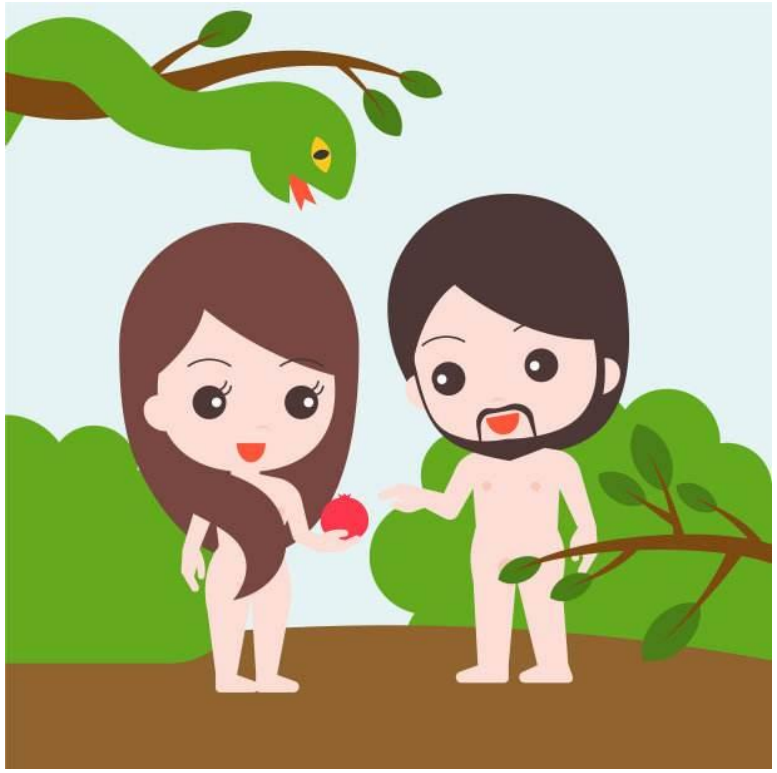
16.Ferocious snake

1.Introduction

Have you heard the story of Adam and Eve.

A long, long time ago Adam and Eve lived in the Garden of Eden.

One day Eve was tempted by a snake to eat an forbidden apple from a tree, and was finally expelled from the Garden of Eden by God.



1.Introduction

In fact, people have been afraid of snakes since ancient times.

Some snakes are not just scary, but also very poisonous. Once bitten by them, it will endanger your life.

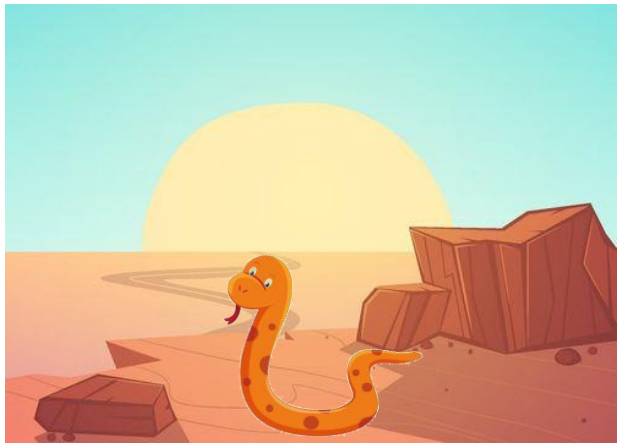
Of course, not all snakes are poisonous, such as pythons.

Snakes are ectothermic animals, when the ambient temperature is lower than 15 ° , the snake will enter hibernation.



1.Introduction

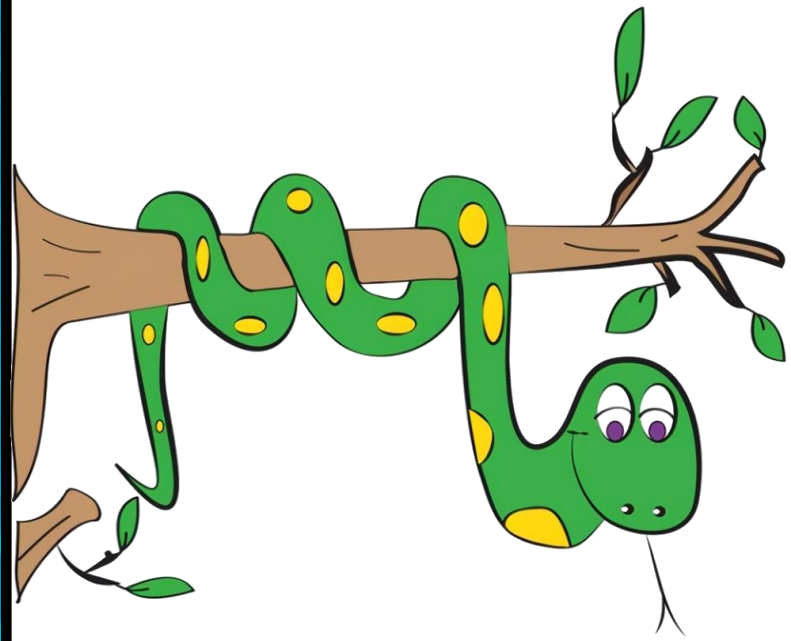
There are many kinds of snakes distributed all over the world.
There are approximately 3,000 species of snakes worldwide.
Snakes can live in many types of environment, including deserts, oceans, jungles...







2.Exploration





Do you know how snakes hunt?

Under normal circumstances, it will disguise itself, quietly waiting for food.

As soon as the snake finds its prey, it will strike, and bite the food with its mouth.

They will prey on mice, birds, frogs... larger pythons will also prey on sheep and deer.

2.Exploration

How can we achieve the action of snake prey?

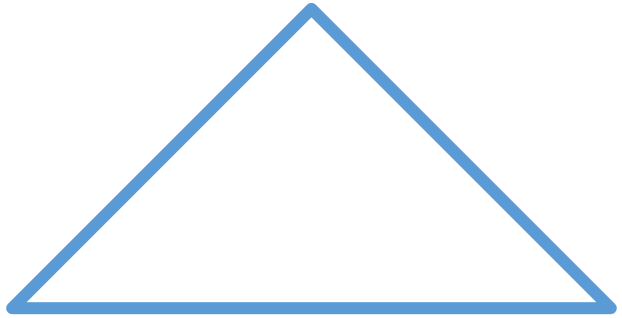
Just imagine that the body of a snake can quickly expand and contract so that it can get its prey.

What shape or structure can be stretched?

