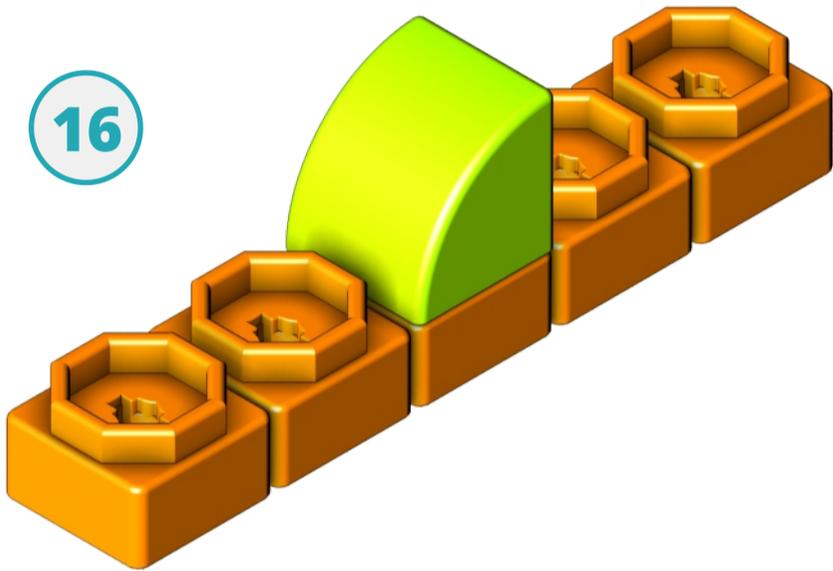


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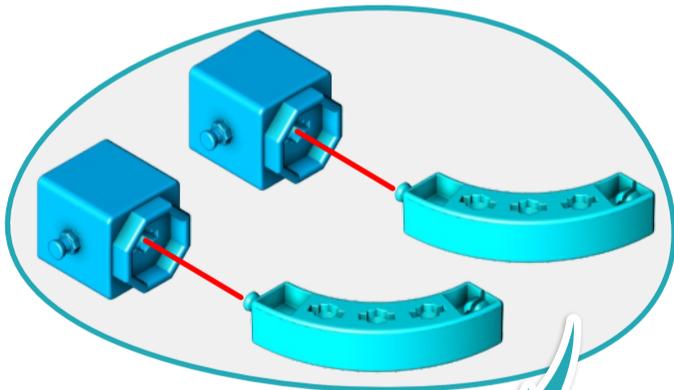
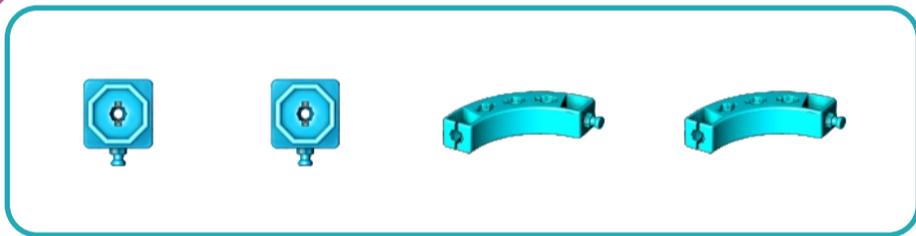




