MACFORMERS®

Intelligent Magnetic Construction Set For Brain Development

IDEA BOOKLET



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The Characteristics of Magformers



Magformers is a 3D educational magnetic toy that includes pieces with 360° rotating magnets inside, so they always rotate to their attraction position ensuring the perfect connection and fit every time. With Magformers, children can naturally understand the underlying geometry of 2D shapes and 3D figures. Also, children can develop mathematical and creative sensibility while building whatever they can imagine.

Learning Value of Magformers

Birth to Age 3



Sensorimotor Stage

In this period, 80% of brain development is formed. The brain and nervous system's development are accomplished through sensory stimulation activities and the movement of the fingers.

Learning Effect

- Stimulating visual sense with various colors and shapes
- Stimulating auditory sense through the crisp sound of attaching/detaching
- Increasing recognition skills of colors and shapes
- Building hand-eye coordination by attaching / detaching Magformers
- Developing gross motor skills and find motor skills by moving arms, hands and figures

Age 3 to 5



Preperational Stage

In this period, children explore their environment with enthusiasm. It stimulates their curiosity while trying to control surrounding things by themselves. Their symbolic thinking is developed, and the overall form of play represents forms of imaginative play and pretend play.

Learning Effect

- Increasing manipulating skills of fingers
- Enhancing divergent thinking, imagination, creativity through spontaneous play
- Developing formative arts skills and understanding symmetry, construction, side and

Age 5 to 7



Concrete Operational Stage

Children's actions are triggered by their self-reliance, independence and accomplishment. Abilities to think and express with their own unique ways are developed. Play is performed by their own creativity and originality.

Learning Effect

- Understanding basic mathematics concepts such as portion and whole, correspondence, and patterns
- Comparison of the shape and size, location and direction of top and bottom/right and left to understand the concept of semiotic relationships and spatial awareness
- Enhancing creativity, problem-solving skills, independence and confidence
- Developing language skills

Age 7 to 12



Formal Operational Stage

Children are able to think specifically and reproduce in detail about what they have experienced around the world. Through this process, observational skills, analytical and logical thinking skills are developed.

Learning Effect

- Building observational skills and analytic thinking to create various objects
- Developing spatial perception by creating buildings and structures
- Developing logical thinking and reasoning
- Building creative problem-solving skills to make complicated structures
- Combining mathematical concepts and science principles to make magnetic constructions



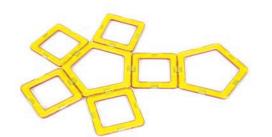




Star

<u>^</u> 20

<u>^</u>2









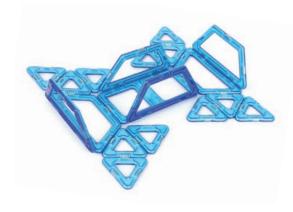


Unicorn

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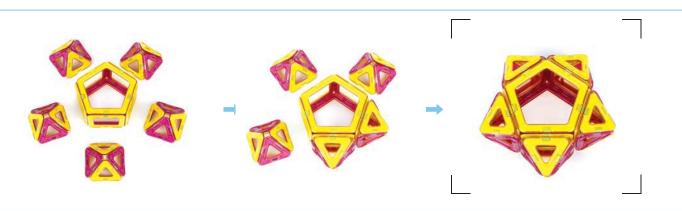


