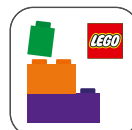




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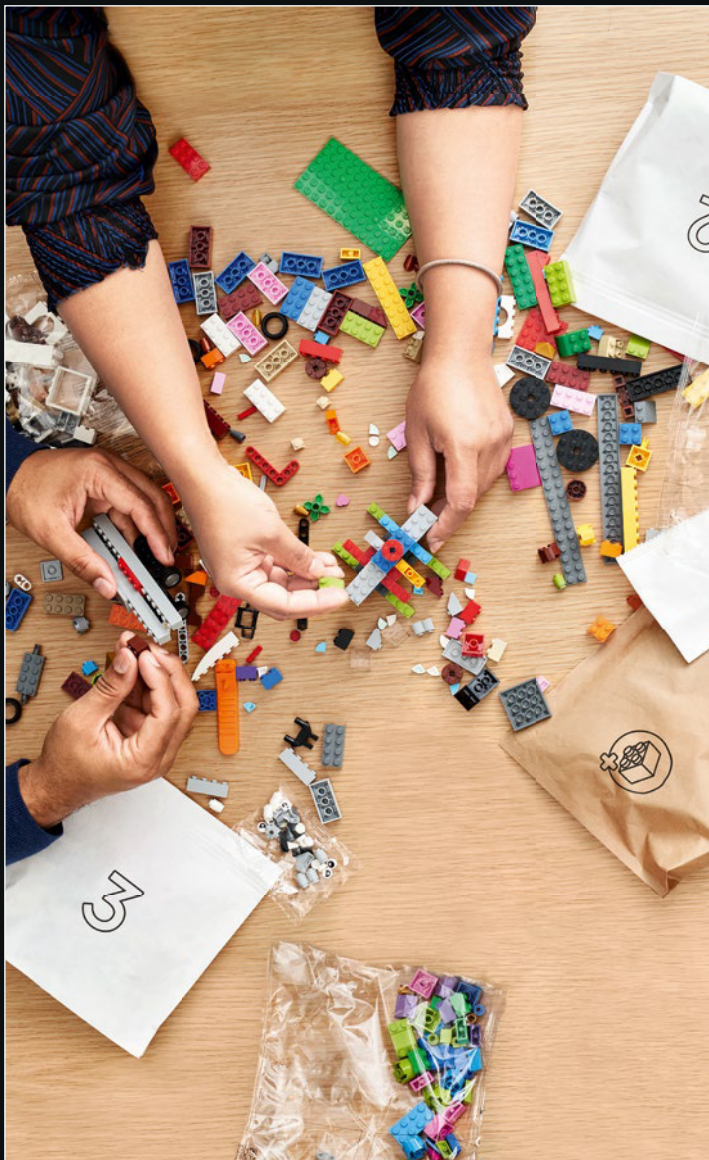


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LEGO® Builder





## WE'RE MAKING OUR PACKAGING MORE SUSTAINABLE

We're transitioning from single-use plastic to paper-based packaging. As we progress, you may find a mix of paper and plastic in our boxes.

## NOUS RENDONS NOS EMBALLAGES PLUS DURABLES

Nous passons des emballages en plastique à usage unique aux emballages à base de papier. Durant la transition, vous pourriez trouver un mélange de papier et de plastique dans nos boîtes.

## QUEREMOS HACER MÁS SUSTENTABLES NUESTROS MATERIALES DE EMBALAJE

Estamos cambiando las bolsas de plástico desechables por bolsas con base de papel. Conforme avanzamos en este propósito, puedes encontrar una mezcla de papel y de plástico en nuestras cajas.

[LEGO.com/sustainable-packaging](https://LEGO.com/sustainable-packaging)



# BUILDER



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Q LEGO® Builder

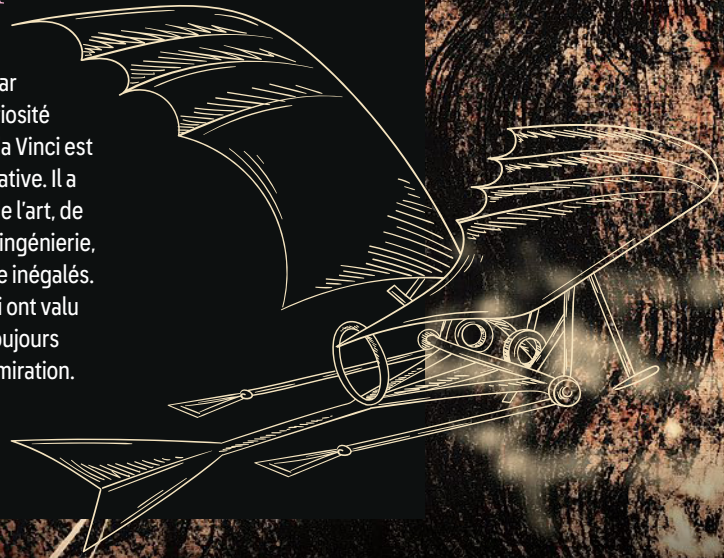


## Artist, Artisan, Aviation Architect

Leonardo da Vinci (1452-1519) is the undisputed master of Renaissance innovation. Adored by his contemporaries for his visionary talent, boundless curiosity and flamboyant character, da Vinci is still rightfully celebrated for his creative ingenuity. He devoted his life to exploring and pushing boundaries in art, human and animal anatomy, physics and engineering, with unparalleled passion, determination and craftsmanship. Painted masterpieces like the *Mona Lisa* and *The Last Supper* originally catapulted him to worldwide fame, but his lifelong fascination with human flight invokes equal awe.

## Artiste, artisan, architecte de l'aviation

Leonardo da Vinci (1452-1519) est le maître incontesté de l'innovation de la Renaissance. Adulé par ses contemporains pour son talent visionnaire, sa curiosité sans bornes et son caractère flamboyant, Leonardo da Vinci est toujours célébré à juste titre pour son ingéniosité créative. Il a consacré sa vie à explorer et à repousser les limites de l'art, de l'anatomie humaine et animale, de la physique et de l'ingénierie, avec une passion, une détermination et un savoir-faire inégalés. Des chefs-d'œuvre tels que *La Joconde* et *La Cène* lui ont valu une renommée mondiale, mais la fascination qu'il a toujours éprouvée pour le vol humain suscite tout autant d'admiration.





## Artista, artesano, arquitecto y pionero de la aviación

Leonardo da Vinci (1452-1519) es el maestro de la innovación renacentista por excelencia. Poseedor de formidables talentos, una insaciable curiosidad y un carácter extravagante, Da Vinci era respetado por sus contemporáneos y, aún en nuestros días, sigue siendo merecidamente aclamado por su visión e ingenio creativo. Dedicó su vida a explorar y desafiar todo límite en el arte, la anatomía humana y animal, la física y la ingeniería impulsado por su pasión y determinación excepcionales y sus notables destrezas manuales. Magistrales creaciones pictóricas de su autoría como *La Gioconda* o *La última cena* lo catapultaron a la fama mundial en un primer momento, aunque su persistente fascinación por el vuelo humano no genera un menor grado de admiración.



“The noblest pleasure is the joy of understanding.”  
« Le plaisir le plus noble réside en la joie de comprendre. »  
“El placer más noble es el júbilo de comprender”.

– Leonardo da Vinci

## Imitating the flight of birds

Although, reportedly, Leonardo da Vinci's aeronautical inventions never came to life during his time, his ideas, designs and studies provided valuable inspiration for the first working aircraft centuries later. The ornithopter is one of his most famous works, but they all rest on the same idea of a single person piloting a mechanical machine with wings. Using their own body strength, the pilot would pull and push on cranks and strings that would make the wings flap up and down.

## Imiter le vol des oiseaux

Bien que les inventions aéronautiques de Leonardo da Vinci n'aient apparemment jamais été concrétisées à son époque, ses idées, ses dessins et ses études ont été une source d'inspiration précieuse pour le premier avion opérationnel des siècles plus tard. L'ornithoptère est l'une de ses œuvres les plus célèbres, mais toutes ses créations reposent sur la même idée : une personne seule pilote une machine mécanique dotée d'ailes. À la force de son corps, le pilote tire et pousse sur des manivelles et des cordes qui font battre les ailes de haut en bas.

## Inspiración para volar como las aves

Aunque la historia oficial registra que los inventos aeronáuticos de Leonardo da Vinci no se materializaron en su época, siglos después, sus ideas, diseños y estudios tuvieron un papel fundamental en la creación de la primera aeronave funcional. El ornitóptero es una de sus obras más famosas, aunque todas ellas se basan en la misma idea de una sola persona al mando de un artefacto mecánico con alas. Usando la fuerza de su propio cuerpo, el piloto debía jalar y empujar palancas y cuerdas para mover las alas hacia arriba y hacia abajo.



“Simplicity is the ultimate sophistication.”  
« La simplicité est la sophistication suprême. »  
“La simplicidad es la máxima sofisticación”.

– Leonardo da Vinci







## From the LEGO® Design Team

“This was where our conceiving started – to make a machine with movable parts that are all linked together and activated when pulling on strings or, in this case, on one single string. It’s a seemingly simple model, yet a great LEGO® engineering challenge. The model is designed to look as if it was made from wood, linen and rope. It has a brick-built skeleton for the tail and wings, and textile wings with a printed pattern. Incorporating the textile string as the main part of the wing-flapping mechanism was a great challenge! The mechanical parts of the model are left exposed to celebrate the functional parts, Leonardo’s vision and to let our own interpretation of the original design take flight.”

**Antica Bracanov,**  
LEGO® Senior Designer

## Un mot de l’équipe de conception LEGO®

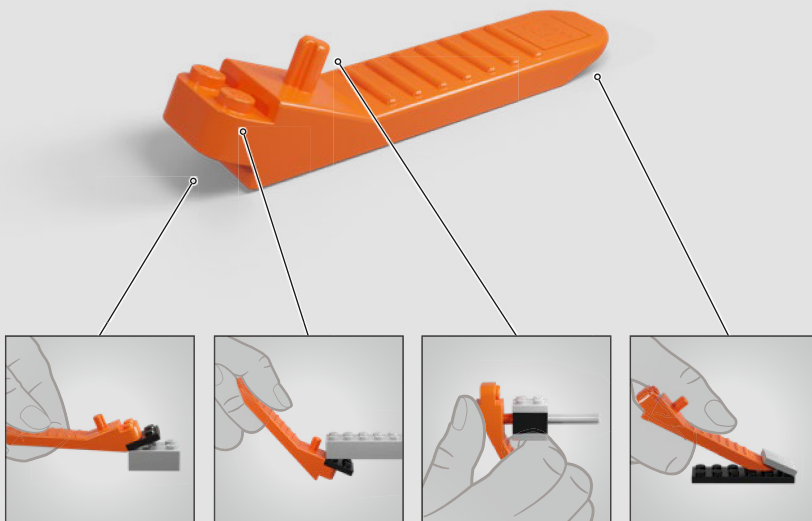
« Notre concept est parti de cette idée : fabriquer une machine dont les pièces mobiles sont toutes reliées entre elles et activées lorsqu’on tire sur des ficelles ou, dans le cas présent, sur une seule ficelle. Il s’agit d’un modèle en apparence simple, mais qui représente un grand défi d’ingénierie LEGO®. Le modèle est conçu pour donner l’impression qu’il a été fabriqué avec du bois, du lin et de la corde. Il possède un squelette en briques pour la queue et les ailes, et des ailes en textile avec un motif imprimé. Incorporer la corde textile comme partie principale du mécanisme de battement des ailes a été un grand défi ! Les parties mécaniques du modèle sont laissées à nu pour célébrer les parties fonctionnelles et la vision de Leonardo, ainsi que pour laisser notre propre interprétation du concept original prendre son envol. »

**Antica Bracanov,**  
conceptrice principale LEGO®

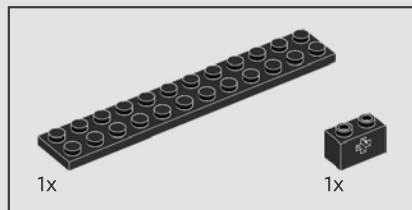
## Impresiones del equipo de diseño de LEGO®

“Este fue el punto de partida de nuestro concepto: crear una máquina cuyas partes móviles, en su totalidad, estuvieran interconectadas y se activaran mediante la tracción de cordones o, en este caso, de un solo cordón. Se trata de un modelo aparentemente simple, aunque representa un gran desafío de ingeniería LEGO®. Se diseñó para que pareciera estar hecho de madera, tela y cuerdas. La cola y las alas tienen un esqueleto construido con bricks, y en las alas de material textil se puede distinguir un patrón impreso. ¡Incorporar el cordón de fibras como elemento principal del mecanismo de aleteo requirió de un gran esfuerzo! Los componentes mecánicos del modelo se dejan descubiertos para resaltar las partes funcionales y la visión de Leonardo, así como para dar oportunidad de emprender el vuelo a nuestra propia interpretación del diseño original”.

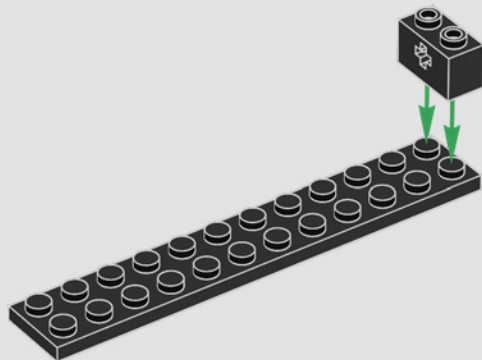
**Antica Bracanov,**  
diseñadora sénior de LEGO®



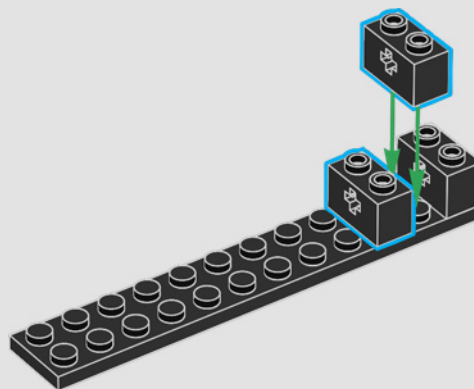


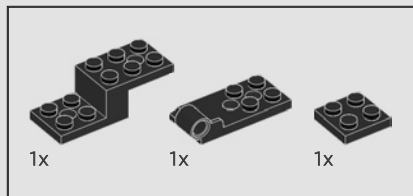


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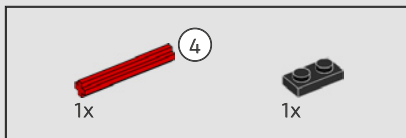
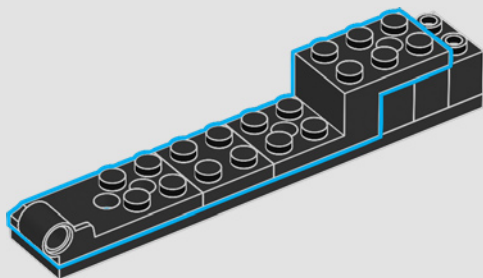


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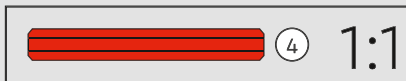
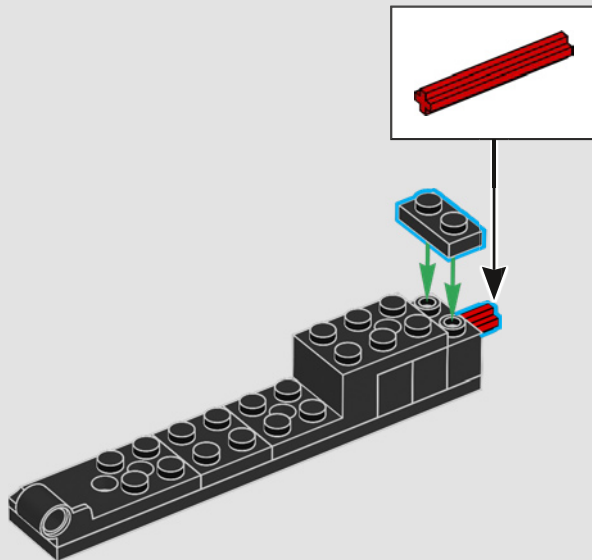




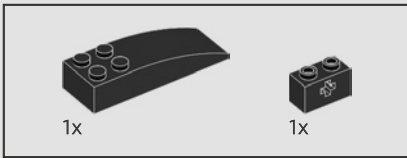
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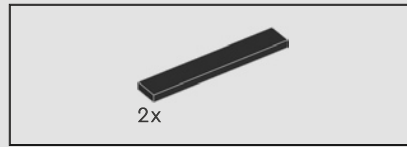
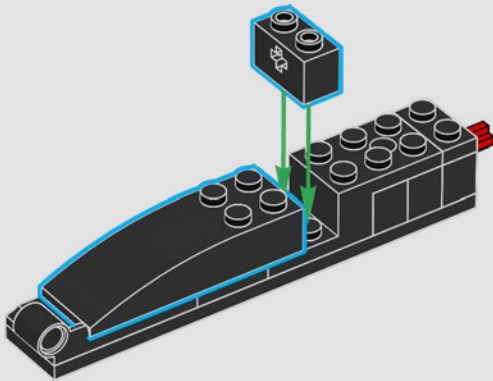
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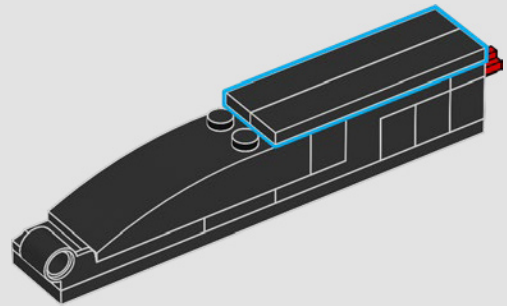


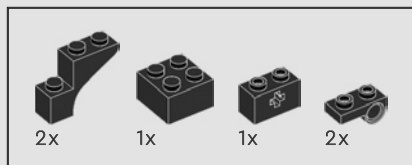


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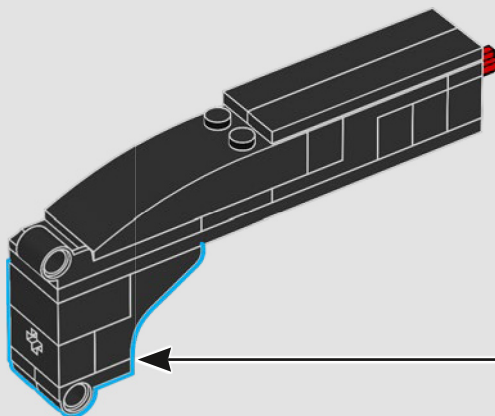
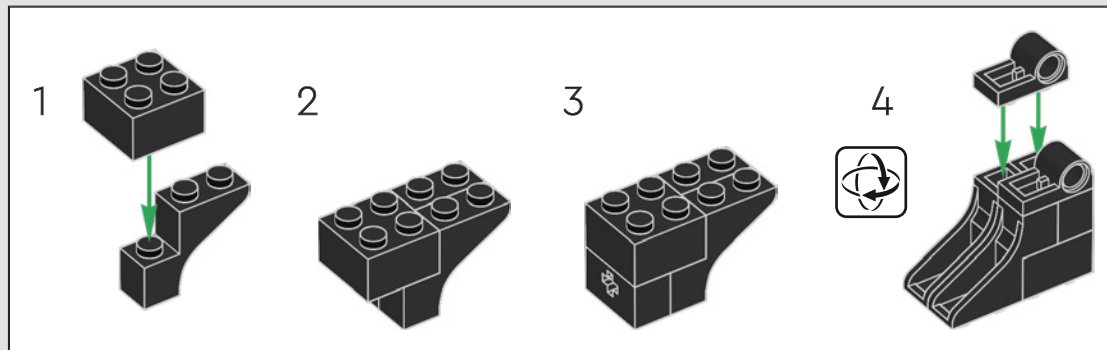


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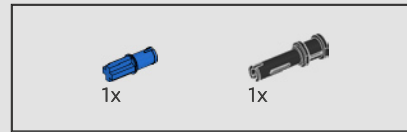
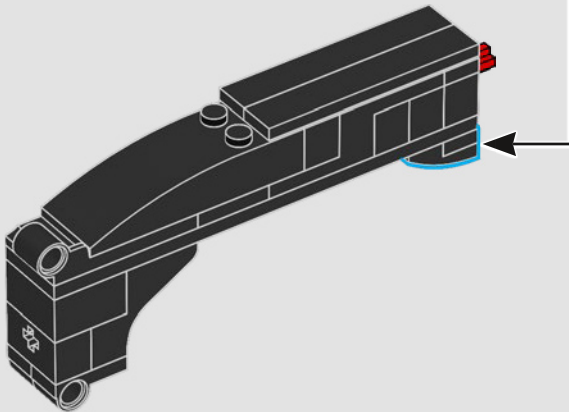
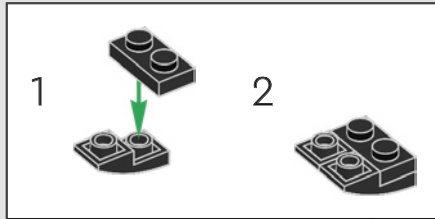
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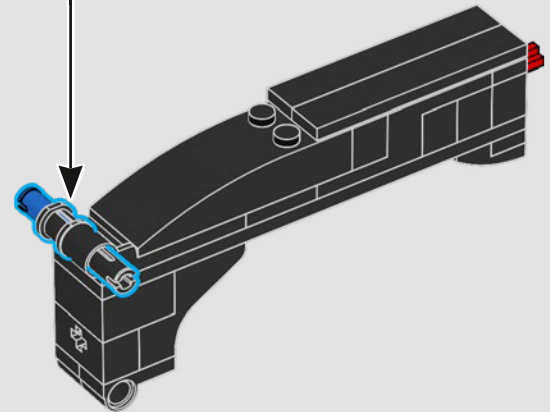
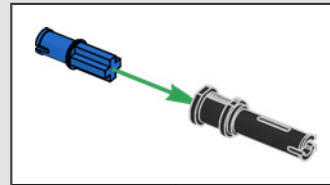


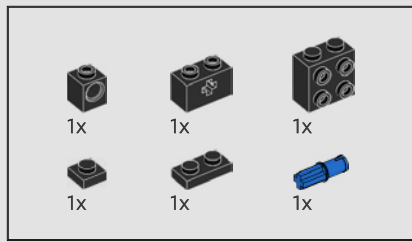


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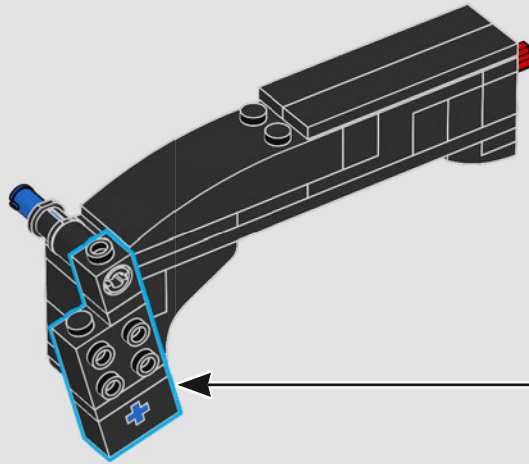
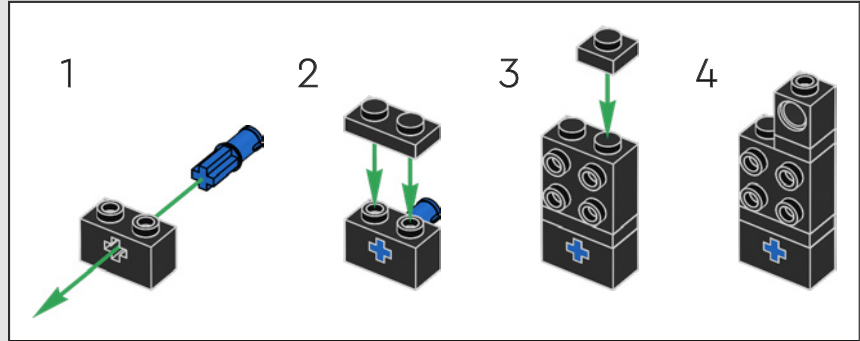


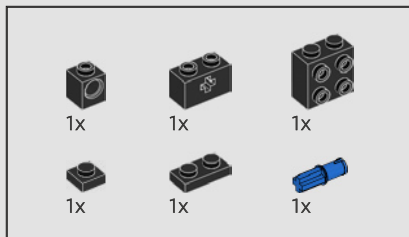
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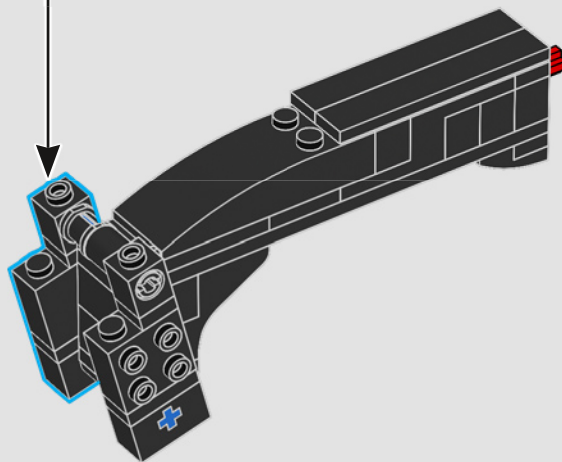
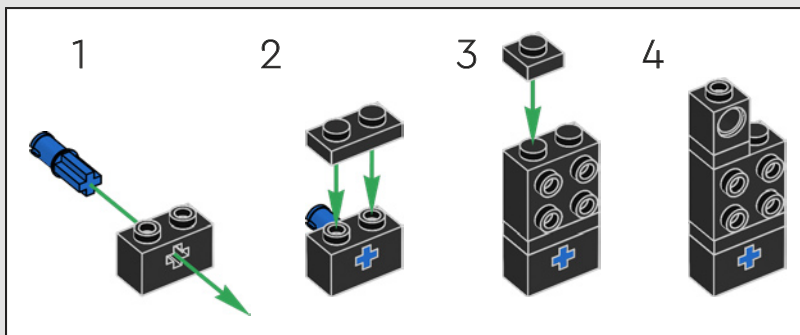


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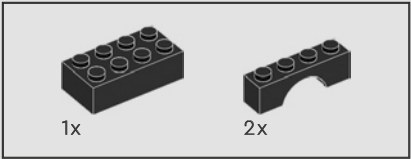


One of da Vinci's machines known as *il Grande Nibbio* was inspired by and named after a bird from the *Accipitridae* family: the kite.

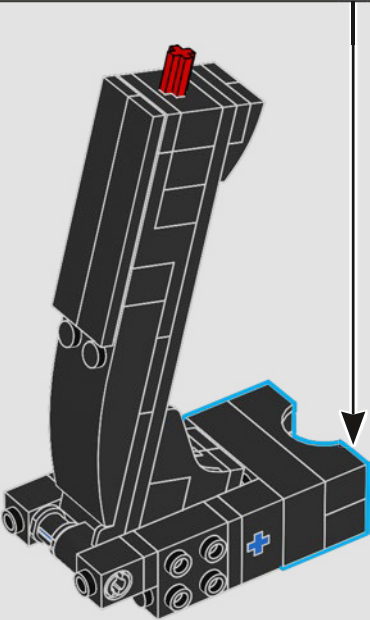
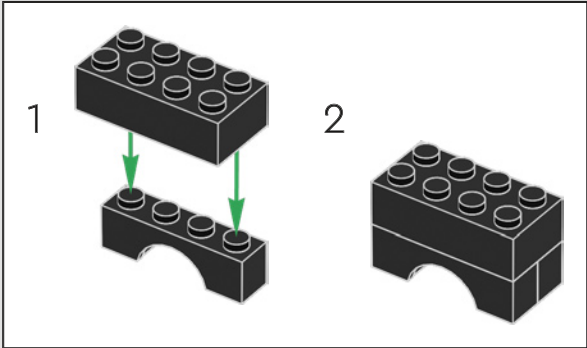
L'une des machines de da Vinci, connue sous le nom de *Il Grande Nibbio*, doit son inspiration et son nom à un oiseau de la famille des *Accipitridae* : le milan.

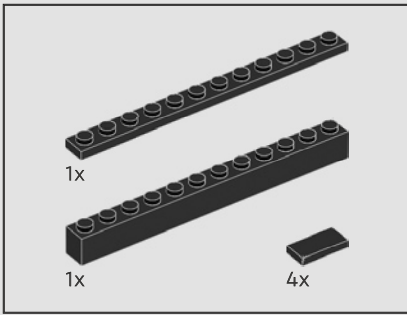
Una de las máquinas de Da Vinci, la conocida como *Il Grande Nibbio*, se inspiró y nombró en honor de un ave de la familia *Accipitridae*: el milano.