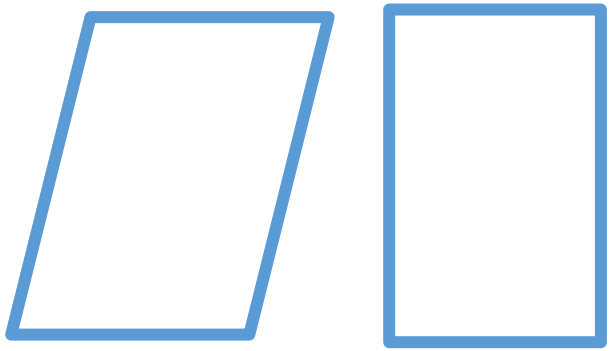
Observe the picture on the left, do you get any inspiration?

2.Exploration

Let's study the properties of quadrilaterals and triangles.



Triangle is stable.



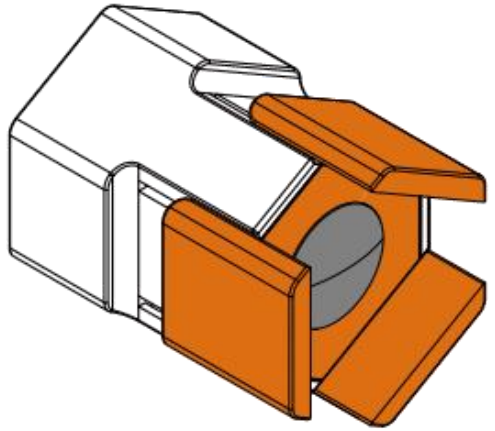
Quadrilaterals can deform easily

2.Exploration

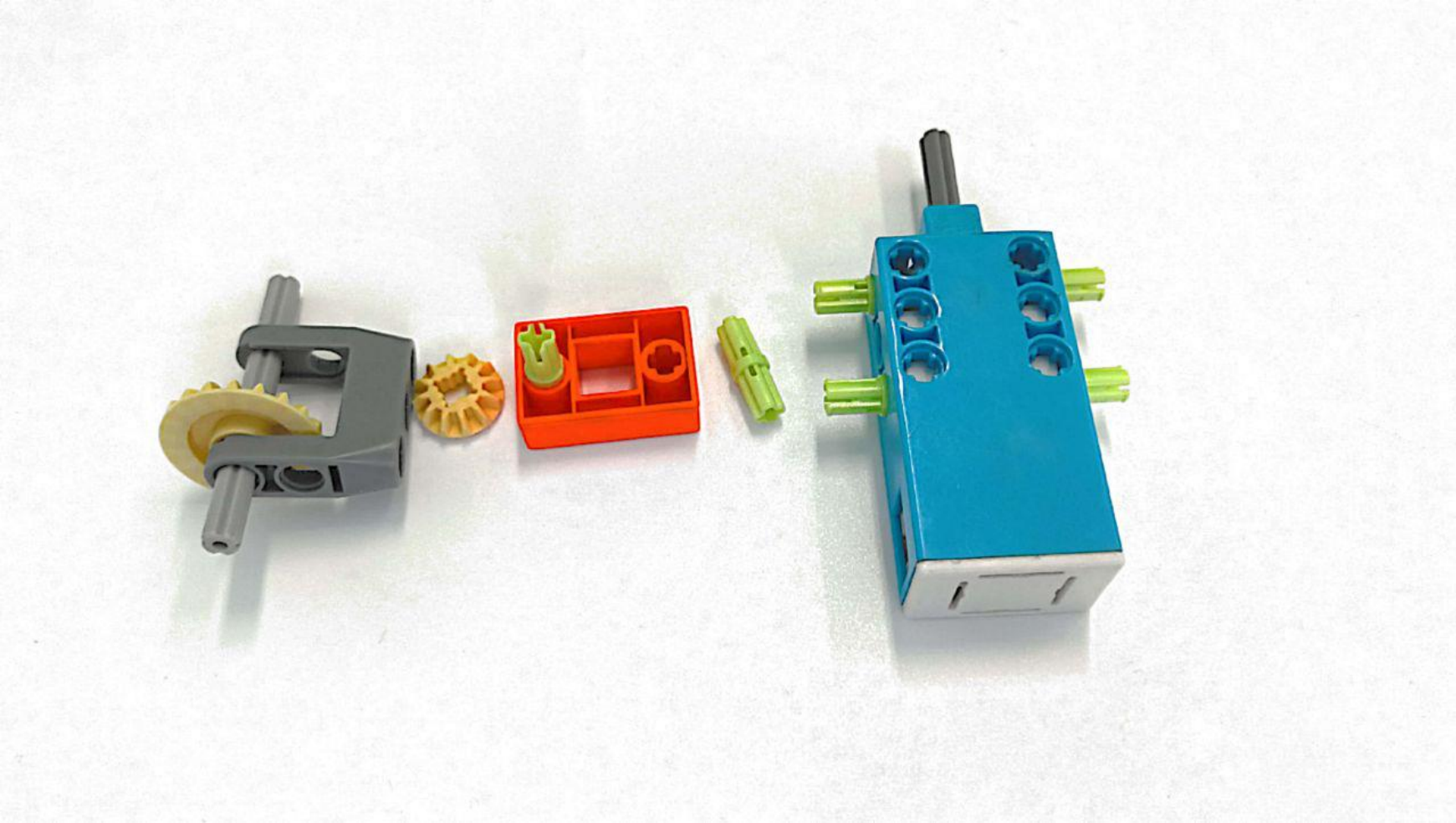
The quadrilateral structure acts as the body of a "snake" that can stretch and retract.



Infrared Sensor can act as snakes' eyes and will attack when they spot prey.