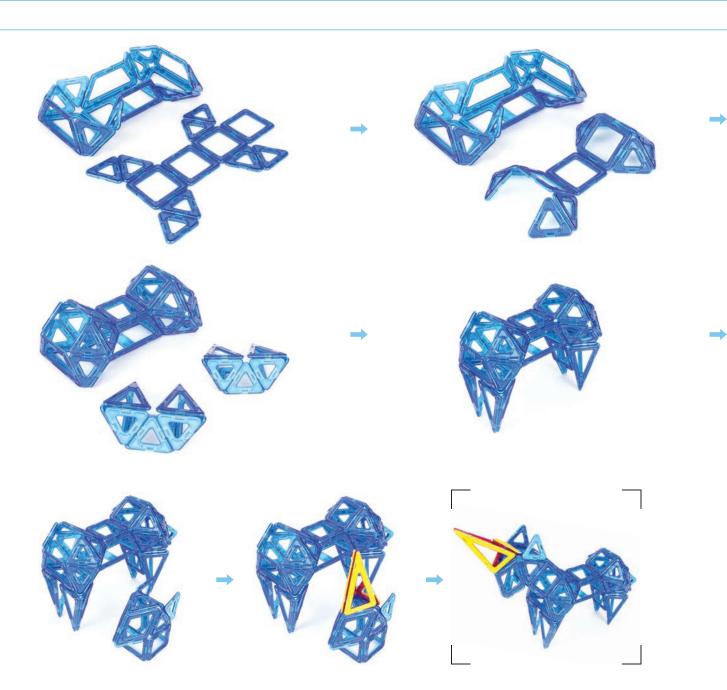














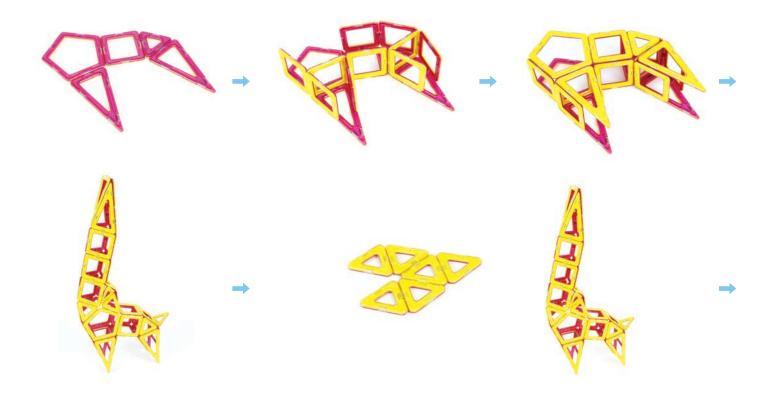
Giraffe

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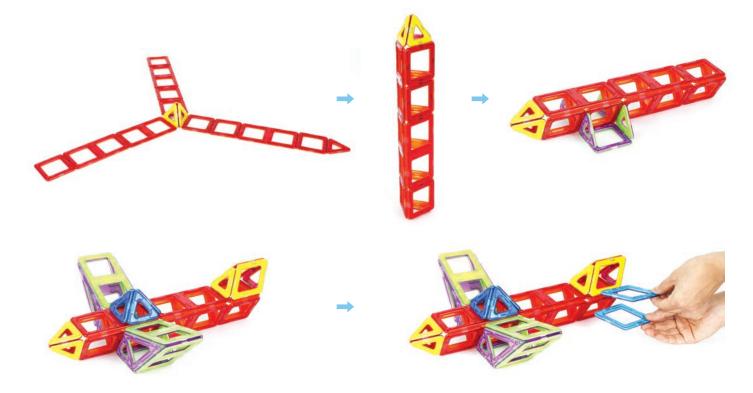


Airplane

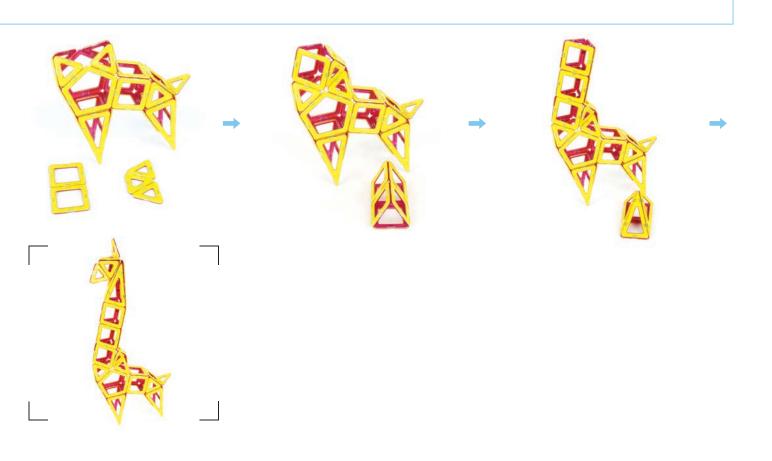
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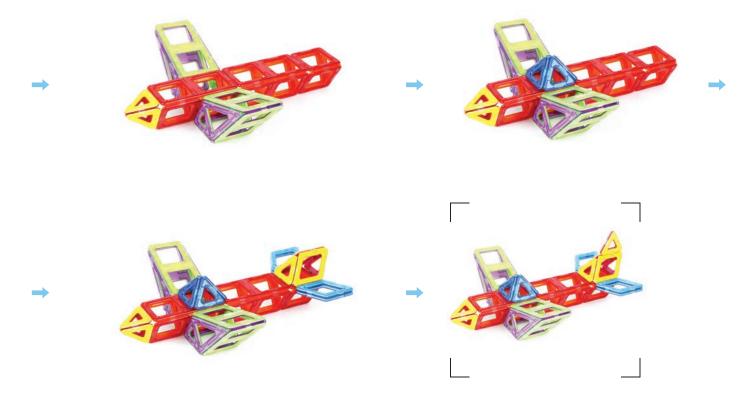
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UFO

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Camera

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Helicopter

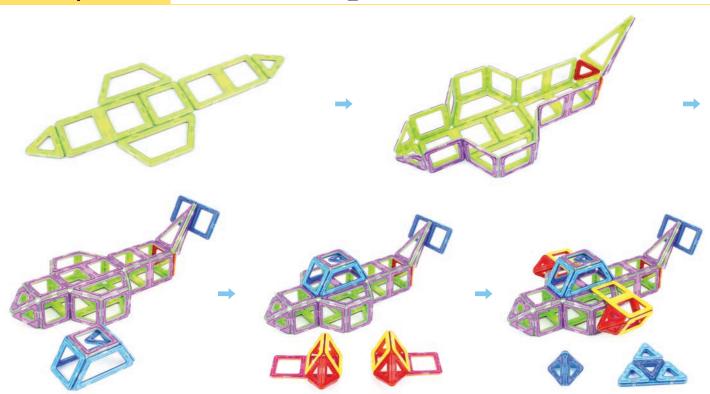
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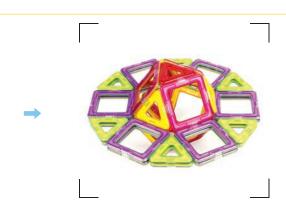
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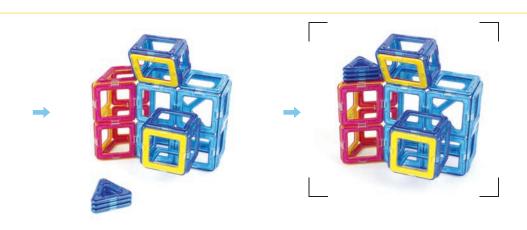
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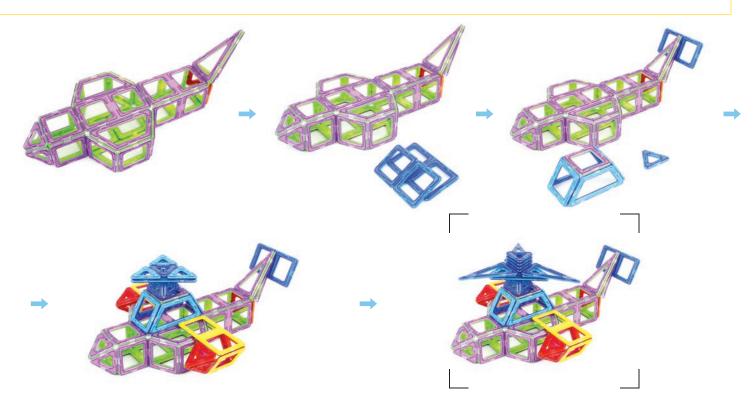
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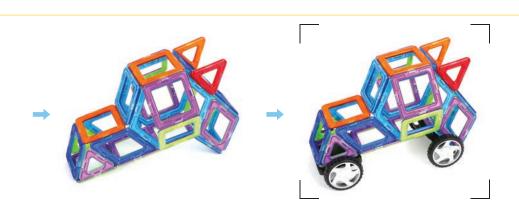