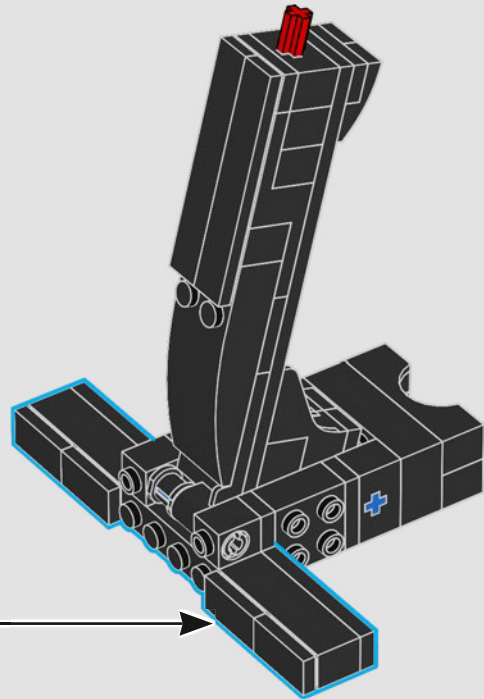
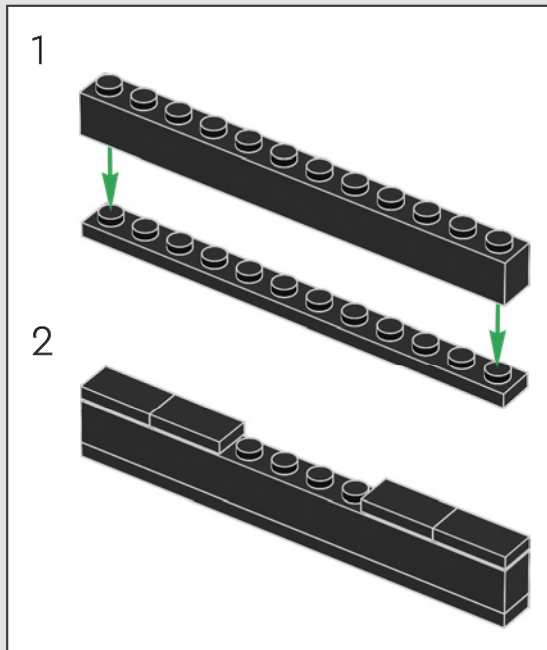


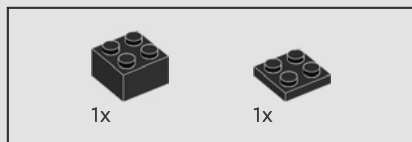
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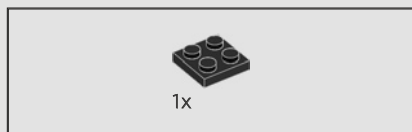
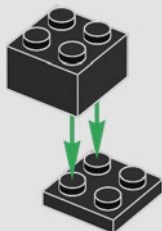


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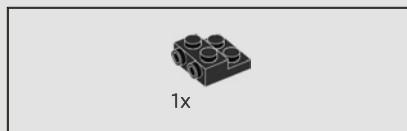
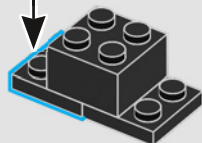
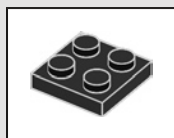




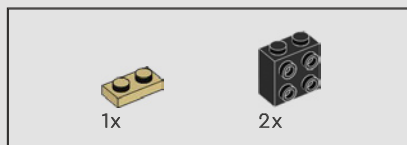
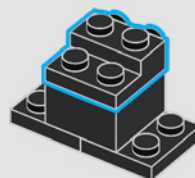
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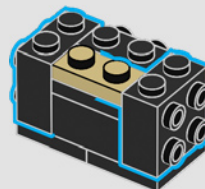
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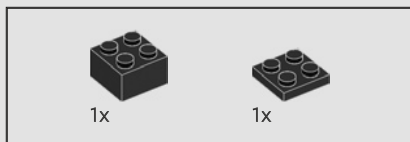


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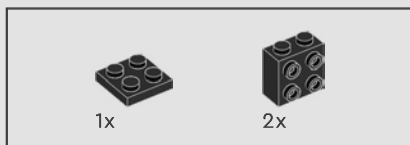
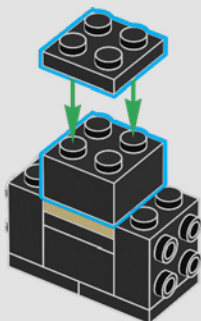


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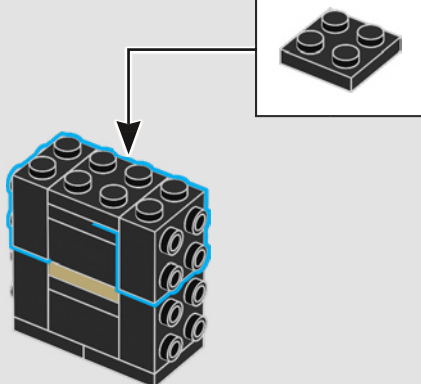




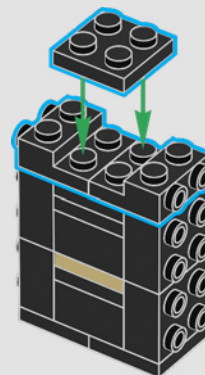
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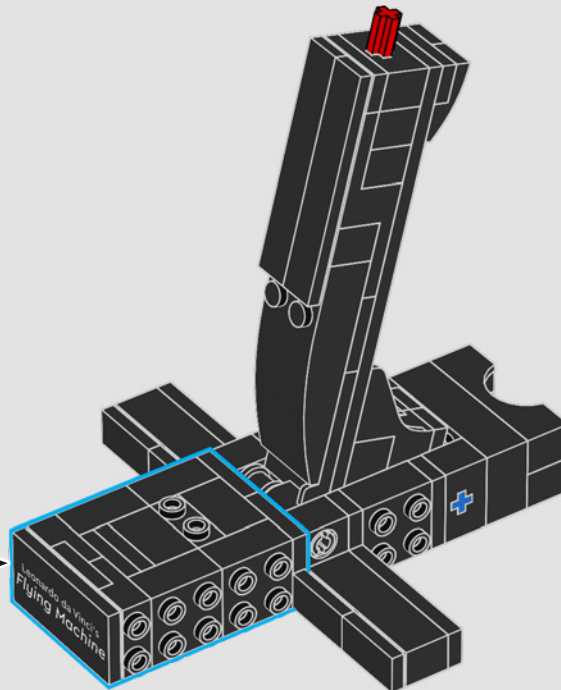


Da Vinci famously wrote in his notebooks in backward handwriting.  
It could only be read correctly when reflected in a mirror.

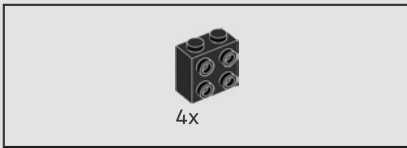
Da Vinci est reconnu pour avoir rédigé ses carnets de notes en écrivant à l'envers.  
Son écriture ne pouvait être lue que lorsqu'elle était reflétée dans un miroir.

Se sabe que Da Vinci escribía a la inversa en sus cuadernos.  
Para poder leer sus notas manuscritas, hay que reflejar la página en un espejo.

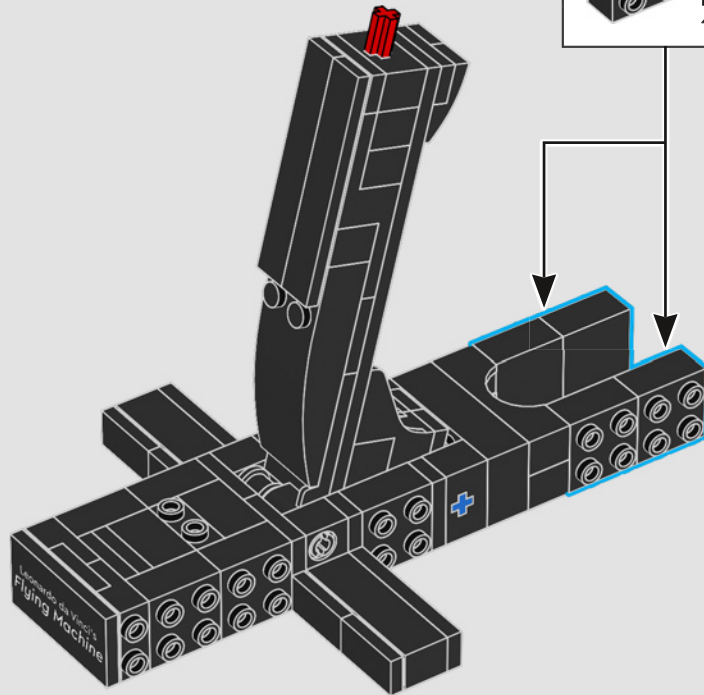
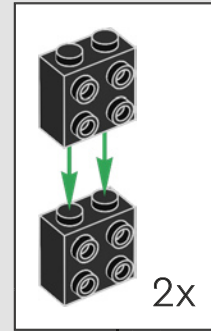
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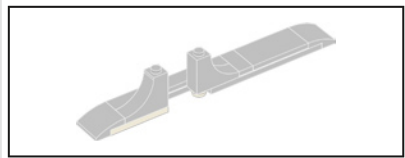




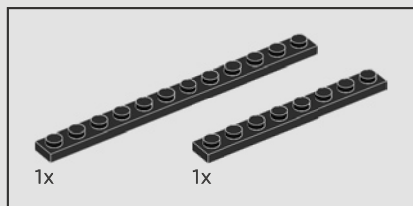


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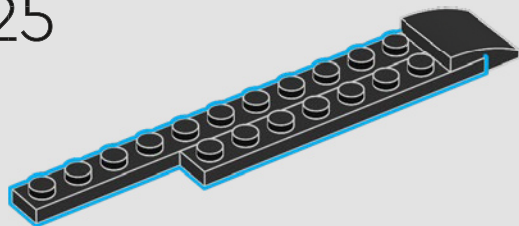




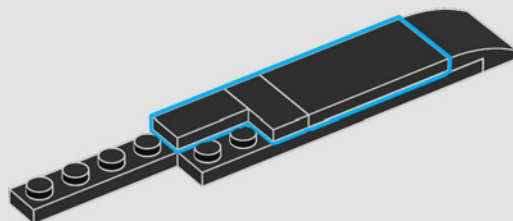
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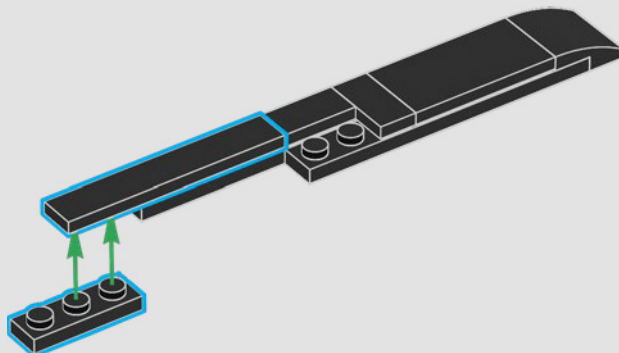
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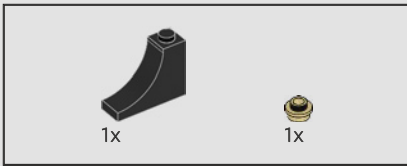


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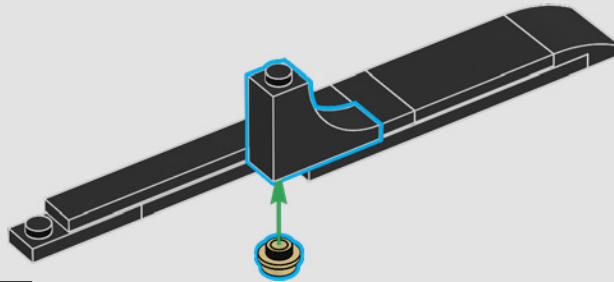


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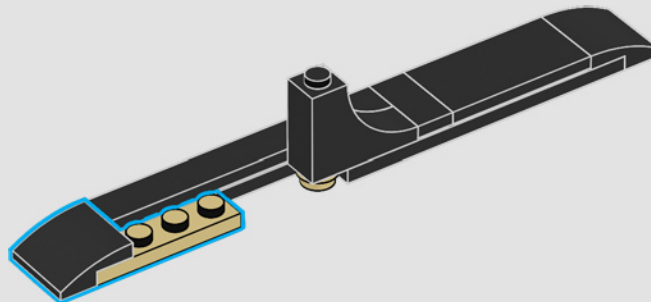


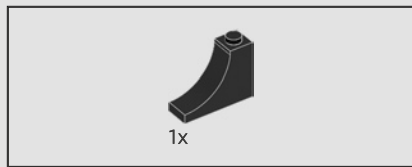


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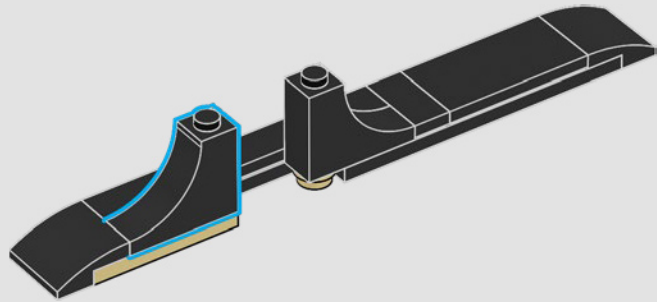


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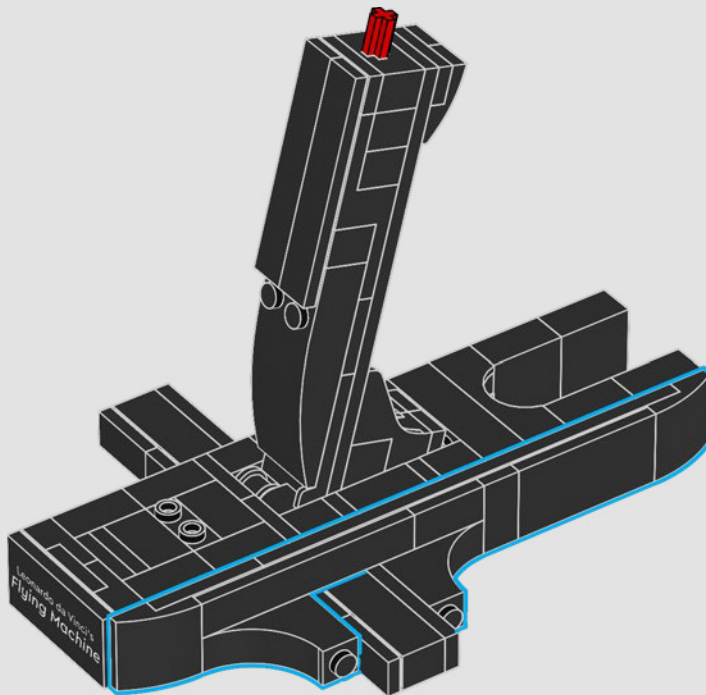


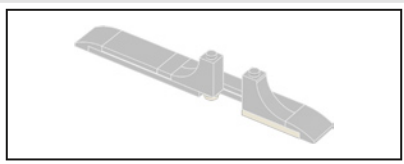


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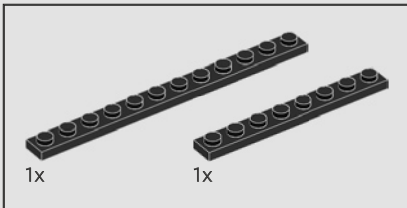


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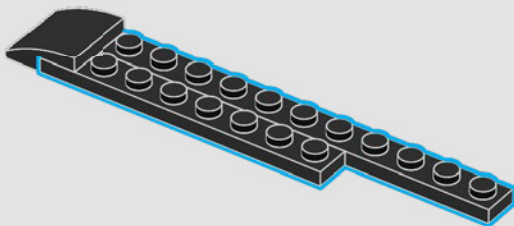




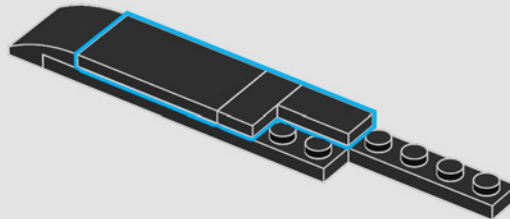
32



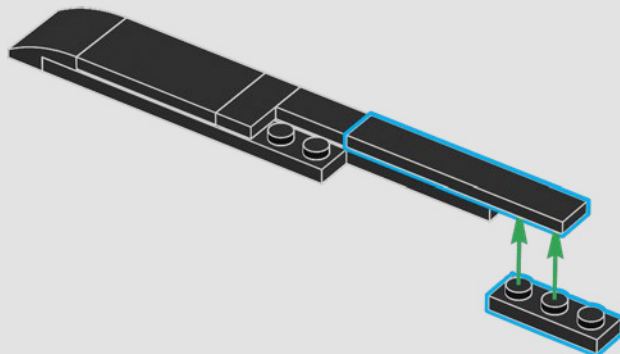
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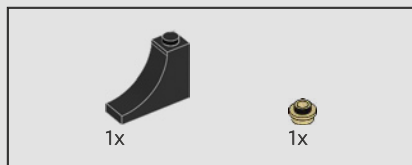
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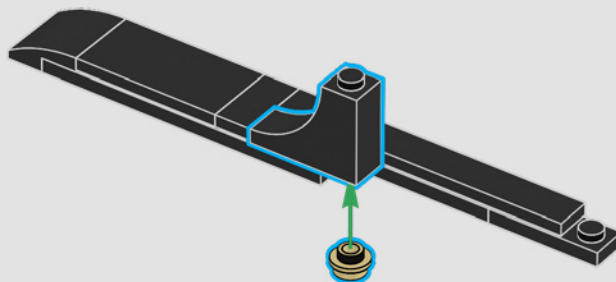
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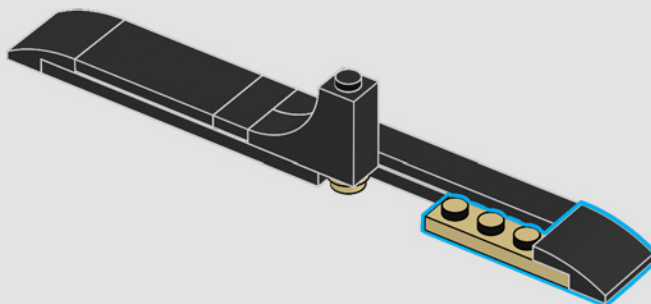


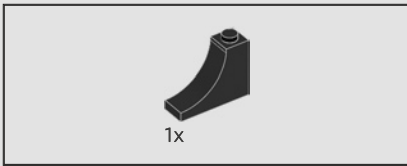


36

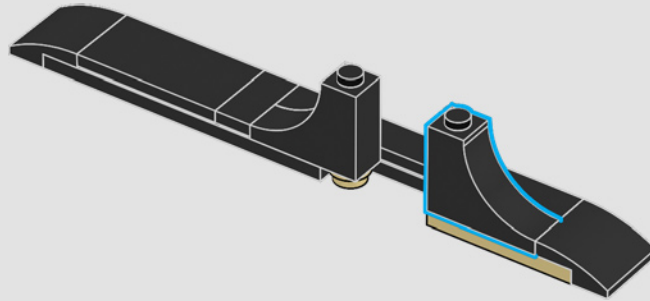


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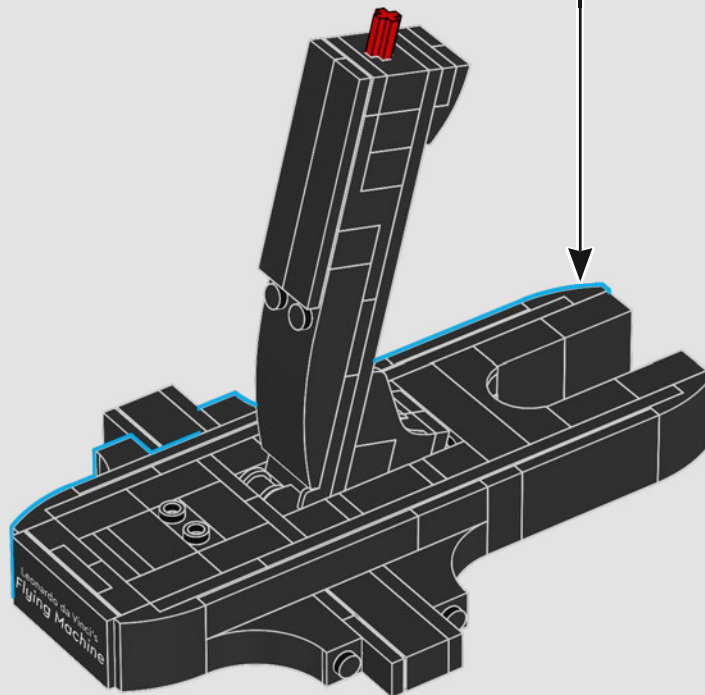




38



39





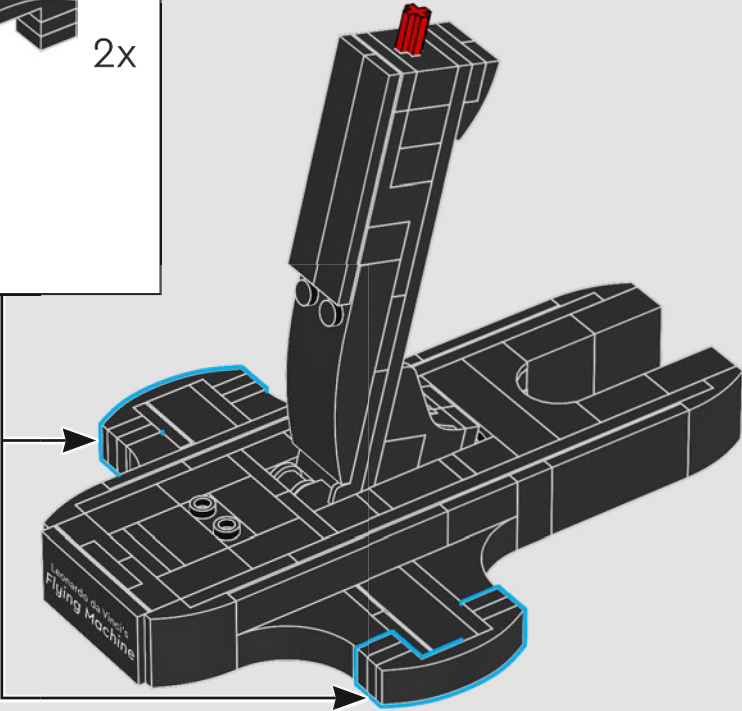
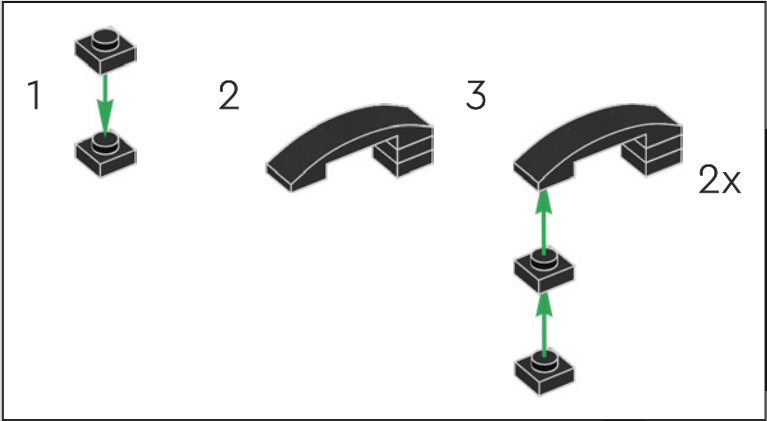
40



Leonardo da Vinci is known to have produced more than 35,000 words and 500 sketches on flight and flying machines!

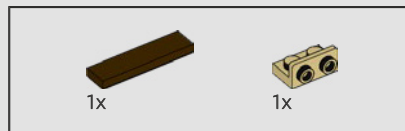
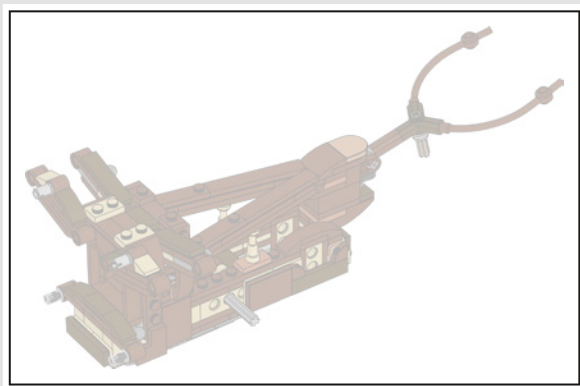
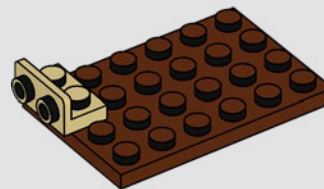
Leonardo da Vinci est réputé avoir produit plus de 35 000 mots et 500 croquis sur le vol et les machines volantes !

Se tiene constancia de que Leonardo da Vinci escribió más de 35.000 palabras e hizo más de 500 dibujos relacionados con el vuelo y las máquinas voladoras.

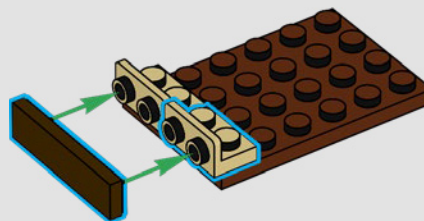




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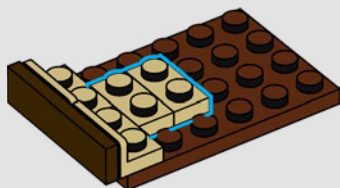
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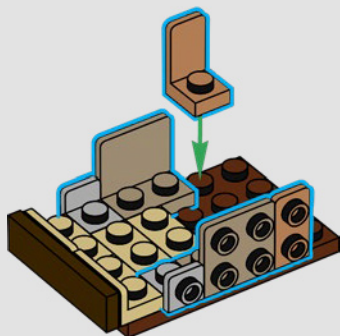




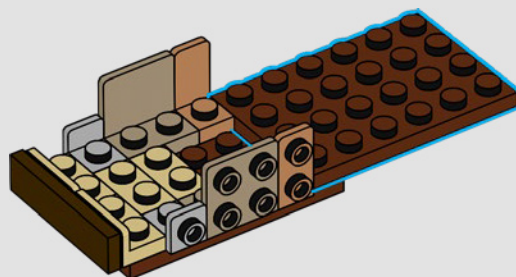
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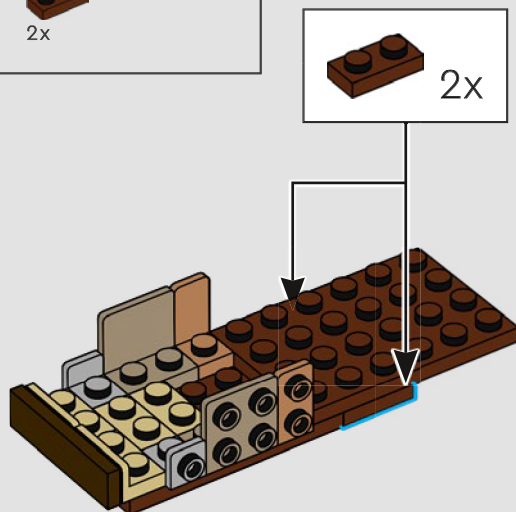
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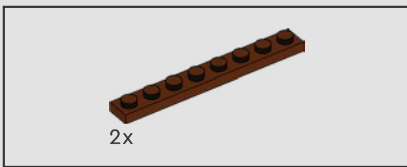


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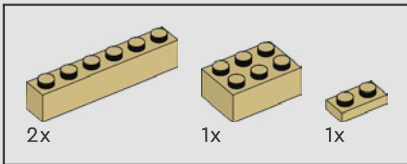
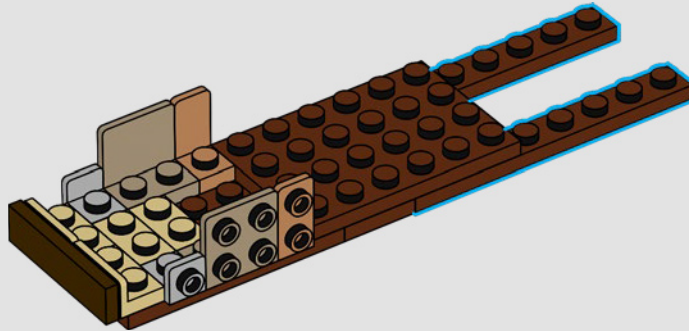


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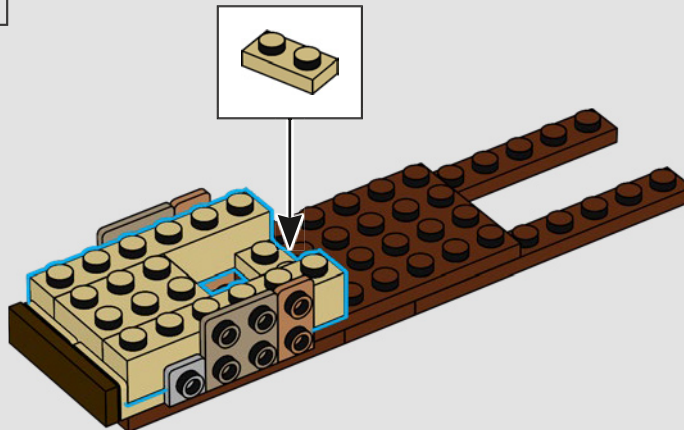


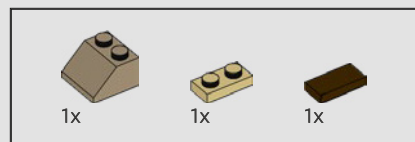


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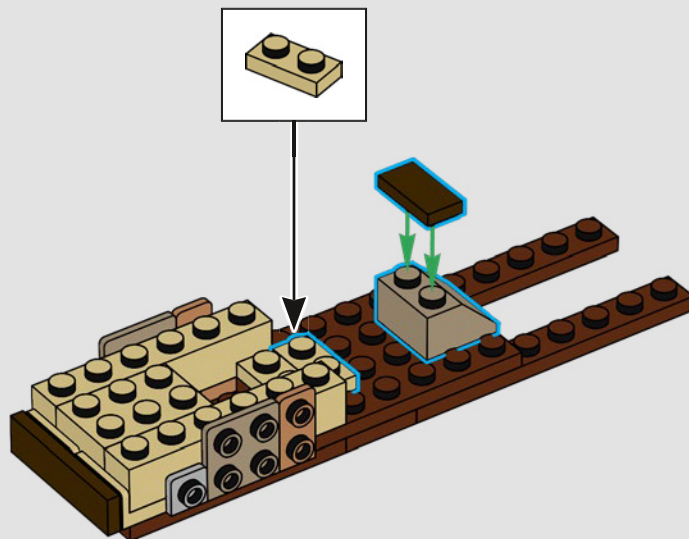