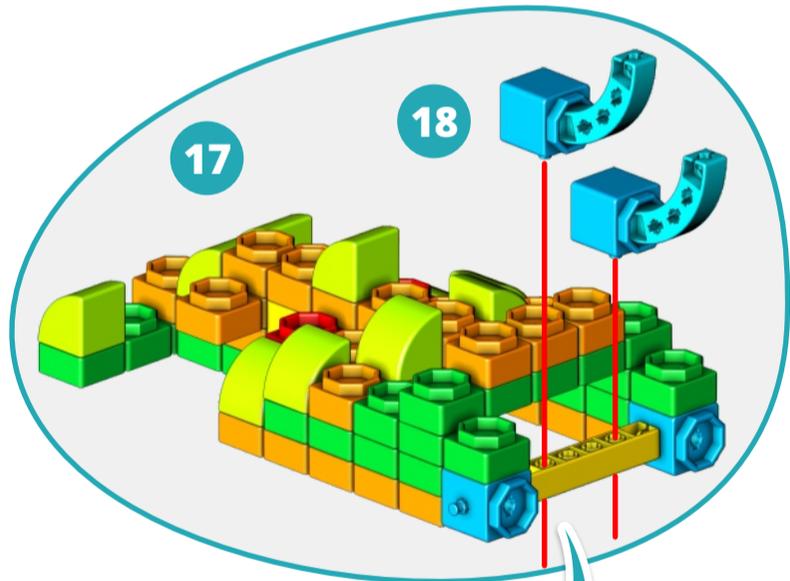
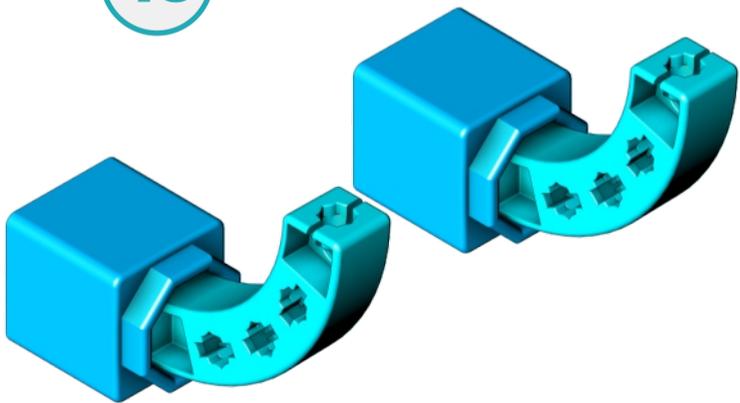
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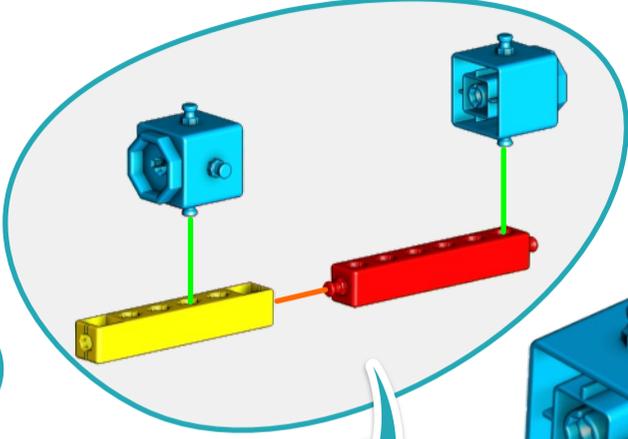
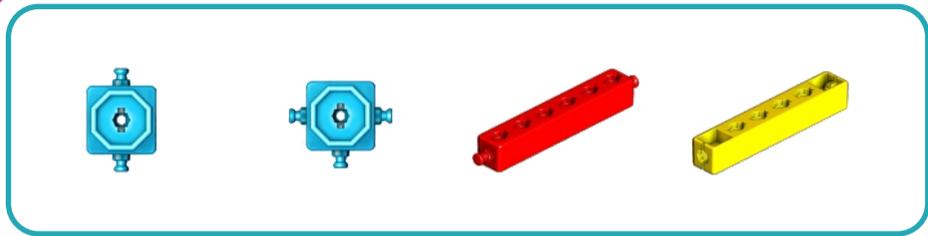


