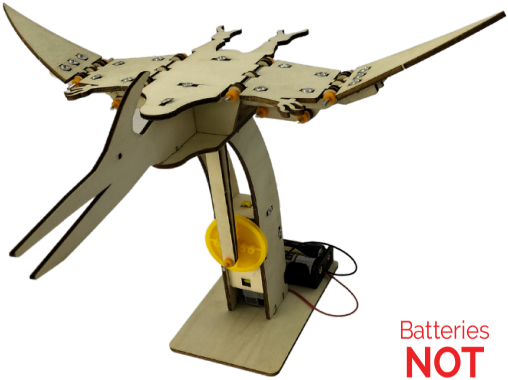
Hello Firecracker

Pterosaur

Discover the Joy of a
Mechanical Friend



Batteries
NOT
included

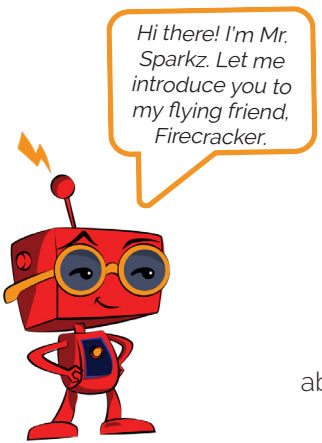
AA AA

level

Firecracker

the wooden mechanical walking

Pterosaur



Hey there, little buddy!

I'm Firecracker, the Pterosaur,
but you can call me the winged giant, Firecracker!

I'm a Pterosaur and I'm here to tell you about me, so get ready for some dino fun!

You could think of me as a flying lizard! I had wings and could soar through the ancient skies about 210 million years ago.

I had wings that helped me soar through the ancient skies. My body was sleek and lizard-like. With these magnificent wings, I was able to explore the world from above, and it was an amazing experience. Unlike some dinosaurs, my flying adventures were like something out of a

I'm glad that we're friends and I'm looking forward to going on all sorts of adventures with you. I'm sure we'll learn a lot about the fantastic creatures from the past, including your fellow Pterosaur and those fascinating dinosaurs. And who knows, we might even discover some cool fossils and secrets from the ancient world along the way!

Are you ready to bring me to life?

Let's see what we need and how to prepare:

How to prepare:

- Before you start, you need to find a safe and clean place to work.
- If you have any questions or need help, you can ask your parents, a grownup, or teacher and they will assist you.

Some things to keep in mind:

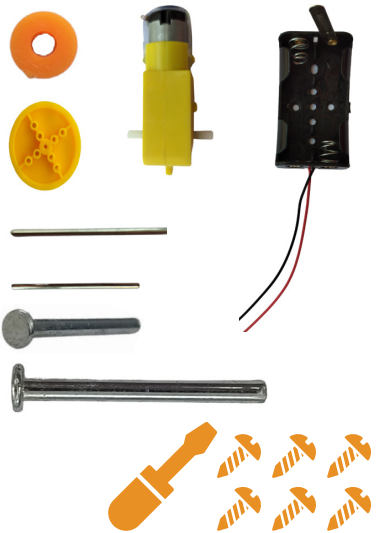
- *Be careful: When you open the package with the parts, do not drop or lose any small parts. They are very important for your model. If you lose a piece, your model might not work!*
- *Read and follow: If you want to make your model easily, you need to read the instructions well and follow the steps.*

Remember to get 2 x AA batteries for Firecracker!

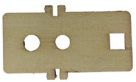
What is in the BOX

- 15 x wooden parts
- 2 x 5cm shafts
- 1 x remote control
- 6 x 1,3 cm tacks
- 1 x yellow motor
- 16 x orange spacers
- 11 x 7mm screws
- 1 x 2,1cm tack

  24 x 4mm screws
- 1 pack with little pads
- 1 x screwdriver
- 2 x 4cm shafts
- 2 x 5cm shafts



X 1 — 1



X 1 — 2

X 1 — 3

X 1 — 4

X 1 — 5

X 1 — 6

X 1 — 7

8 — 1 X

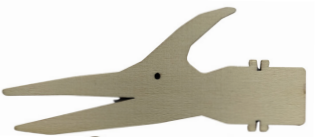
9 — 1 X

10 — 1 X

11 — 1 X

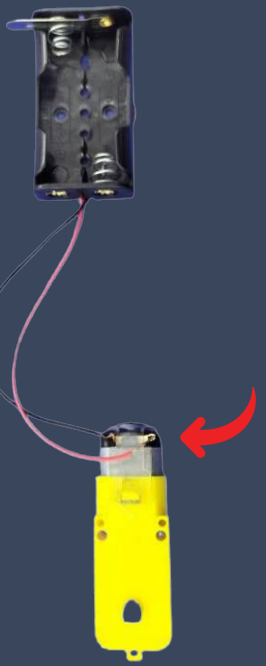
12 — 1 X

13 — 1 X



14 — 1 X

15 — 1 X



Step 1

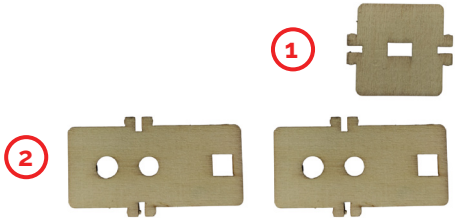
You will need to strip the wire on the remote so that about 1cm of the wire is exposed.

