

INSTRUX™

166
Piece



**Proudly Made
in the U.S.A**

Getting started with Lux™

Here are a few of the things you'll want to know about Lux™ before getting started. For more ideas, or if you prefer to watch a "how-to" video, please visit our website at www.luxblox.com.

Dimples. The dimples are the rectangle-shaped cavities on the egg-shaped connector. One thing to keep in mind when building with Lux™ is to be consistent with the direction your dimples are facing. Make sure all the dimples are facing the same direction - either all 'in' or all 'out', so they will all connect to each other. Otherwise, you may need to go back and remake parts.



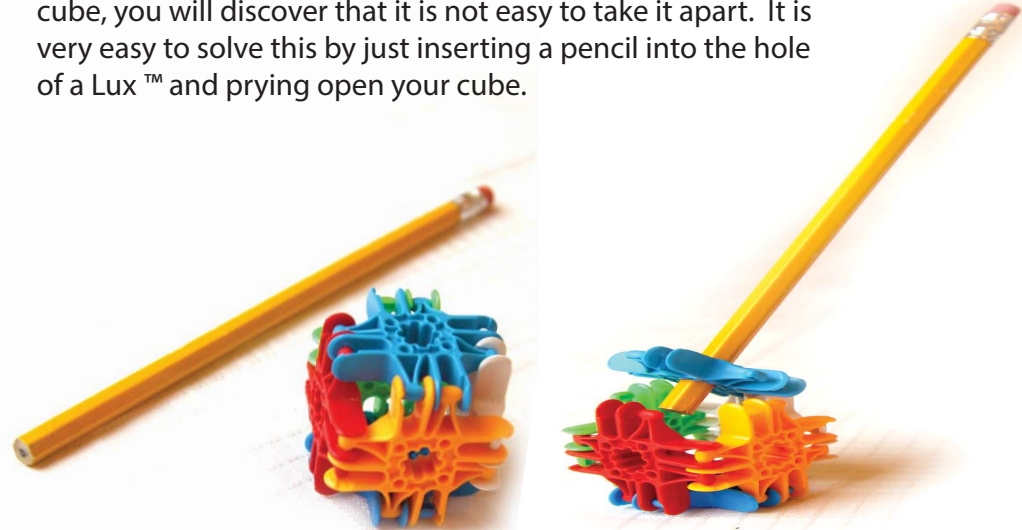
Dimple

The egg goes in the nest™. When connecting Lux™, simply push the connectors together so each egg-shaped part goes into each U-shaped "nest" and the Lux™ will snap into place. Once it snaps, it becomes a strong hinge with 240 degrees of rotation.



Go to WWW.LUXBLOX.COM to learn more and see what others are building with Lux™!

Unsticking your cube. If you make a Lux™ cube, you will discover that it is not easy to take it apart. It is very easy to solve this by just inserting a pencil into the hole of a Lux™ and prying open your cube.



What is the hole in the middle for?

Lux™ was made to be a tool for creativity and invention. The star-shaped hole was designed to fit two craft sticks side by side so you can expand your Lux™ creations with the addition of these inexpensive items. Craft sticks are also the ideal tool when building with Lux™ because you can use them to hold the Lux™ in place as you snap on other parts and not crush what you have already made. The hole will also allow a pencil to rotate freely, which makes a great axle in machines and vehicles. 1/4 inch diameter wooden dowel rods, which you can find in craft and home improvement stores, also make great axles. 5/16 inch diameter rods will also make great struts for adding structure to your creations. The smaller four holes are for wires, toothpicks, or other similar sized objects.



LUX™ MOTION!

One of the most exciting features of Lux™ is that you can make things that move! And not just motions you may be used to seeing, but motions that sometimes we only see through microscopes or in things like smoke, water, and in living 'machines'.

Here are a few creations that will get you started building some of nature's coolest motions. First is the **Centrifugon™**, which demonstrates centrifugal motion; next is the **Flux™** or **Capillarion™**, which demonstrates precession and capillary pumping action; then there is the **Gimbalgus™**, which demonstrates gimbal action; the **Flex-cube™**, which demonstrates the beauty of a collapsing and expanding cube; the **Arthropodion™**, which shows the amazing diversity of segmentation in the animal world; and the **Teetotum**, a spinning top which demonstrates the power of angular momentum.

The Centrifugon™ 25 pieces

The Centrifugon™ demonstrates centrifugal force. As you spin the spindle (pencil or dowel rod) between your fingers, the flex arms are free to spin around. As they do, they go up until they have risen 90 degrees from the spindle. To make a plus-shaped Centrifugon™, make a chain of Lux™ that intersects evenly through a center Lux™ (like the red Lux™ in the illustration below). For the spindle you can use either a pencil or a dowel rod. The eraser ought to be thick enough to fit tightly within the center Lux™. If not, use a little tape to wrap around the shaft to thicken the diameter to get a good tight fit. On the ends of each of the plus signs are triangular prisms made of three Lux™ each. The added weight assures that the arms will fall down nicely when the spindle slows down.



Lux™ Flux™



27 Pieces

1. Make three triangular prisms, making sure that all the Lux™ have the dimples facing to the inside of their prisms.



2. Make six strips of three Lux™ each.

3. Connect the three strips to the first prism.

4. Connect the strips to the second prism.

5. Repeat by connecting the remaining three strips to the second prism.

6. Connect the strips to the third prism.

7. Grab the Lux™Flux™ by the first and third prism then push and pull to your heart's delight.

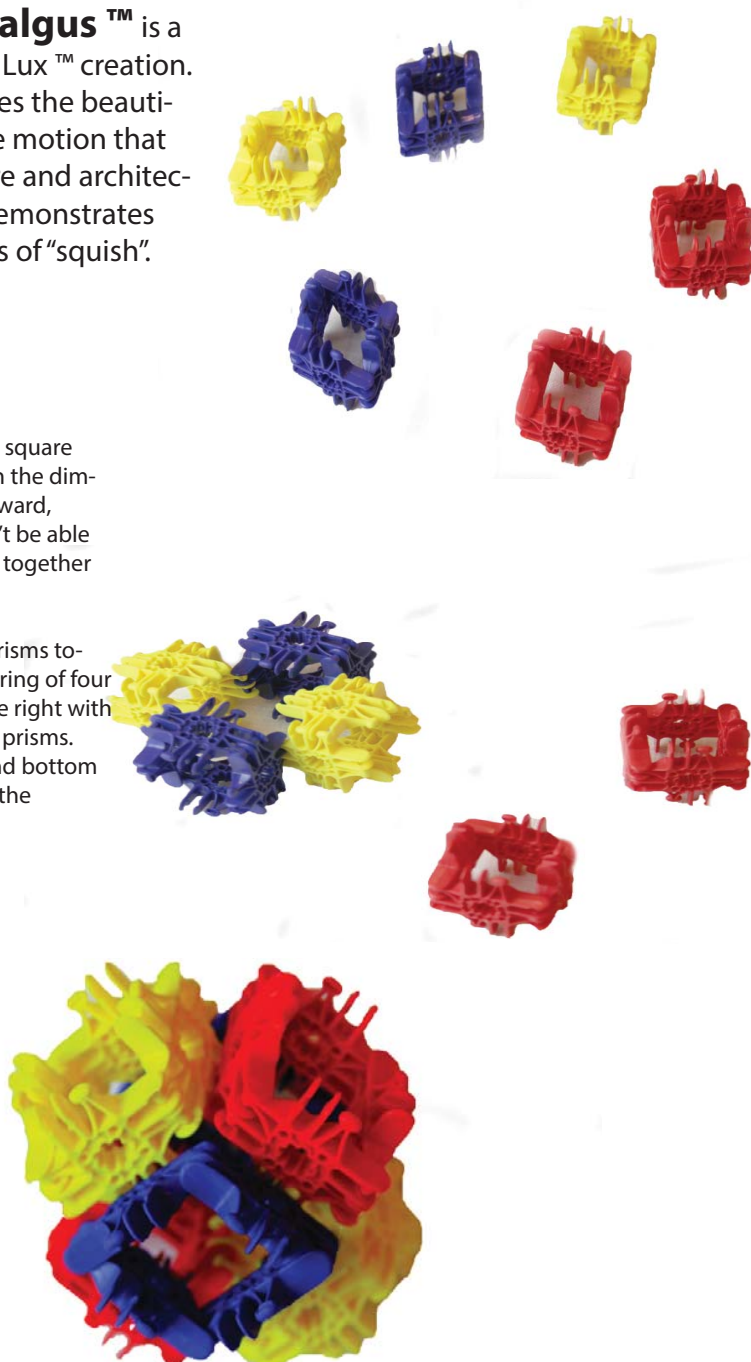


The Gimbalgus™ is a very amusing Lux™ creation. It demonstrates the beautiful gimbal-like motion that exists in nature and architecture. It also demonstrates the mechanics of “squish”.

24 Pieces

Begin by making six square prisms. Make certain the dimples are all facing inward, otherwise they won't be able to connect properly together in this model.

Next, connect the prisms together. First make a ring of four prisms as seen to the right with the blue and yellow prisms. Then add the top and bottom prisms to complete the Gimbalgus™.



Arthropodion™

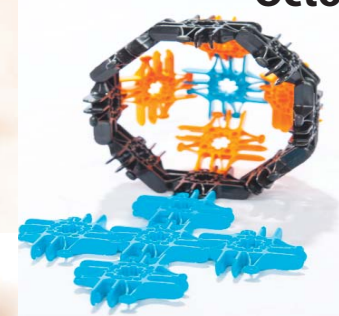
When making a moving hinge for the jointed animal, make sure to only connect one hinge. This allows motion.