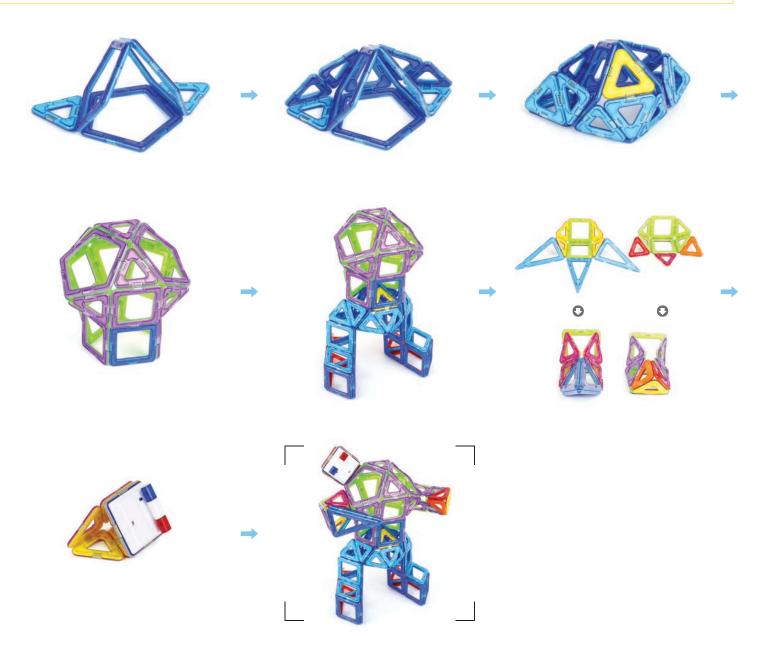




2 Car 2 **4** Robot 2 **1** <u>^</u> 45 <u></u> 6 **7**2 **5** <u>26</u> **_**2













Sailboat

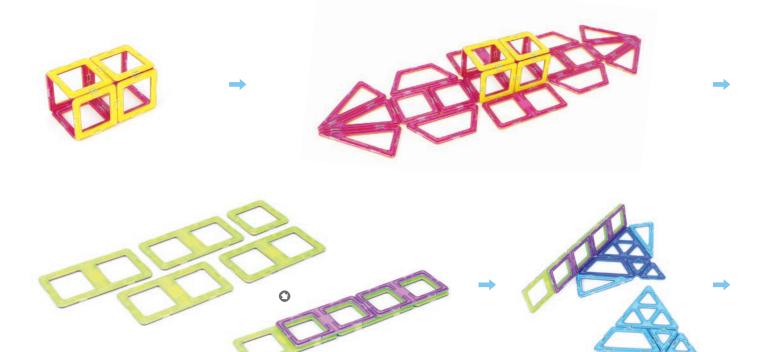
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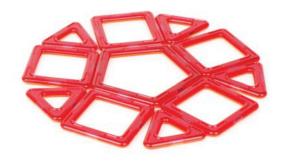


Pumpkin

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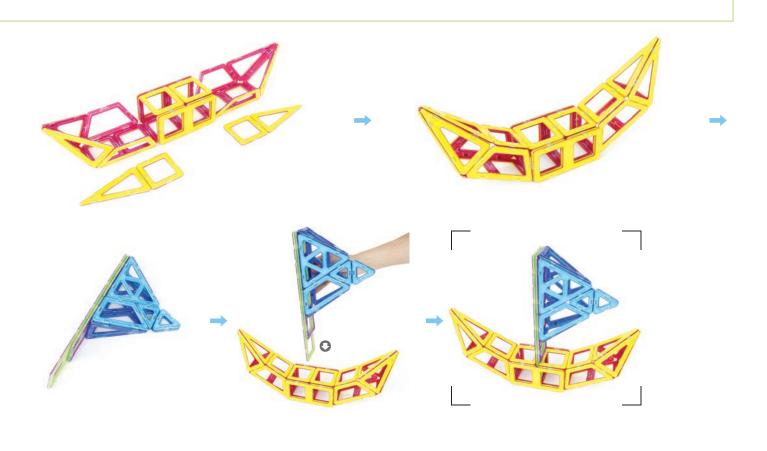