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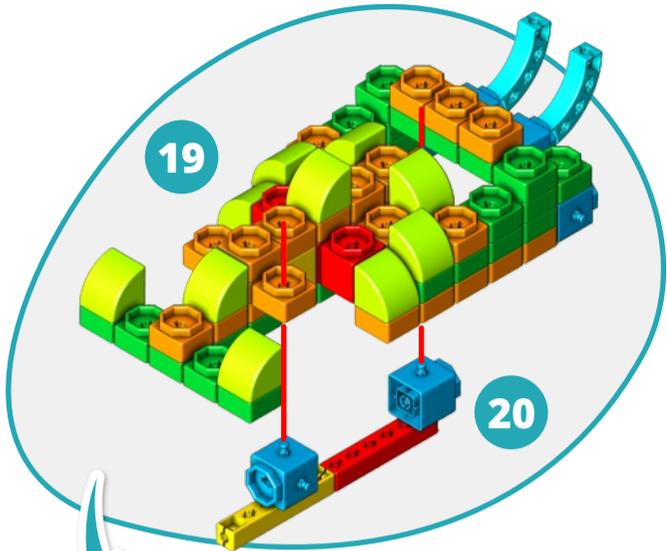
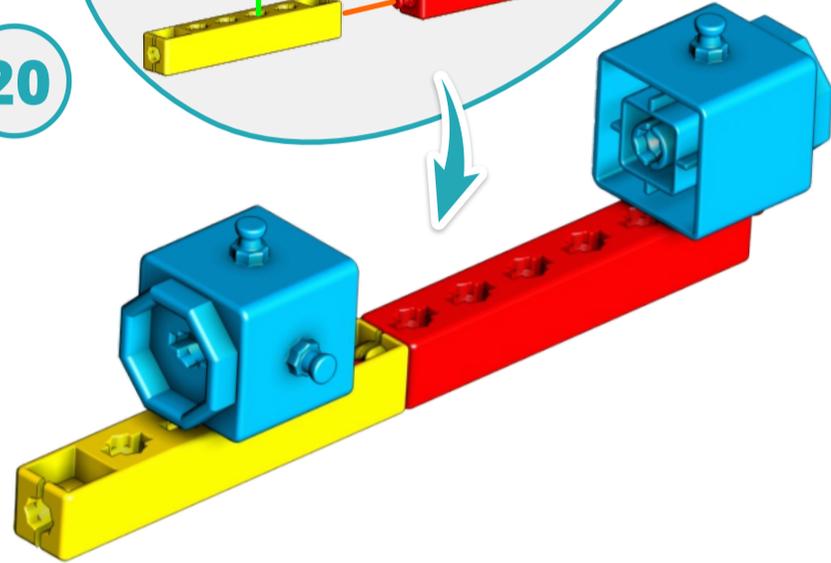


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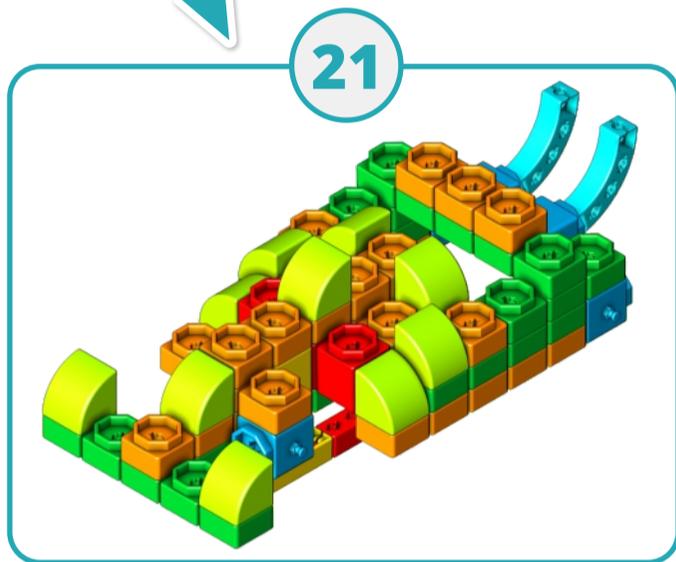


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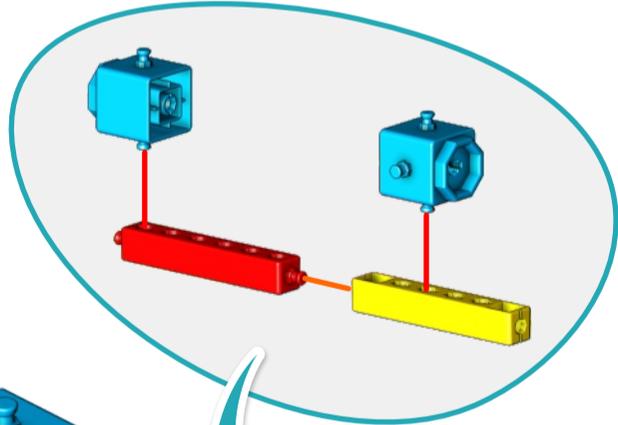
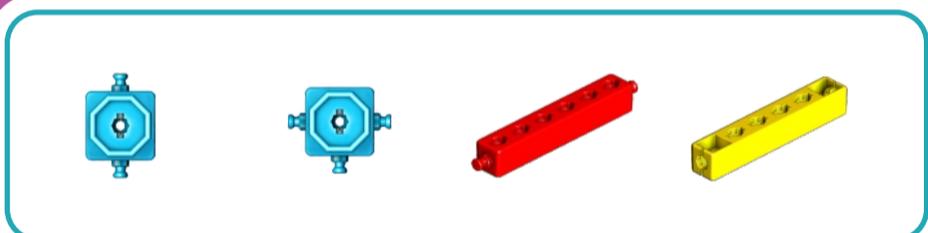