To make segmented animals like the Arthropodion™, make a Lux™ Octoball™ for the body and add the segmented legs made of triangular prisms. **68 pieces**



Octoball™



The Lux™ Flex-Cube™

30 Pieces

To make the Flex-Cube™, make six “plus signs” out of five Lux™ each. Then arrange them in the cross configuration (A) as shown below. Snap the six plus signs into a cube/sphere shape. The structure will be squishy!



The Lux™ Teetotum

A teetotum (or T-totum), is a form of gambling spinning top that is known across Europe from Roman times. It has a polygonal body - originally four-sided - marked with letters or numbers, which indicate the result of each spin. The name originates from Latin Totum meaning ‘all’ which was marked by a T on one of the four sides and indicated that the winning player could take all the played tokens.

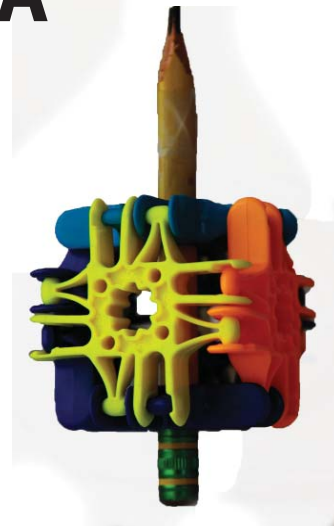
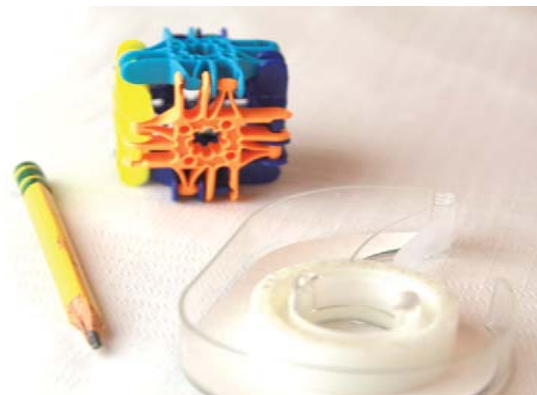
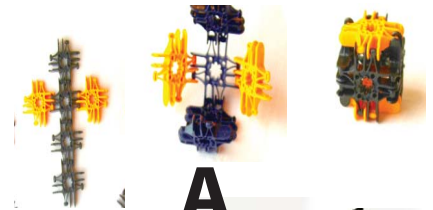
The teetotum survives today as dreidel, a Jewish game played during Hanukkah and as the Perinola, a game played in many Latin American countries. Some modern teetotums have six or eight sides, and are used in commercial board games in place of dice. The original 1860 version of The Game of Life used a teetotum in order to avoid the die’s association with gambling.



6 Pieces

Use either a four inch long pencil or 1/4 inch diameter dowel rod. You may have to add some tape to the pencil or dowel rod to make it thick enough to snugly fit into the Lux™ cube.

To make a cube, snap six Lux™ into a cross configuration and then fold them up and snap them into a cube. (A)



Dragon 166 Pieces

When making the dragon, first lay out the body and the wing base (two blue square prisms) as shown below. Make certain the dimples are facing inside when making your wing base prisms.



Square prism is base of wing

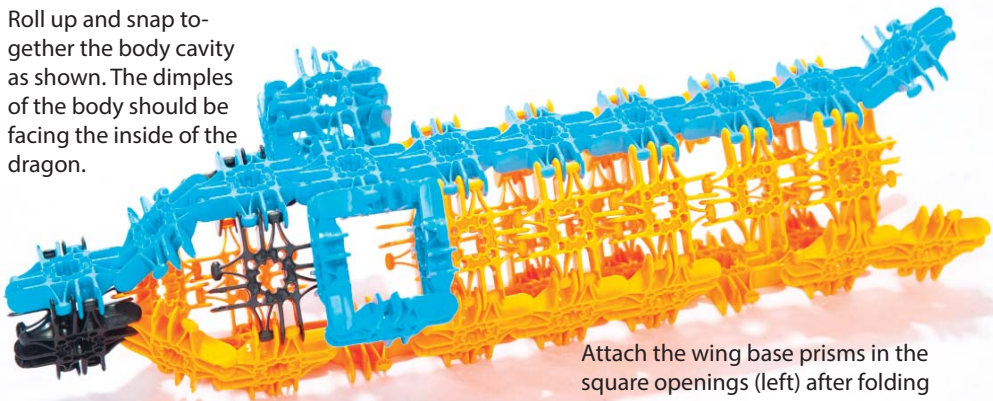
Dragon Body
(Dimple side up as shown)

Base of neck

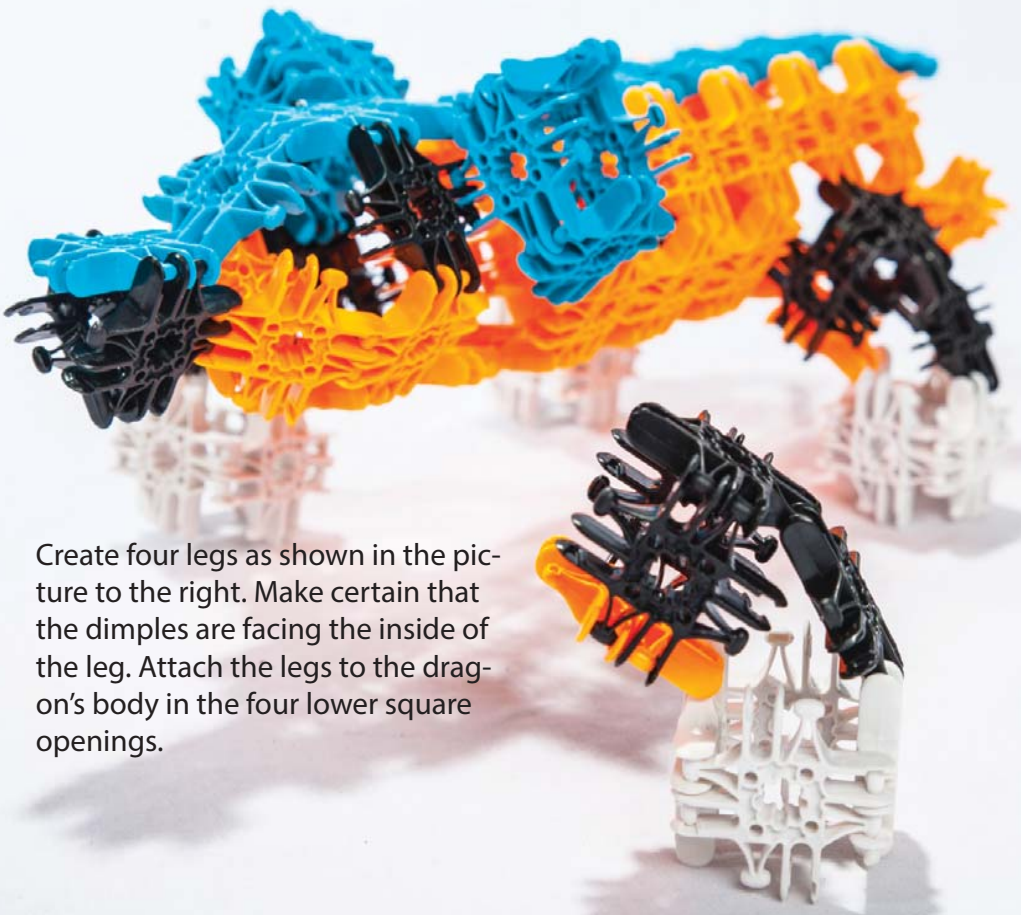
Base of tail

Square prism is base of wing

Roll up and snap together the body cavity as shown. The dimples of the body should be facing the inside of the dragon.



Attach the wing base prisms in the square openings (left) after folding up body cavity.



Create four legs as shown in the picture to the right. Make certain that the dimples are facing the inside of the leg. Attach the legs to the dragon's body in the four lower square openings.

Create wings,
neck, head,
and tail and lay
them out as
shown here.

Tail is made of six triangular
prisms attached only by one
edge for motion.