3.Construction



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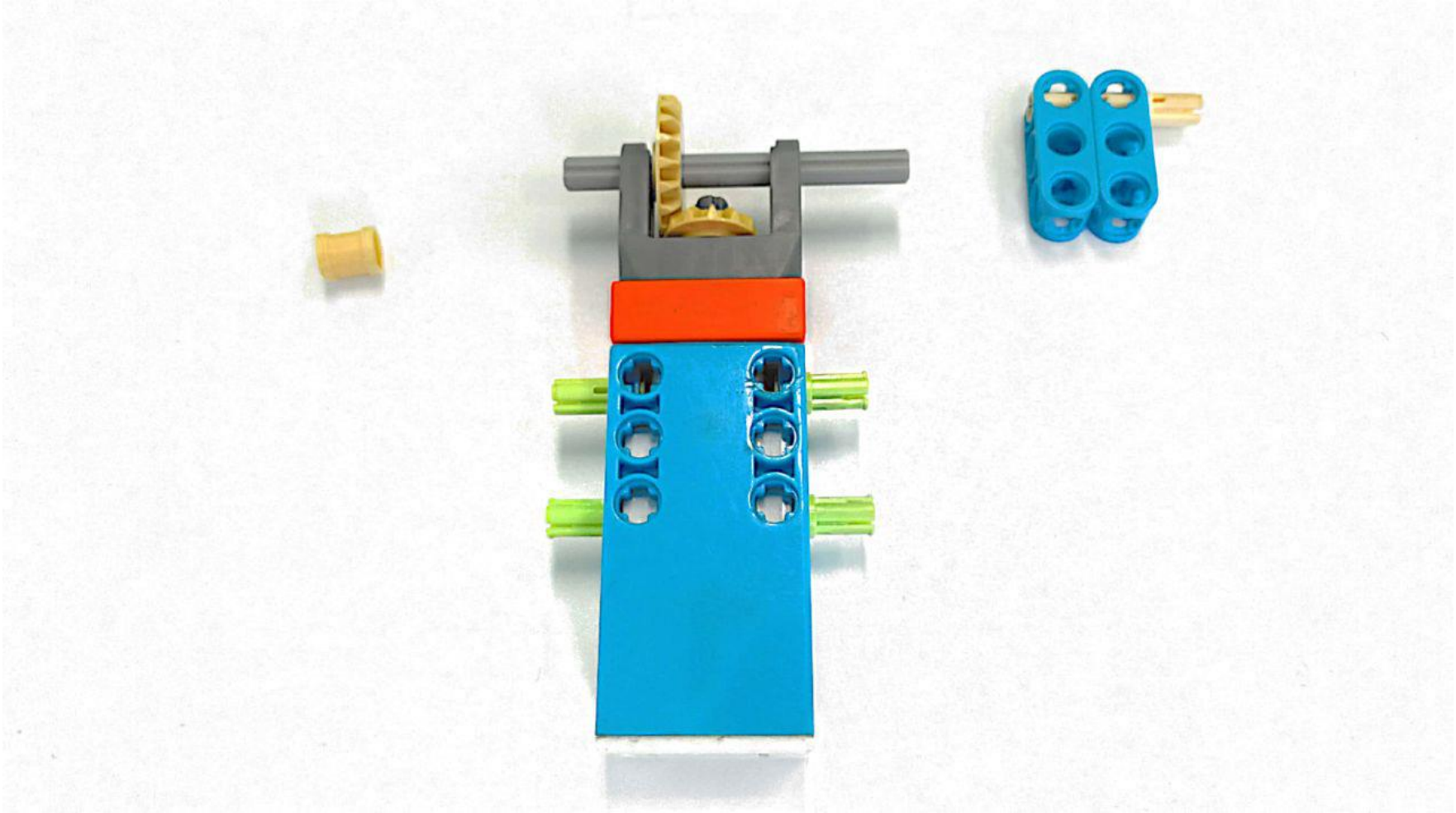

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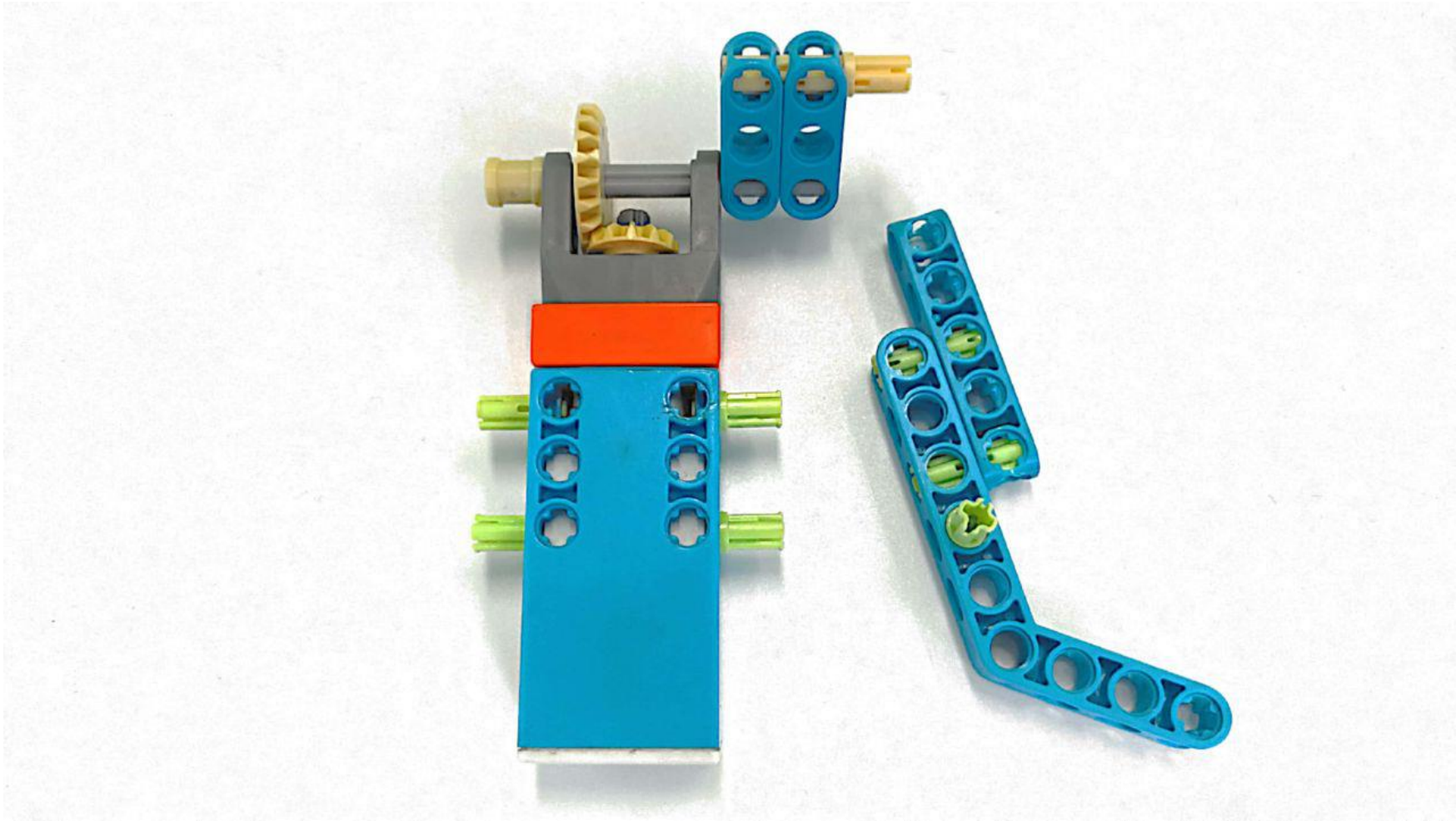