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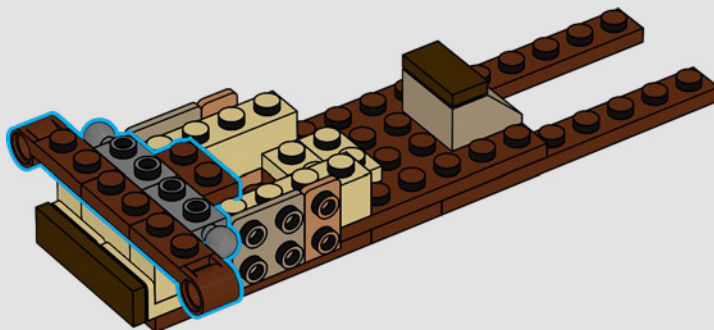


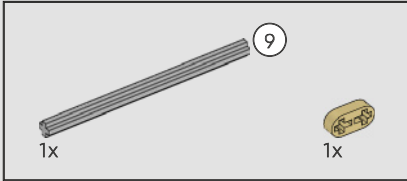
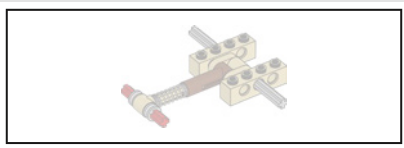


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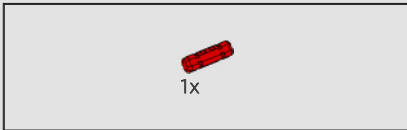
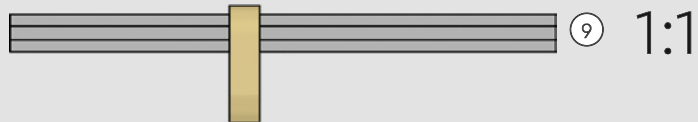


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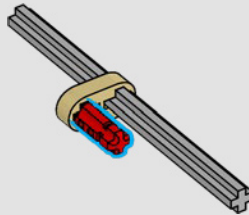


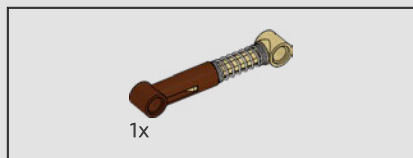


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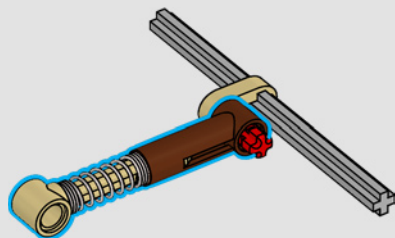


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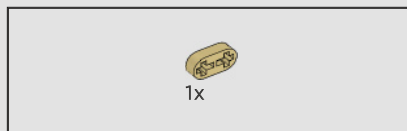
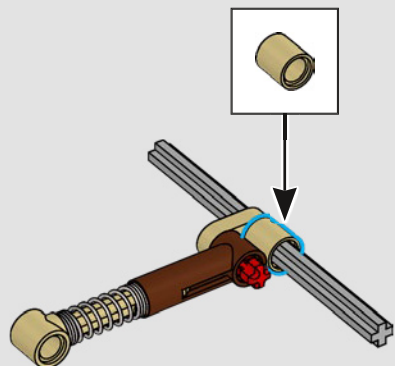




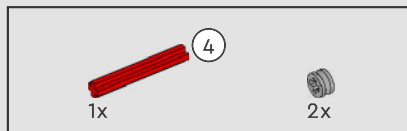
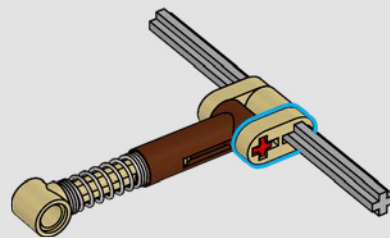
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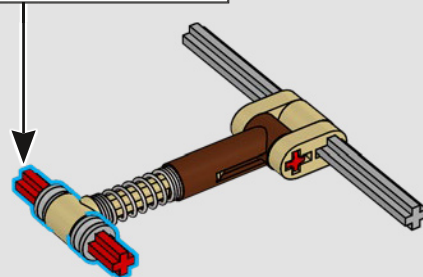
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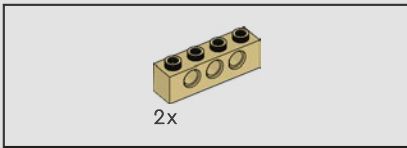
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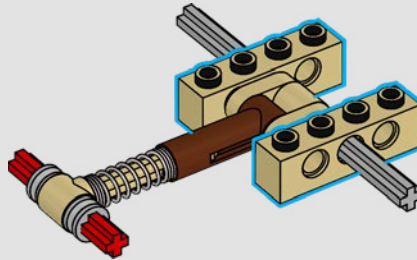
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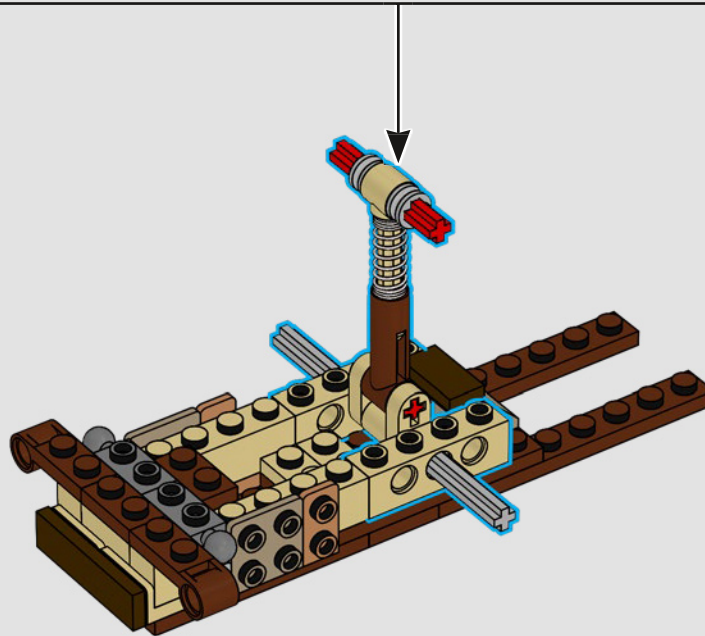




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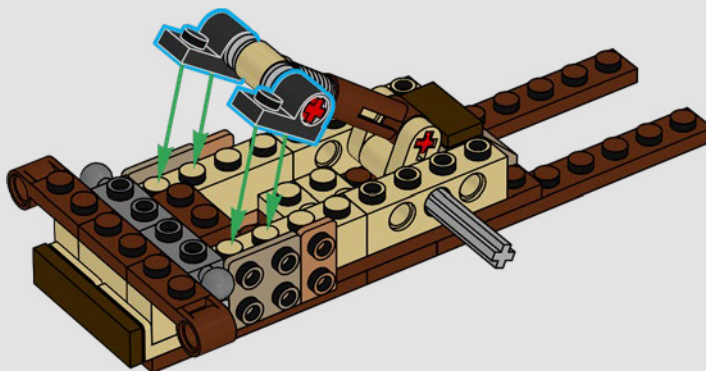
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2x

59

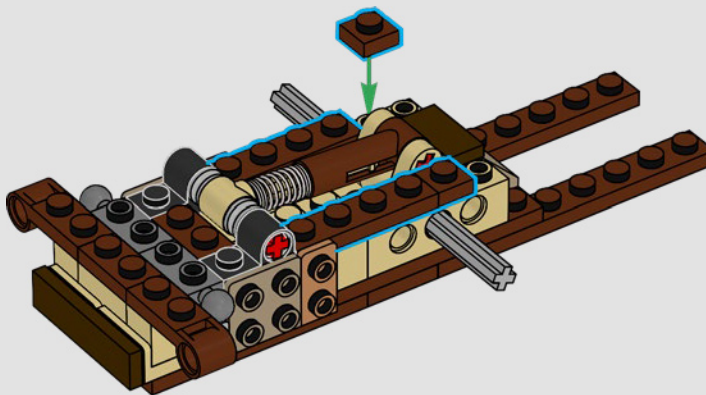


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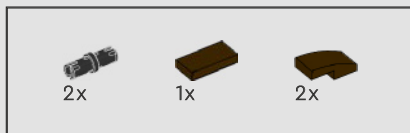
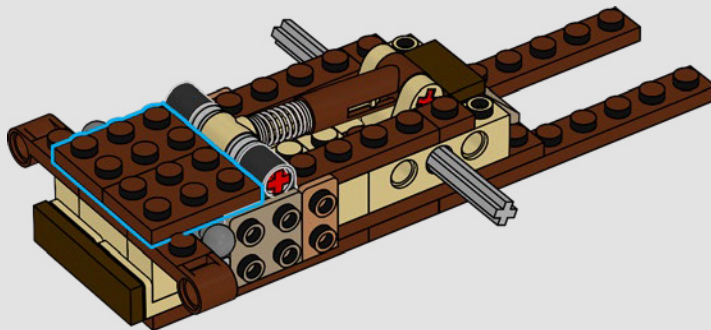
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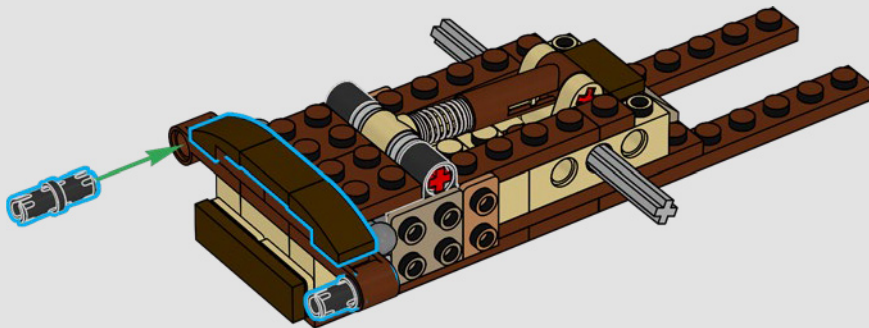


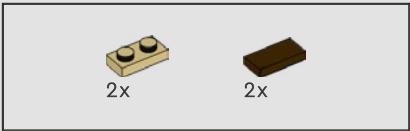


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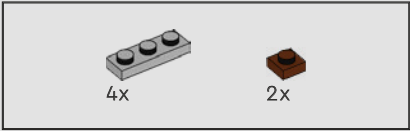
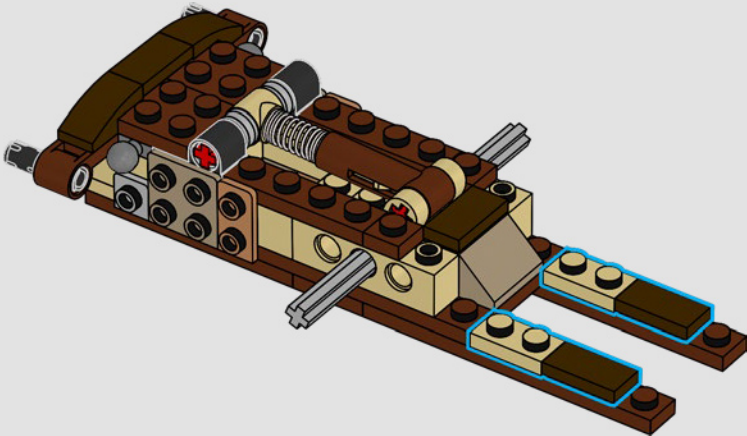


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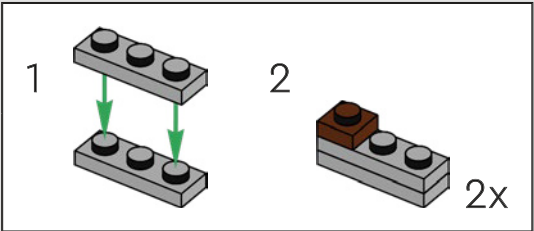
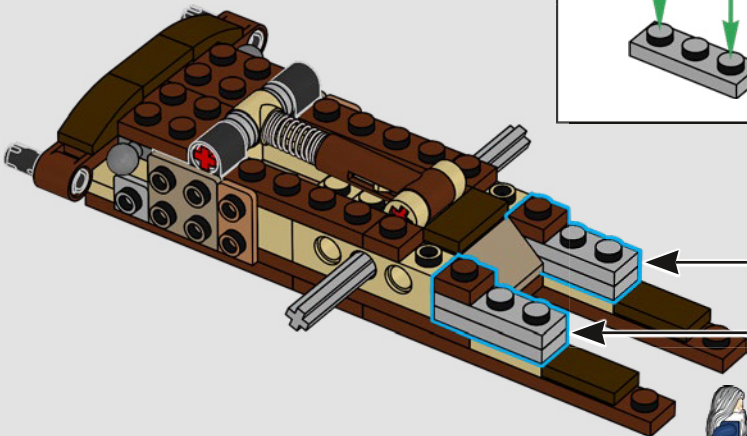


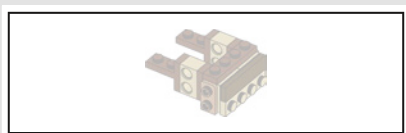


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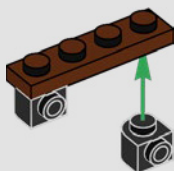


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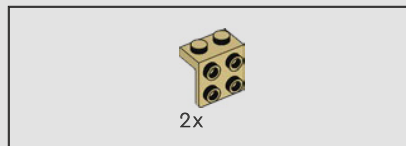
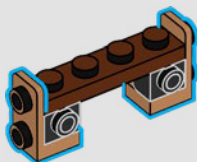




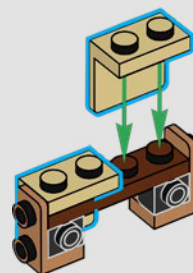
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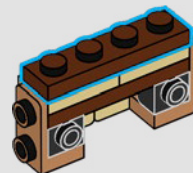
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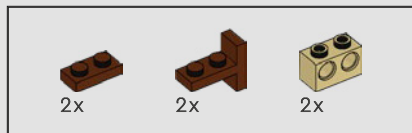


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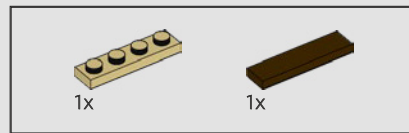
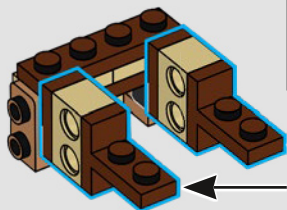
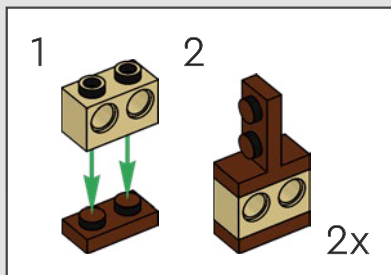


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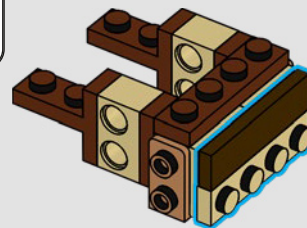




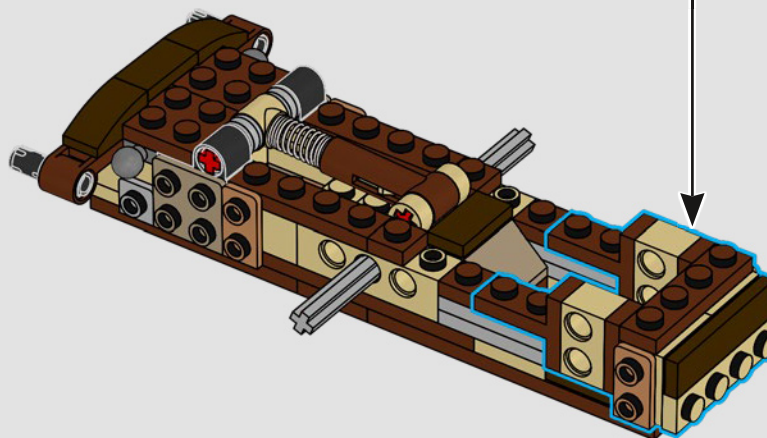
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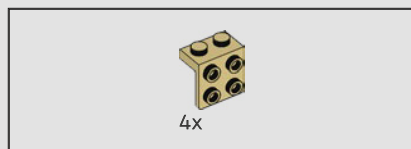
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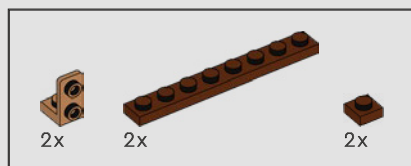
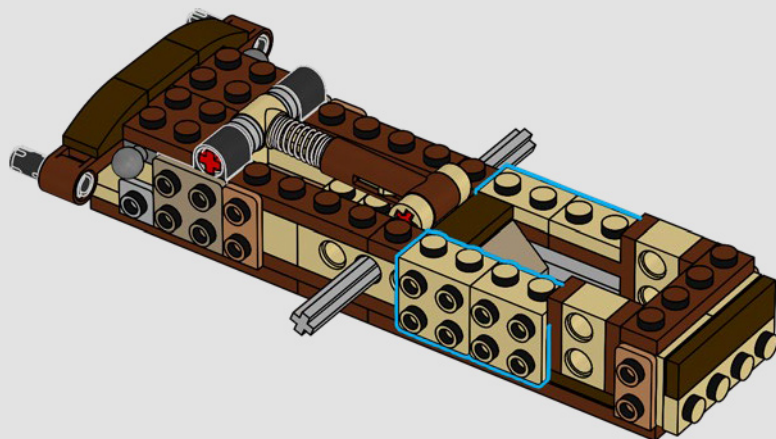
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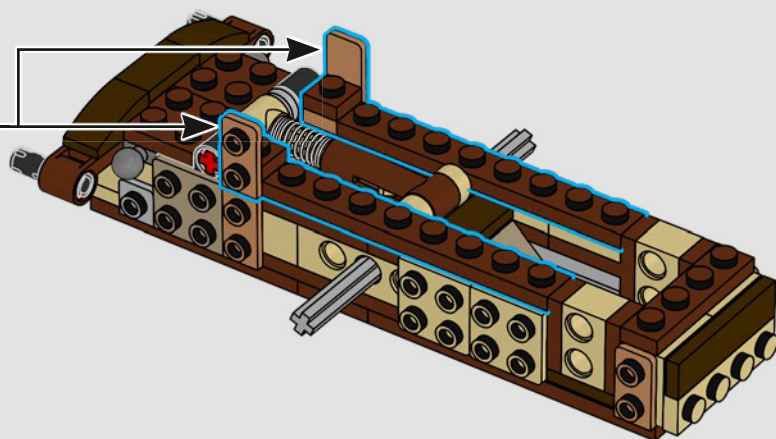
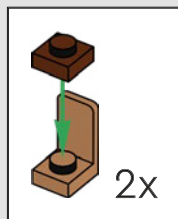




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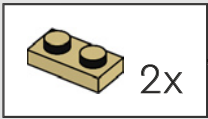
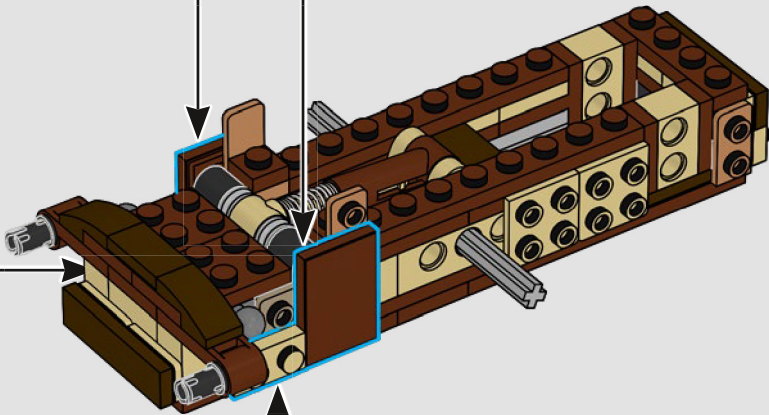
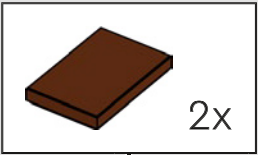


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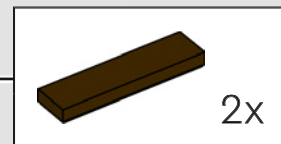
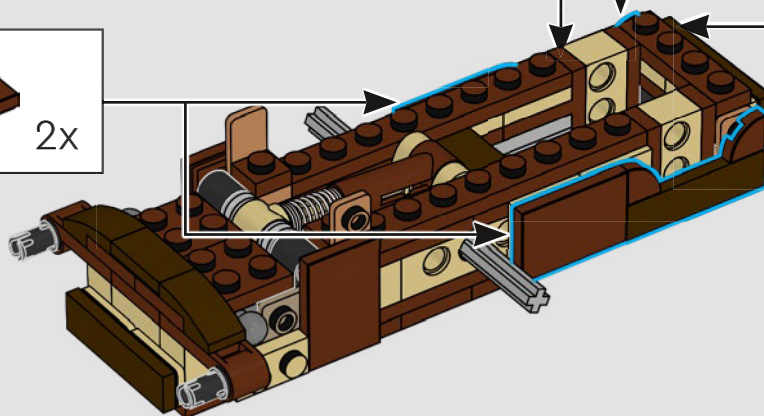
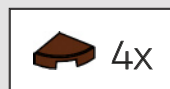


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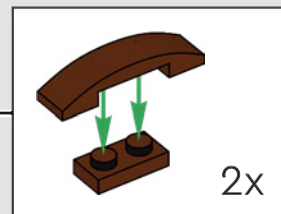
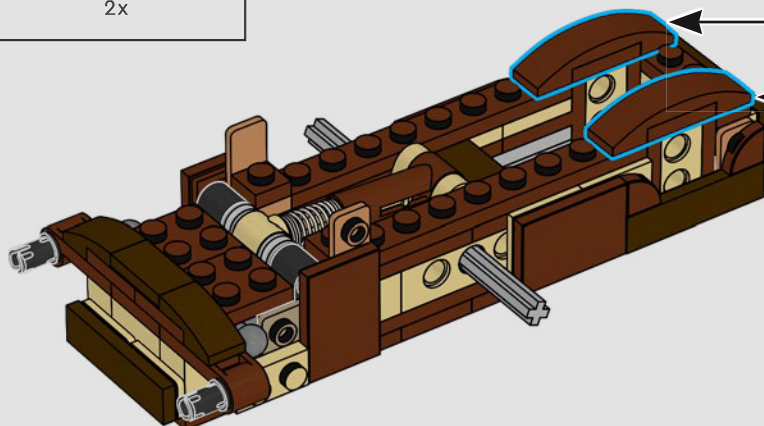


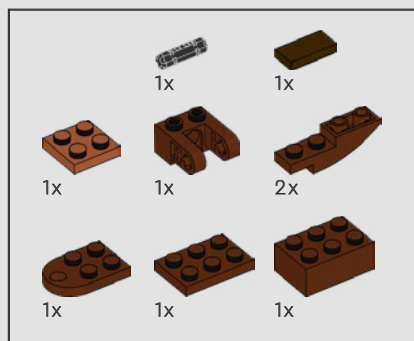


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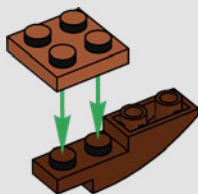
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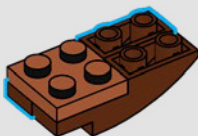


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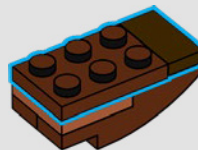
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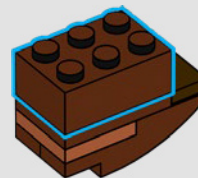
2



3



4



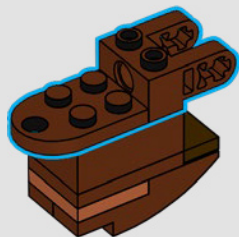


Leonardo's ornithopter, built for and test-piloted by a friend of the artist from a low altitude, wasn't entirely successful. The machine crashed, and da Vinci's friend broke a leg.

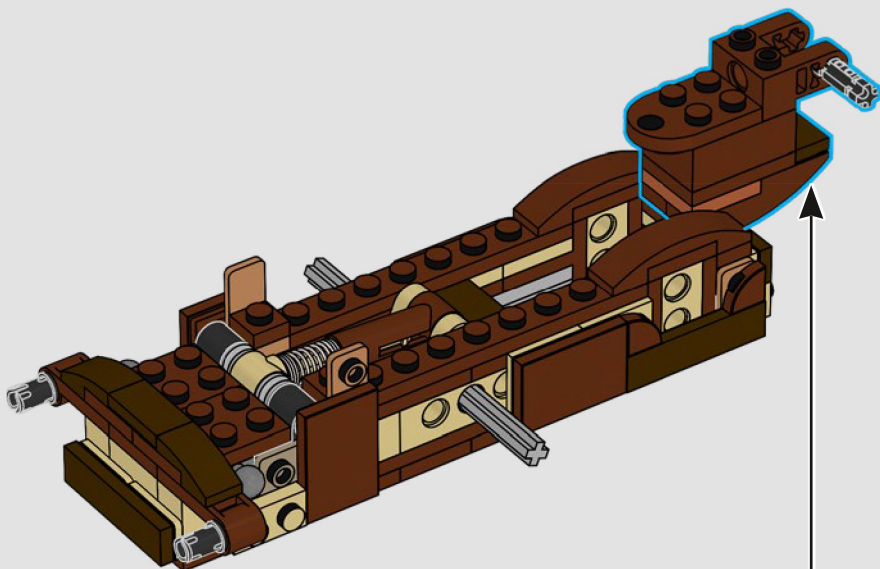
L'ornithoptère de Leonardo, construit pour un ami de l'artiste qui le pilotait à basse altitude, n'a pas été un franc succès. La machine s'est écrasée et l'ami de Da Vinci s'est cassé une jambe.

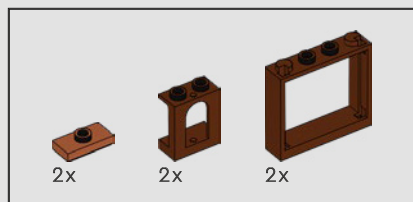
El ornitóptero de Leonardo, construido para un amigo del artista dispuesto a pilotarlo a baja altura, no resultó del todo exitoso. La máquina se estrelló y el amigo de Da Vinci se rompió una pierna.