If you don't know how to do this, ask a grown-up for help.

Connect the wire of the remote control to the copper tags on the yellow motor.

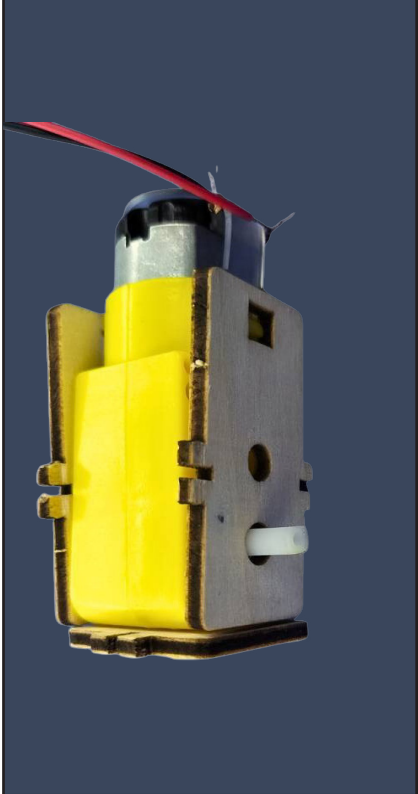
It's like giving Firecracker some power!

Step 2



Attach board 1 and both board 2s on the yellow motor.

Make sure the boards are facing the right way as shown in the image.



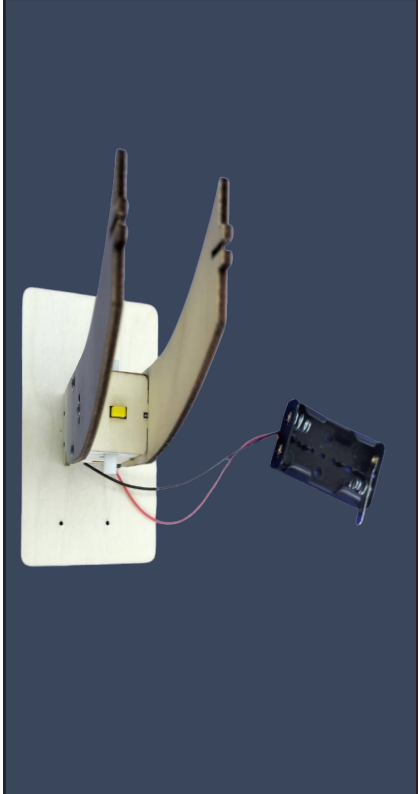
Step 3

Attach board 3 to board 1 and 2, using 4mm screws.

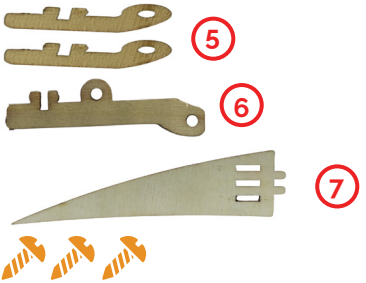
Check that the wires are in the right place.

Step 4

Use the 7mm screws to attach the No. 3 boards to the No. 4 board. Then, put the battery box on the No. 4 board using 4mm screws.



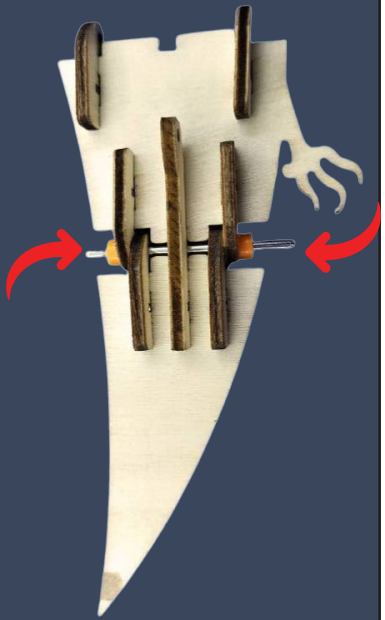
Step 5



Use the 4mm screws to attach 2 board 5s and board 6 on board 7.

Step 6

Attach 4 of the No. 5 boards to the No. 8 board with 4mm screws.