Wing 2 by 8 Lux™

Attach wings



Sword

166 pieces

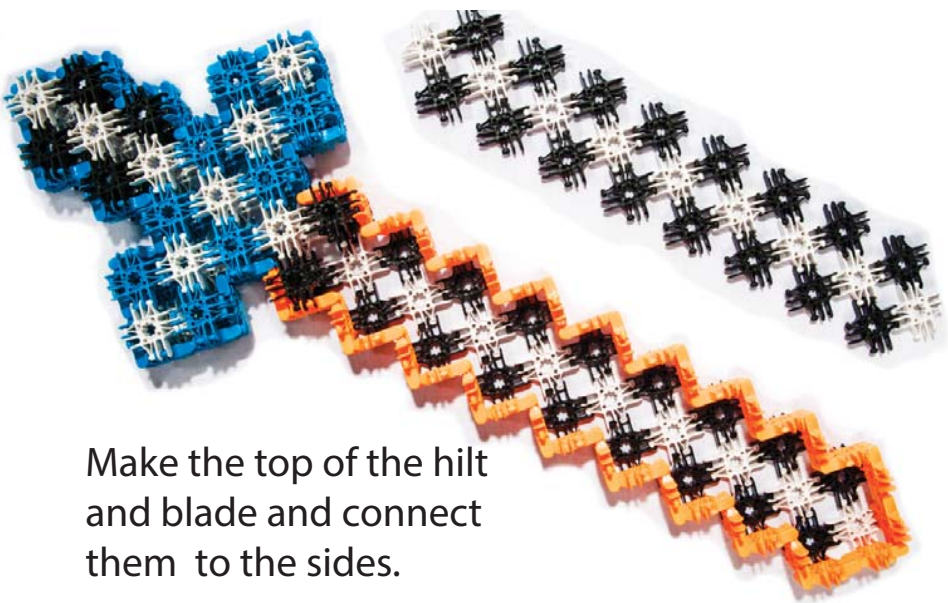
First make the hilt (A)
(handle) and cross-
guard(B) and blade
bottom (C). Then make
an upright side wall of
Lux[™] going all the way
around the connect-
ed hilt and blade. (D)

A

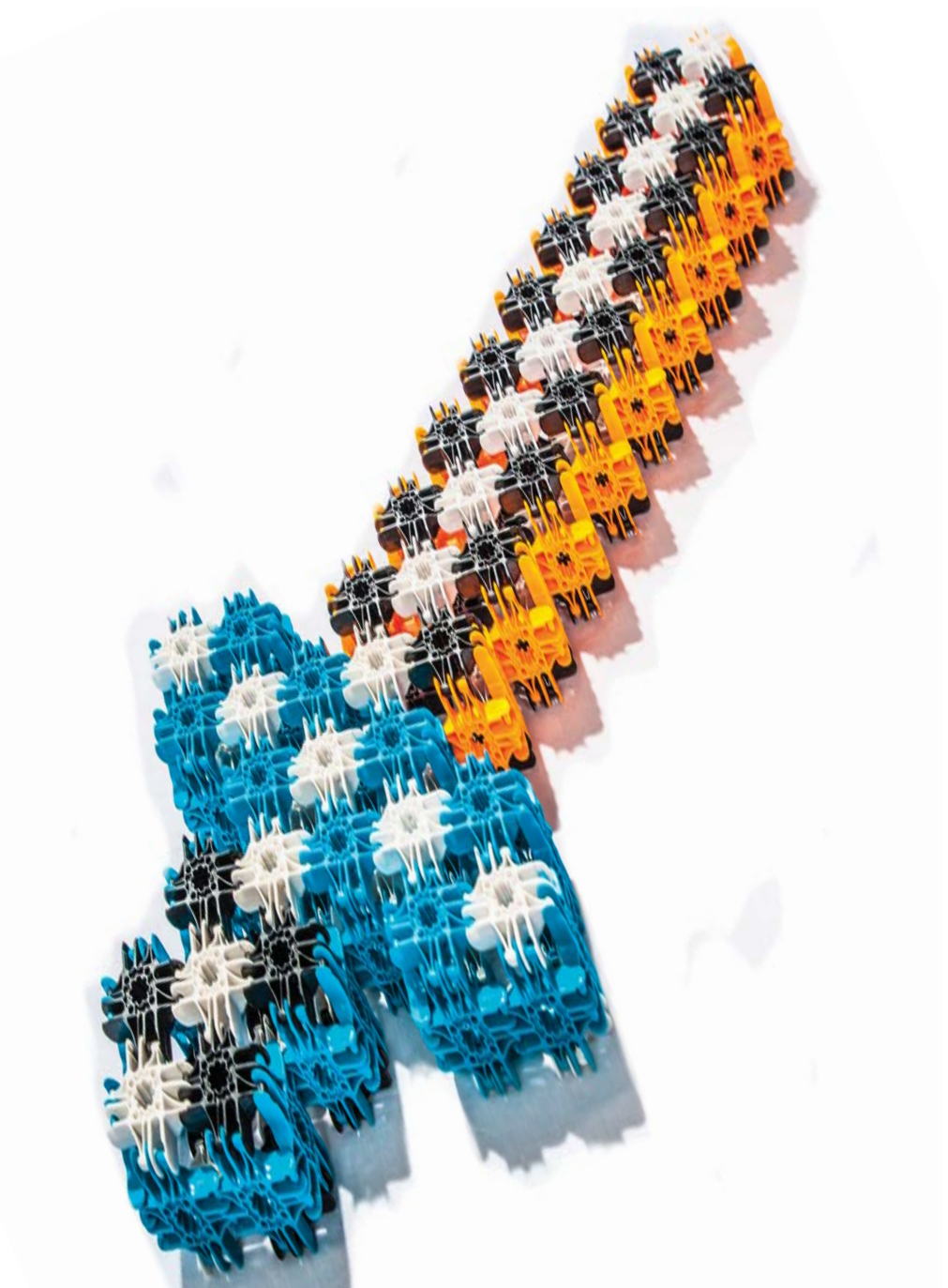
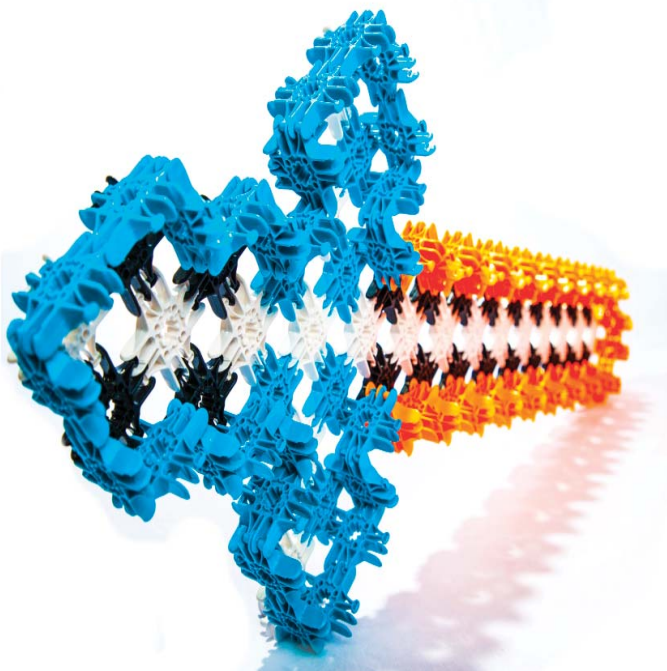
B

C

D



Make the top of the hilt and blade and connect them to the sides.

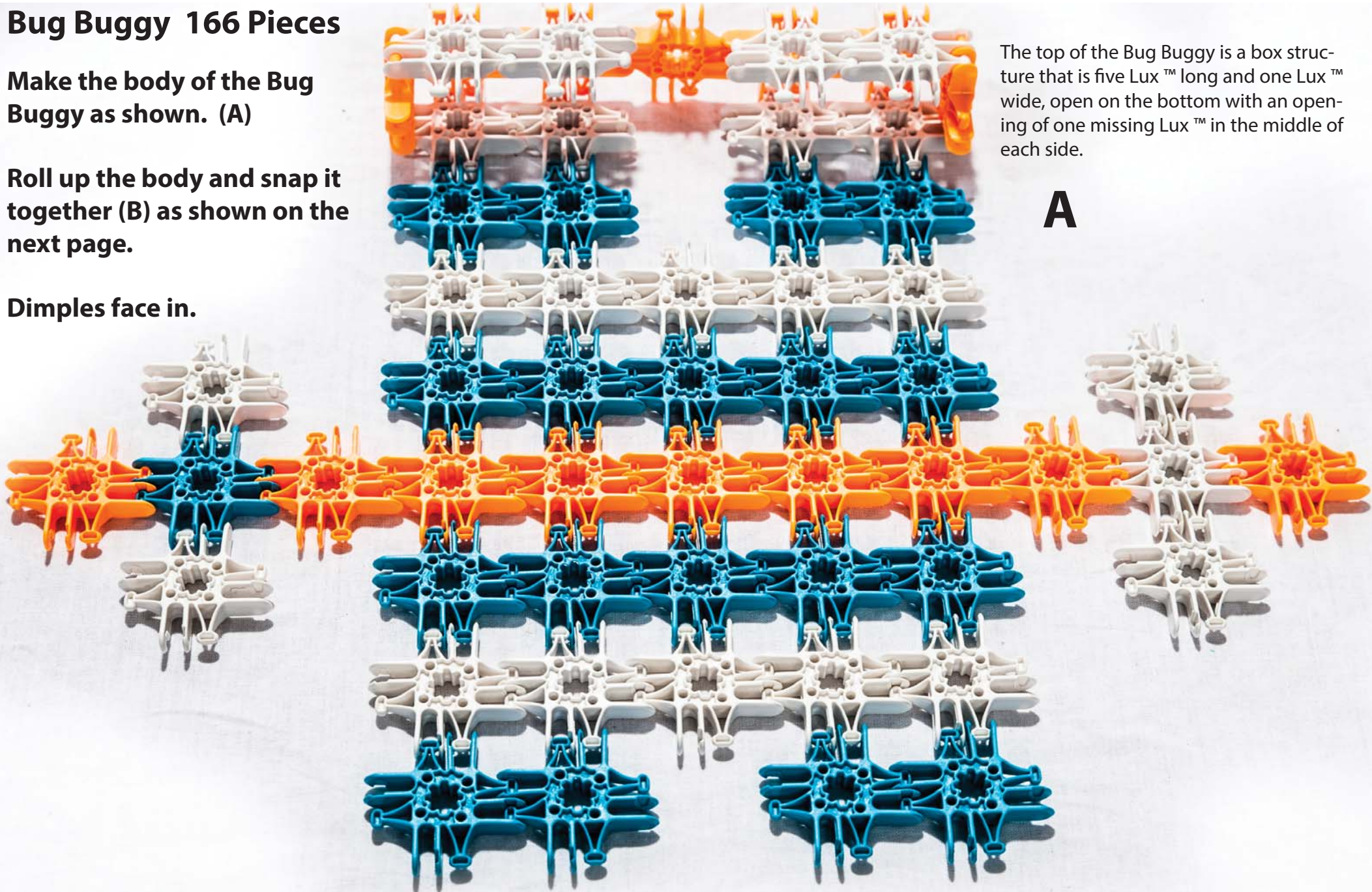


Bug Buggy 166 Pieces

Make the body of the Bug Buggy as shown. (A)