5

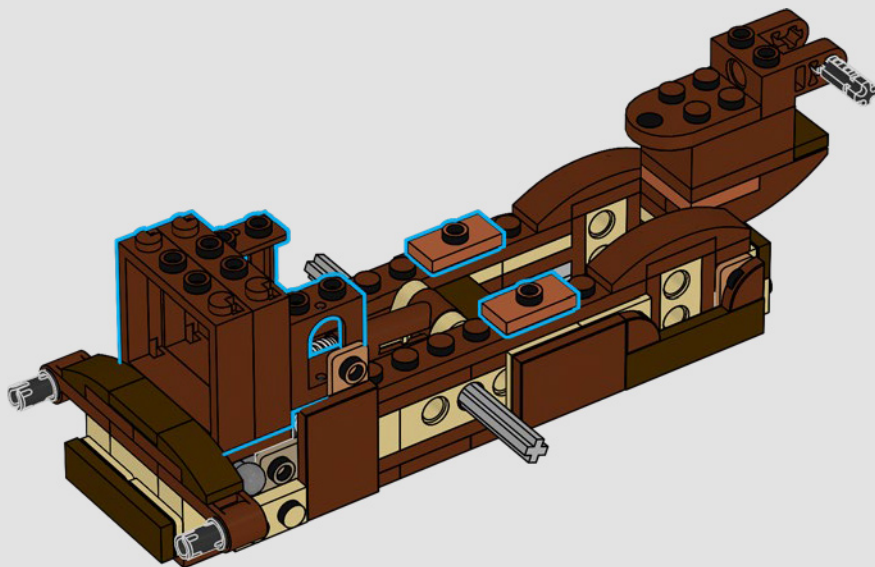


6





78







2x



2x

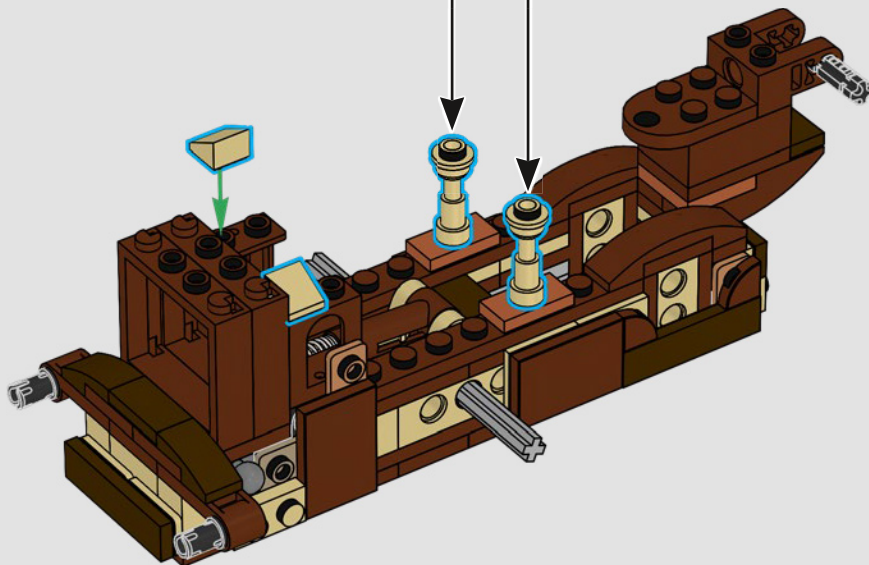


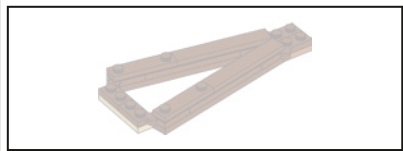
2x

79

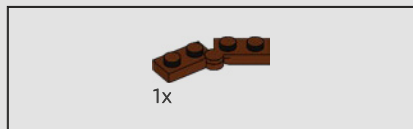
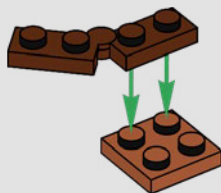


2x

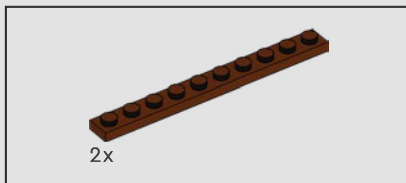
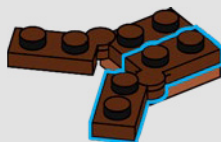




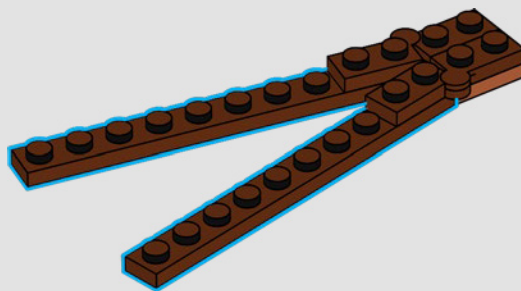
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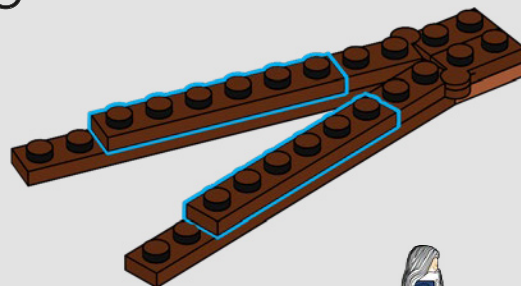
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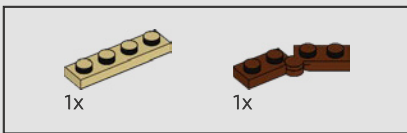


82

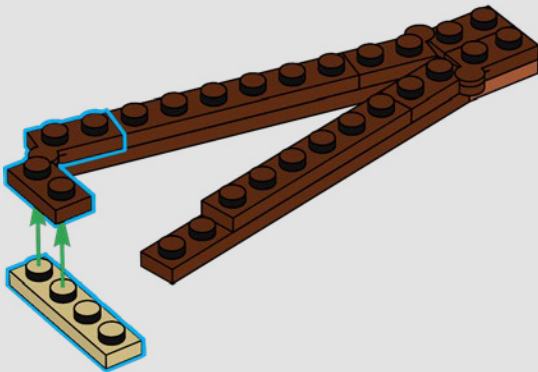


83

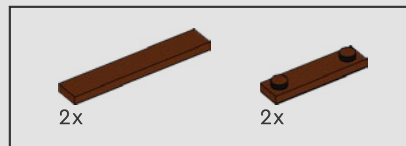
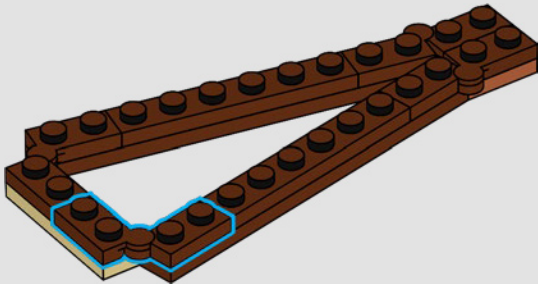




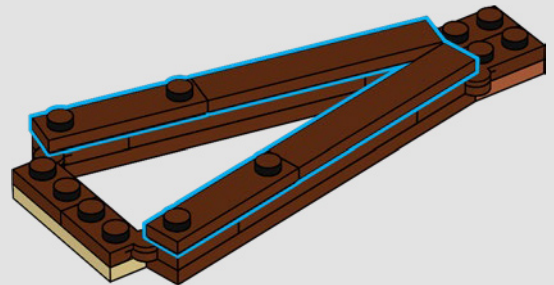
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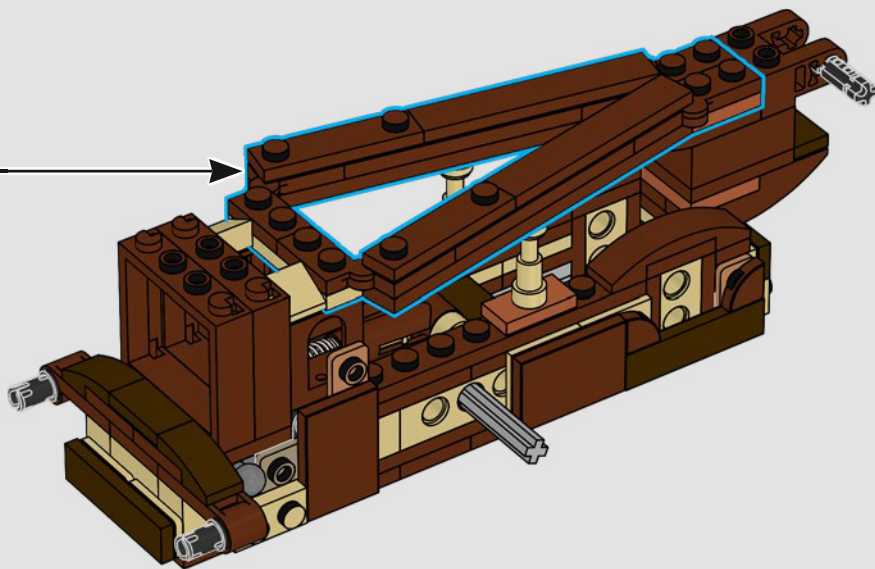


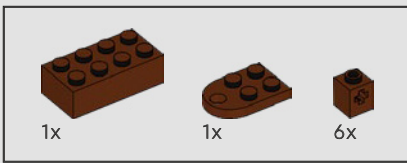
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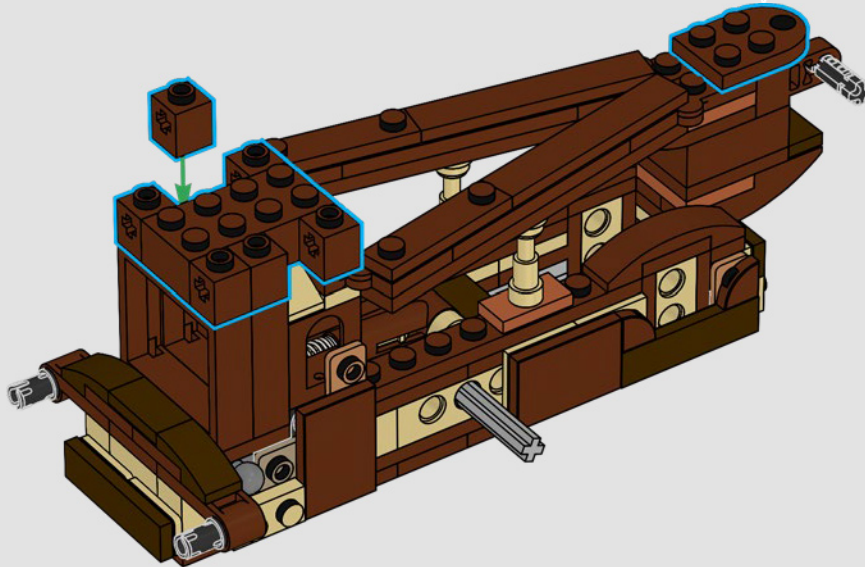
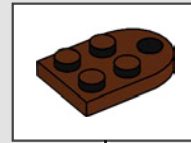
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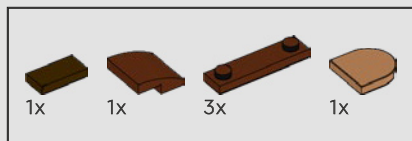




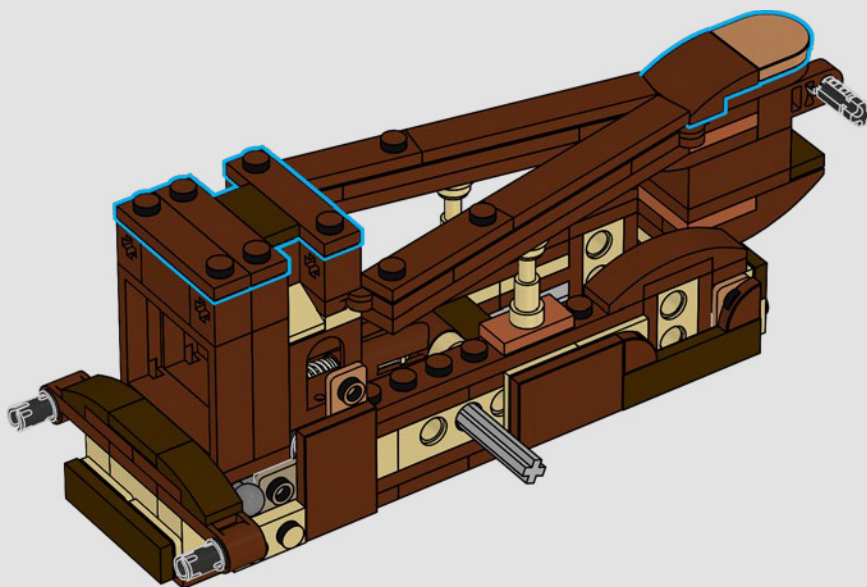


88





89







2x



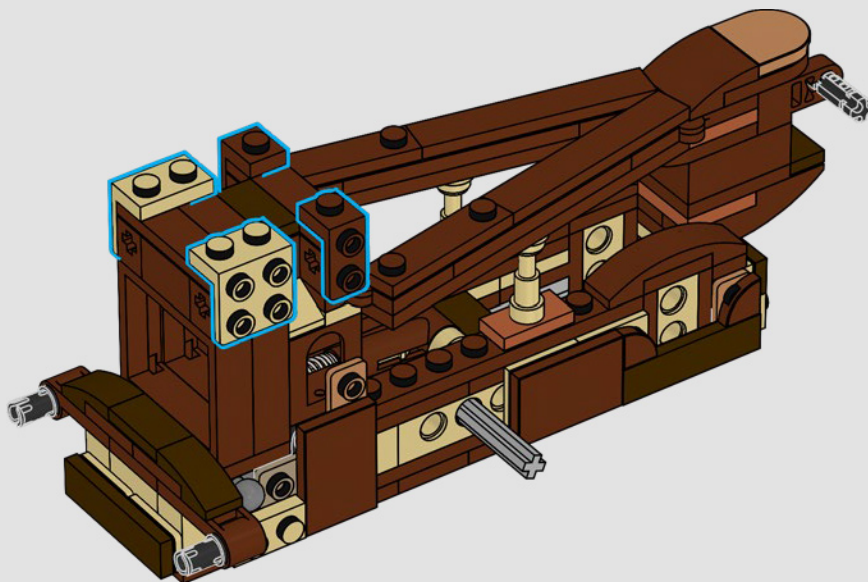
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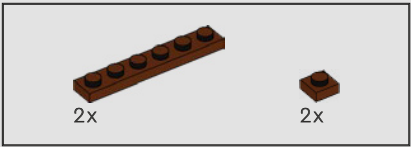
90

Leonardo da Vinci was persistent in his idea that the human body could produce enough energy to power a flying machine.

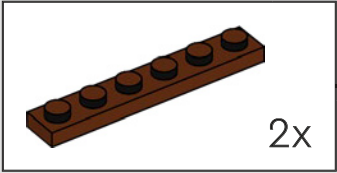
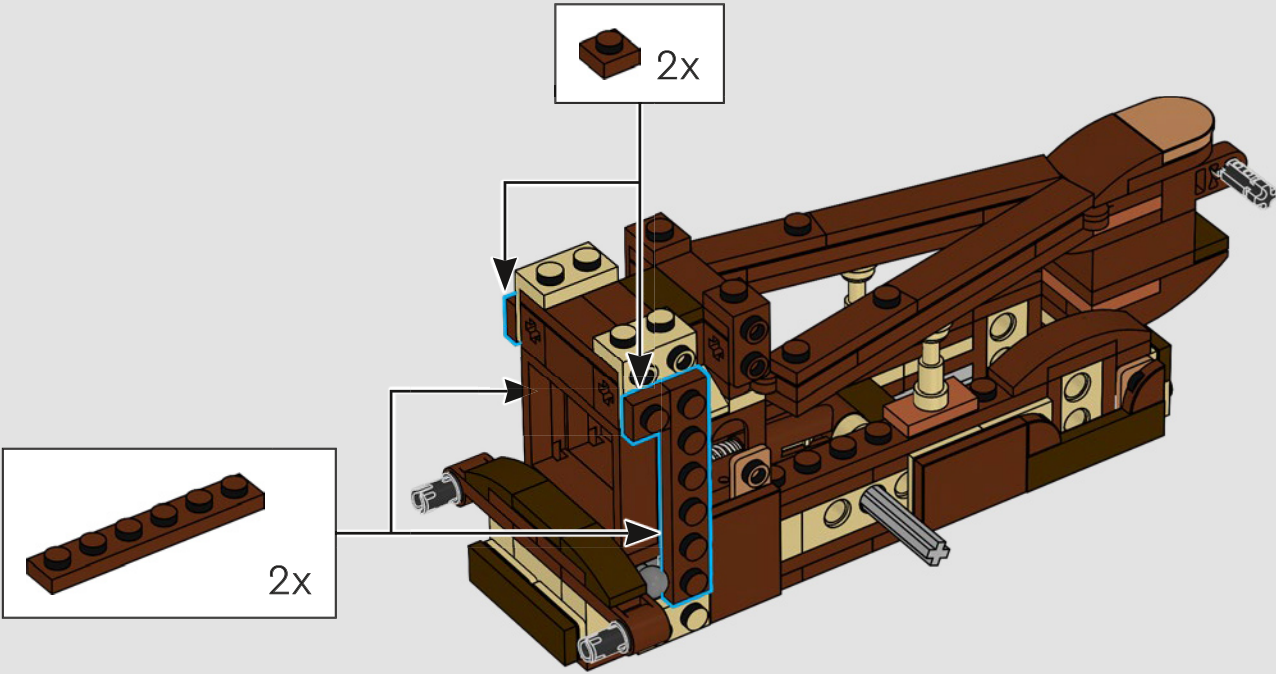
Leonardo da Vinci était convaincu que le corps humain pouvait produire suffisamment d'énergie pour propulser une machine volante.

Leonardo da Vinci persistió en su idea de que el cuerpo humano podía producir la energía suficiente para impulsar una máquina voladora.



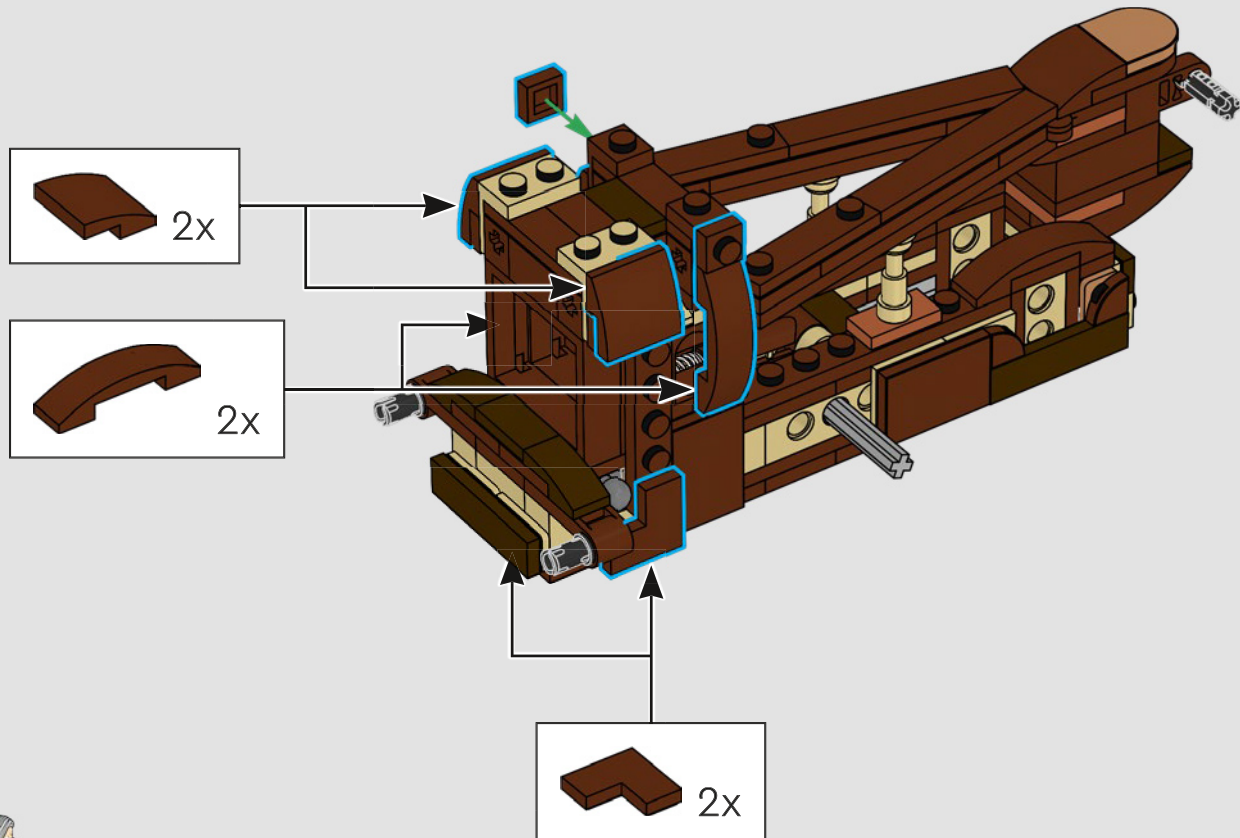


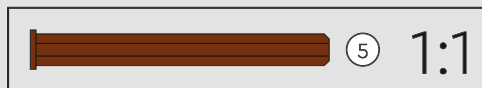
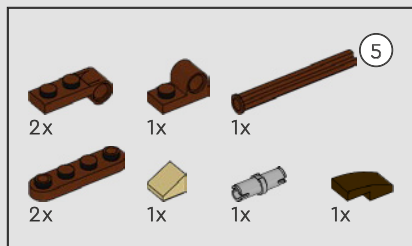
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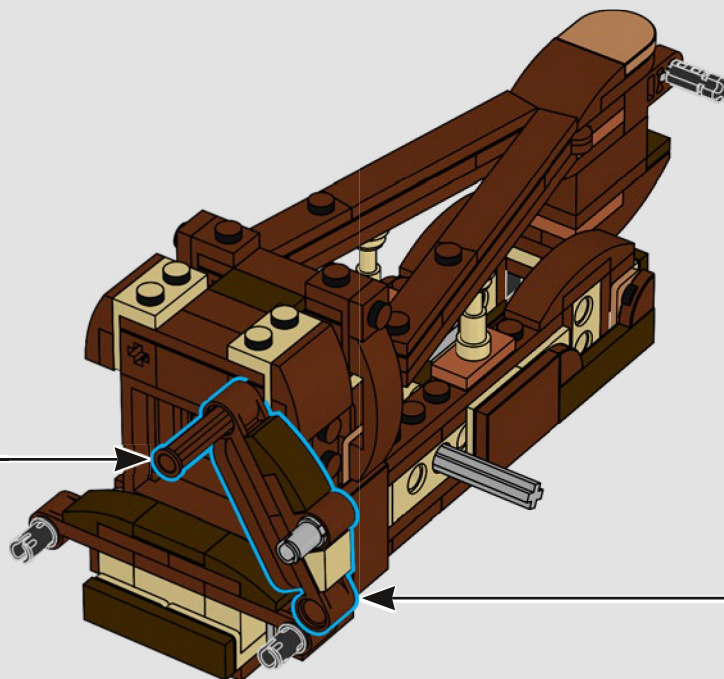
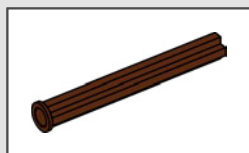
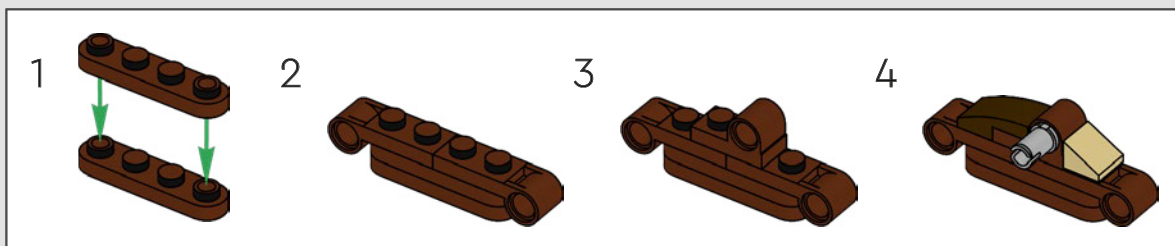


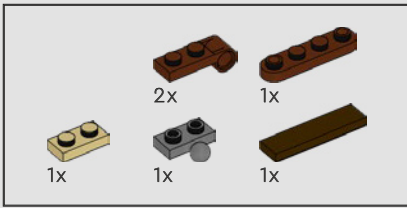
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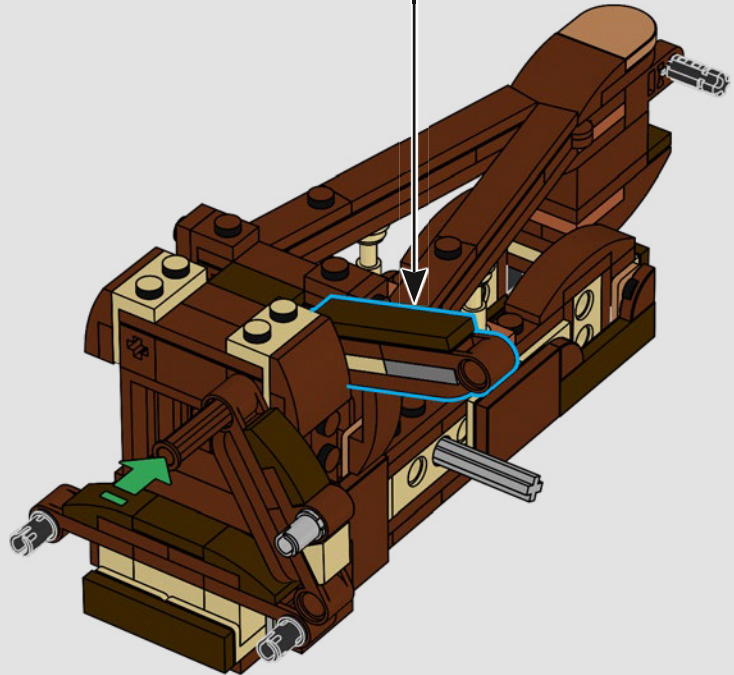
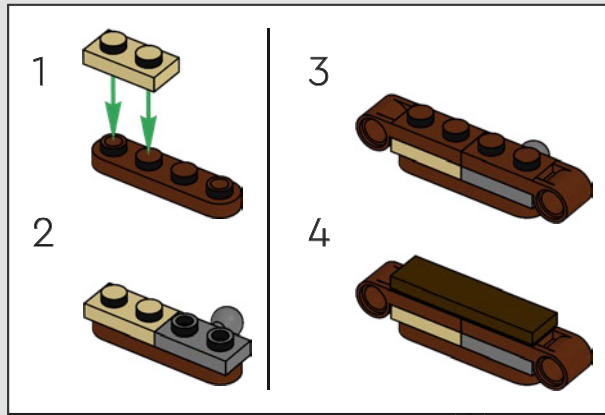


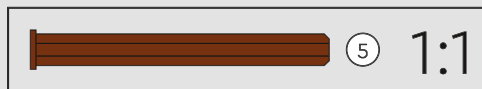
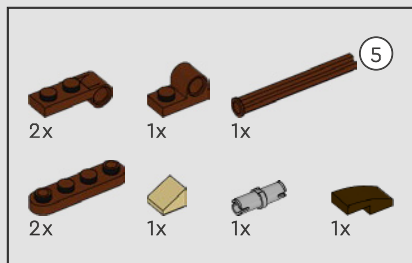
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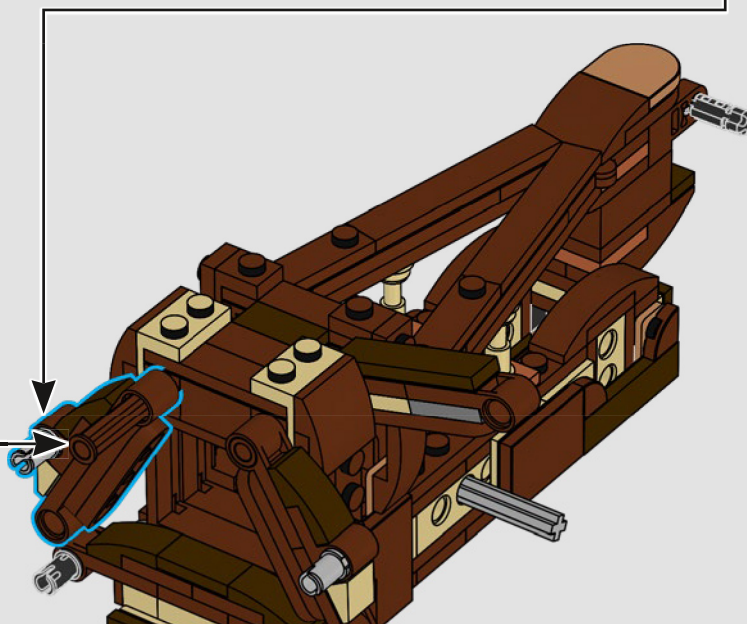
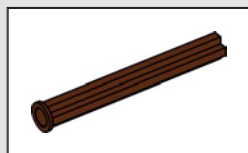
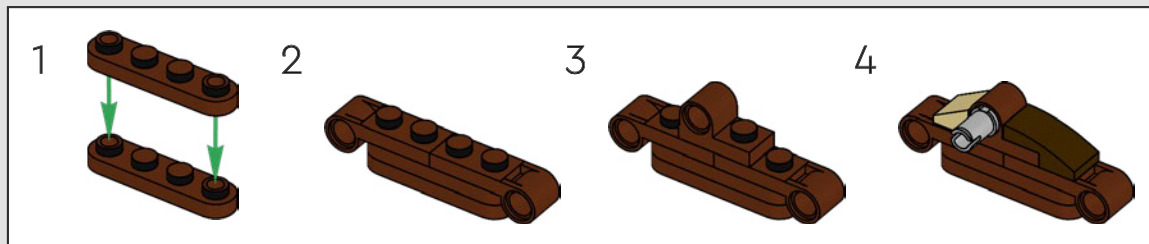


94

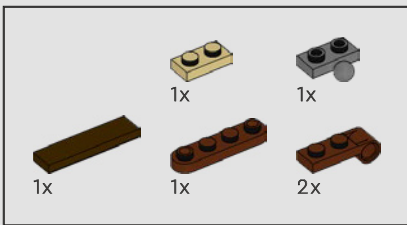




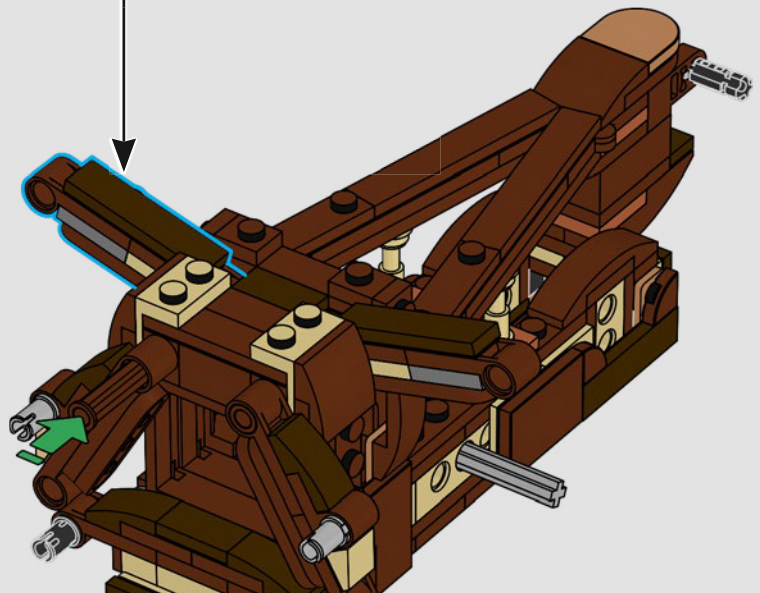
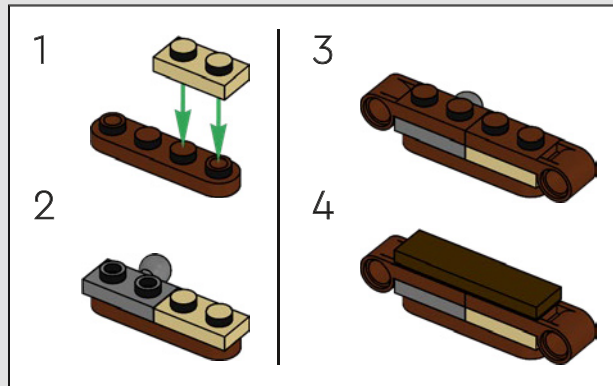
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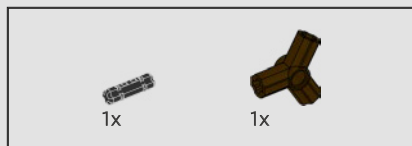




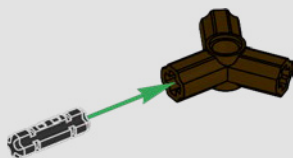
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97



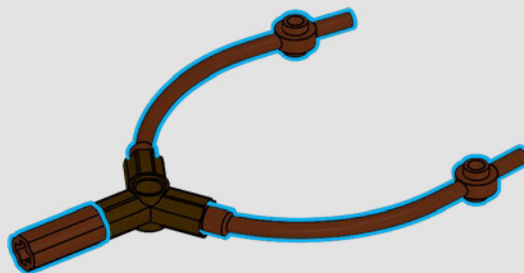
Leonardo da Vinci's sketches show different flying machines operated by a pilot using various power mechanics – some powered by legs, some by legs as well as arms, and others even with rudders connected to the pilot's head.