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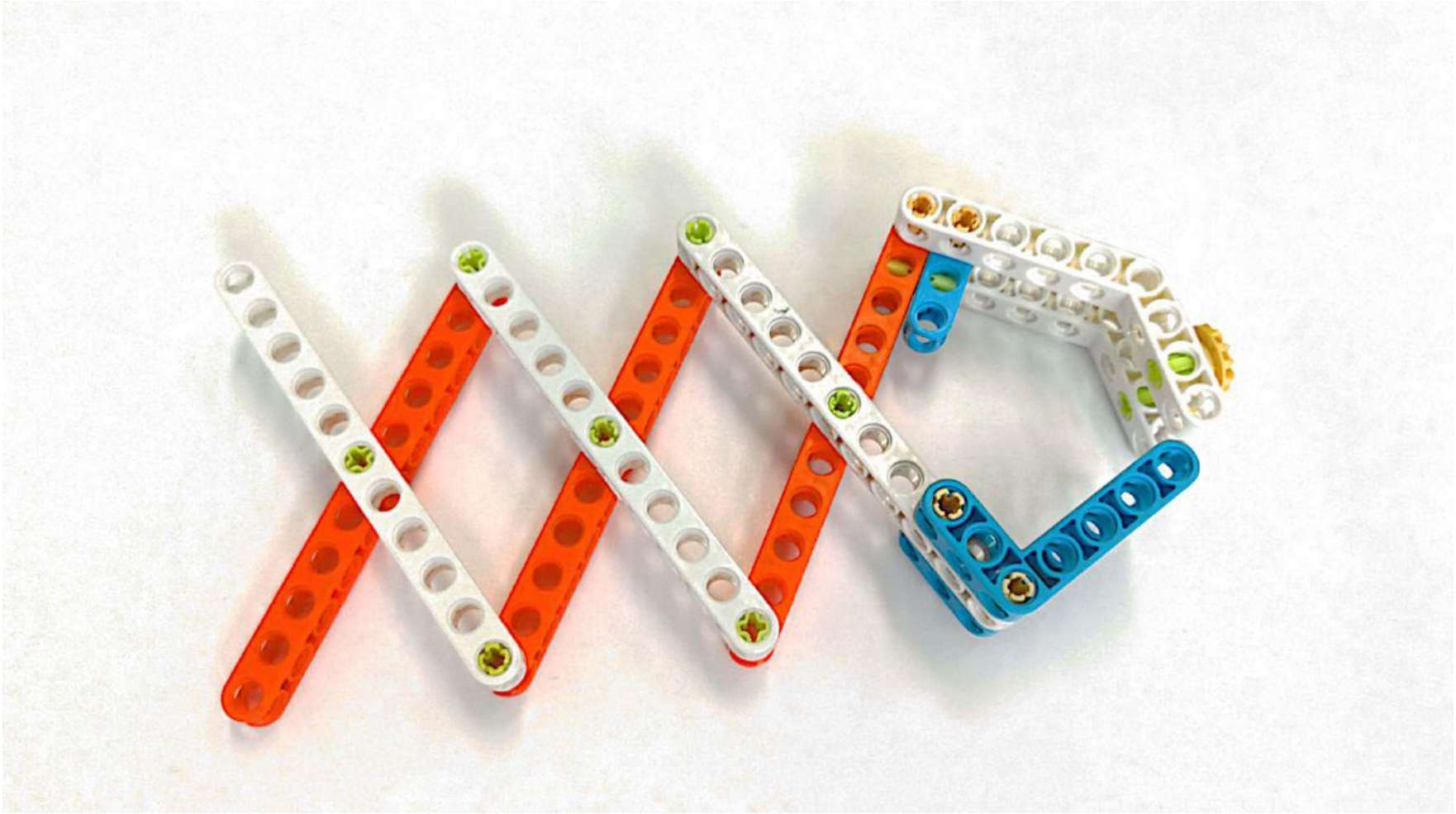

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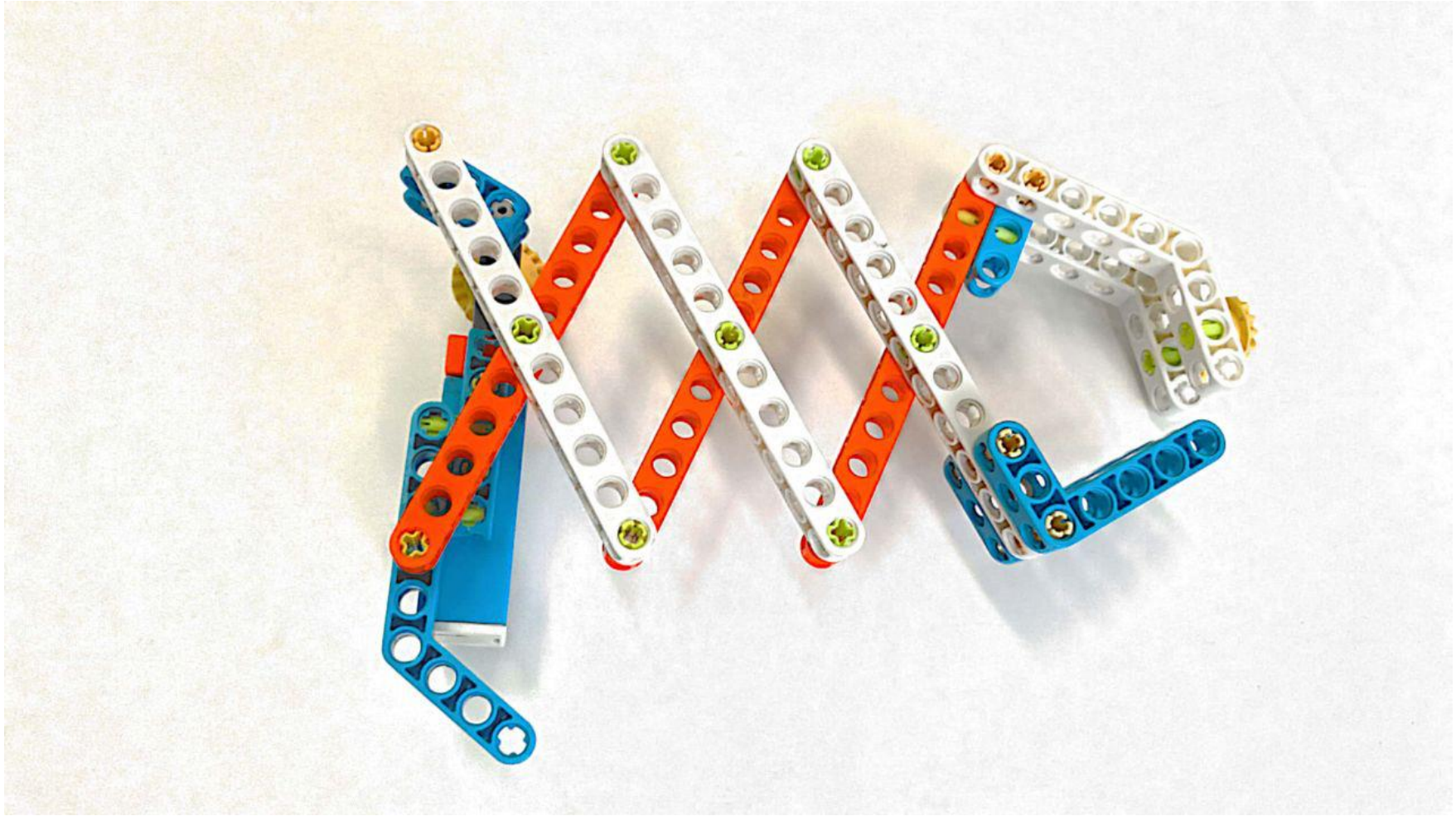