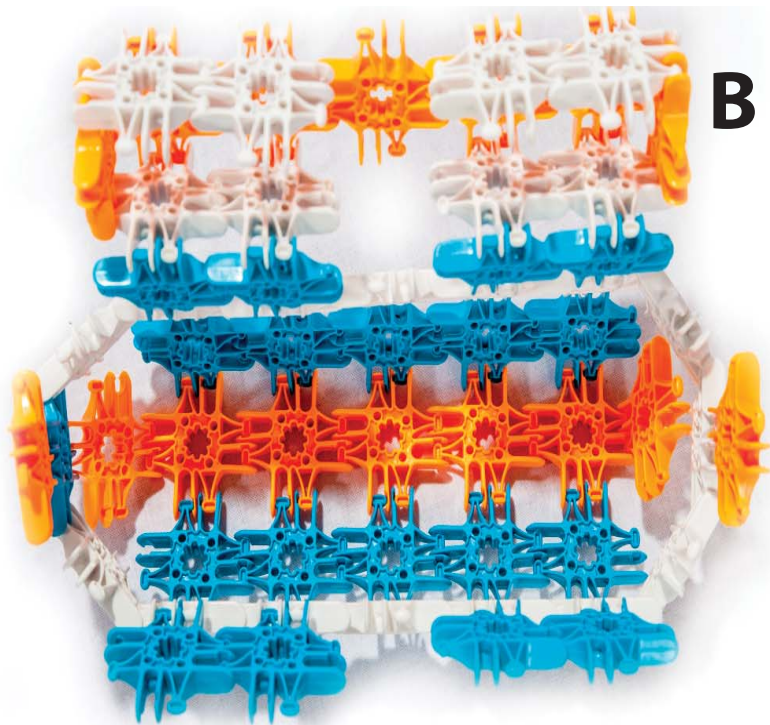
Roll up the body and snap it together (B) as shown on the next page.

Dimples face in.

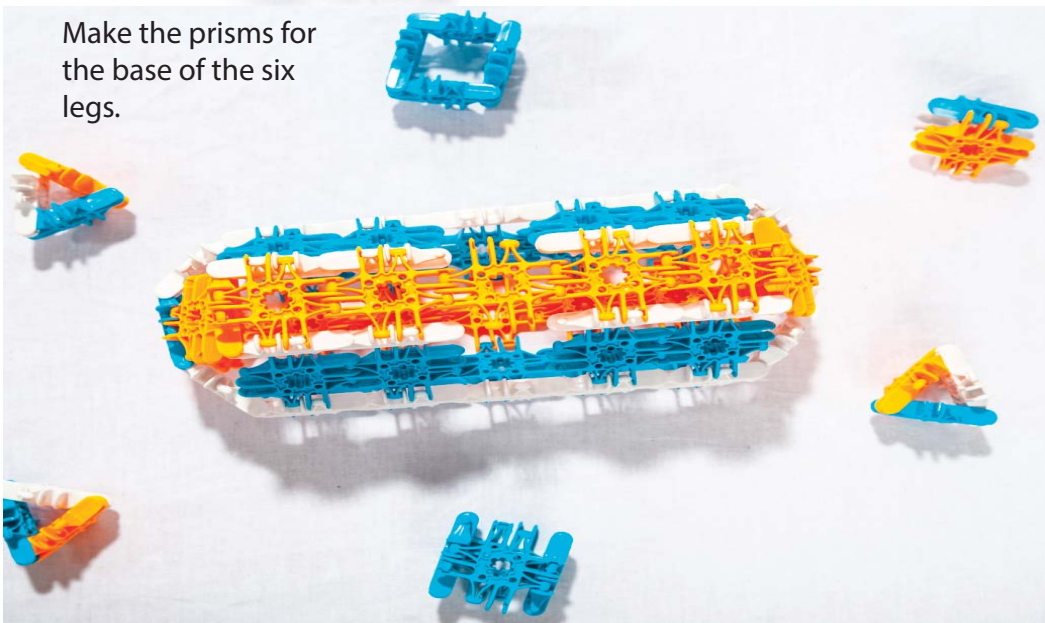


The top of the Bug Buggy is a box structure that is five Lux[™] long and one Lux[™] wide, open on the bottom with an opening of one missing Lux[™] in the middle of each side.

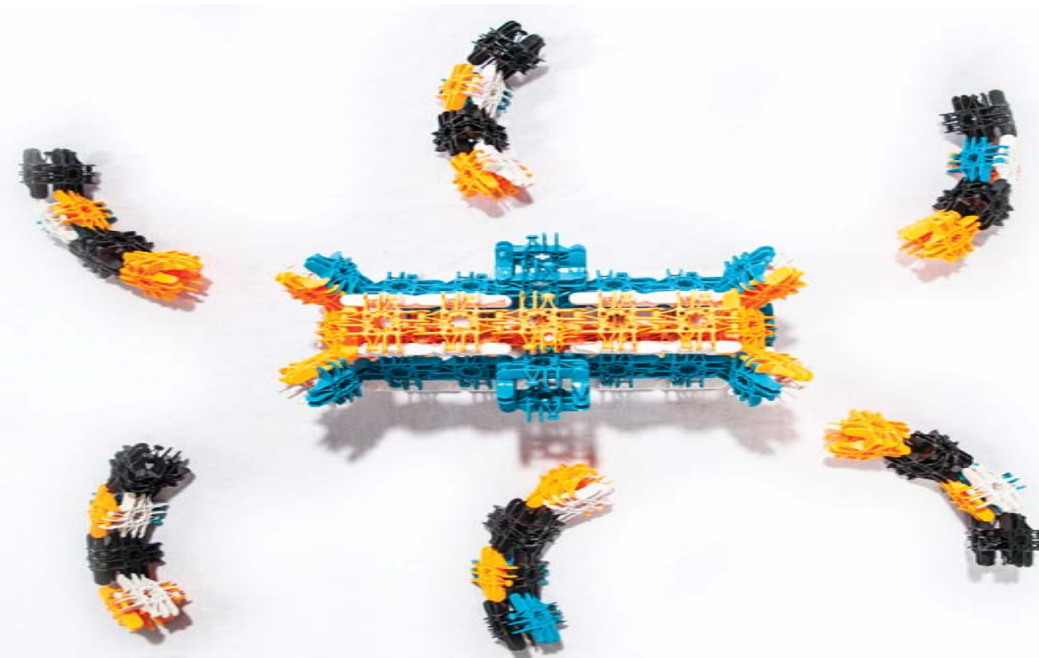
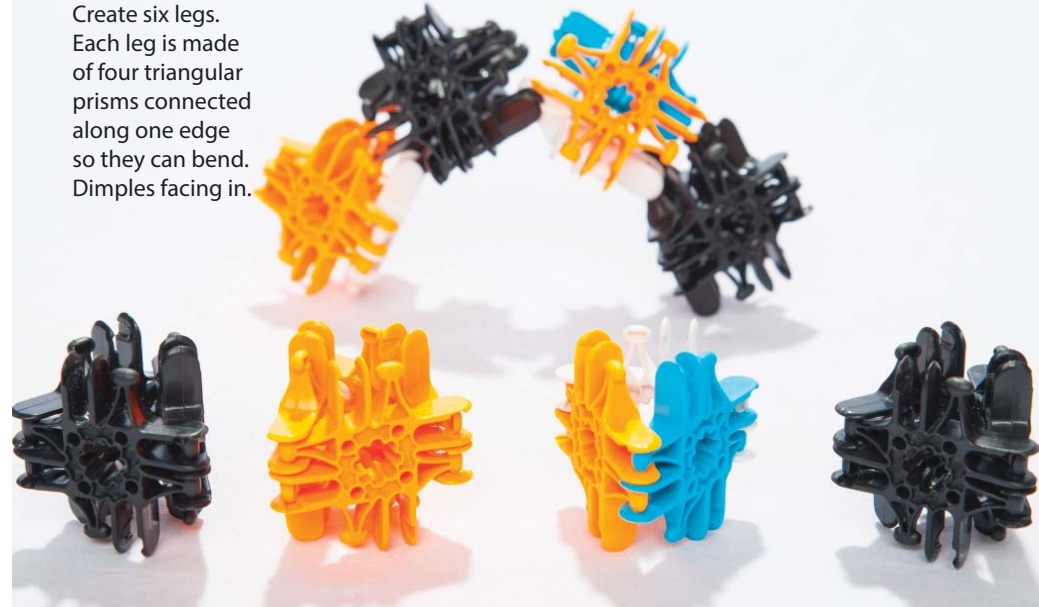
A



Make the prisms for
the base of the six
legs.