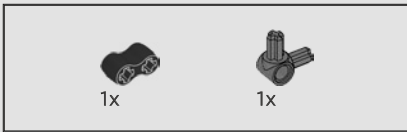
Les croquis de Leonardo da Vinci montrent différentes machines volantes actionnées par un pilote à l'aide de différents mécanismes de propulsion – certaines actionnées par les jambes, d'autres par les jambes et les bras, et d'autres encore avec des gouvernails reliés à la tête du pilote.

Los dibujos de Leonardo da Vinci muestran distintas máquinas voladoras controladas por un piloto que usa diversos mecanismos de propulsión, como las piernas o una combinación de las piernas y los brazos. Algunas de ellas incluso contemplan timones conectados a la cabeza de su tripulante.

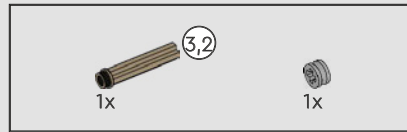
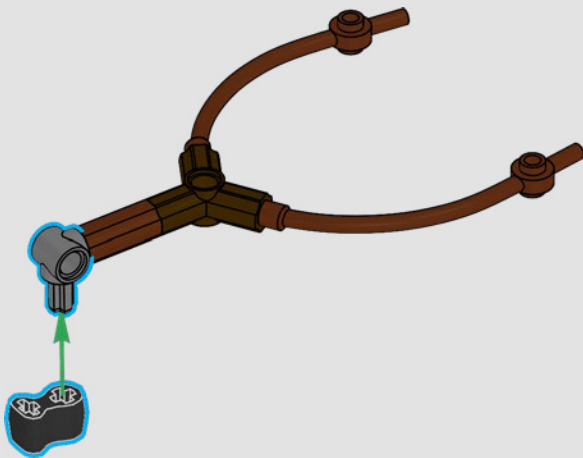


98

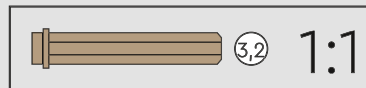
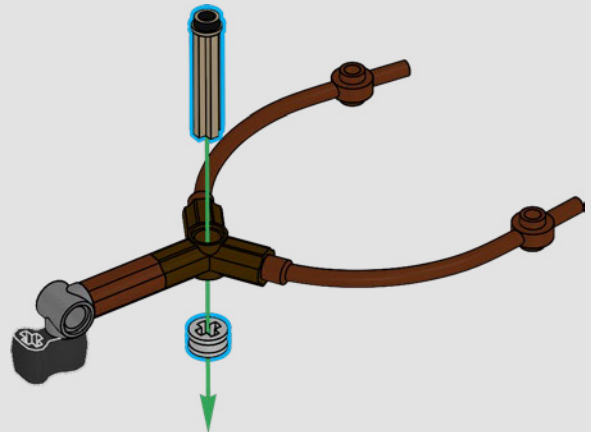




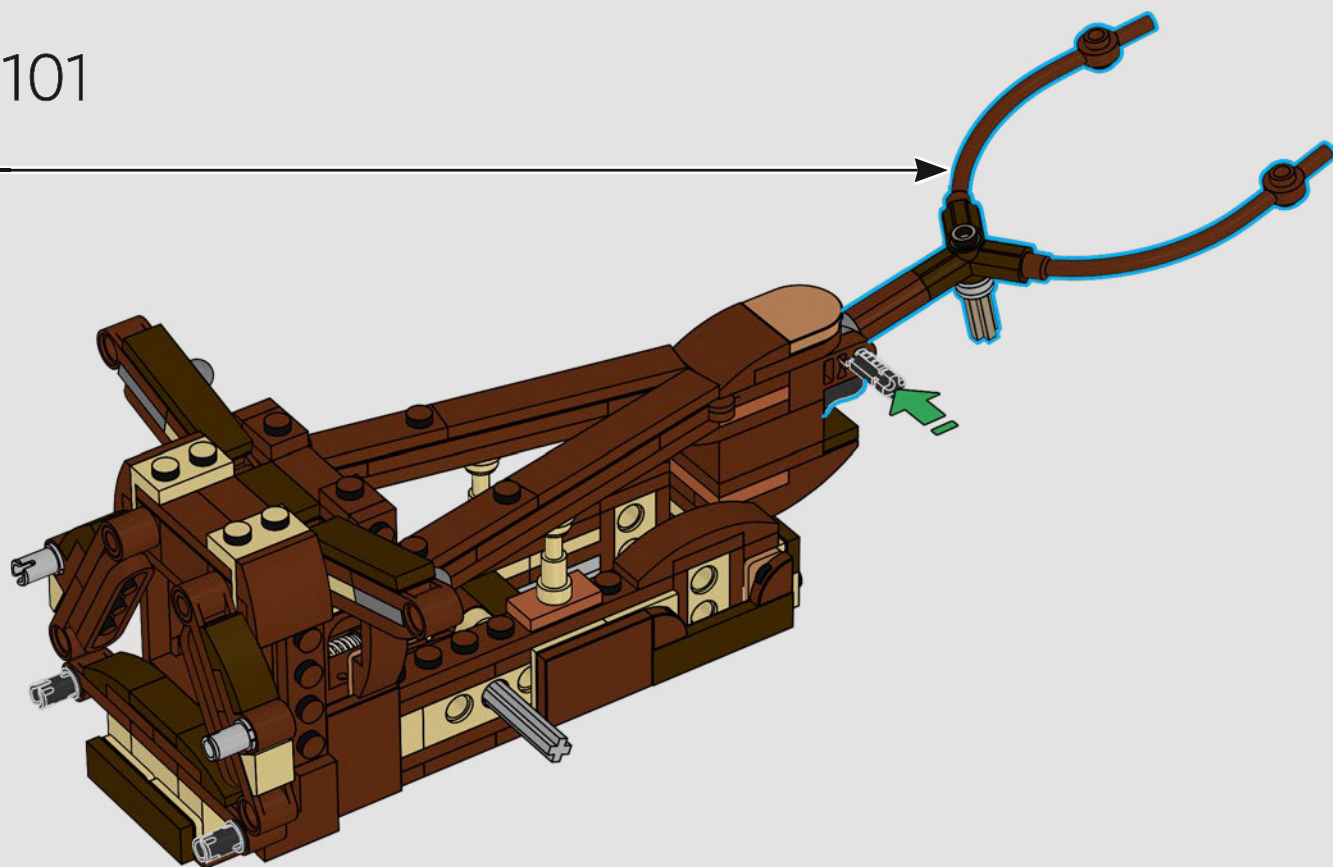
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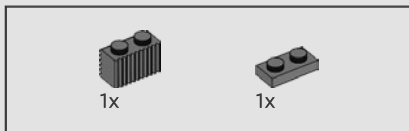
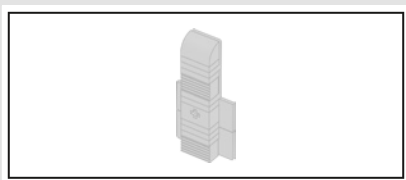


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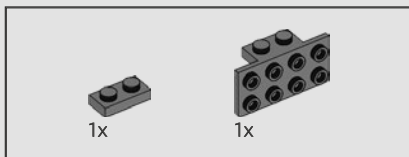
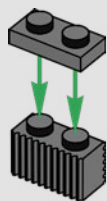


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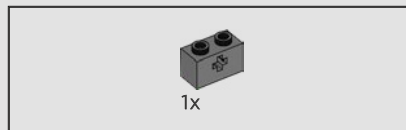
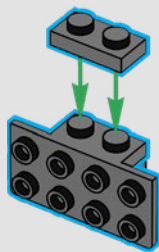




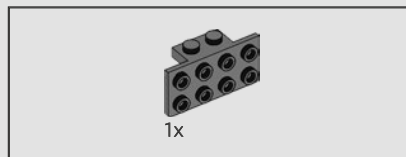
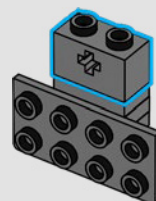
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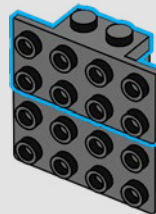
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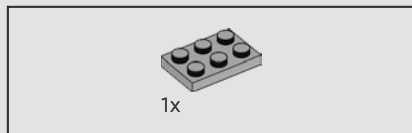


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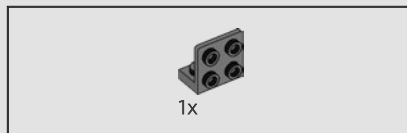
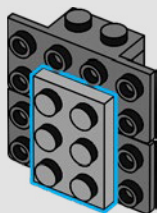


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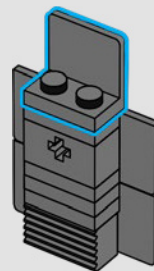


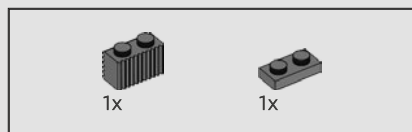


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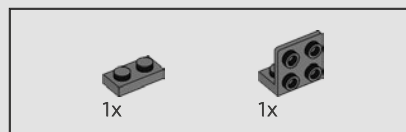
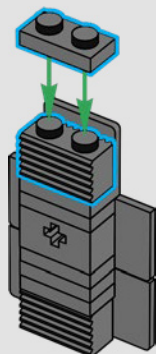


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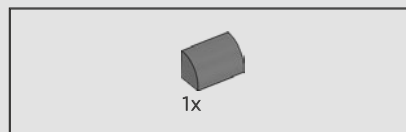
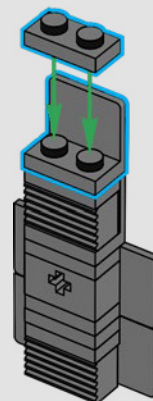




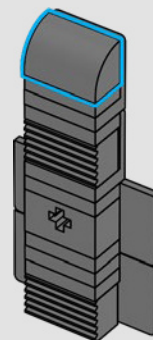
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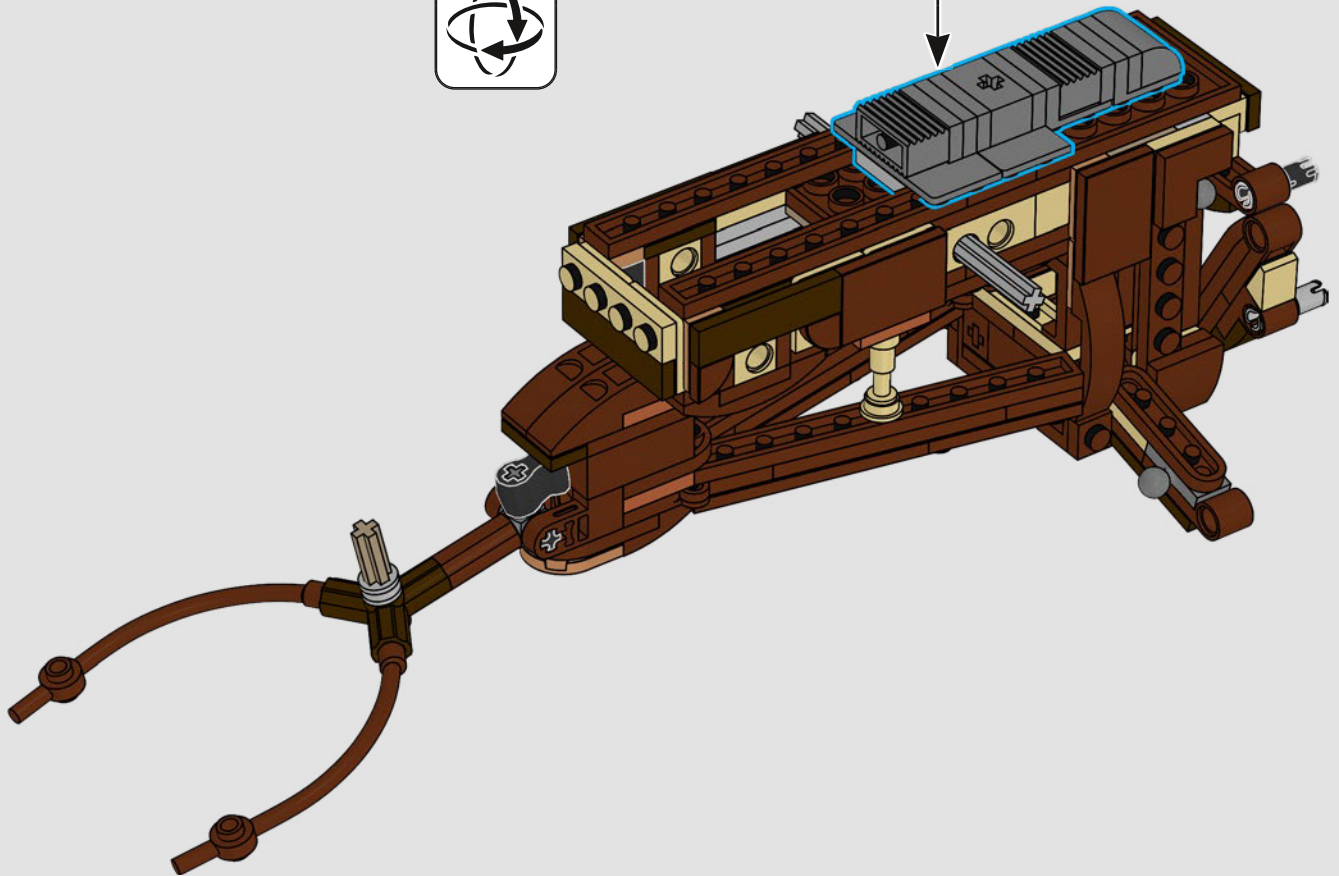


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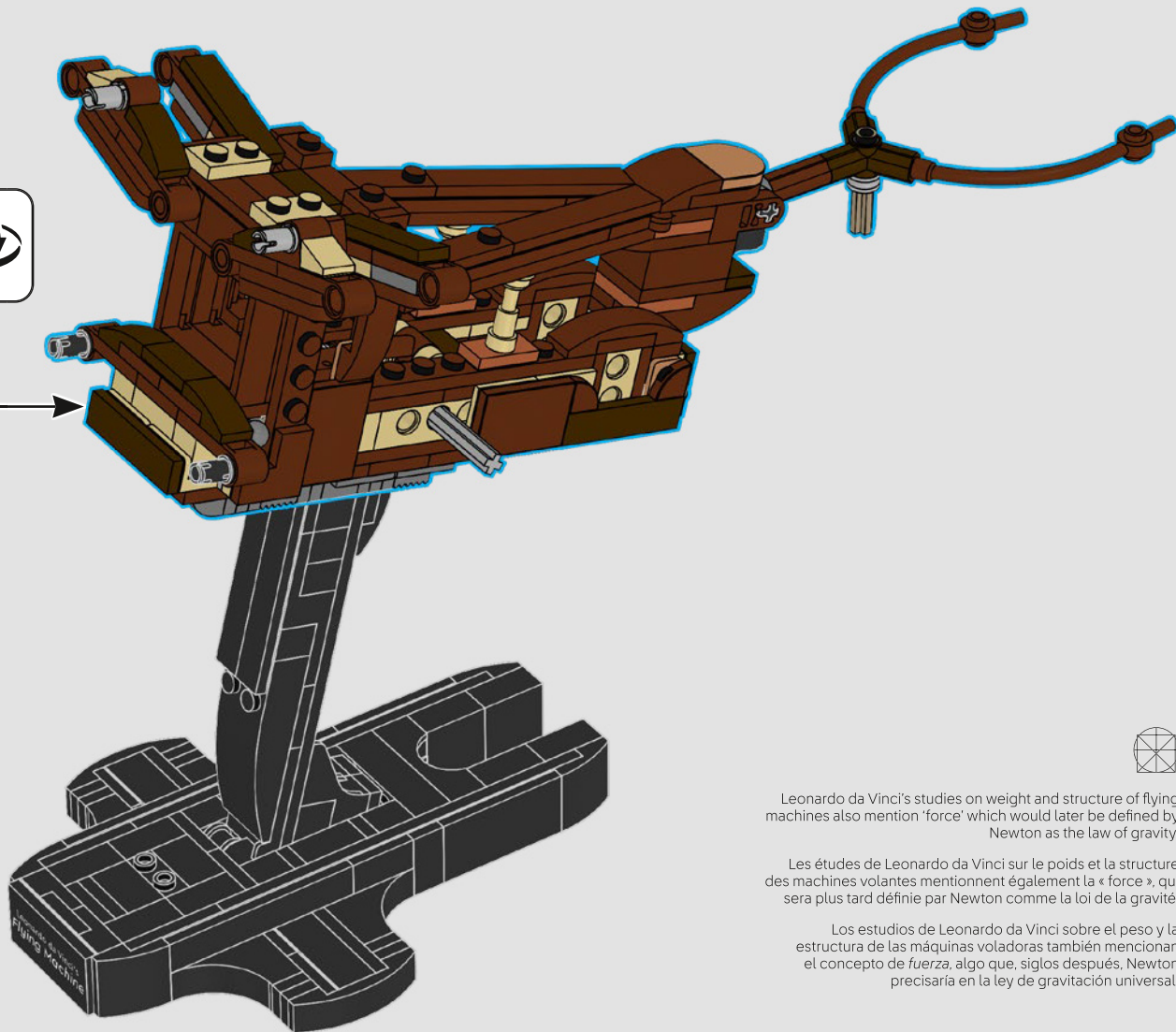
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112

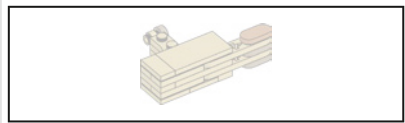


Leonardo da Vinci's studies on weight and structure of flying machines also mention 'force' which would later be defined by Newton as the law of gravity.

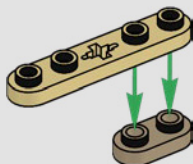
Les études de Leonardo da Vinci sur le poids et la structure des machines volantes mentionnent également la « force », qui sera plus tard définie par Newton comme la loi de la gravité.

Los estudios de Leonardo da Vinci sobre el peso y la estructura de las máquinas voladoras también mencionan el concepto de *fuerza*, algo que, siglos después, Newton precisaría en la ley de gravitación universal.

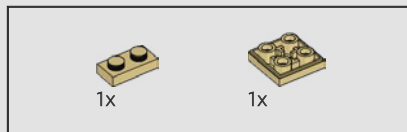
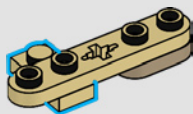




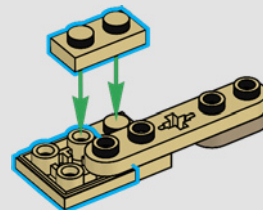
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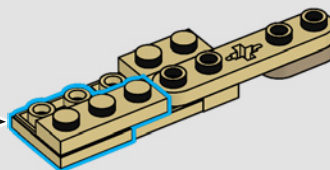
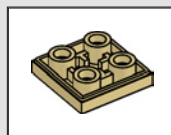
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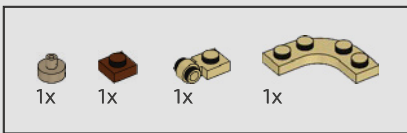


115

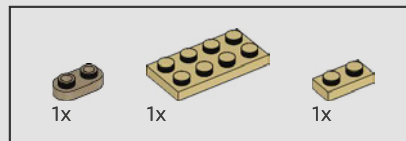
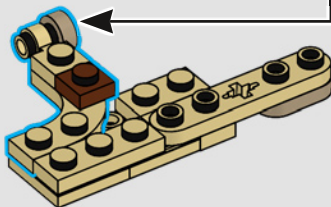
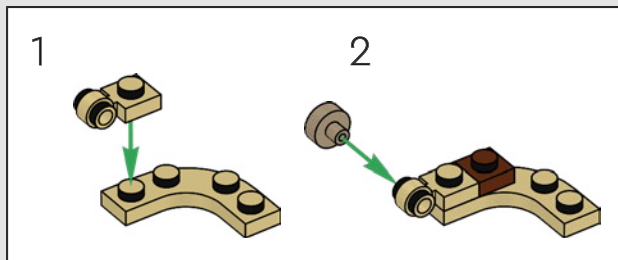


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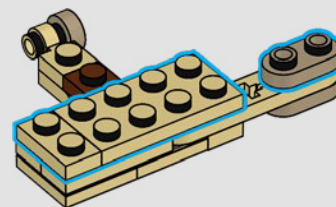


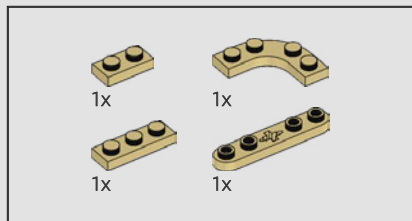


117

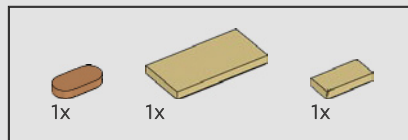
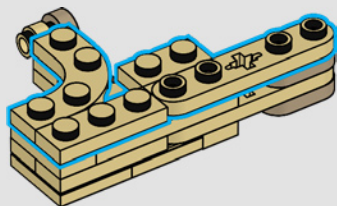


118

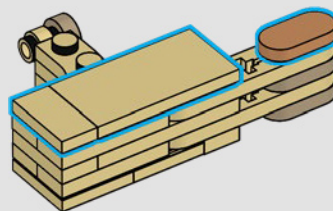


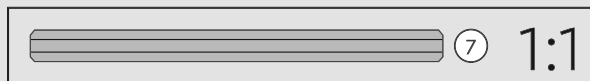
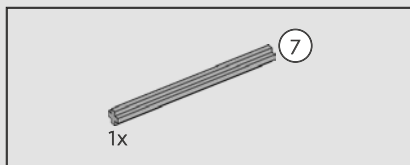


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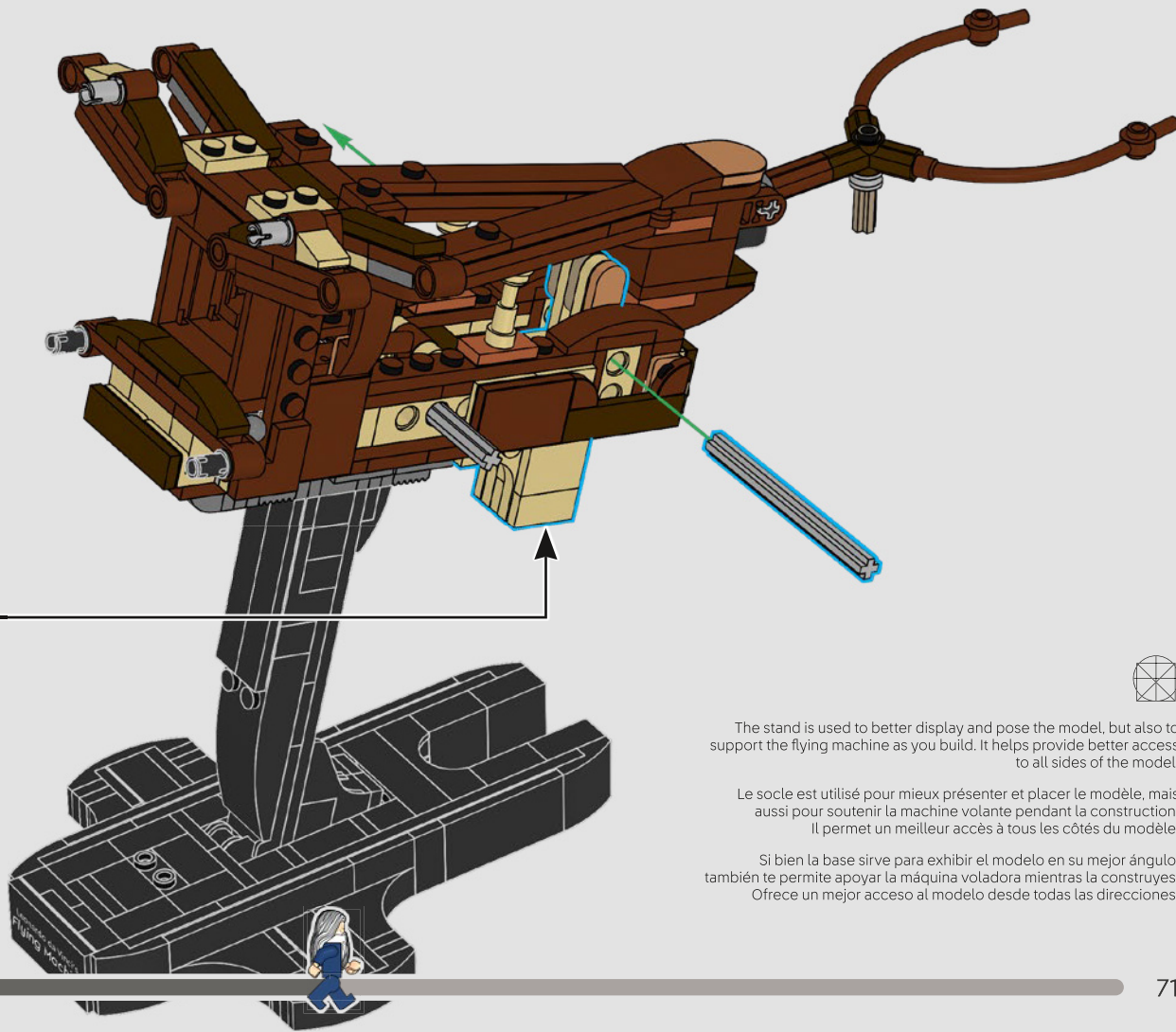


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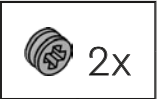
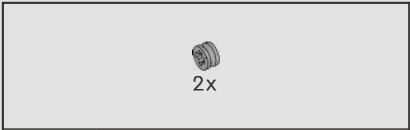
121



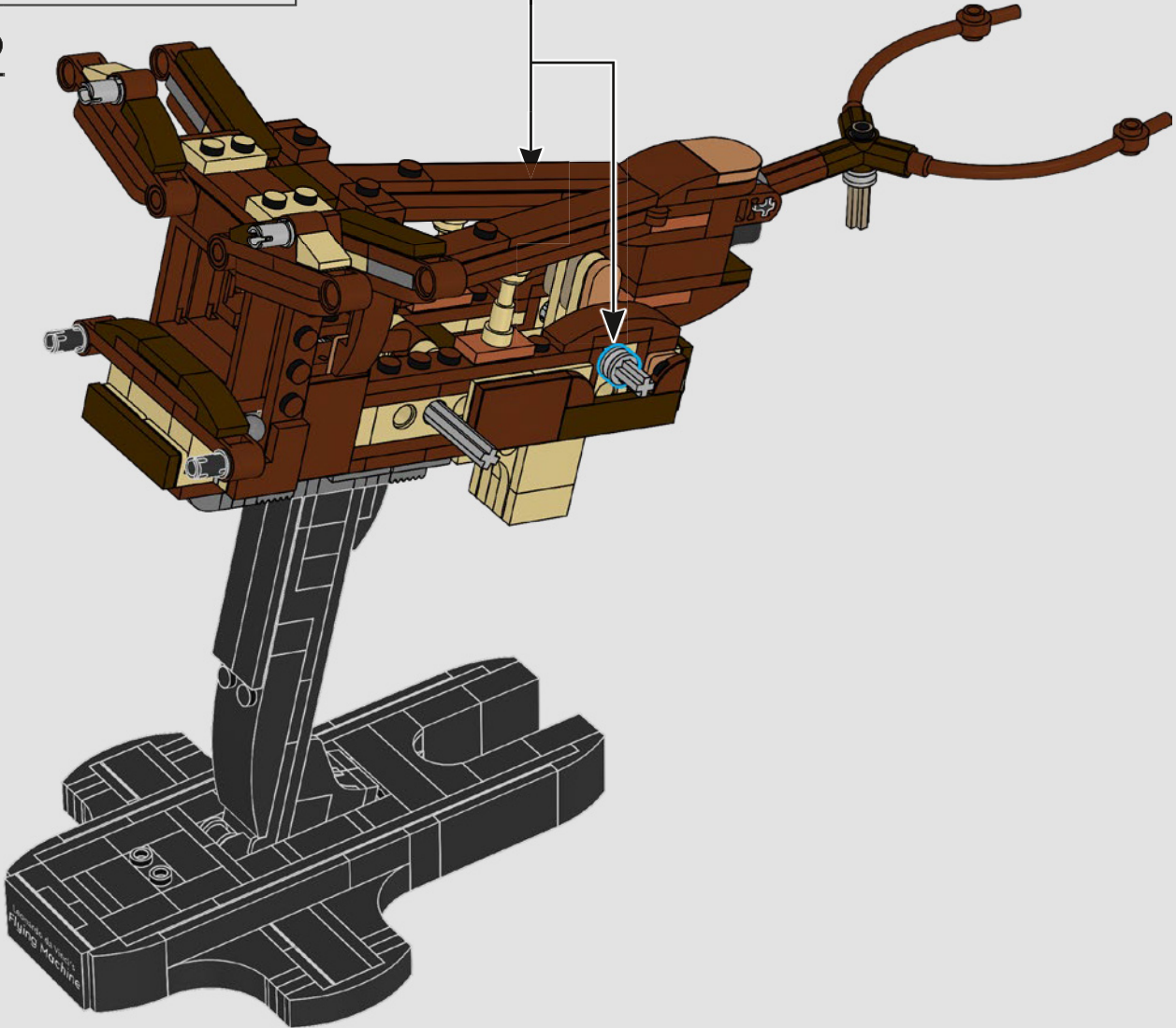
The stand is used to better display and pose the model, but also to support the flying machine as you build. It helps provide better access to all sides of the model.