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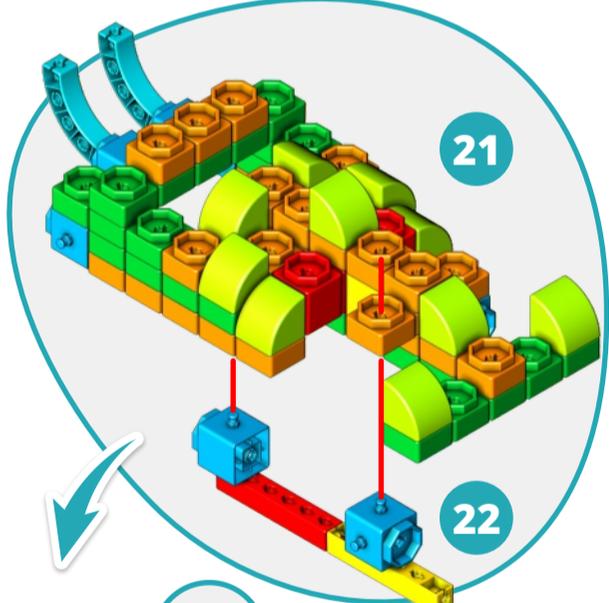
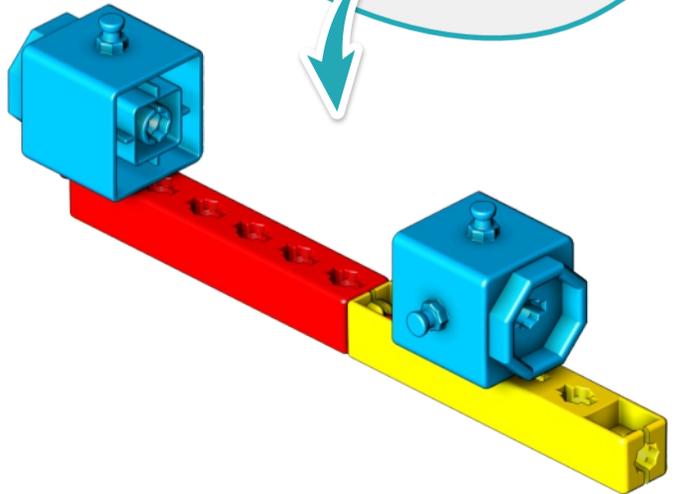
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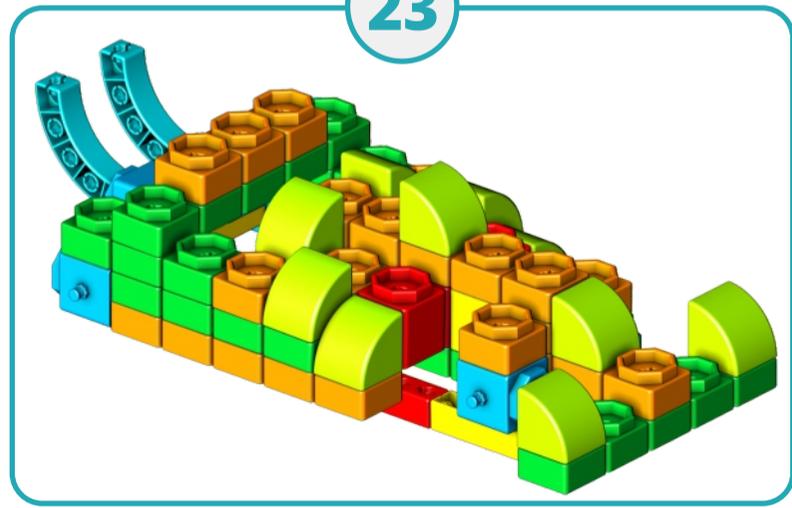


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