Create six legs.
Each leg is made
of four triangular
prisms connected
along one edge
so they can bend.
Dimples facing in.



Upside-down Bug Buggy!



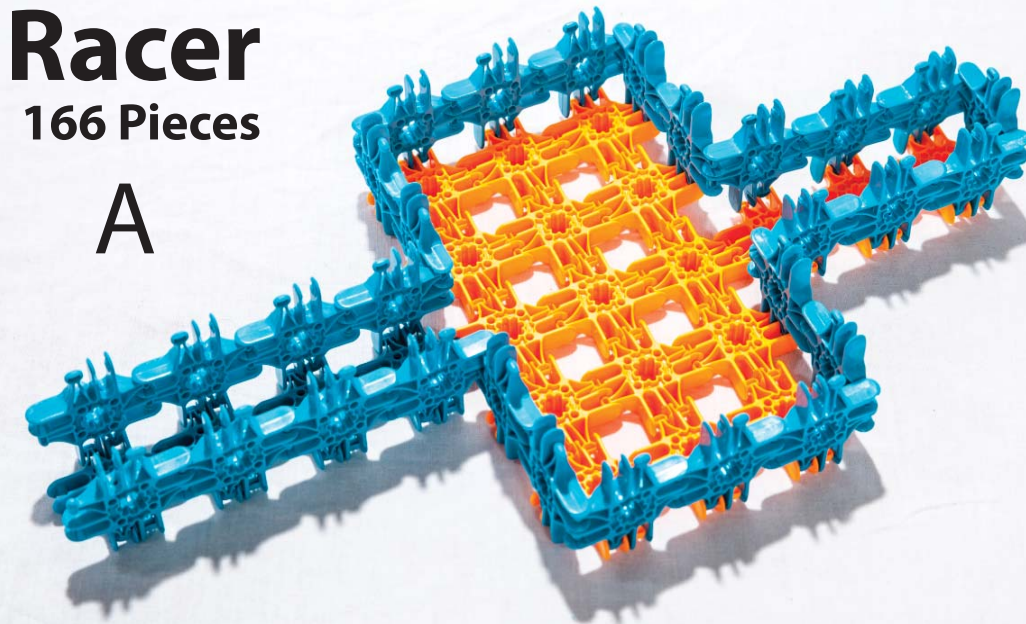
Connect the legs
to their bases.



Racer

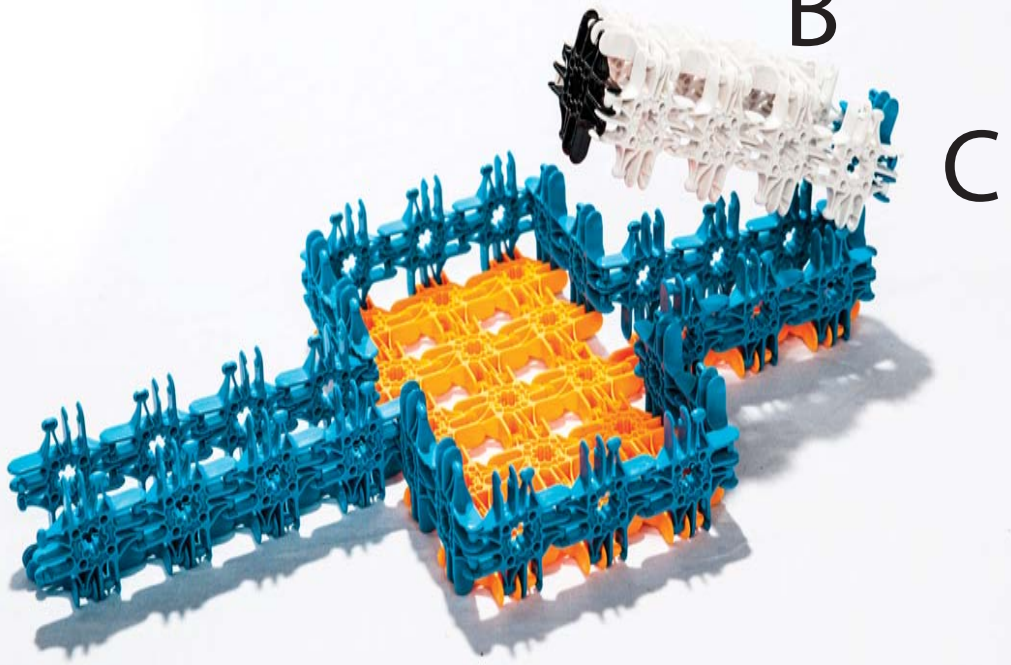
166 Pieces

A



B

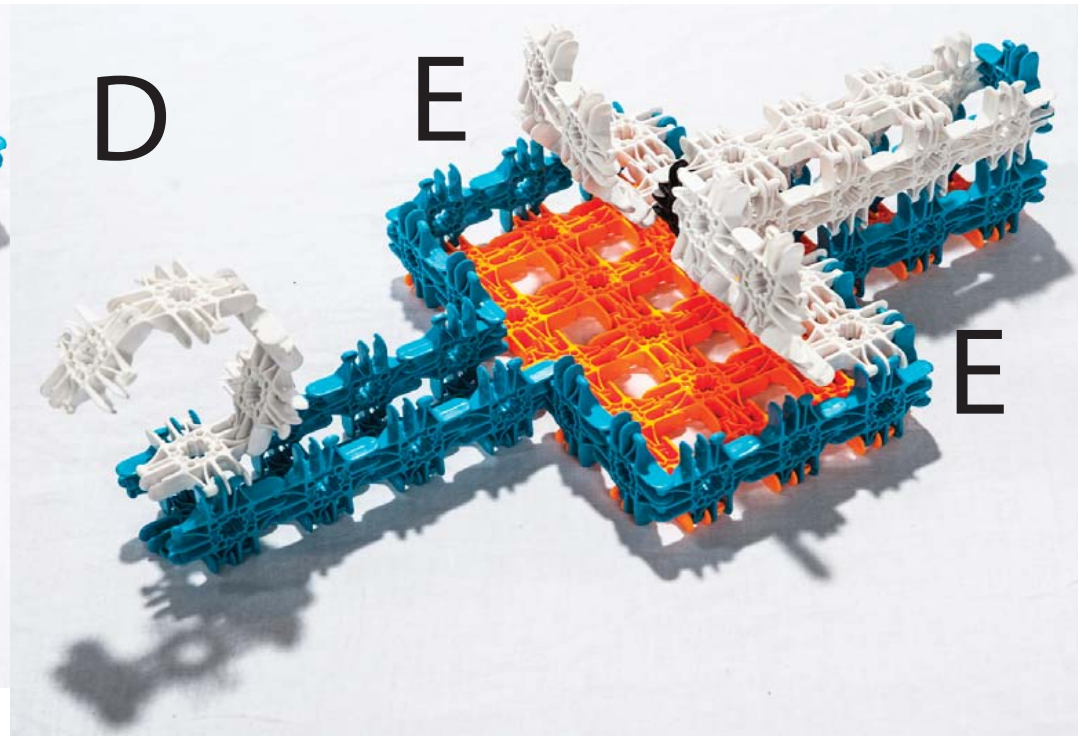
C



D

E

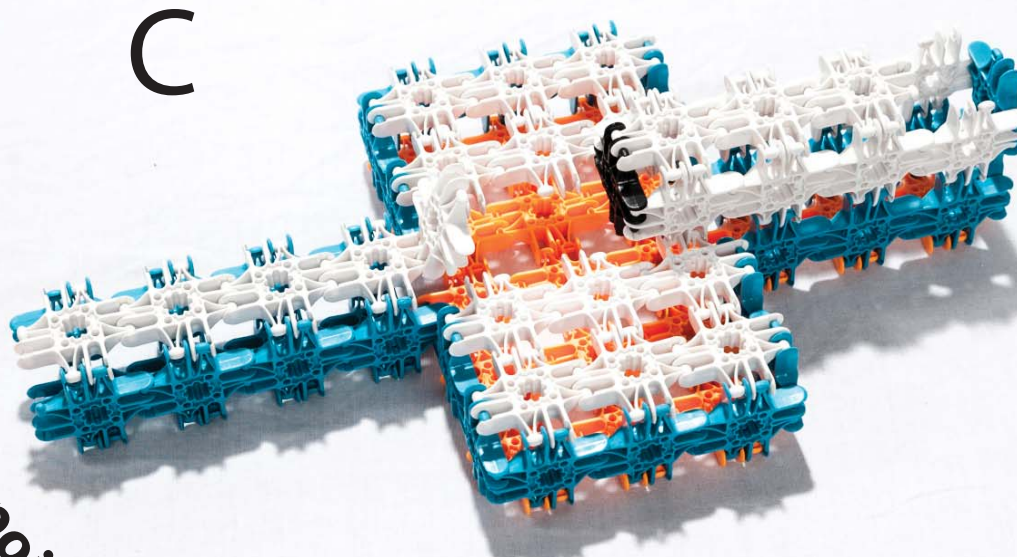
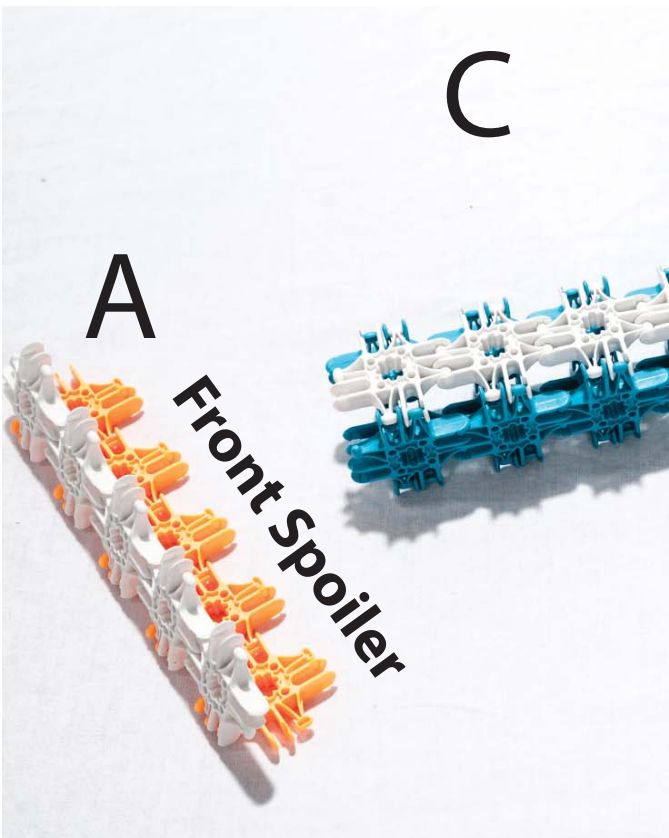
E