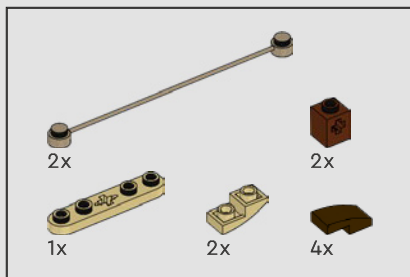
Le socle est utilisé pour mieux présenter et placer le modèle, mais aussi pour soutenir la machine volante pendant la construction. Il permet un meilleur accès à tous les côtés du modèle.

Si bien la base sirve para exhibir el modelo en su mejor ángulo, también te permite apoyar la máquina voladora mientras la construyes. Ofrece un mejor acceso al modelo desde todas las direcciones.



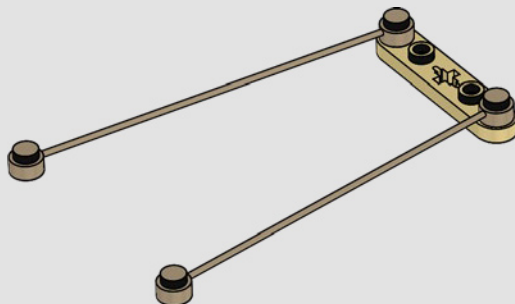
122



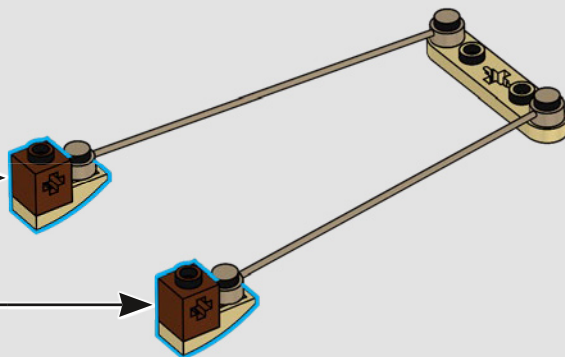
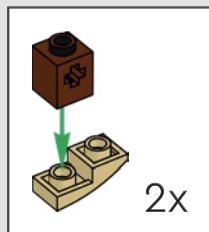


123

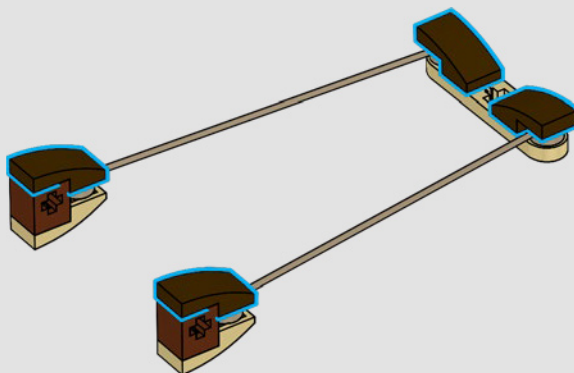
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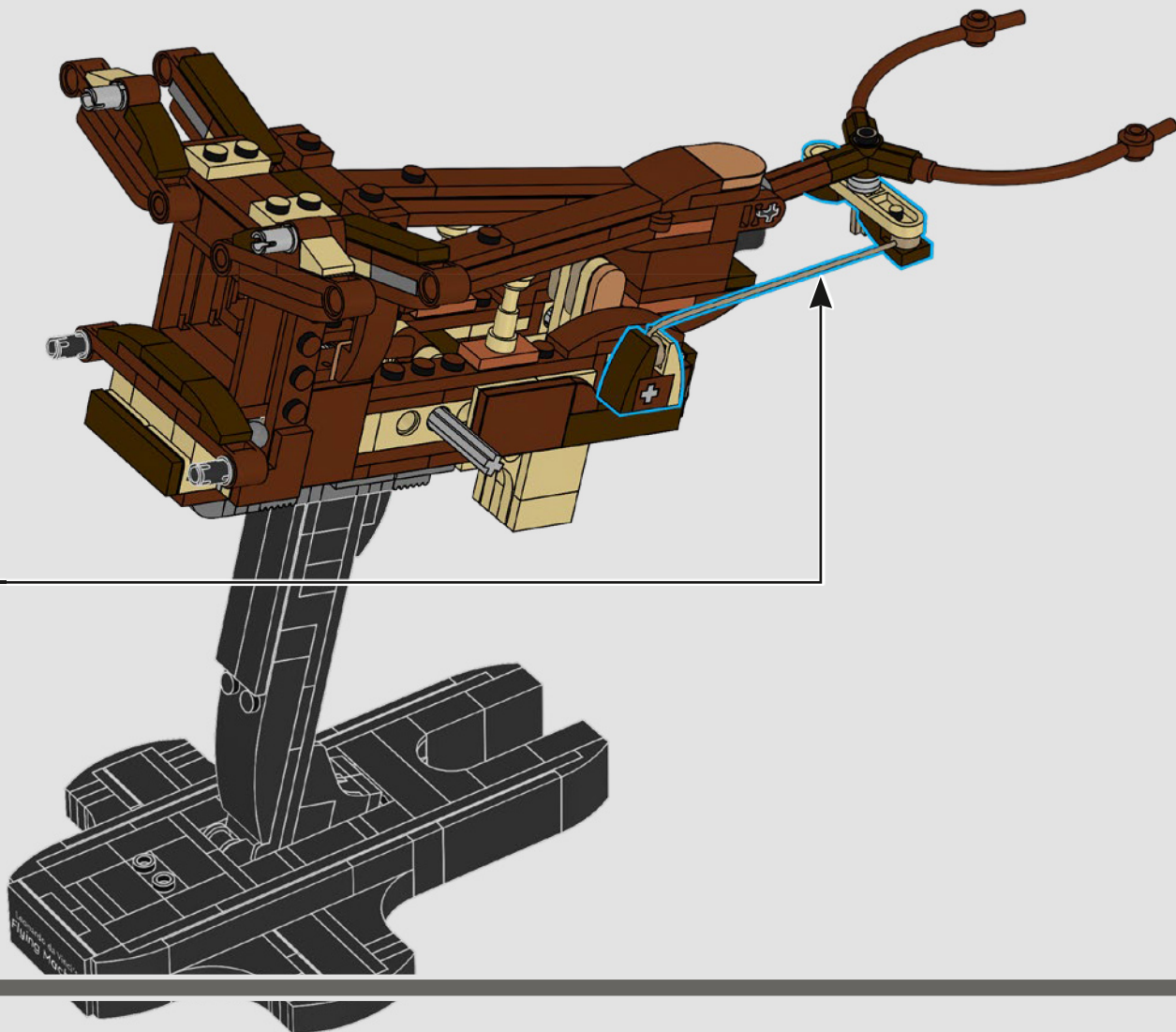
2



3



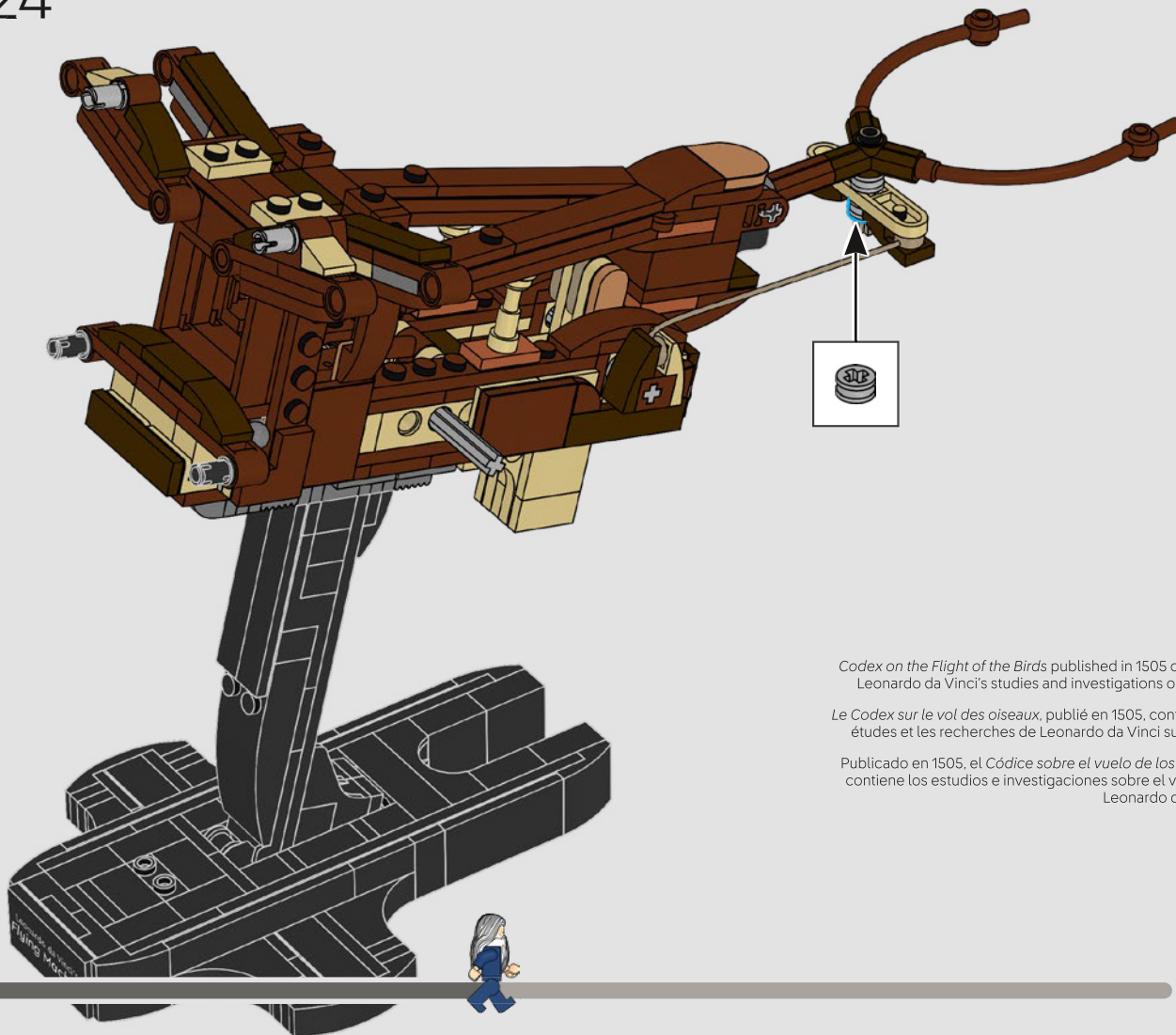






1x

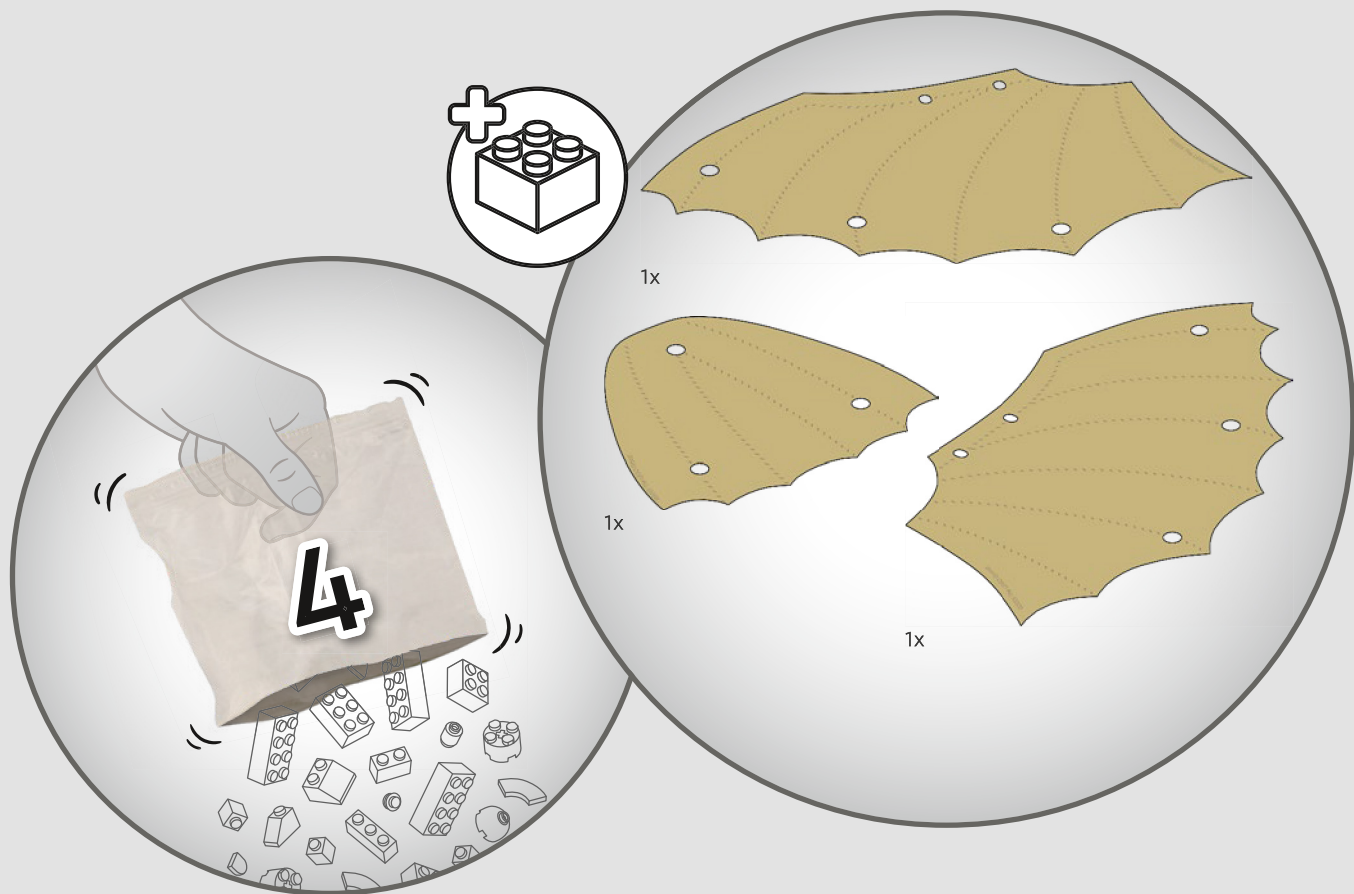
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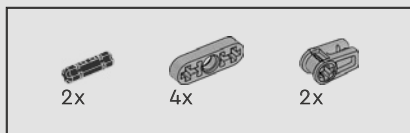


*Codex on the Flight of the Birds* published in 1505 contains Leonardo da Vinci's studies and investigations on flying.

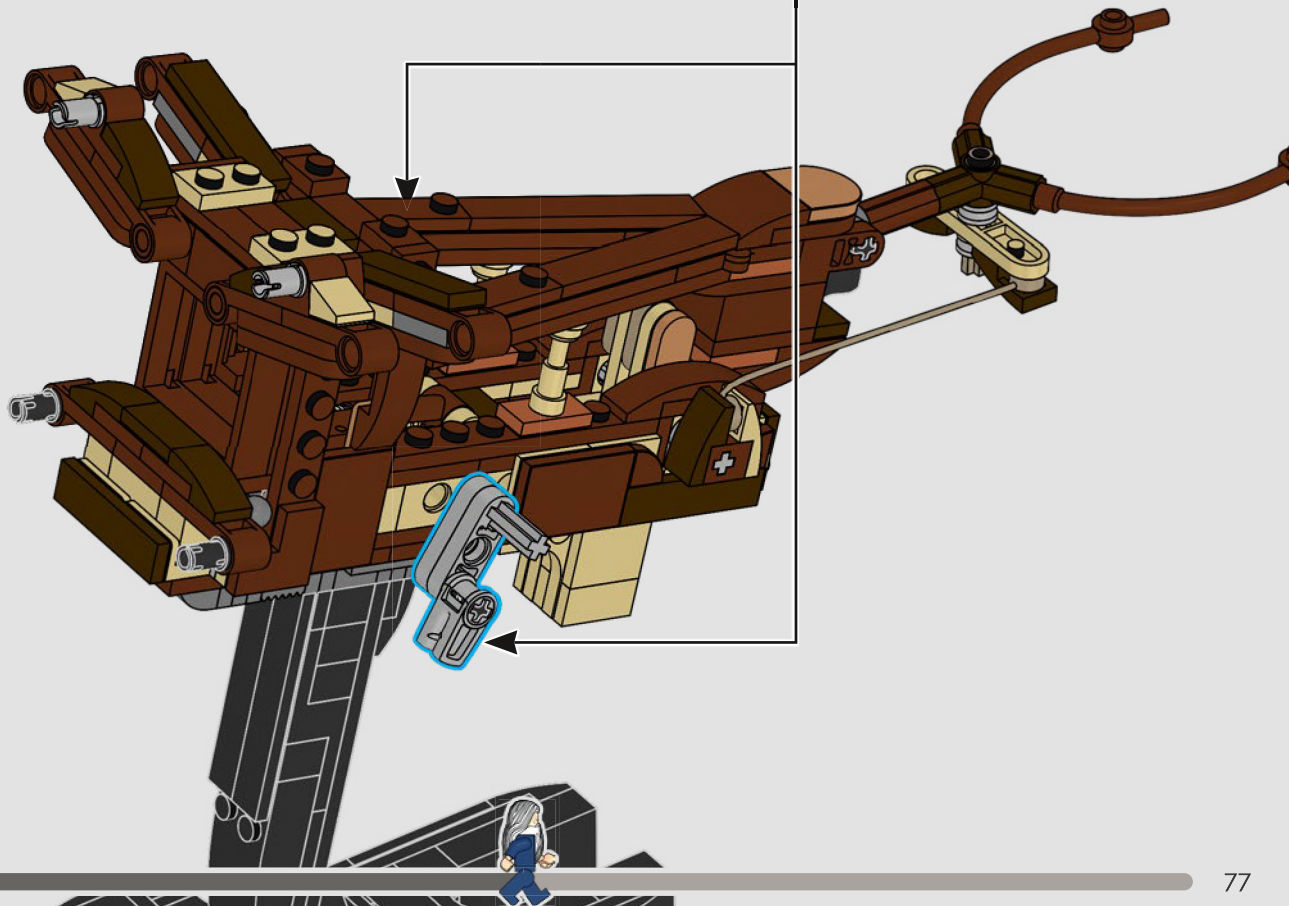
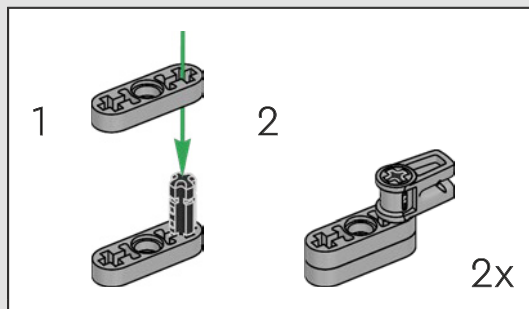
*Le Codex sur le vol des oiseaux*, publié en 1505, contient les études et les recherches de Leonardo da Vinci sur le vol.

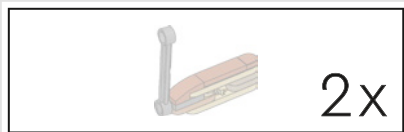
Publicado en 1505, el *Código sobre el vuelo de los pájaros* contiene los estudios e investigaciones sobre el vuelo de Leonardo da Vinci.



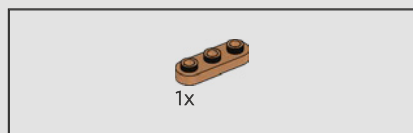
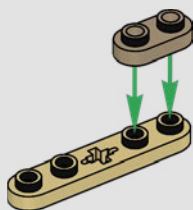


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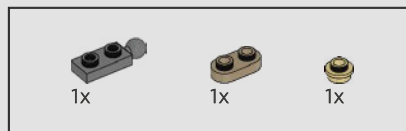
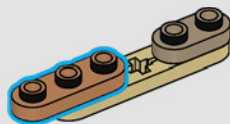




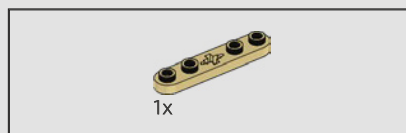
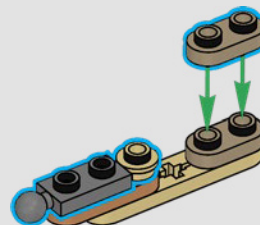
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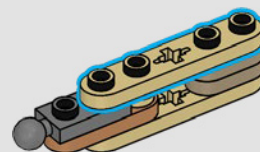
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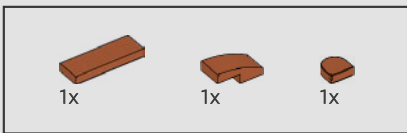
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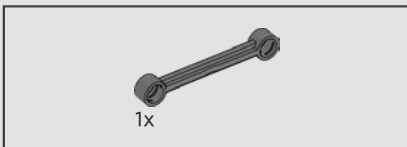
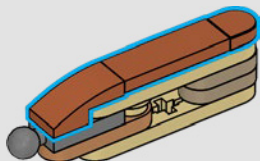
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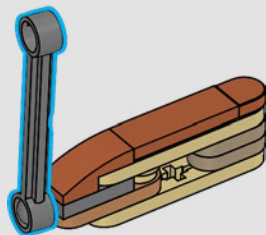




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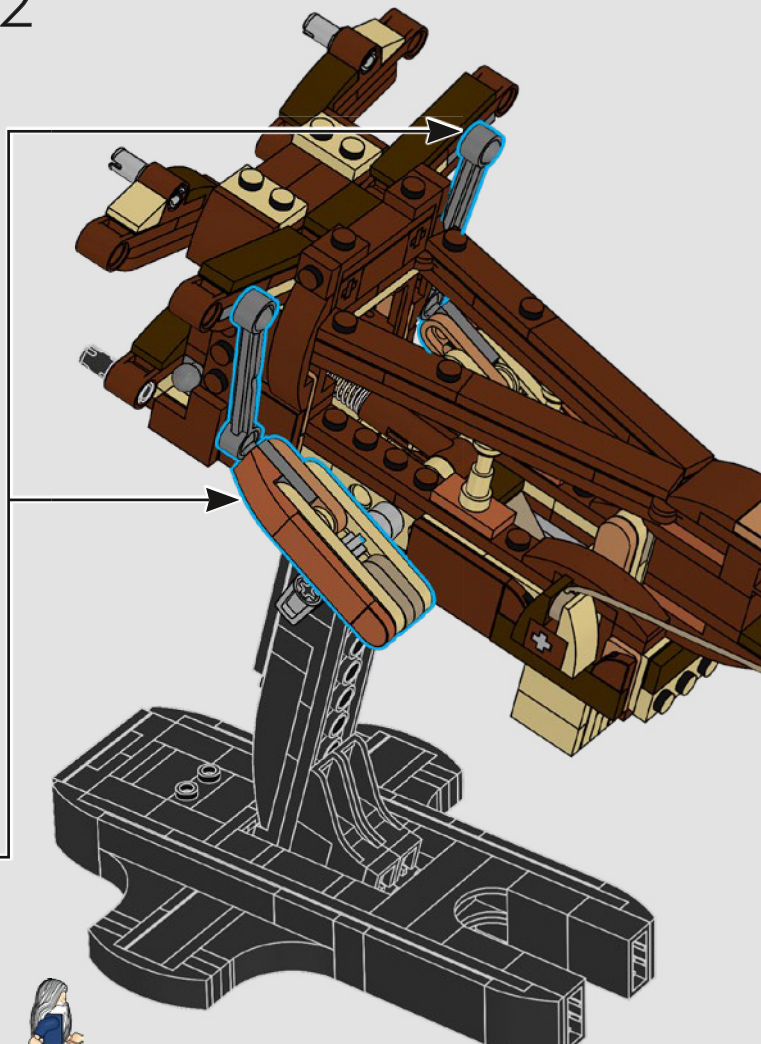


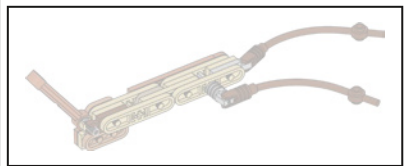
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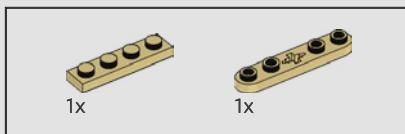
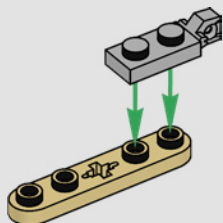
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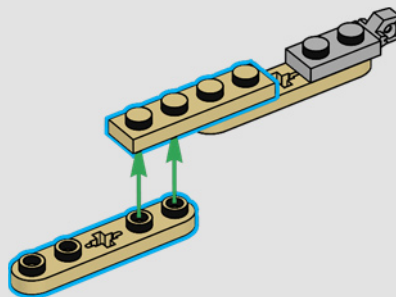




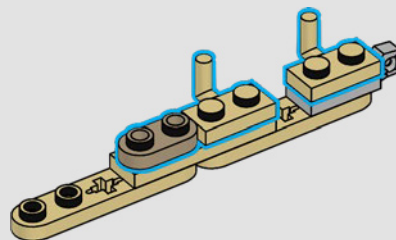
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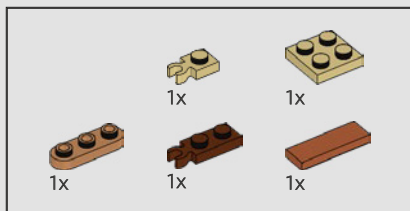
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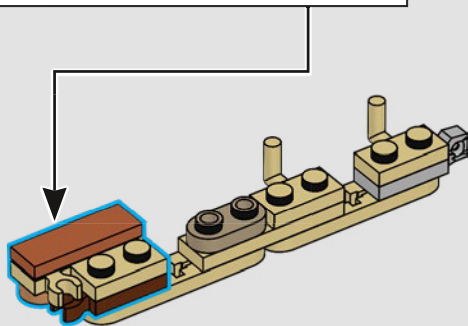
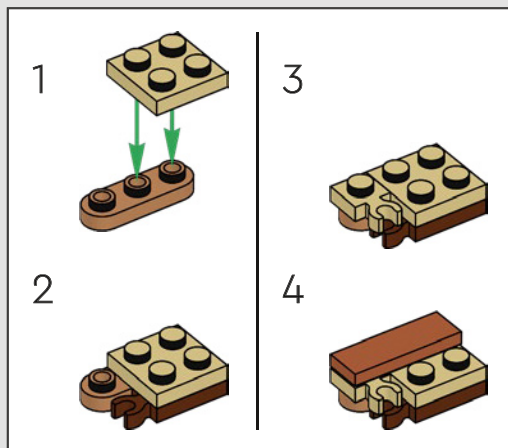
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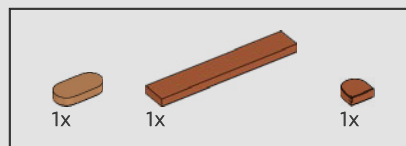
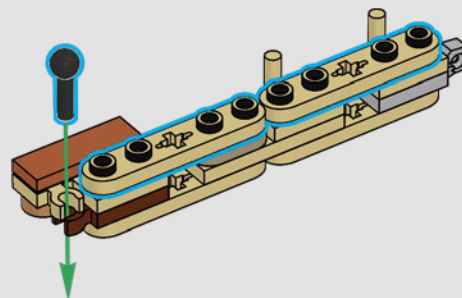




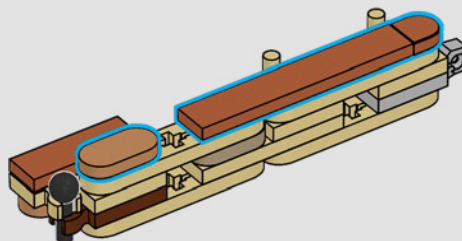
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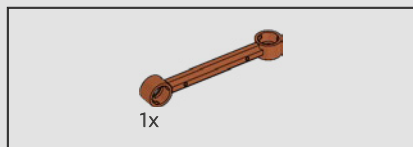


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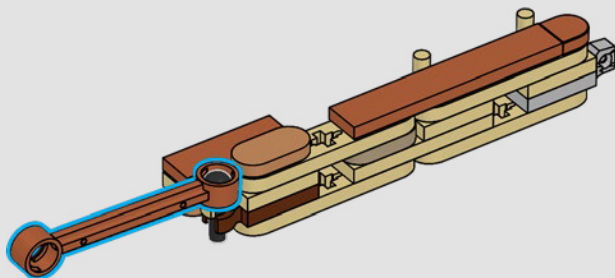


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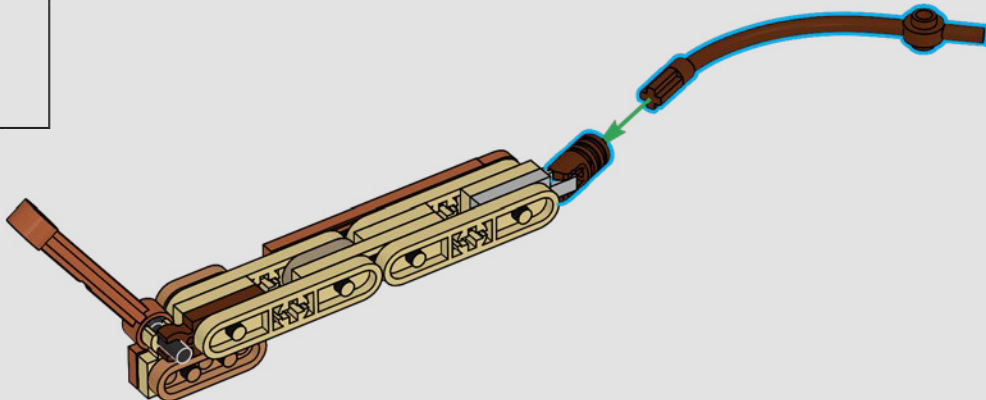