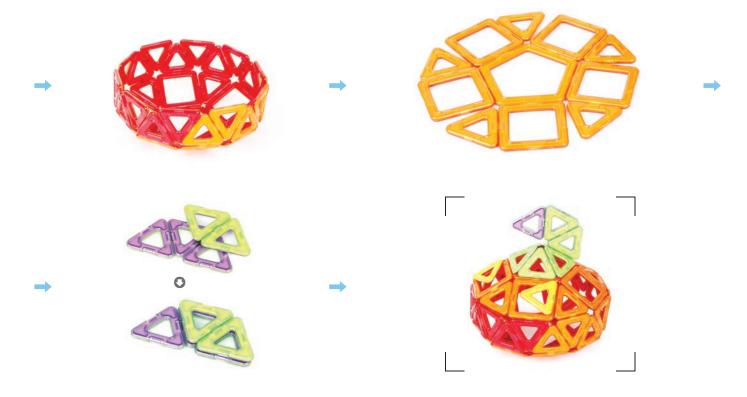




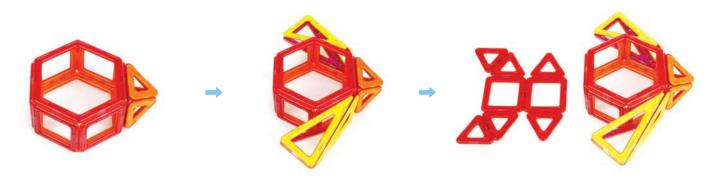


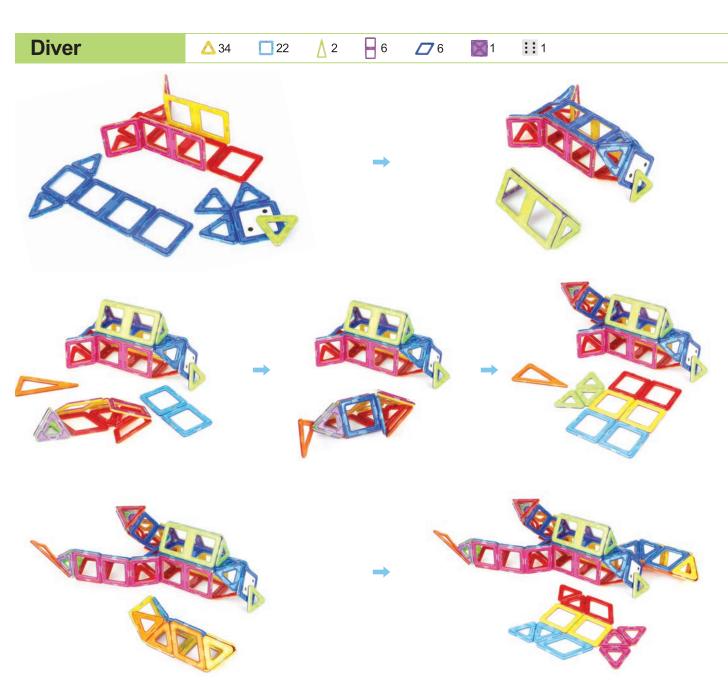




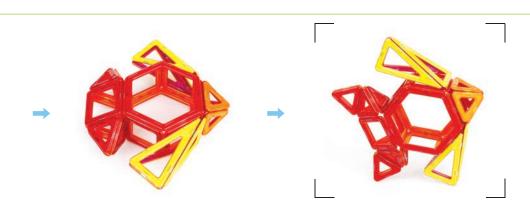


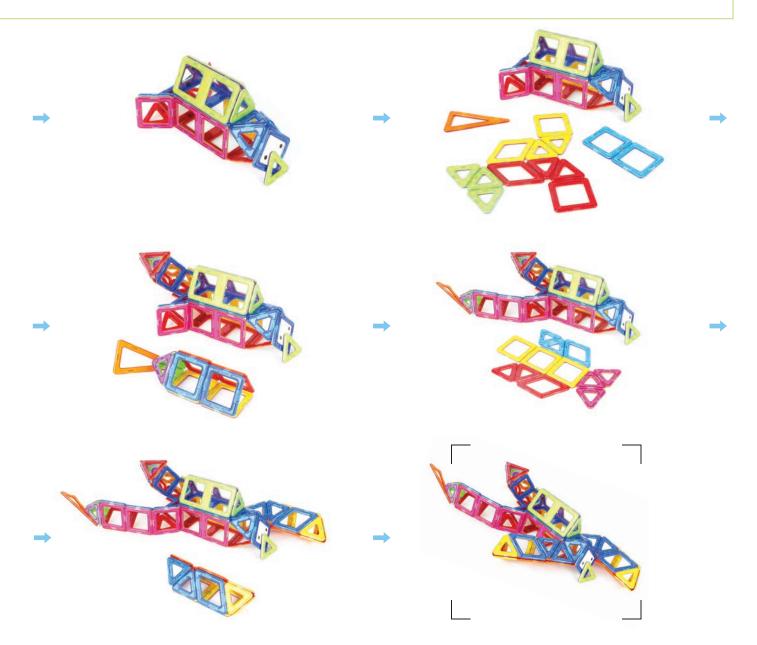














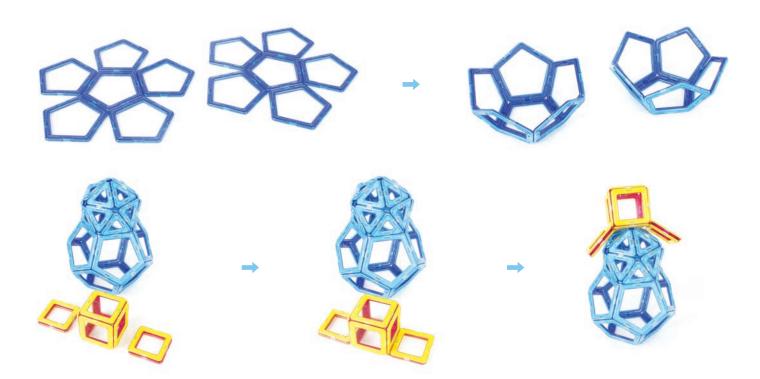