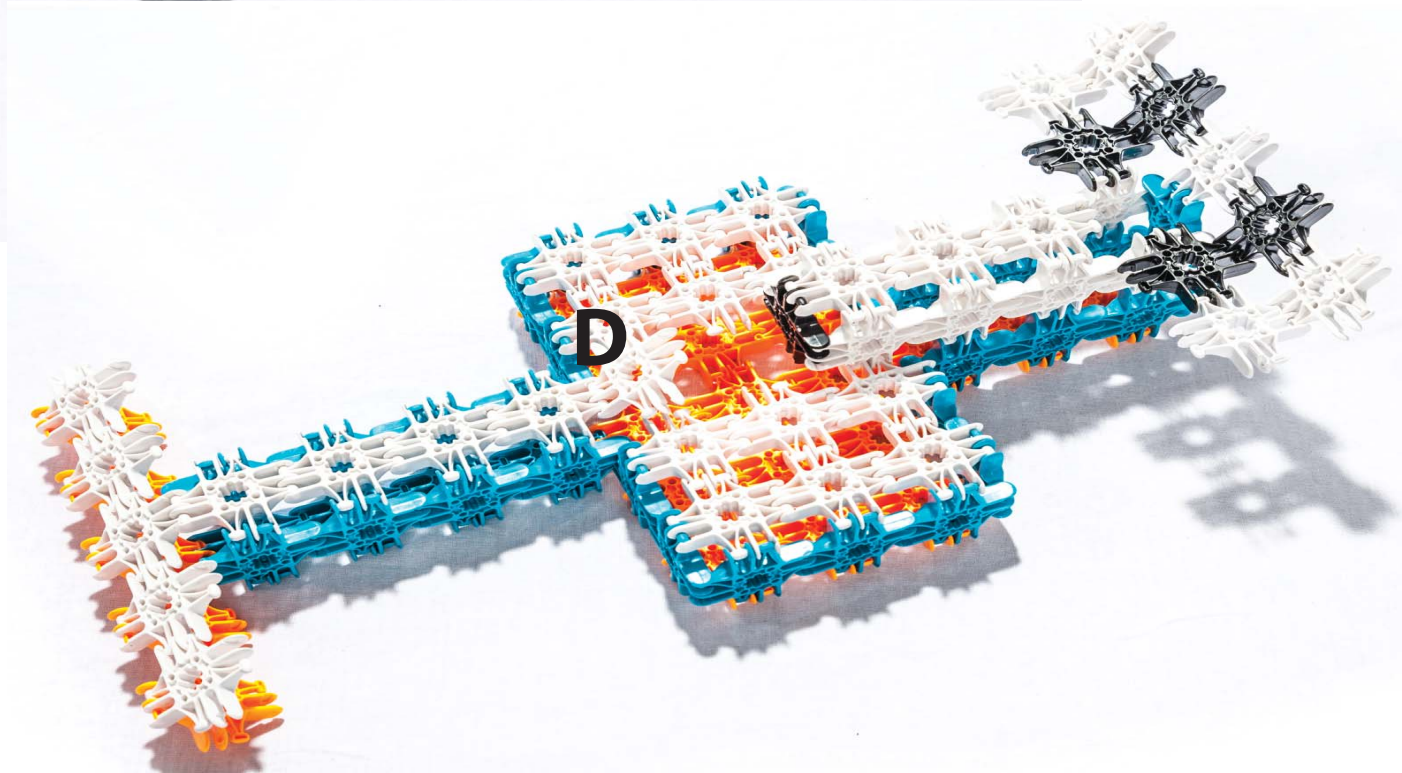
Build the Racer from the bottom up. First snap together the bottom of the car and then its sides. (A)

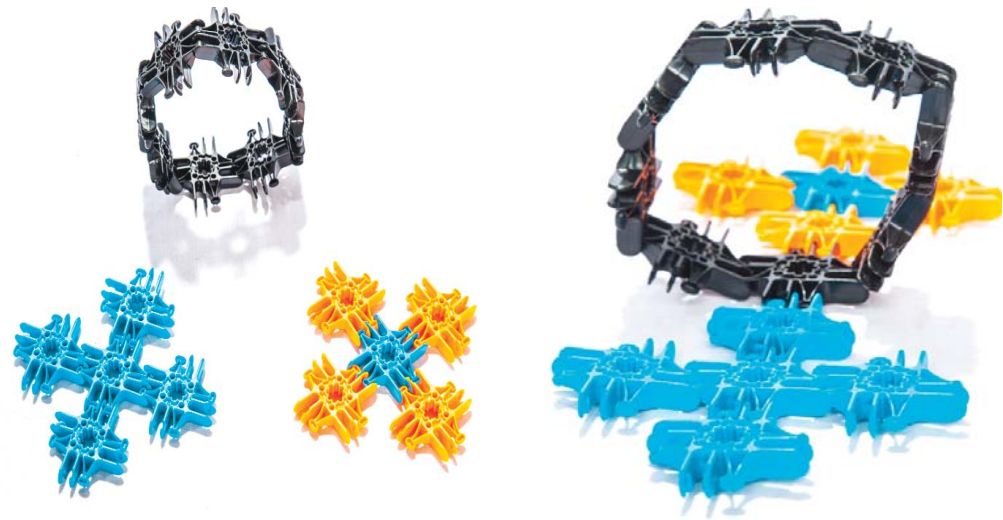
Next, create a box four Lux[™] long, one Lux[™] wide, and one Lux[™] tall for the engine cover (B). Attach it to the rear of body. (C)

Attach the top panels of the body. The top panels are five Lux[™] in front (D) and a two by three Lux[™] rectangular strip on each side. (E)