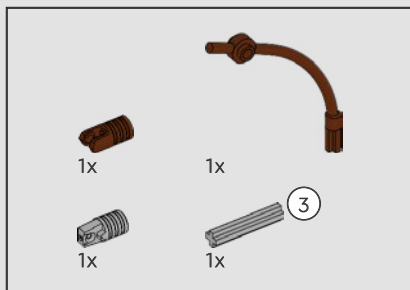


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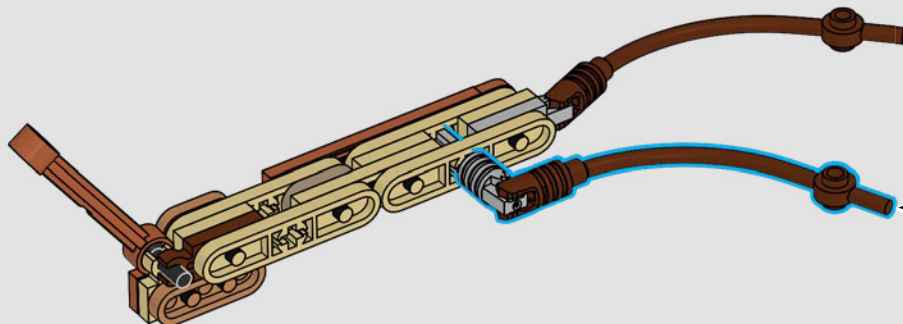
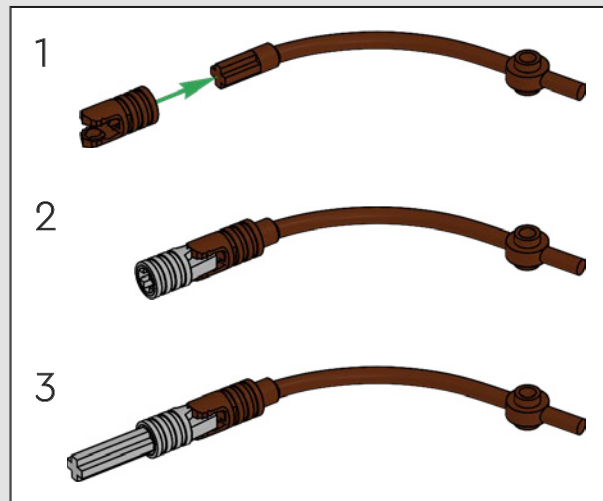


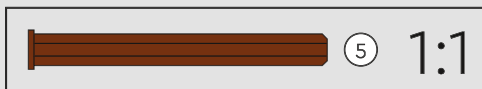
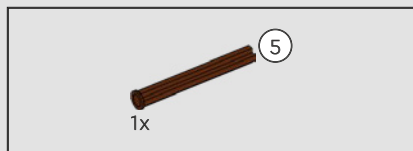
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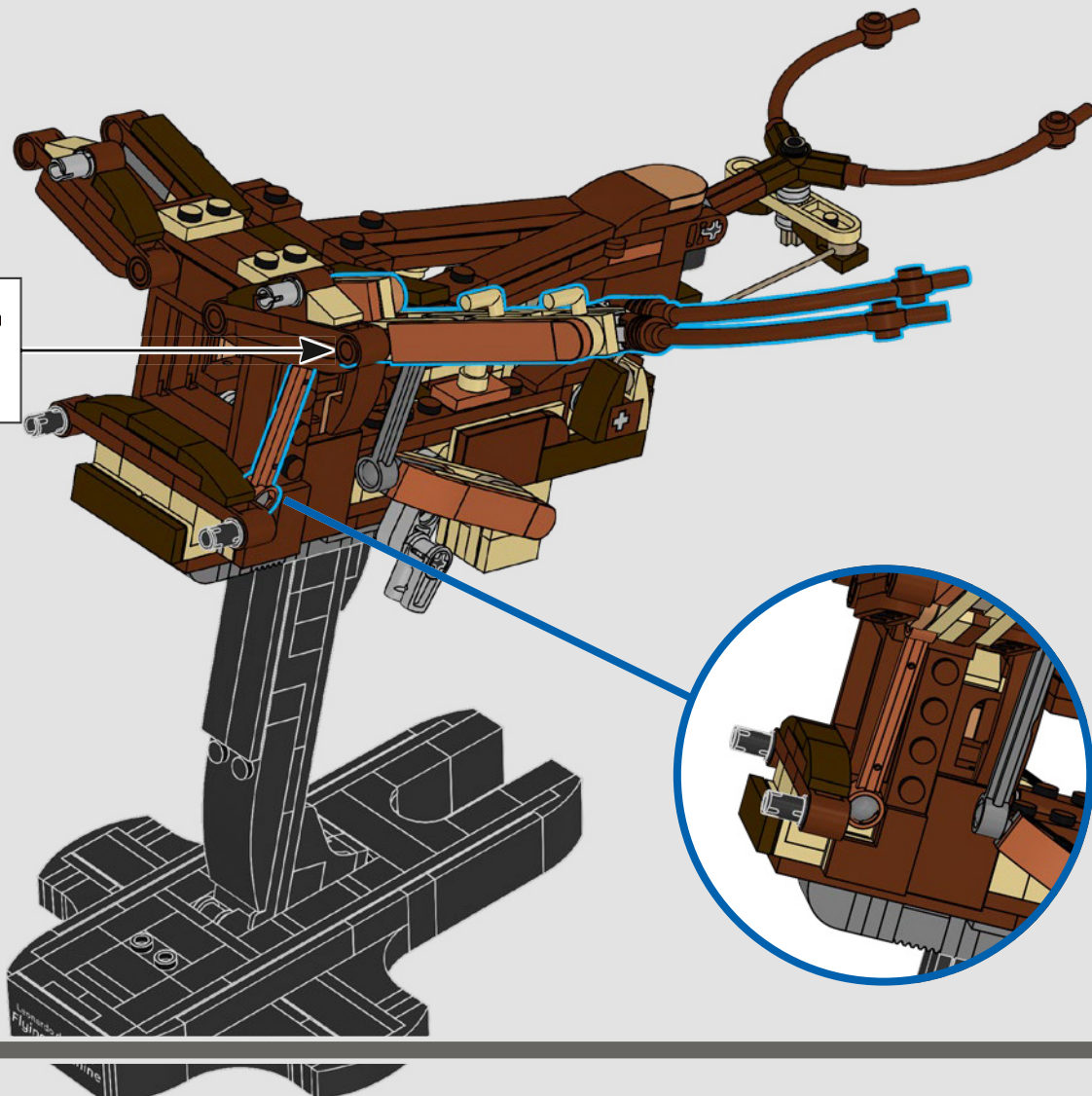
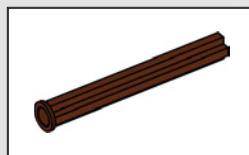


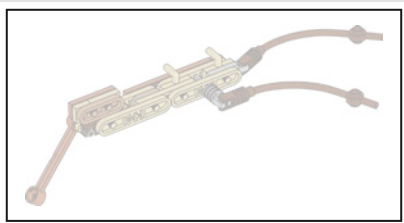
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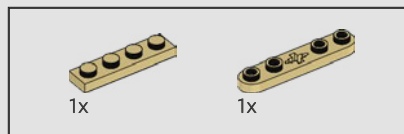
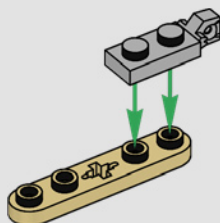


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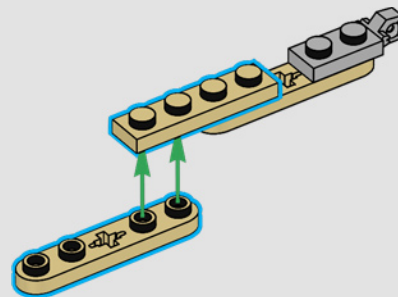




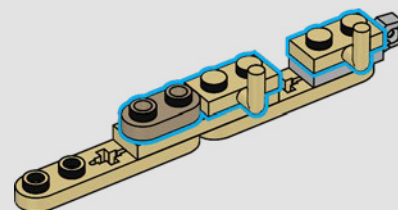
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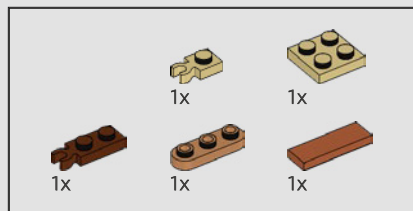


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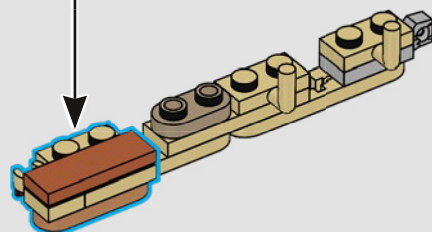
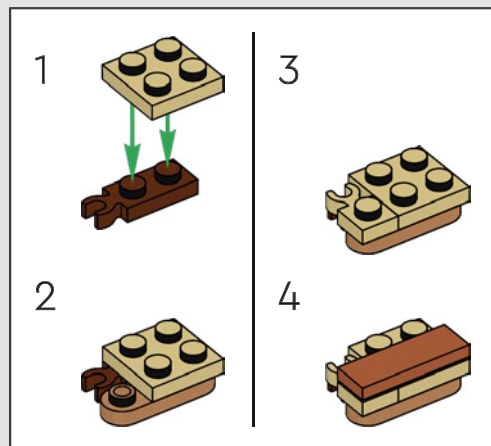


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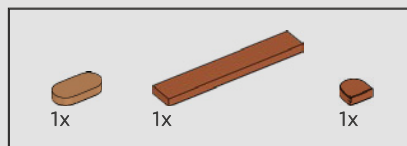
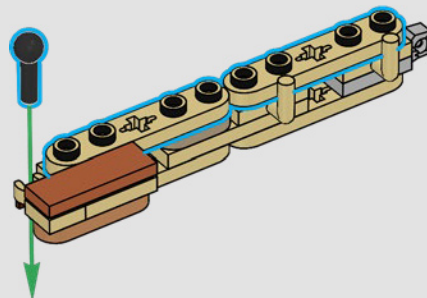




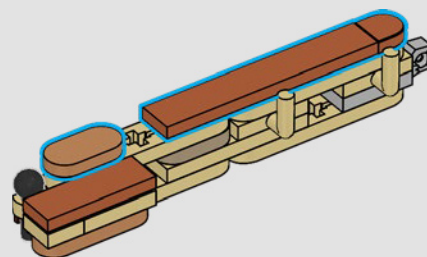
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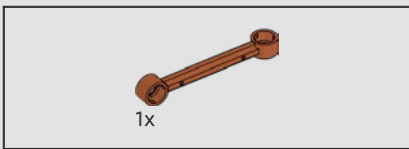


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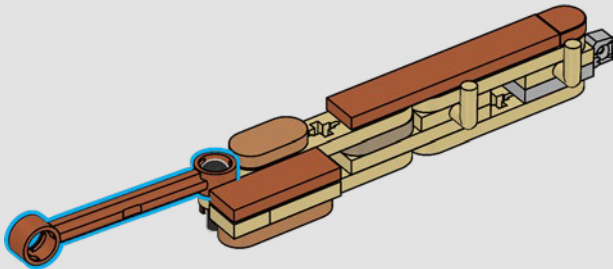


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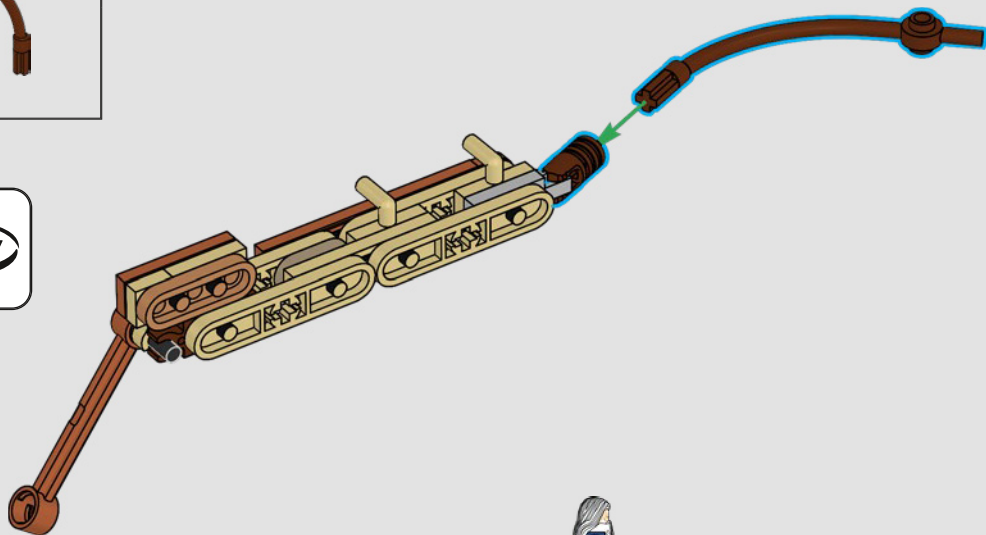




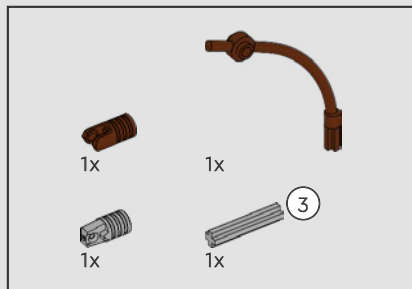
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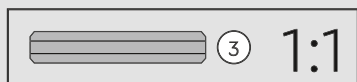
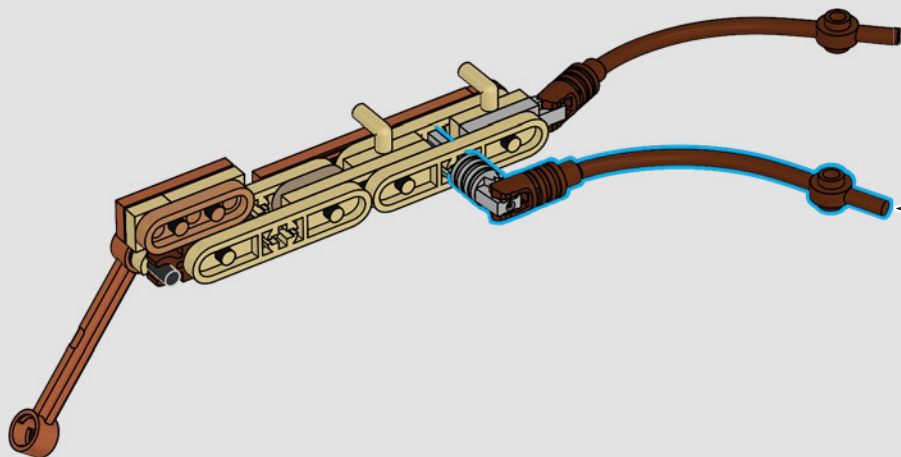
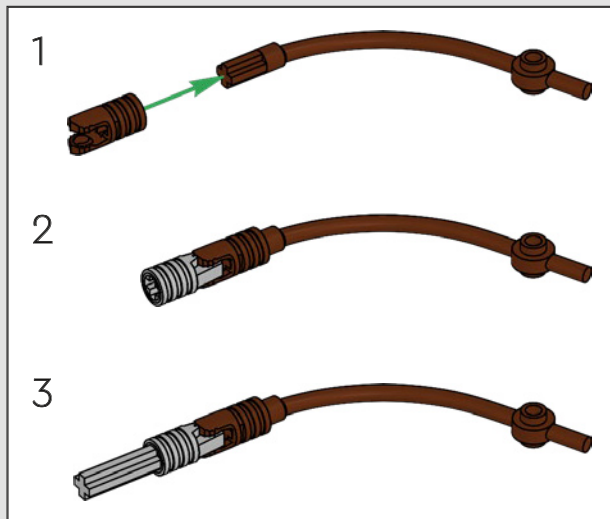
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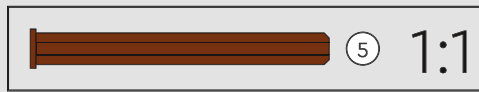
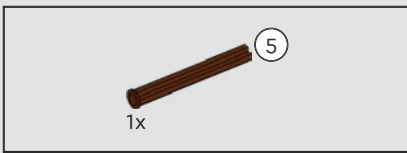




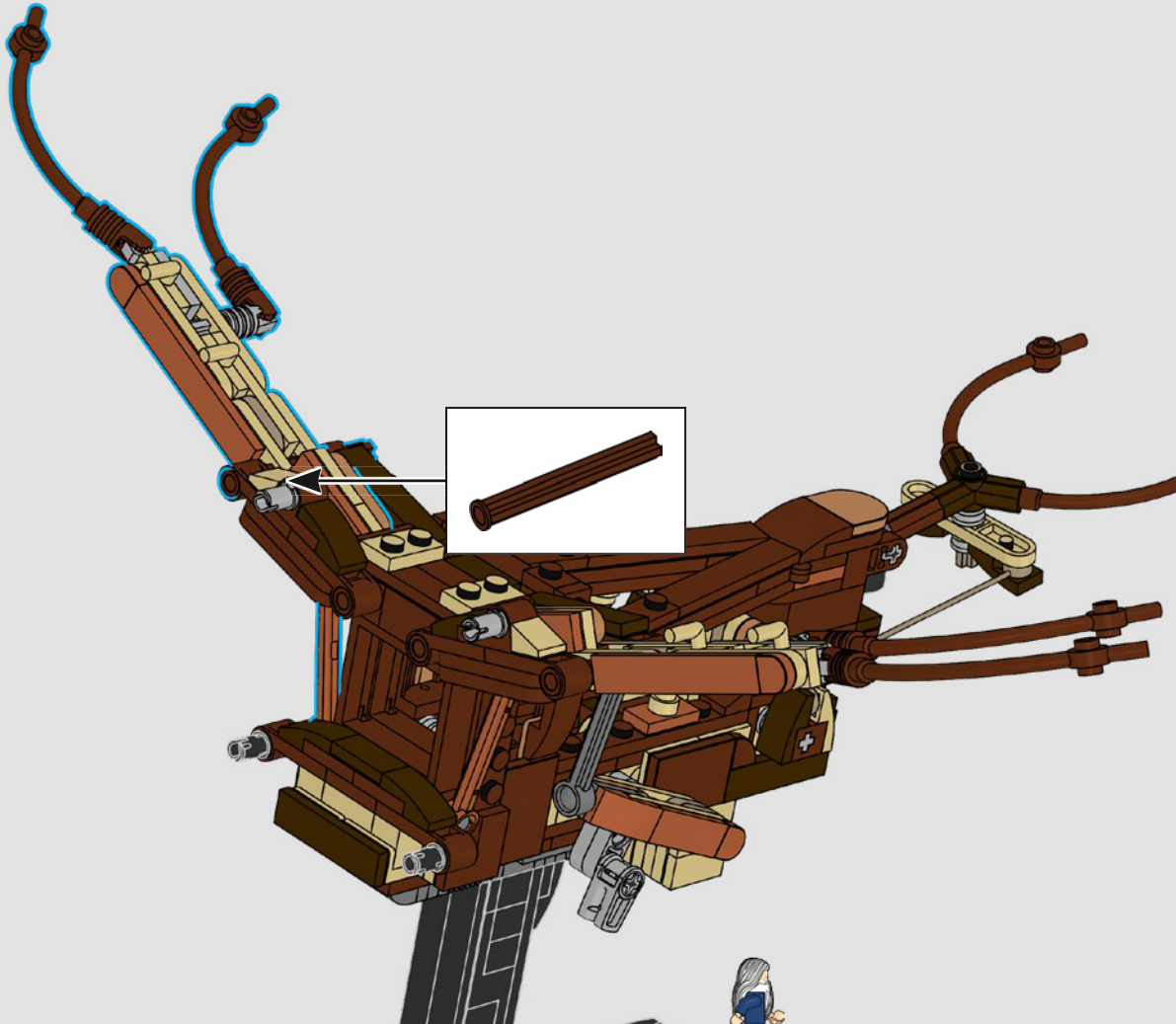


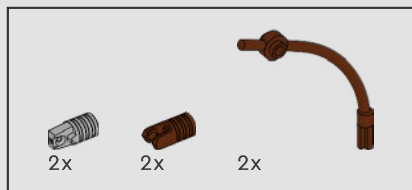
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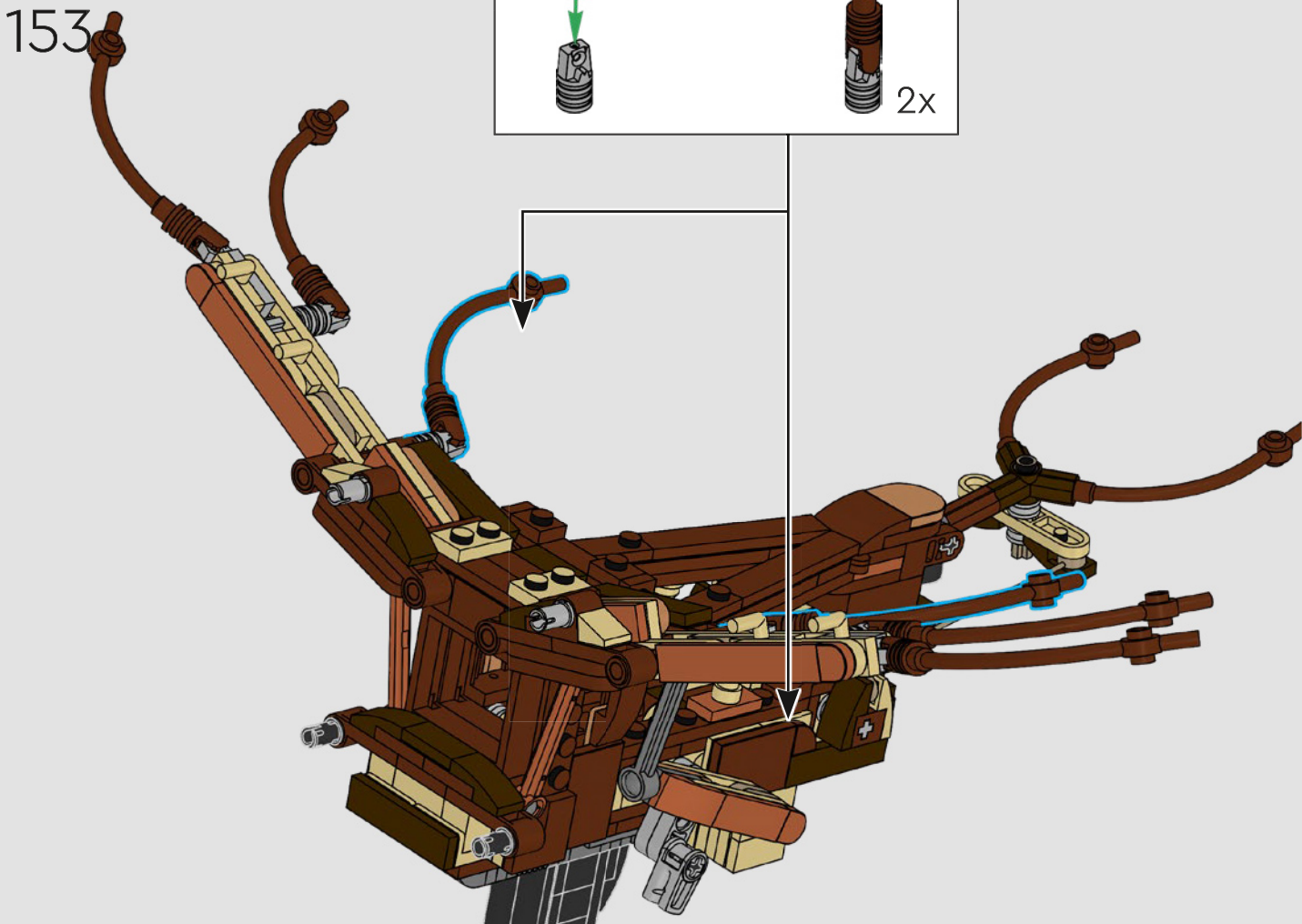
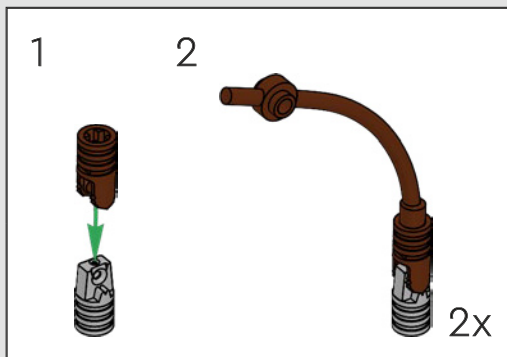


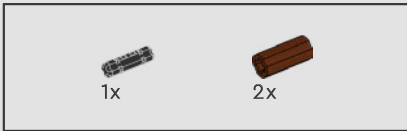
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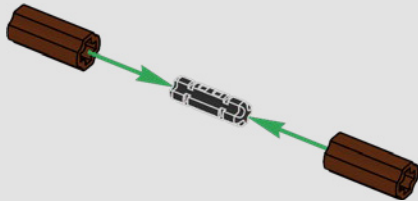


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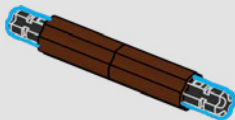




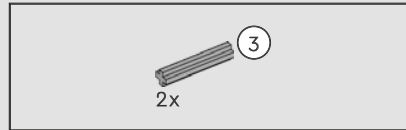
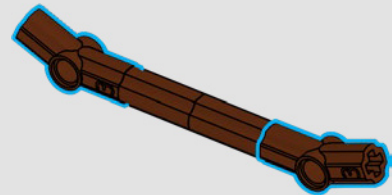
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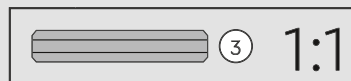
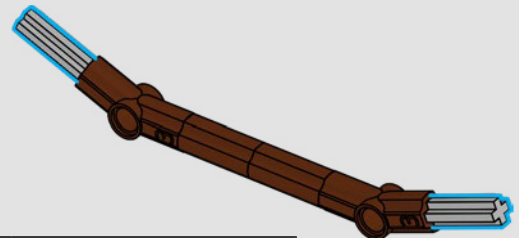
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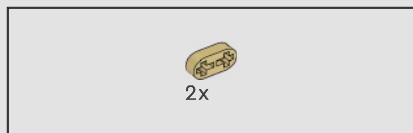


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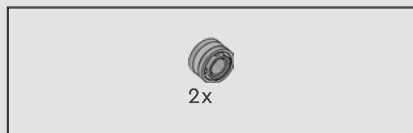
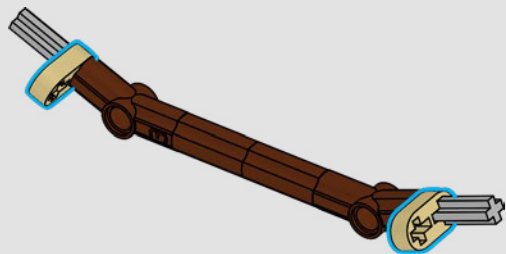


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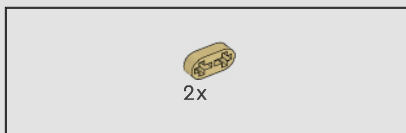
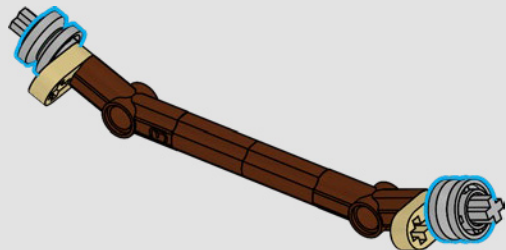




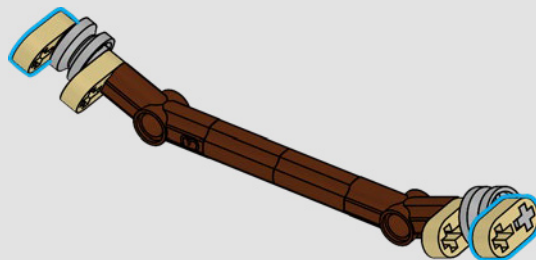
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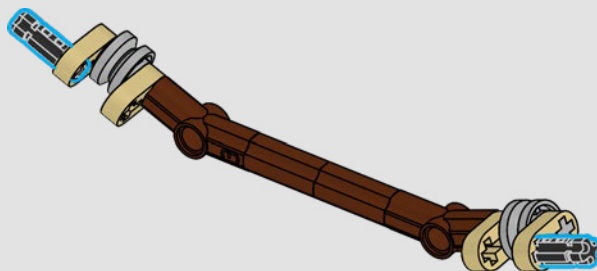
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160



161



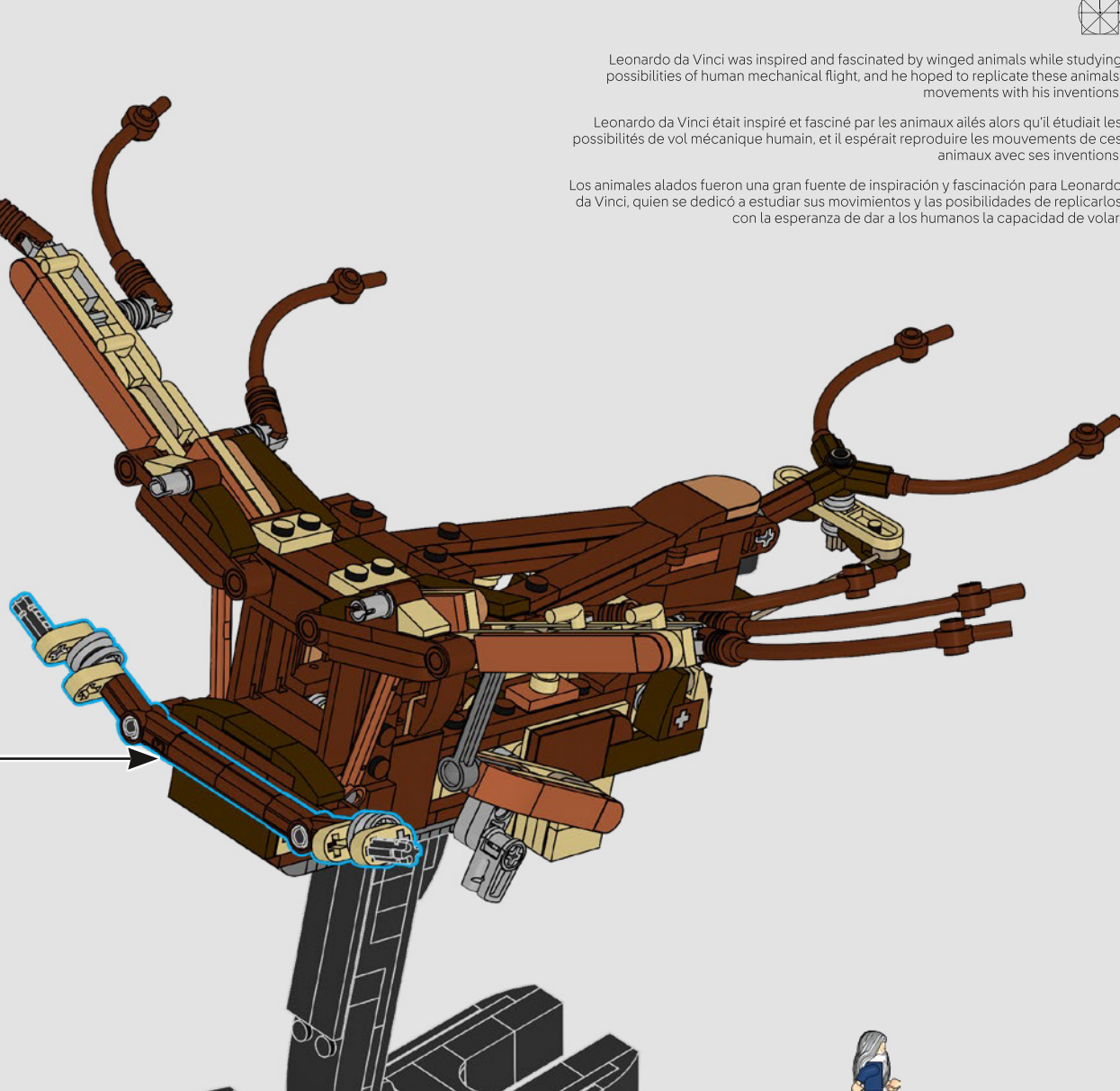


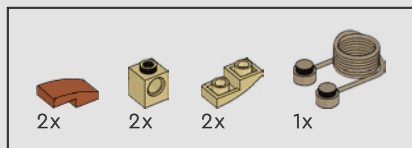
Leonardo da Vinci was inspired and fascinated by winged animals while studying possibilities of human mechanical flight, and he hoped to replicate these animals' movements with his inventions.