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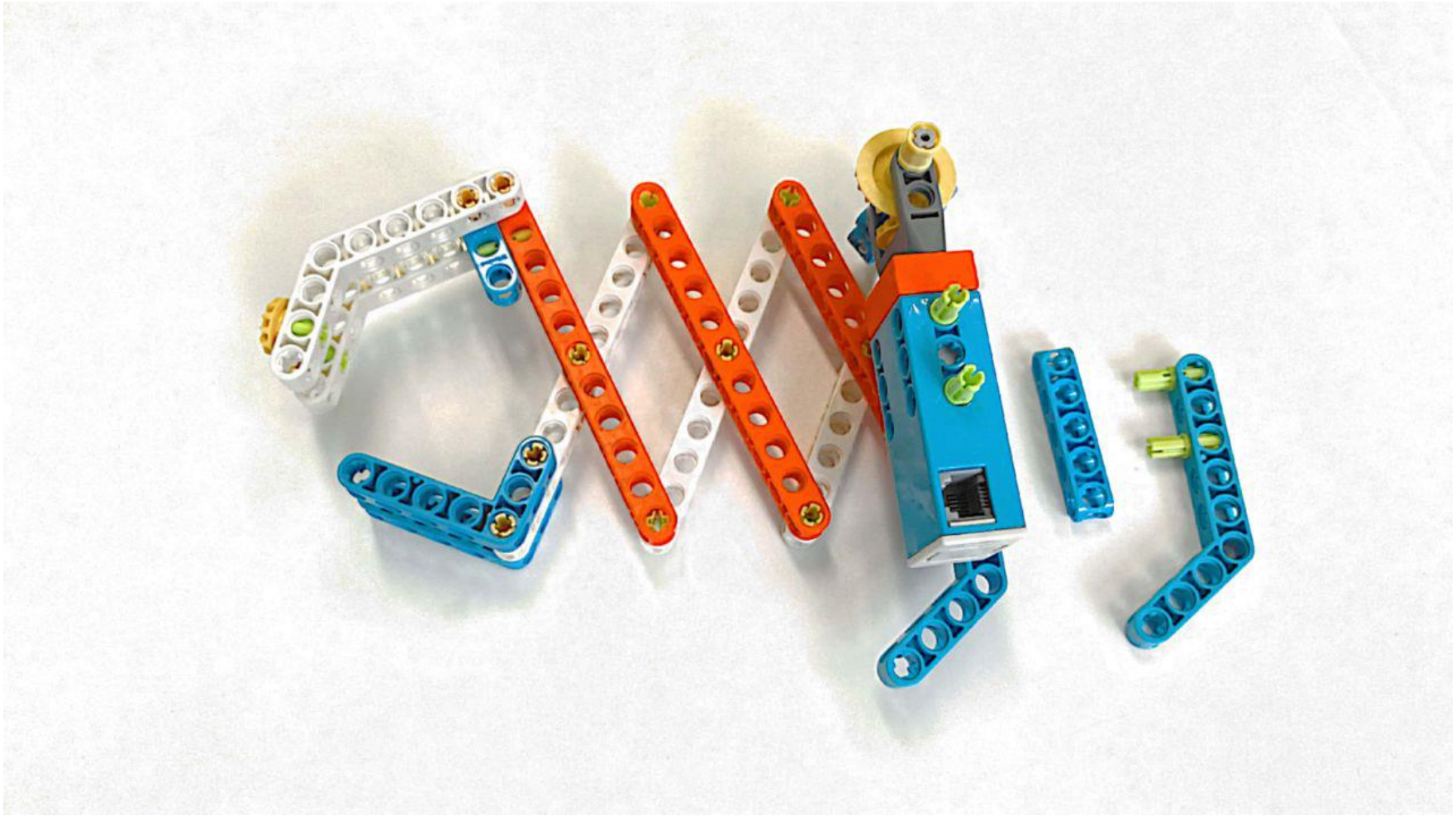