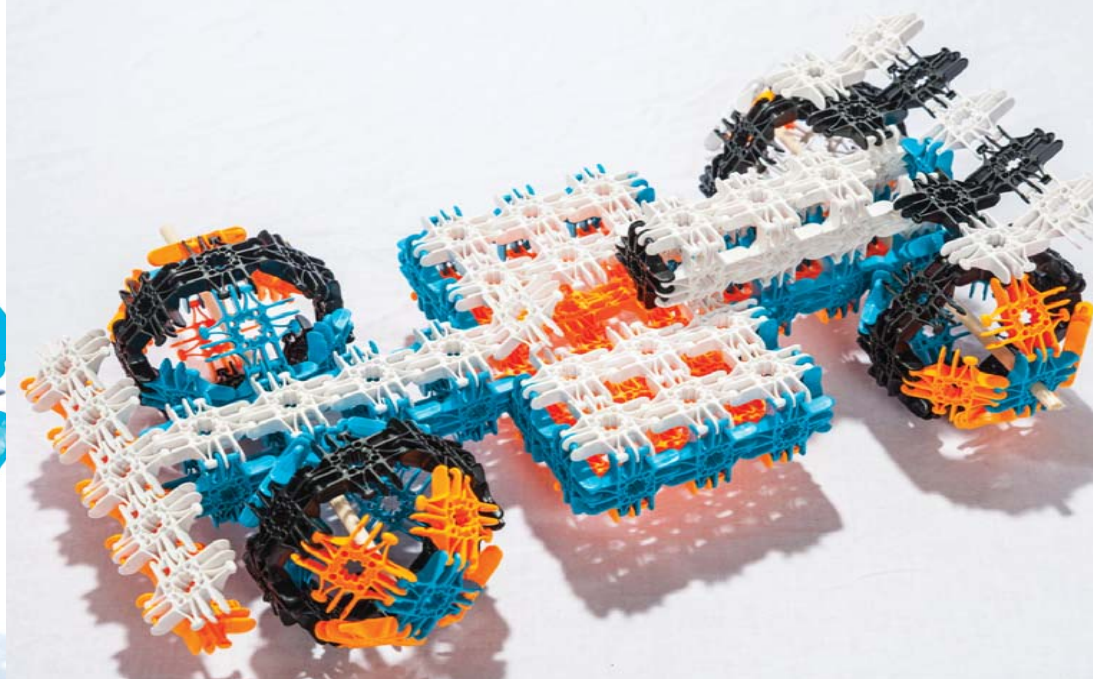
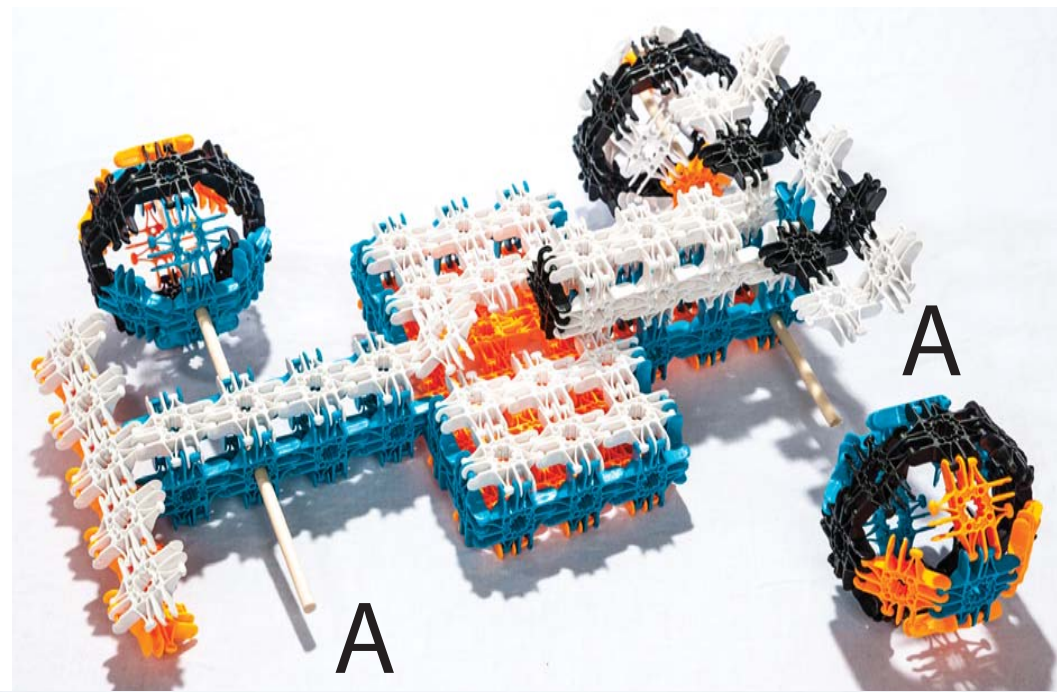
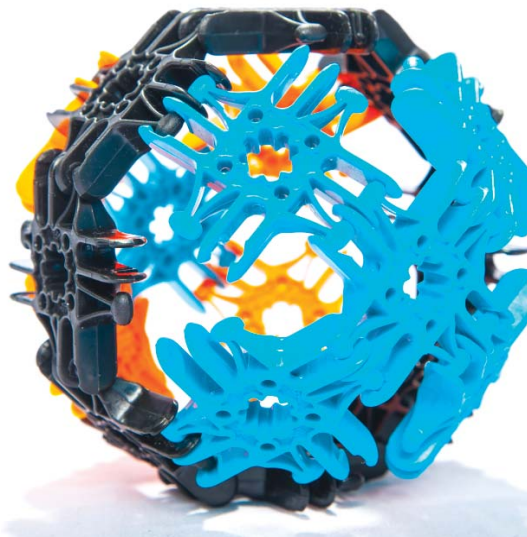
Create and attach the front spoiler (A) and rear spoiler (B) to the body (C) . Add windshield (D).

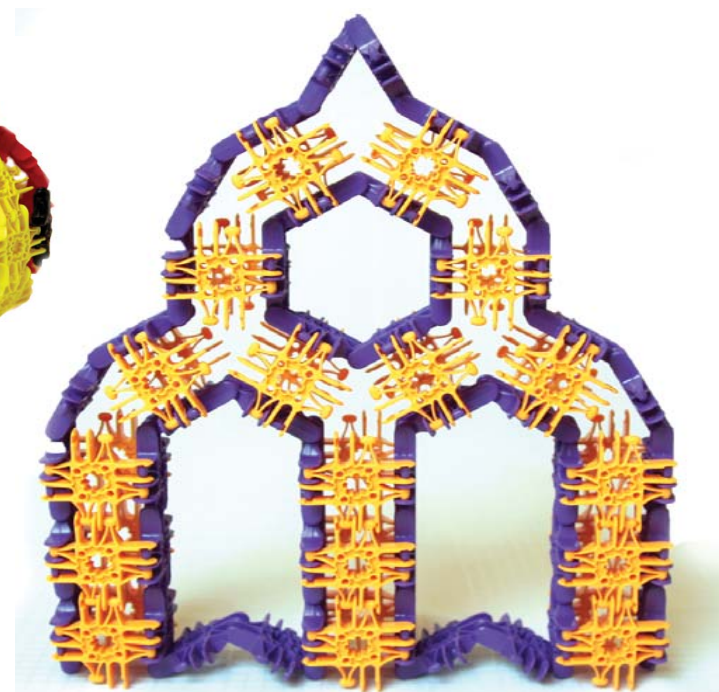
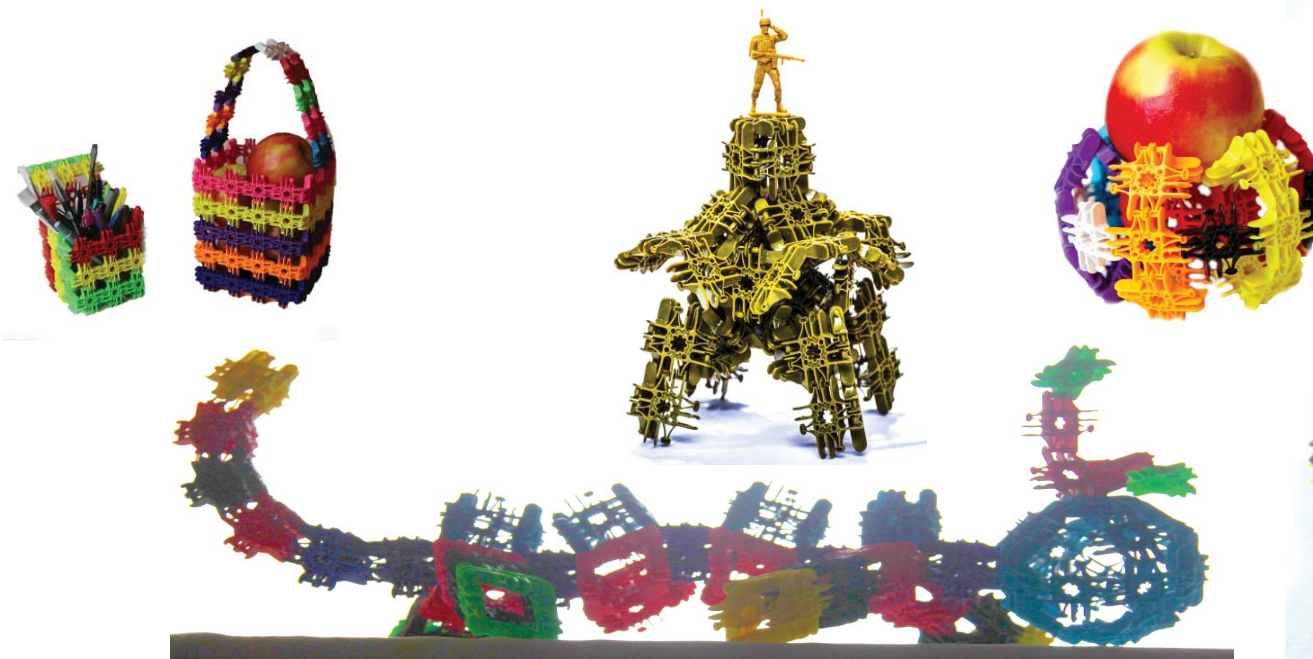




Make four Octoballs™ for wheels.

Insert two ten inch dowel rods (A) through the body as shown. Attach the Octoball™ wheels and secure with rubberbands.