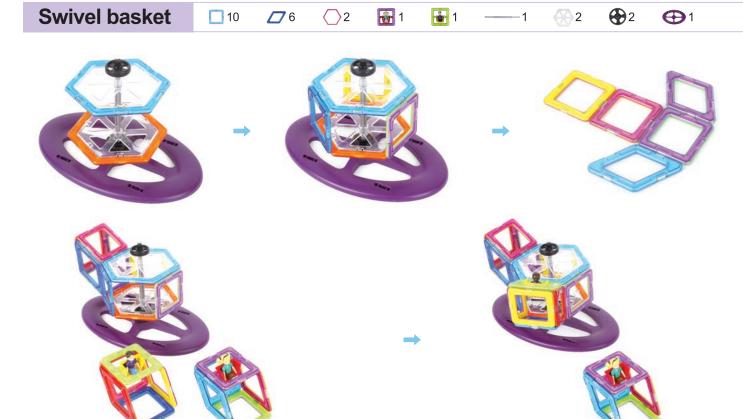


Snowman

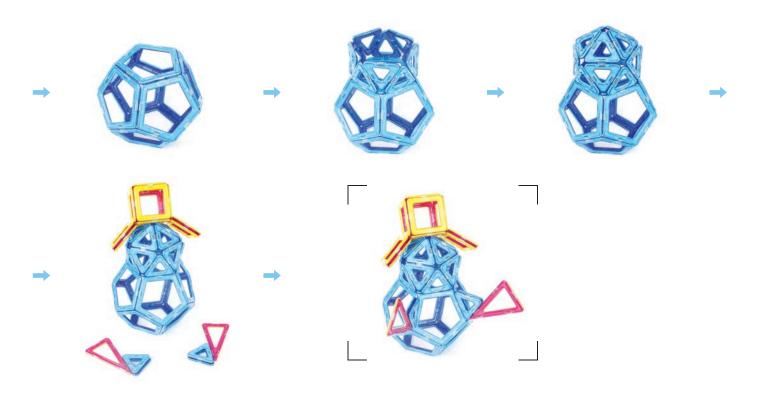
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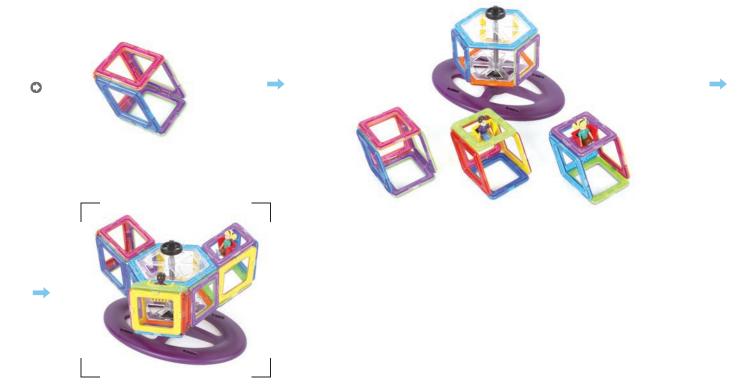
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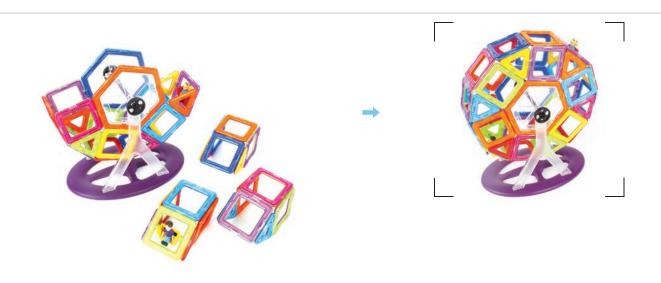