Leonardo da Vinci était inspiré et fasciné par les animaux ailés alors qu'il étudiait les possibilités de vol mécanique humain, et il espérait reproduire les mouvements de ces animaux avec ses inventions.

Los animales alados fueron una gran fuente de inspiración y fascinación para Leonardo da Vinci, quien se dedicó a estudiar sus movimientos y las posibilidades de replicarlos con la esperanza de dar a los humanos la capacidad de volar.

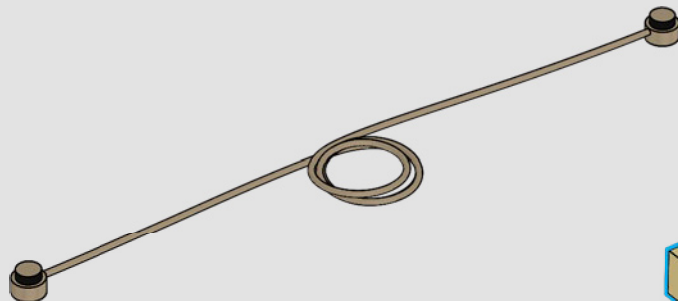
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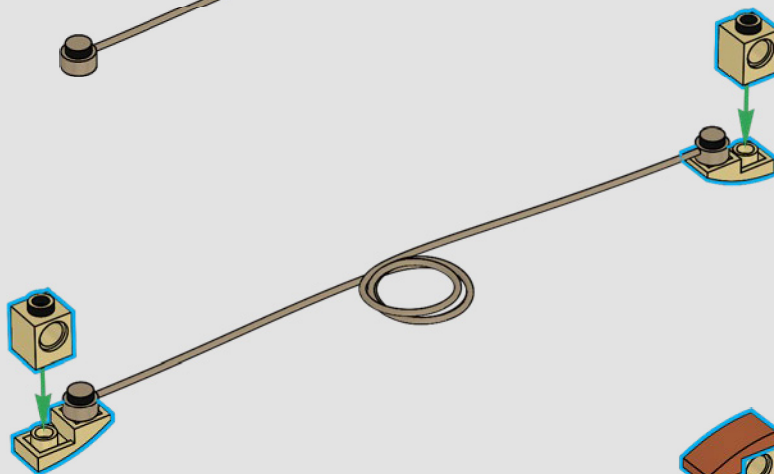


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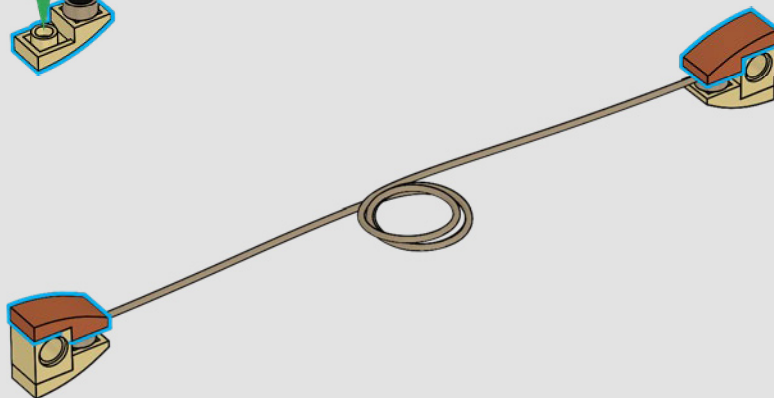
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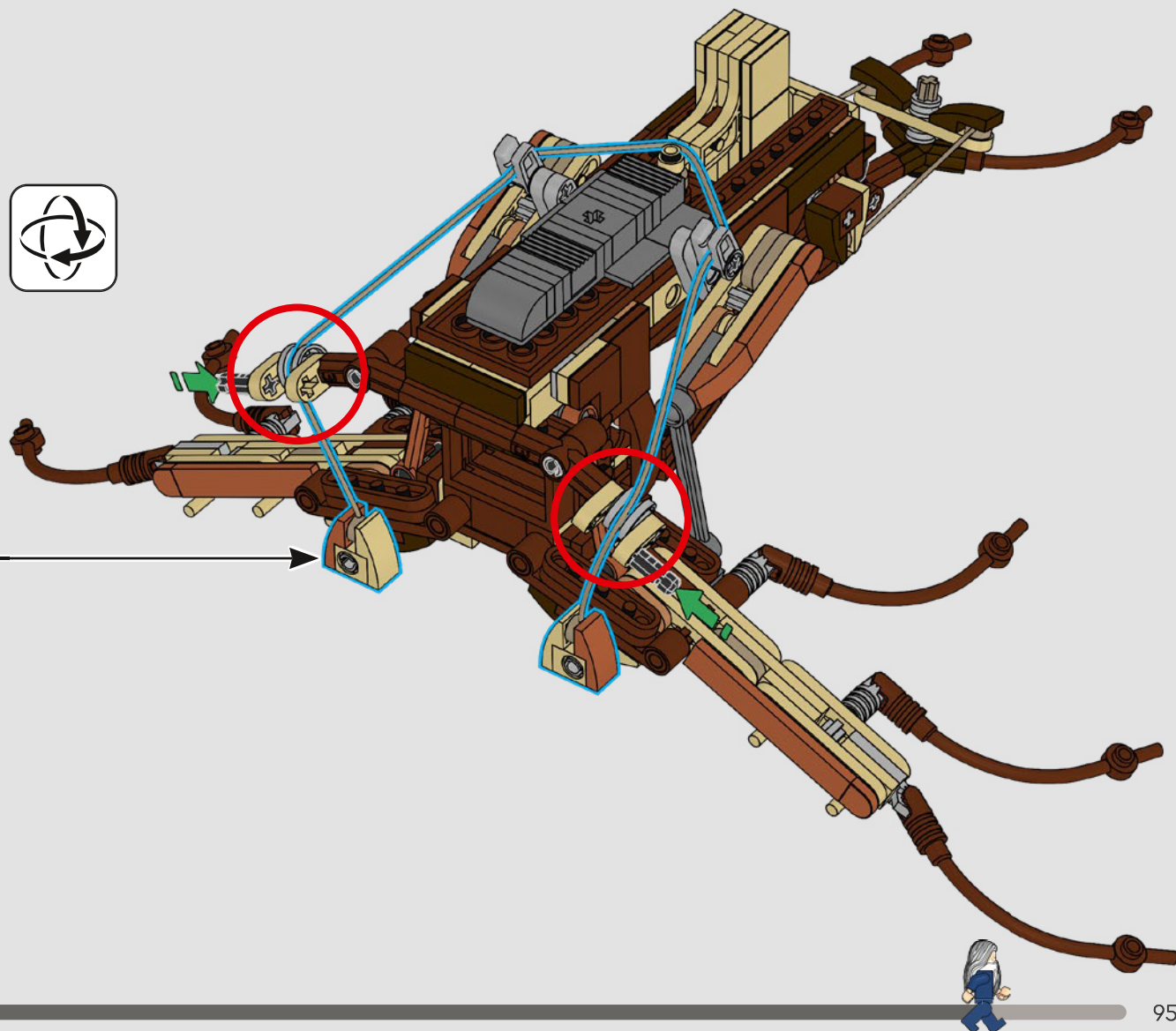
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3

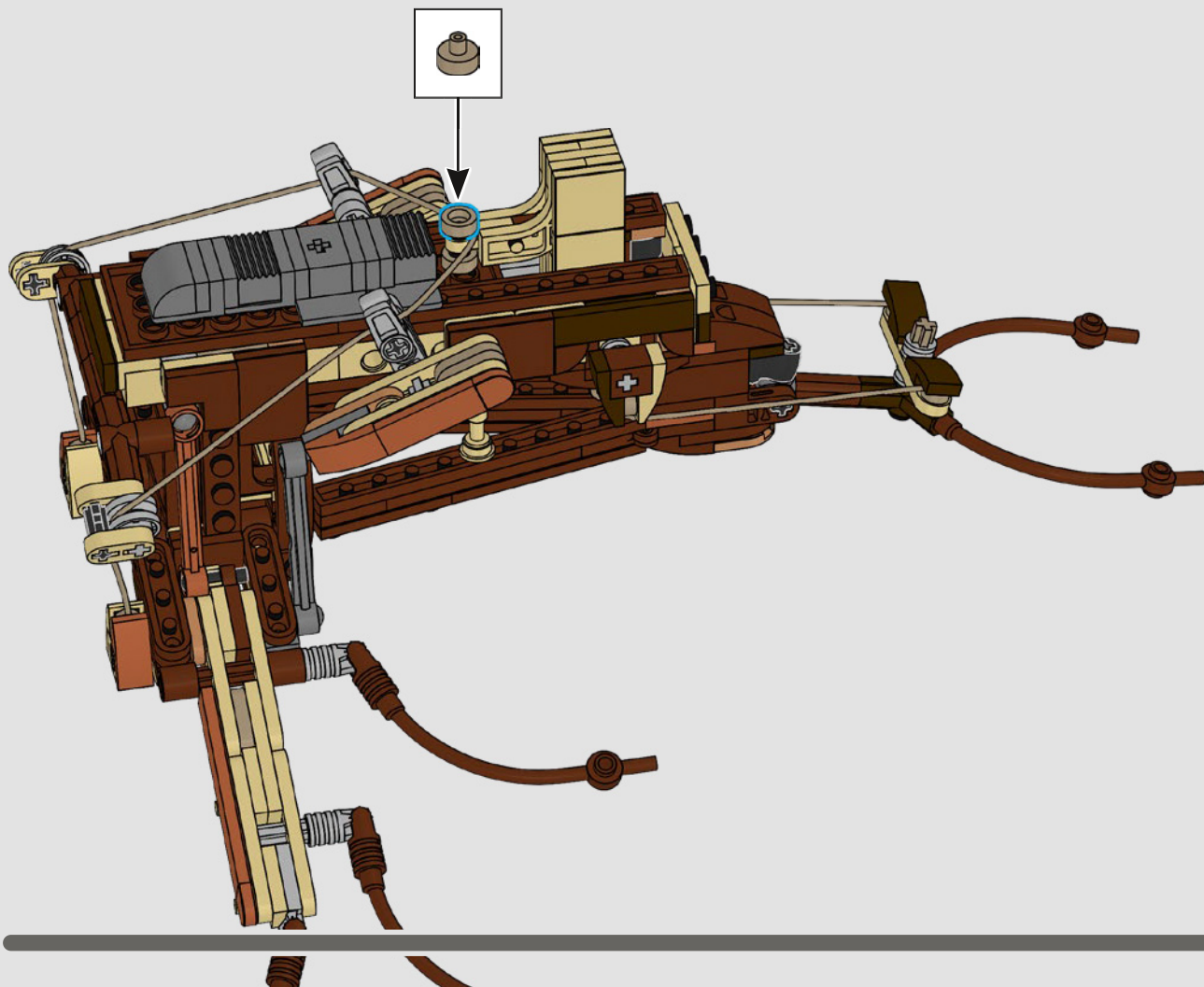




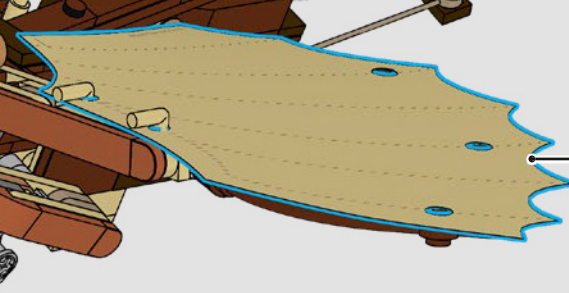
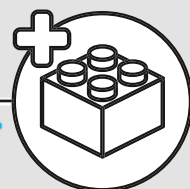
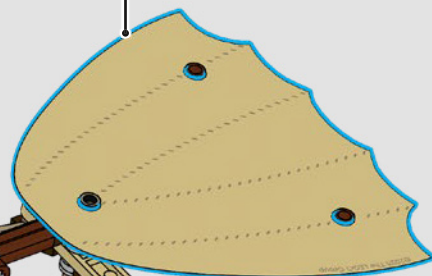
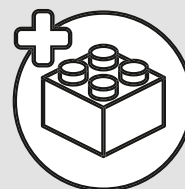
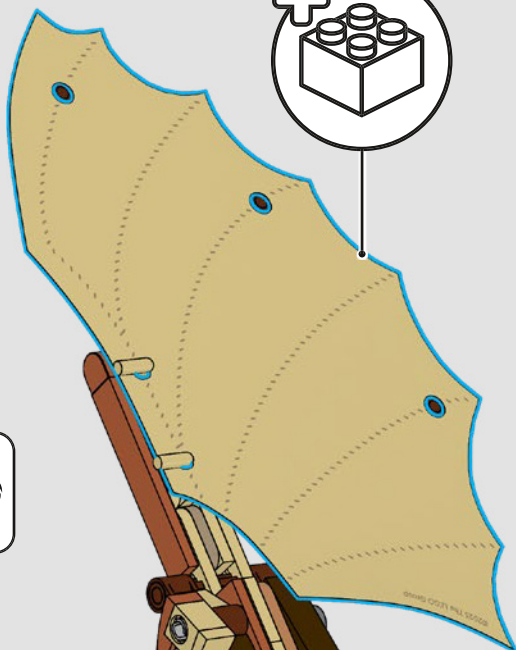
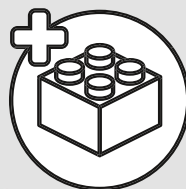


1x

164



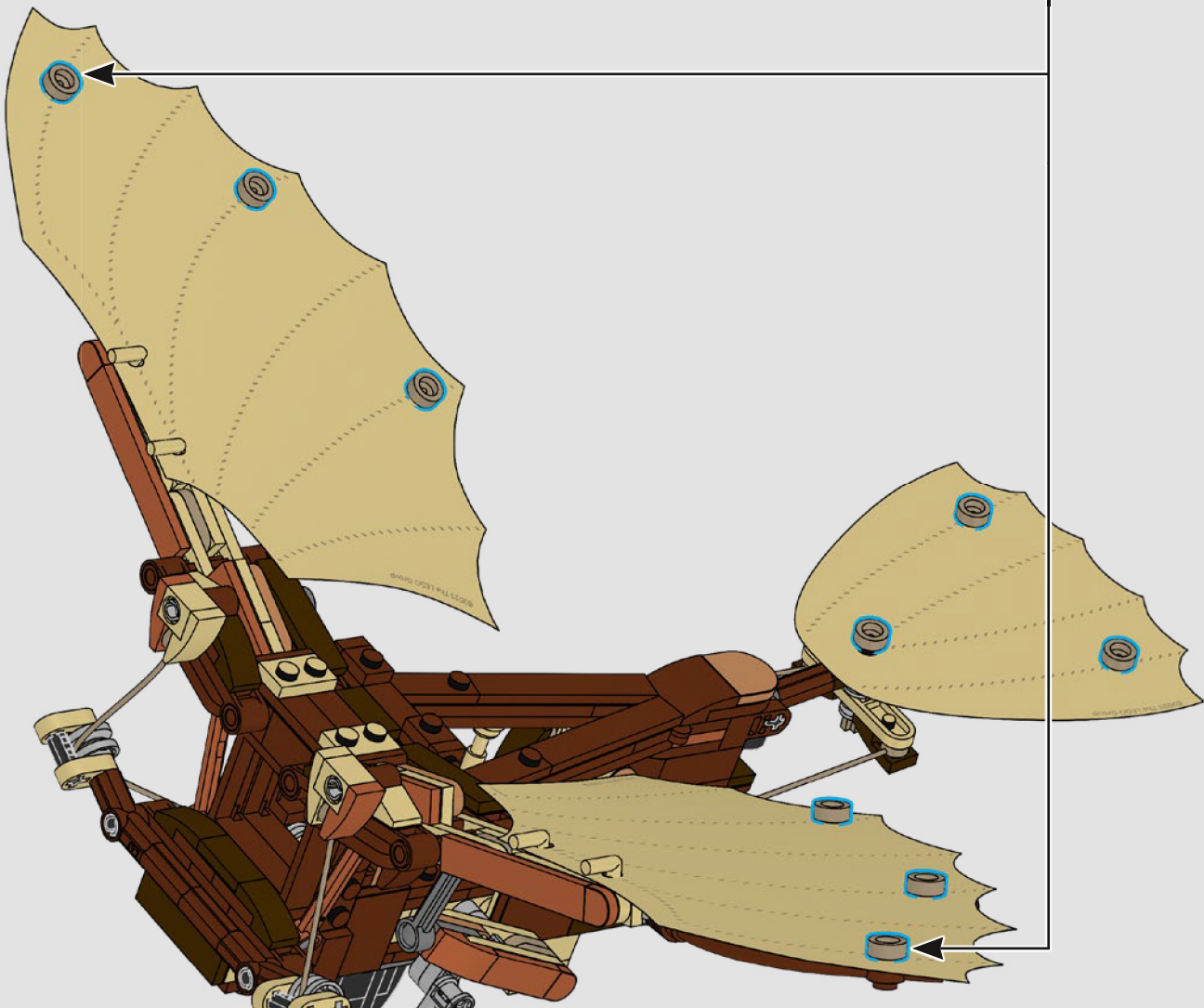
165



9x

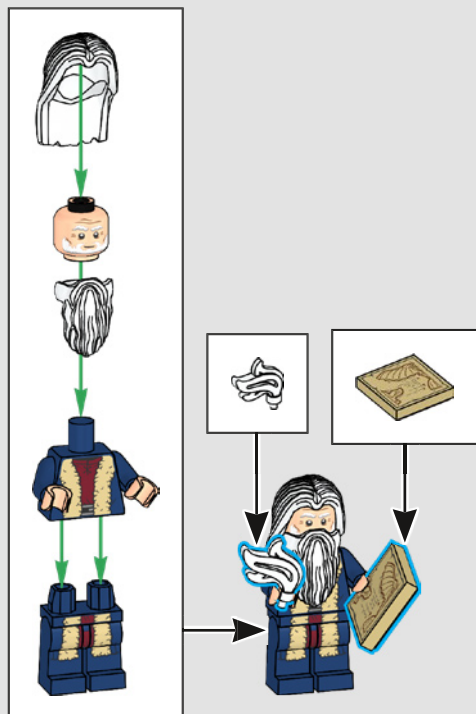
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166





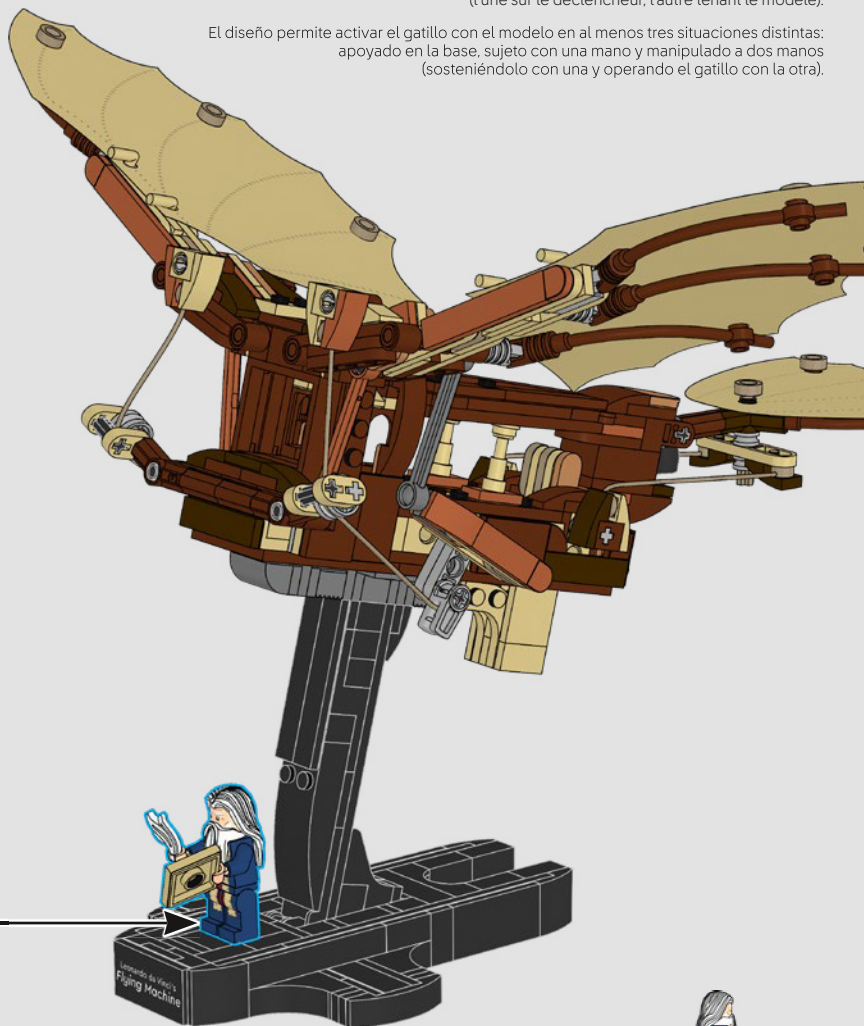
167



The model was designed so that the trigger can be activated in at least three different ways – on the stand, while held in one hand, and while held with two hands (one on the trigger, the other one holding the model).

Le modèle a été conçu de manière à ce que le déclencheur puisse être activé d'au moins trois manières différentes : en appuyant sur le support, en le tenant d'une main et en le tenant des deux mains (l'une sur le déclencheur, l'autre tenant le modèle).

El diseño permite activar el gatillo con el modelo en al menos tres situaciones distintas: apoyado en la base, sujeto con una mano y manipulado a dos manos (sosteniéndolo con una y operando el gatillo con la otra).

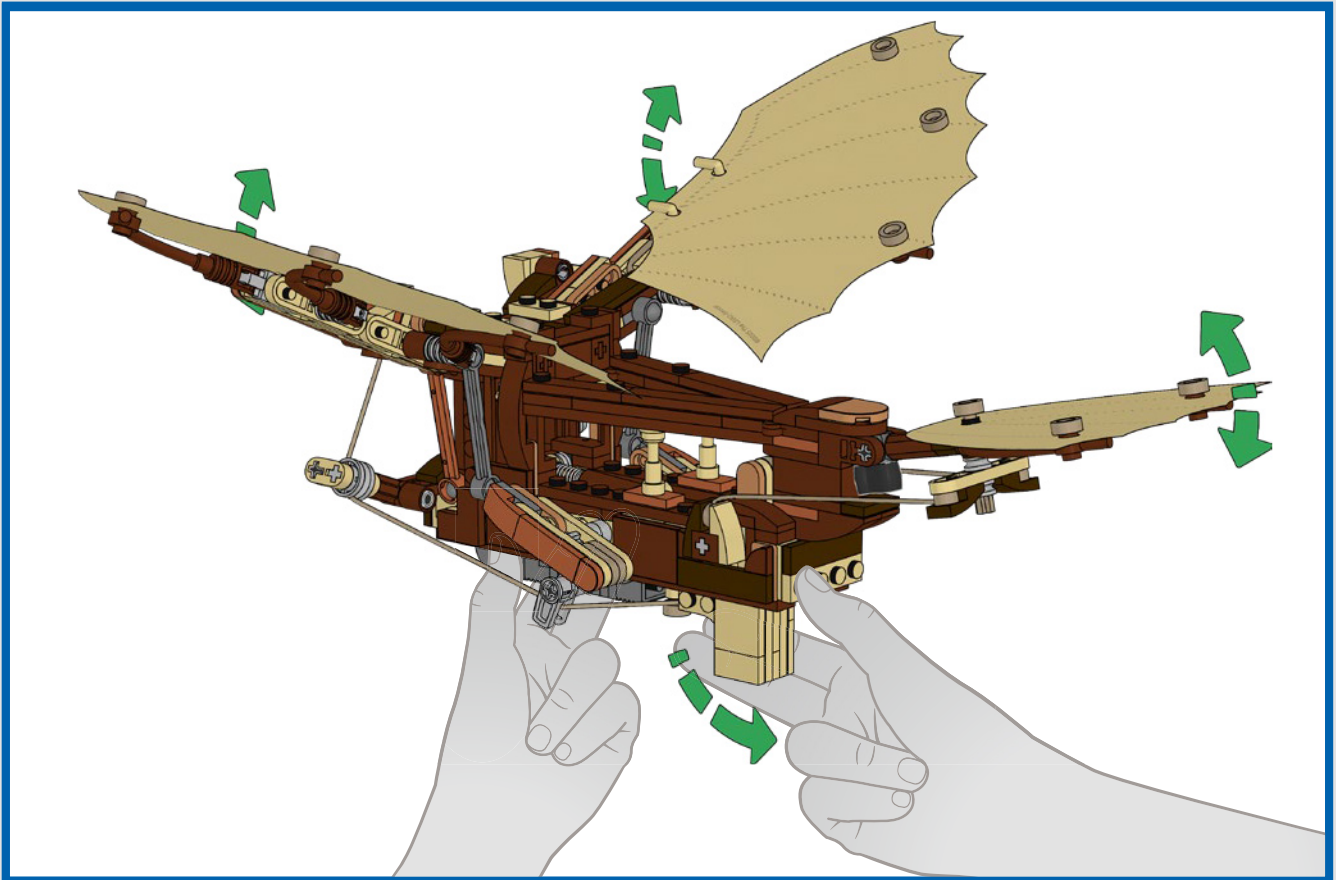




One of the design challenges was to figure out where to place the trigger for the flapping function so that builders' hands don't interfere with any parts of the mechanism or strings.

L'un des défis de la conception a été de trouver l'endroit où placer le déclencheur de la fonction de battement afin que les mains des constructeurs n'interfèrent pas avec les pièces du mécanisme ou les cordes.

Uno de los desafíos del diseño fue decidir dónde colocar el gatillo de la función de aleteo a fin de que las manos del constructor no interfirieran con ninguna parte del mecanismo ni con los cordones.



2x 6424674  
2x 654126  
10x 302426  
2x 6509664  
9x 4109810  
2x 6279875  
1x 4198367  
2x 6114987  
7x 6178922  
4x 302326  
8x 306926  
10x 6275806  
2x 6192309  
2x 6147050

6x 302226  
3x 300326  
4x 6053077  
3x 6469445  
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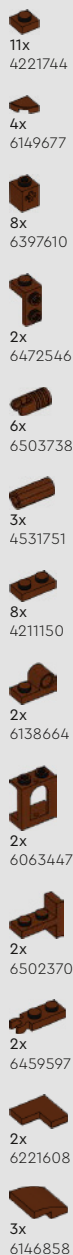
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1x 244526  
1x 6523326  
1x 6530674

6x 6380634  
3x 6507790  
1x 6513939  
4x 6492538  
3x 4206482  
1x 4142865  
2x 6129995  
6x 6443061  
1x 6167923  
4x 4516055  
2x 4179771  
6x 6376461  
2x 6352222  
1x 6281995  
15x 4113917  
2x 4523145

4x 6261357  
4x 6251252  
1x 4114026  
2x 6060850  
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8x 6117975  
2x 4114084  
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1x 6523327  
2x 4121921  
1x 4159739  
2x 4234365  
6x 4113233

2x 6397561  
15x 6311104  
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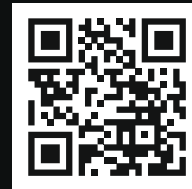




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