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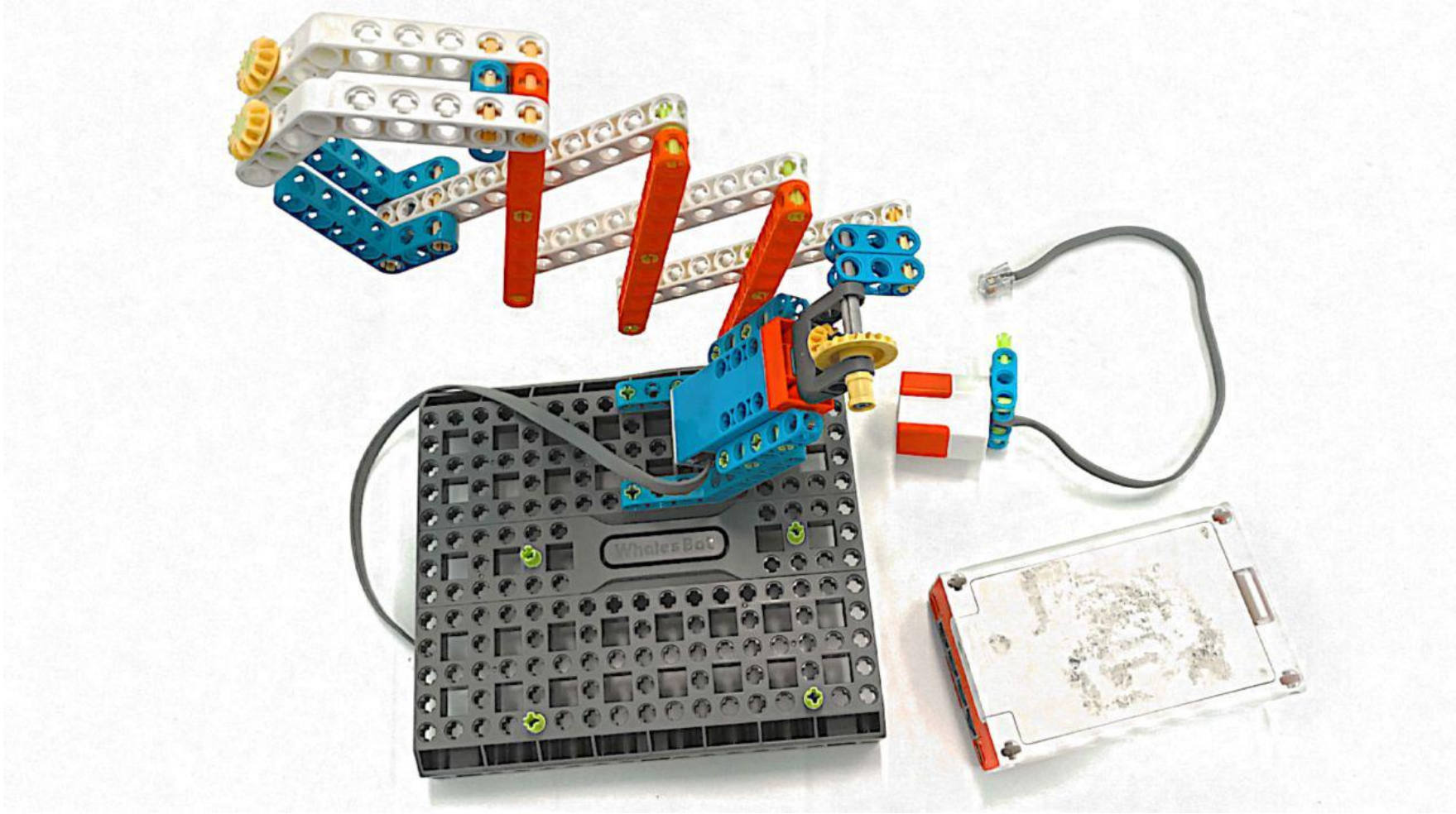

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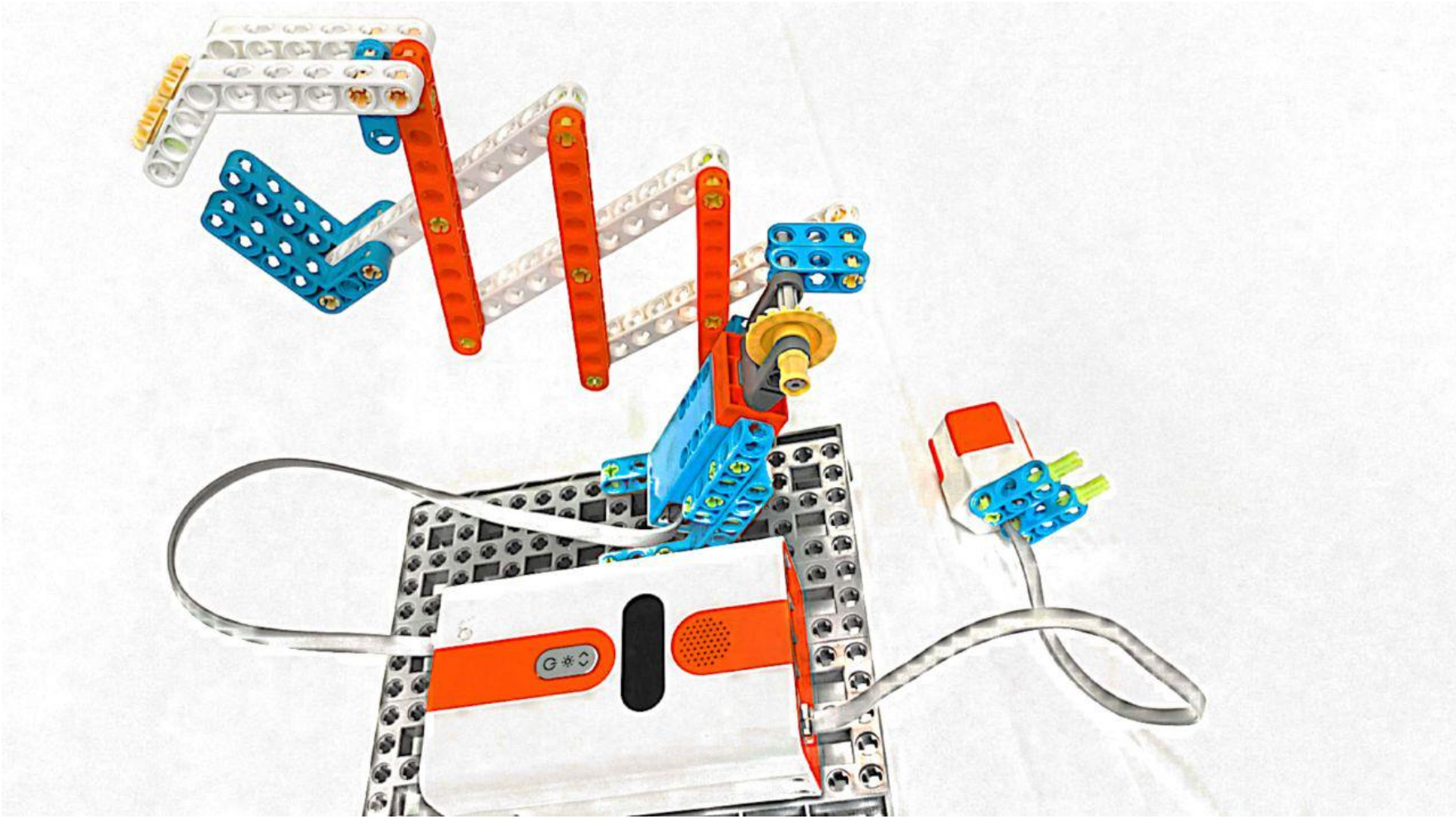