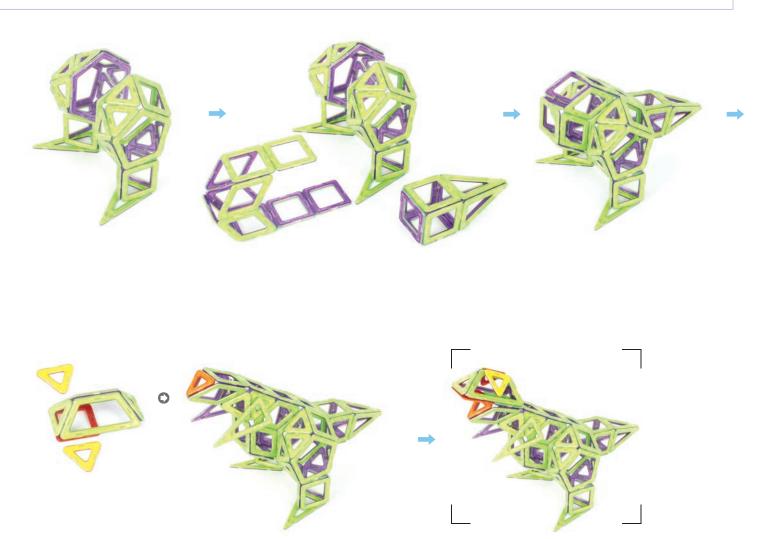








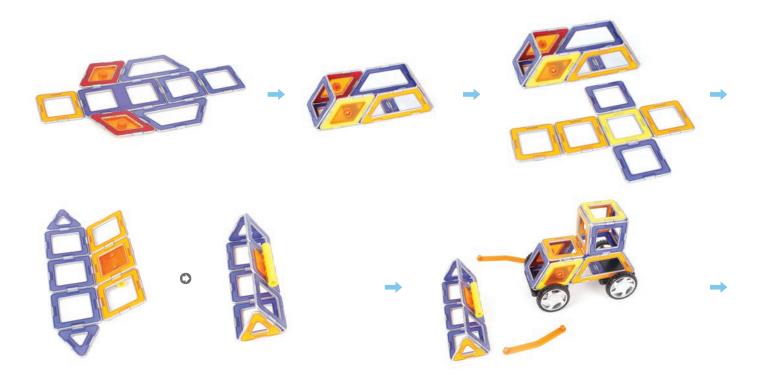


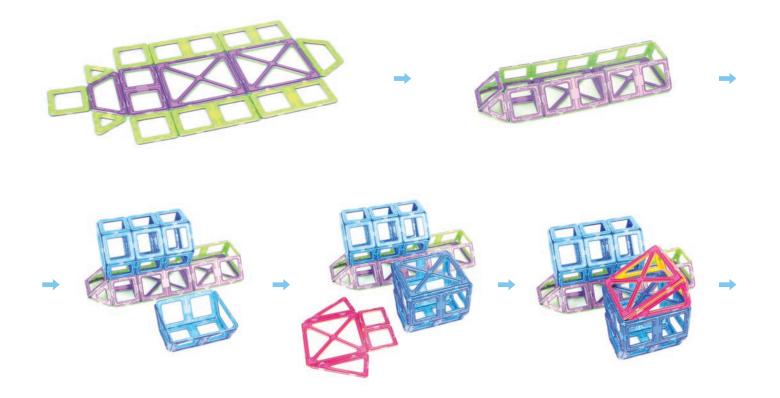




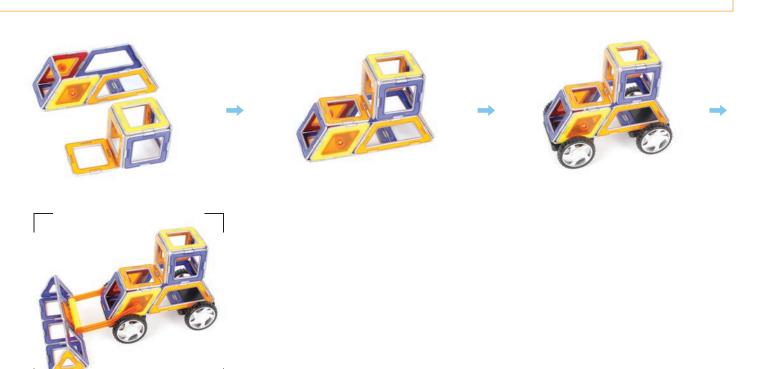


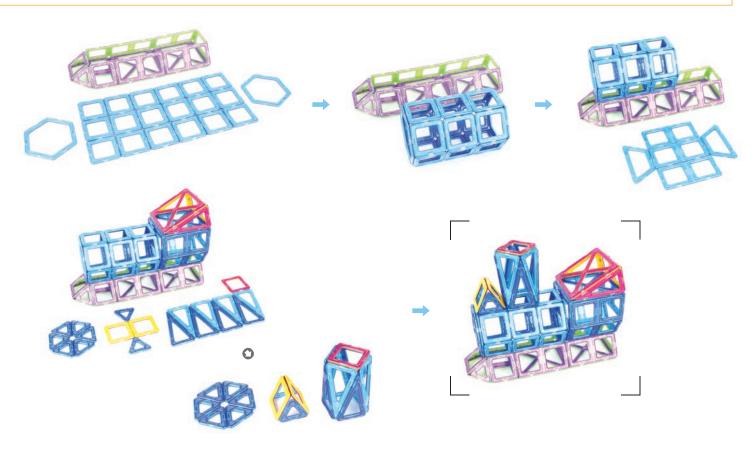














Fire truck

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Dino car

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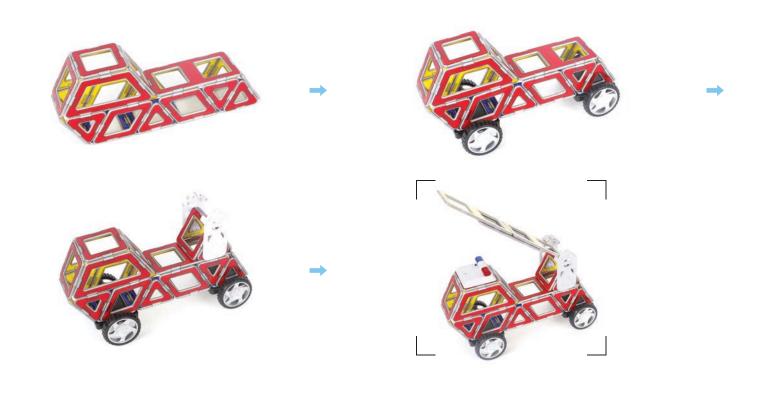