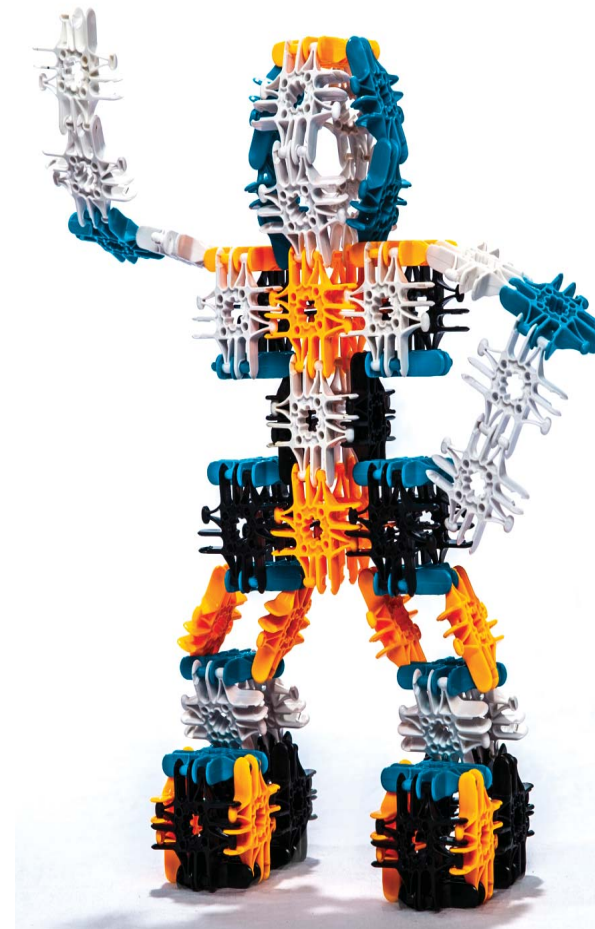
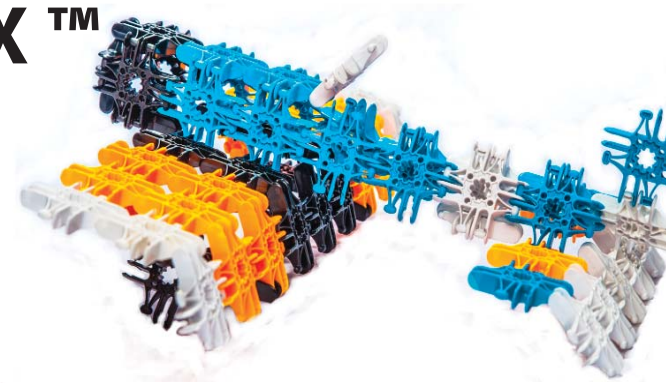
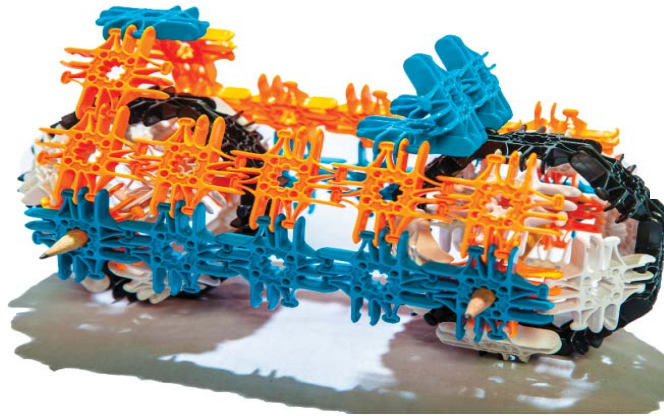






Also Available from LUX™ 66 Piece Set

This is a great way to get started with Lux™ and it makes a wonderful gift. Comes with instructions on how to make these models and much more! Accessories included.





Lux™ 330 Piece

Instructions for our new SCRAMJET,
Armored Tank, Swan Neck Ferris Wheel, and tons more!
Accessories included.

SCRAMJET



Armored Tank

Swan Neck Ferris Wheel

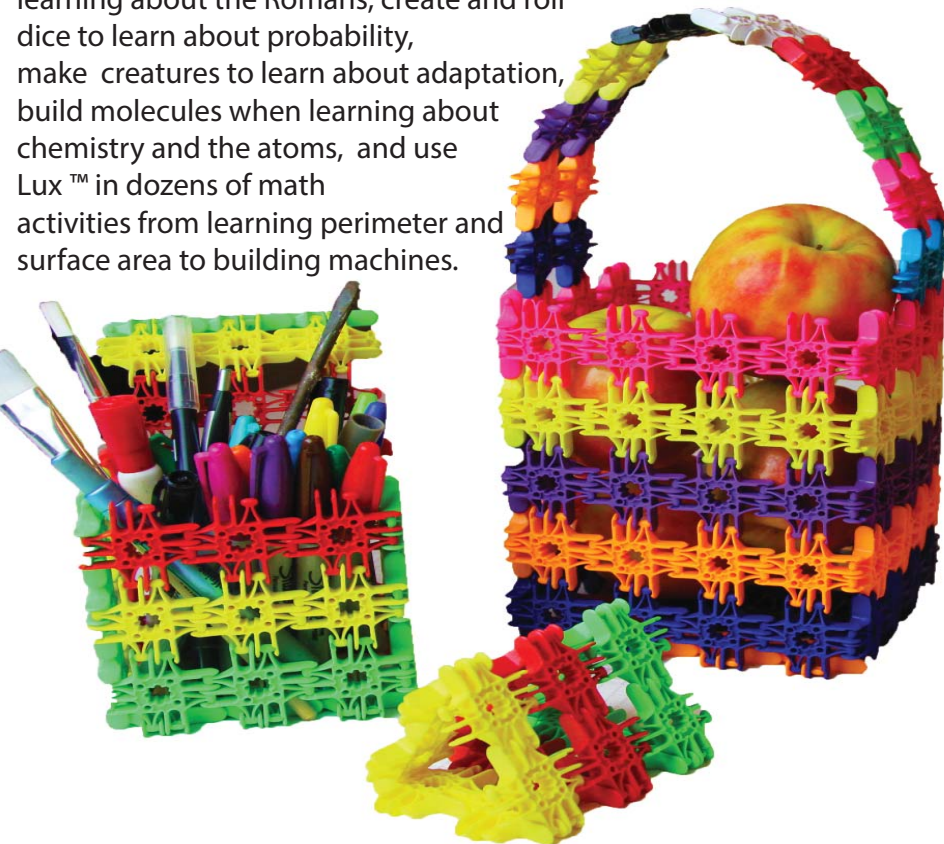


Lux™ Classroom Set™

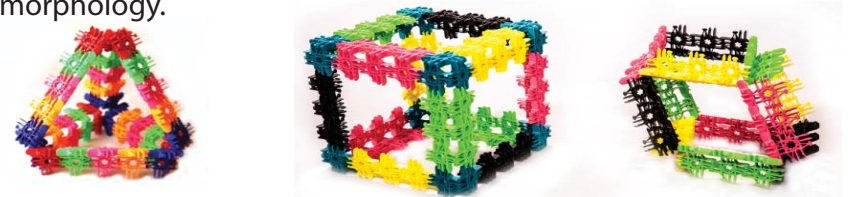
One Thousand Colorful Pieces

(Available only at www.luxblox.com)

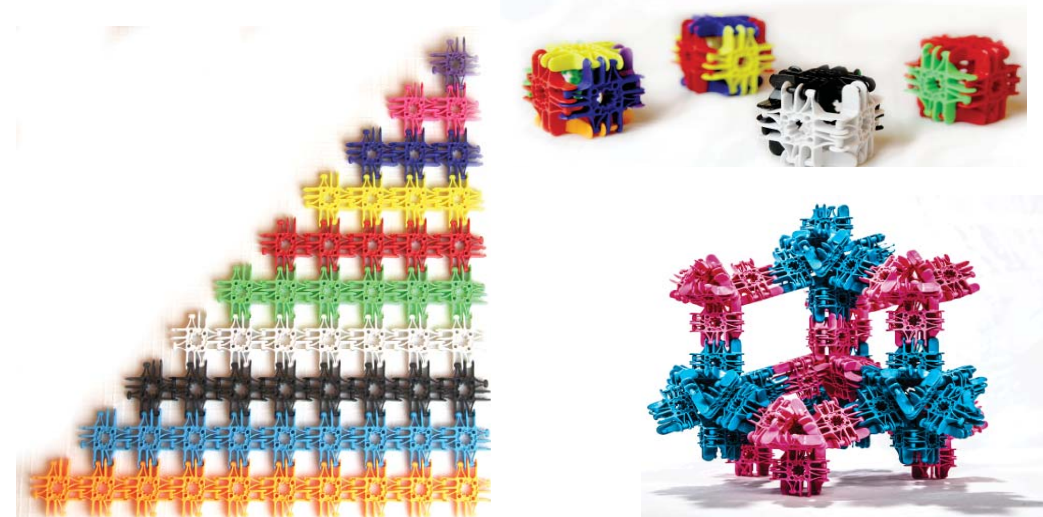
Our new 1000 piece classroom set includes an idea book that will bring fun, excitement, and wonder into the classroom. Lux™ connects creativity to learning by giving the teacher and the student access to nature's own building principles. Lux™ gives children a creative outlet to help them learn and retain the perfect balance of physical, emotional, and cognitive stimulation. Lux™ bridges all the subjects with a common language of structure. Build an aquaduct or colonnade when learning about the Romans, create and roll dice to learn about probability, make creatures to learn about adaptation, build molecules when learning about chemistry and the atoms, and use Lux™ in dozens of math activities from learning perimeter and surface area to building machines.



Build the natural world! Because Lux™ have moving connections, they imitate living things. Kids from kindergarten through college can build their own creatures and learn how moving and stable structures help creatures survive and succeed. Explore concepts such as motion, grasping and pinching, digestion, respiration, and morphology.



Bridge math, art, and science as you use the same pieces to learn mathematical ideas, from counting and number families to the families of shapes and solids, making probability dice, creating crystal structures like snowflakes, and making molecules like diamonds.



Lux™ is the World's Most Versatile and Dynamic 3D Educational Construction System

**Lux™ is engineered to snap together and rotate
240 degrees, making structures that curve, bend,
imitate nature, and move!**

**Now kids of all ages can learn through creative
play how the world is put together.**

**Lux™ products are
packaged and fulfilled
by the skilled hands of
people with disabilities
through our partner-
ship with Bridgeway
Inc., a not-for-profit
agency whose mis-
sion is to empower
people with disabili-
ties through training
opportunities and the
creation of meaningful
employment.**



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