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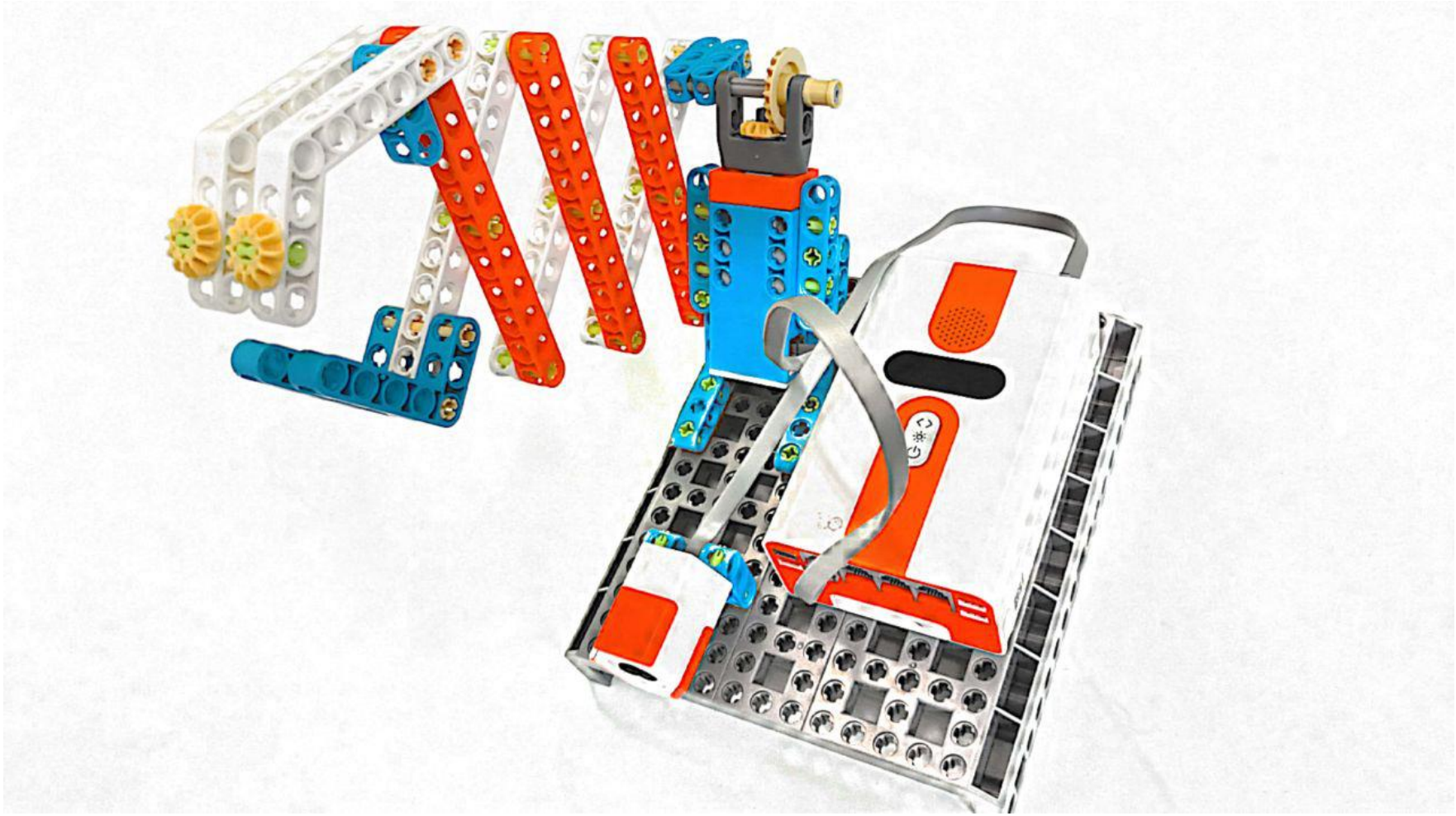
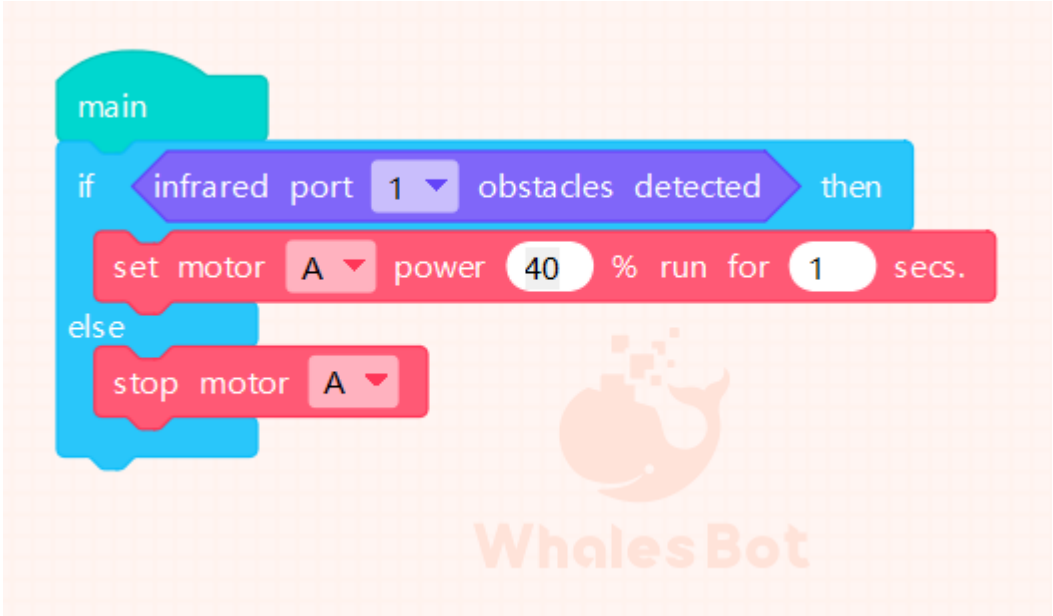