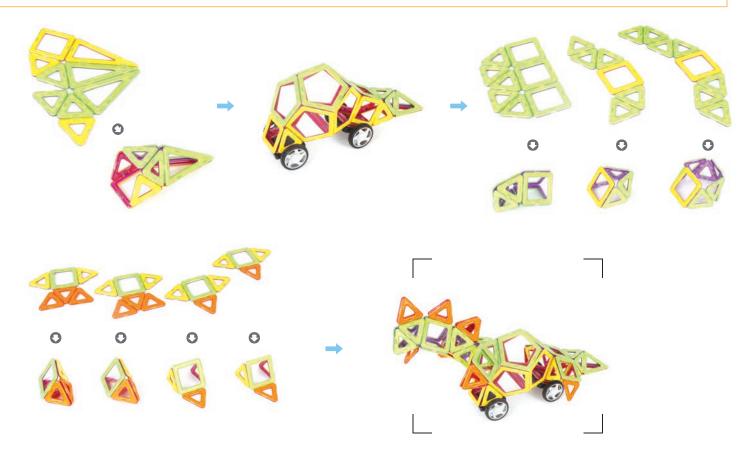














Scooter

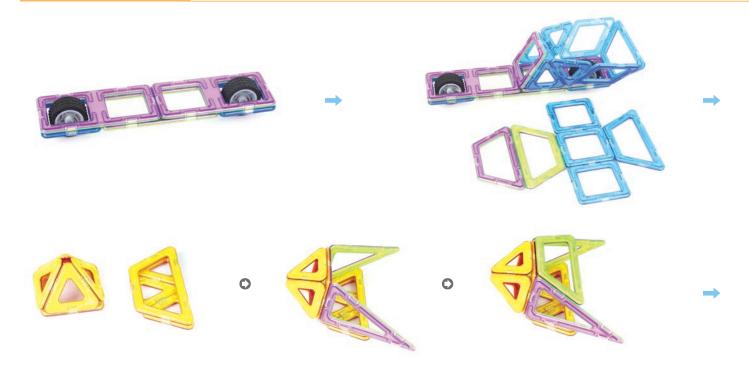
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Construction vehicle

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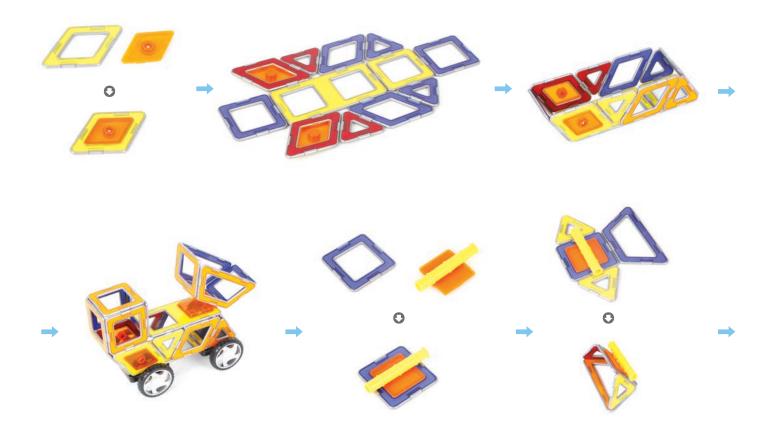
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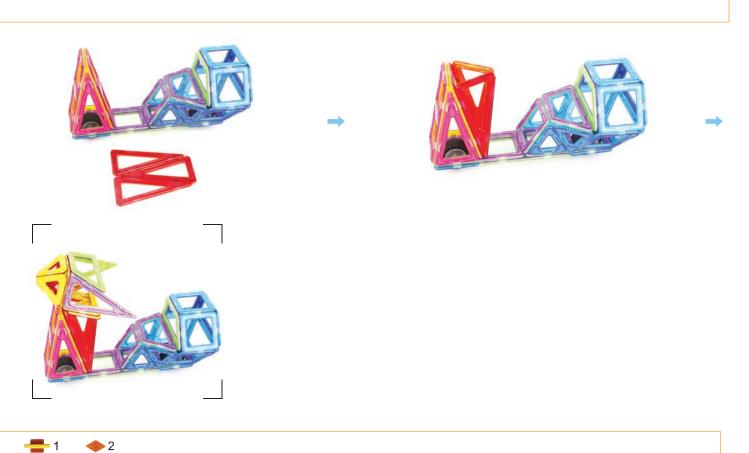
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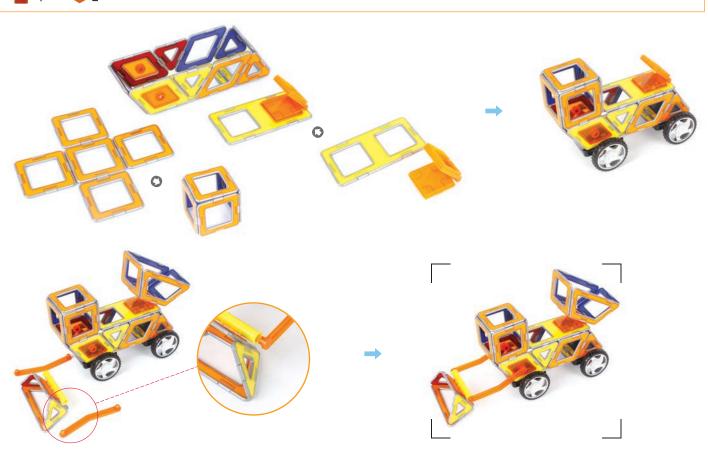
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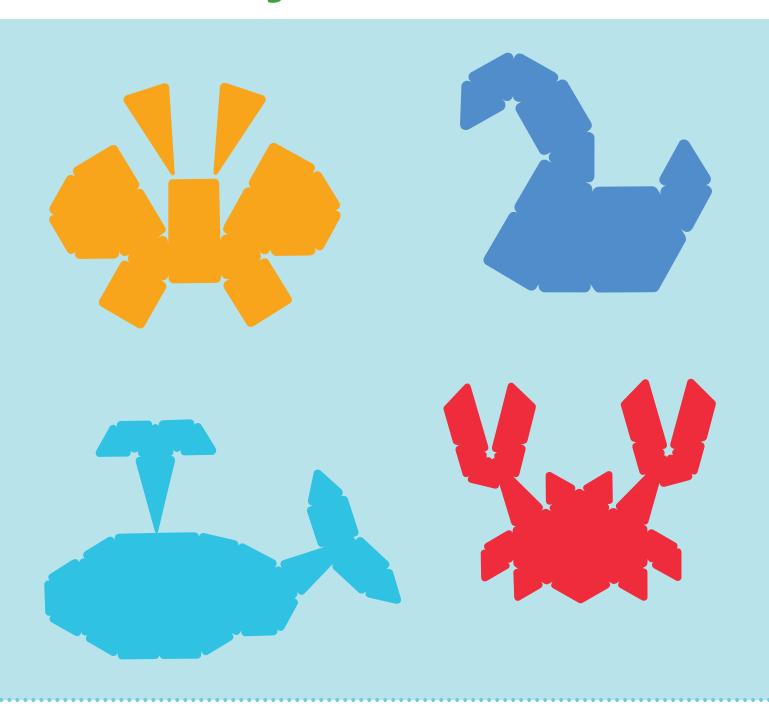




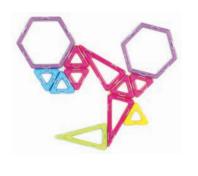


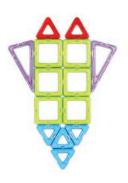


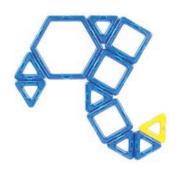
Let's Play Game!





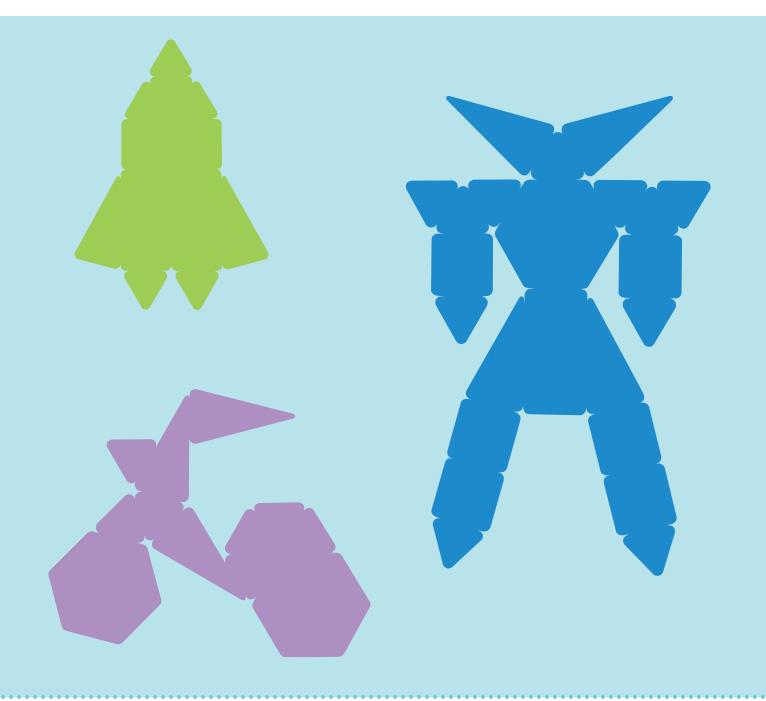


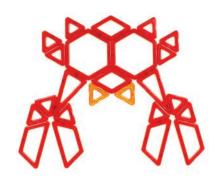


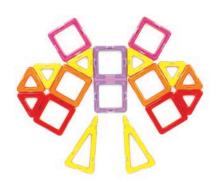


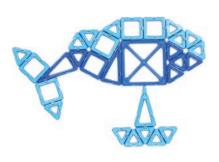


• MAGFORMERS TANGRAM







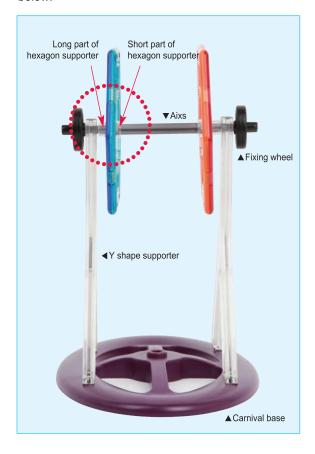


How to assemble carnival

How to assemble carnival accessories

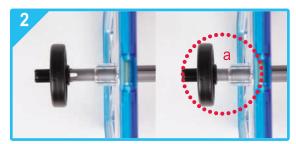
Assembly of the Axis

The parts that are connected to the axis of the hexagon supporter have a long one and a short one. Connect it to the axis by making a long one get out to the outside and making a short one face towards the inside. Assemble it to become the shape as below.





Until feeling the square groove of the axis is hooked in the supporter, push it in with turning in the direction of short one of hexagon supporter.



If pushing the fixing wheel strongly till becoming the state of "a", it is combined with the sound of "pop"



The assembly of supporter: Connect the assembled axis directly to carnival base and make the rotation basket.

The assembly of Supporter



Connect the assembled axis directly to carnival base and make the rotation basket.



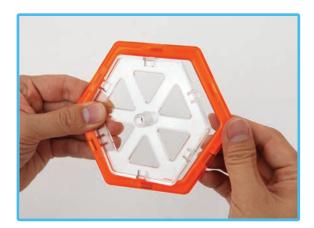
Make a Ferris wheel and a Viking with Y shape supporters.

How to assemble carnival

Hexagon supporters + Hexagon pieces

The hexagon supporters and the hexagon pieces are packed as assembled. They can be separated.





How to use Siren Block

How to remove and insert replaceable batteries.

Power Button





- · Non-rechargeable batteries are not to be recharged.
- Rechargeable batteries are to be removed from the toy before being charged.
- Rechargeable batteries are only to be charged under adult supervision.
- Different types of batteries or new and used batteries are not to be mixed.
- Batteires are to be inserted with the correct polarity.
- Exhausted batteries are to be removed from the toy.
- The supplu terminals are not to be short-circuited.

Awards



2007, 2013, 2014 US Oppenheim Platinum



2012, 2013, 2014 US Oppenheim Gold Seal



2009, 2010 US Best Toys



2014 Academics' Choice Brain Toy



2015 Family Choice Award



2015 Dr.Toy Best Classic