4.Coding

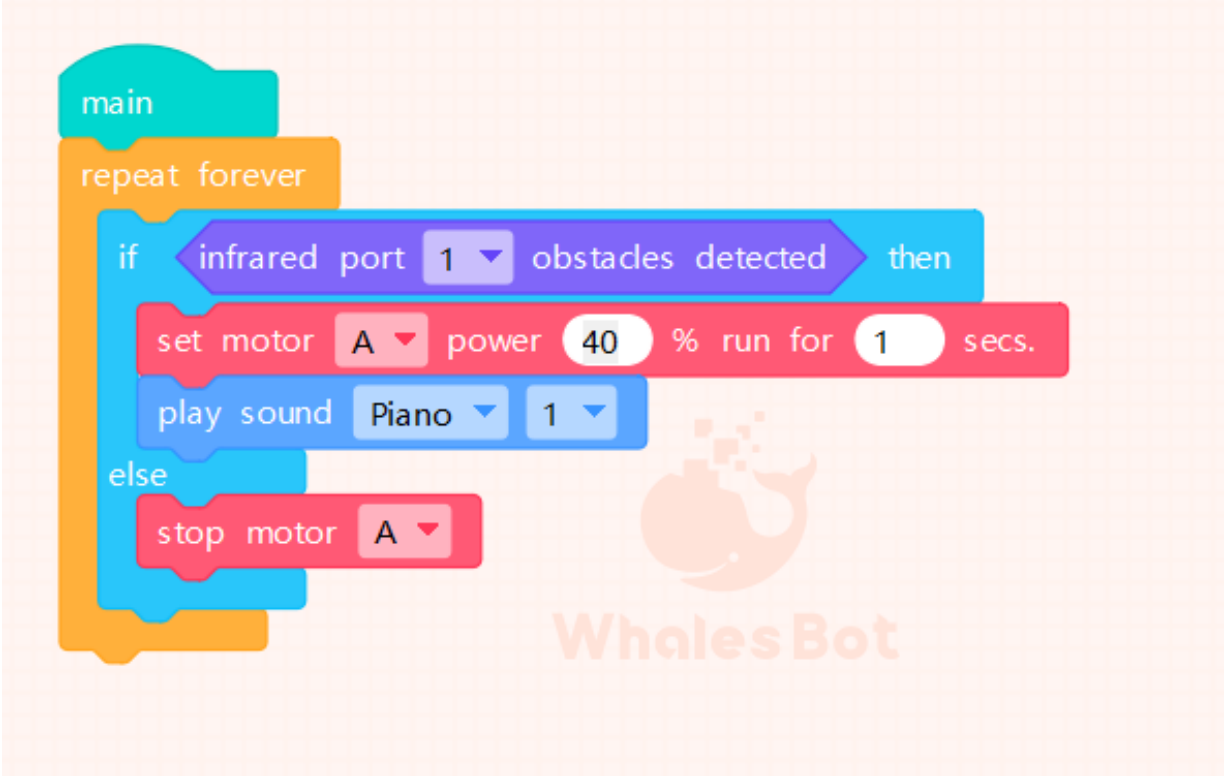
When the infrared sensor detects the prey, the motor starts to work, otherwise the motor will not work.





4.Coding

We can also add sounds and loops to the program.

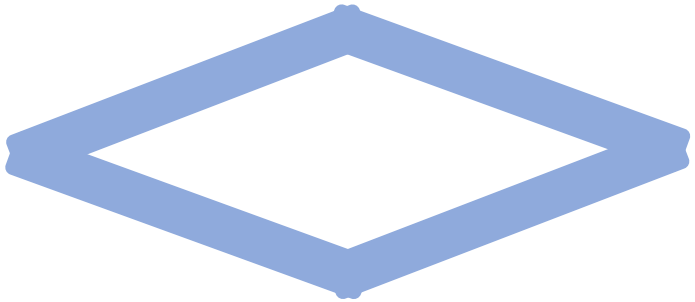


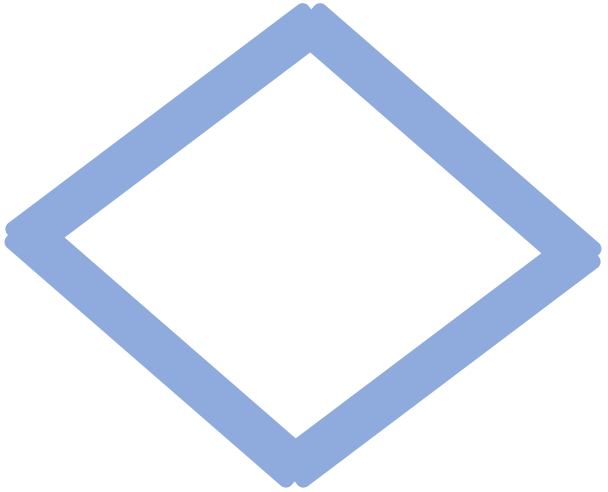


5.Evaluation

Why can our "snake" stretch and shrink? What principle was used?

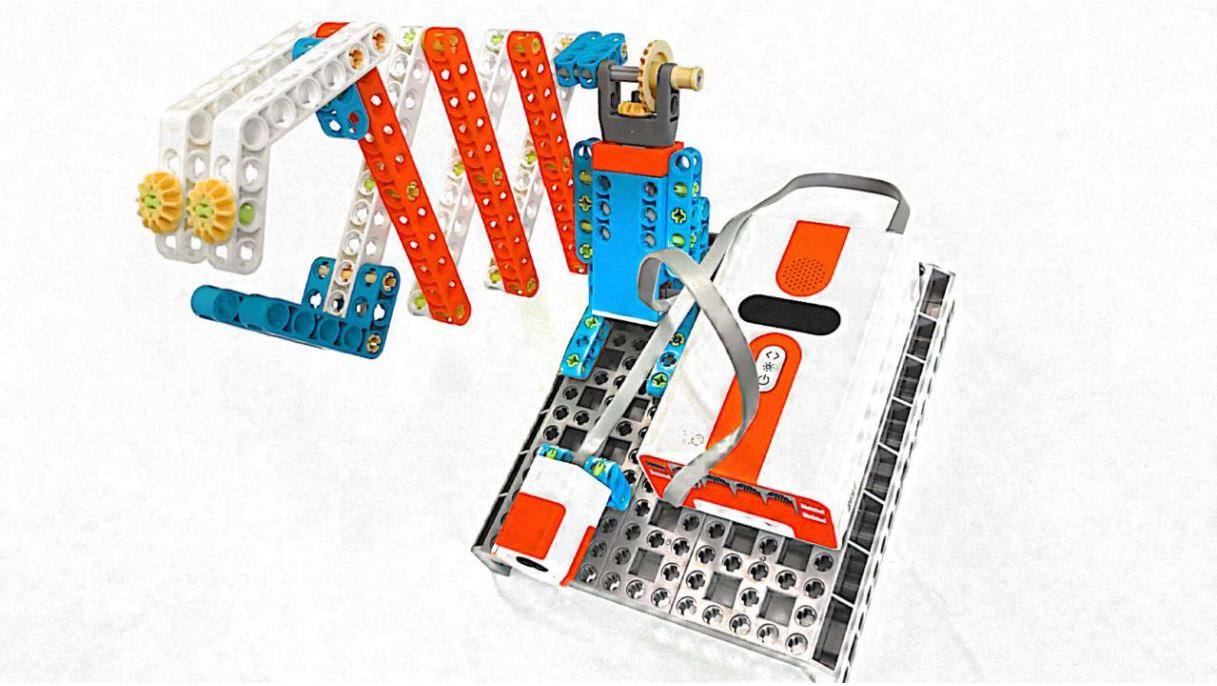
We use the property of quadrilaterals - the ability to deform. So that the "snake" can expand freely.







6.Presentation



Maybe we can decorate the snake a little bit more. Like installing a tail on it.