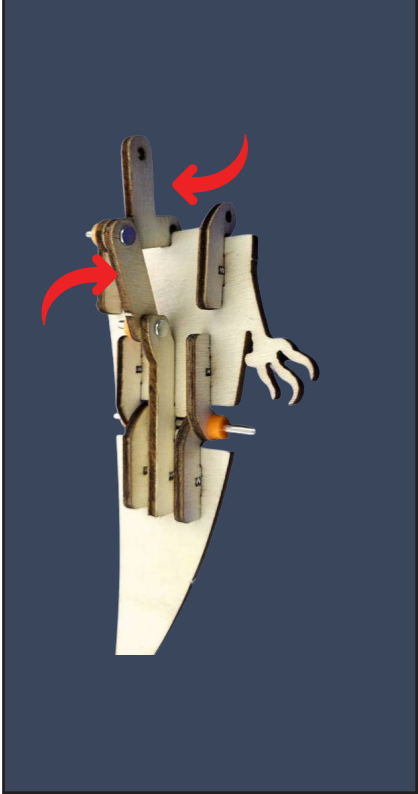


Step 7

Slide the 4cm shaft through board 5 and 6, then secure it with spacers.

Step 8

Use a 1.3cm shaft to put the No. 9 board on board 6, and use a spacer to keep it in place. Do the same for the No. 10 board.



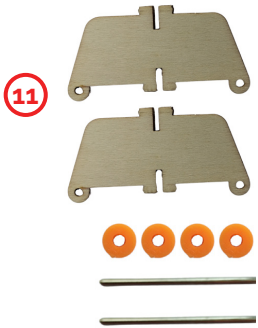
Step 9

Build the other wing just like you did in step 6, 7, 8, and 9.

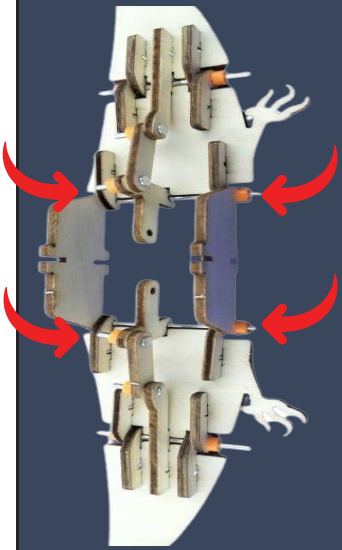
Follow the same procedures to build the second wing.

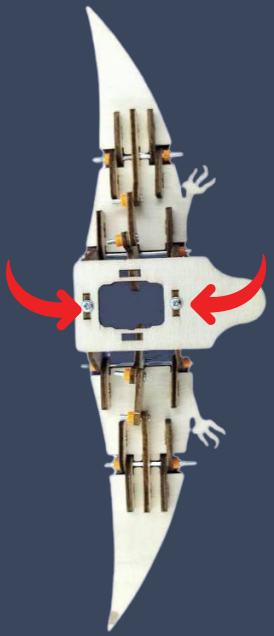
But remember, the No. 8 board should face the right way.

Step 10



Slide two 5cm shafts through boards 1, 5, and 10, then use the four spacers to keep them secure.

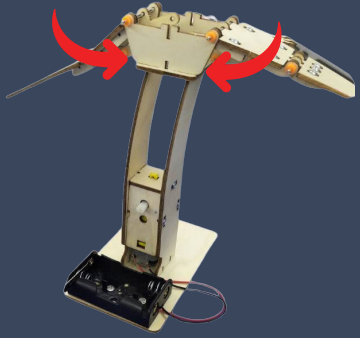




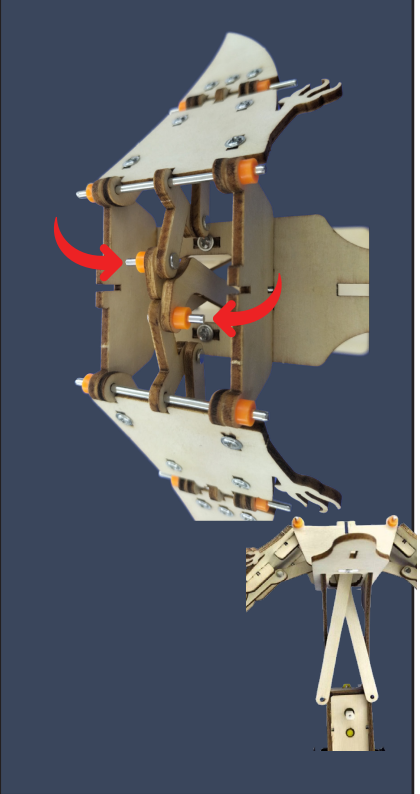
Step 11

Use the 7mm screws to attach the No. 12 board to two No. 1 boards.

Step 12



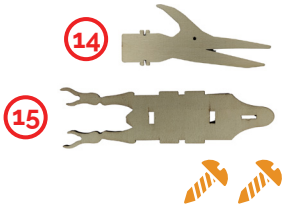
Use the 7mm screws to attach the No. 12 board to two No. 3 boards.



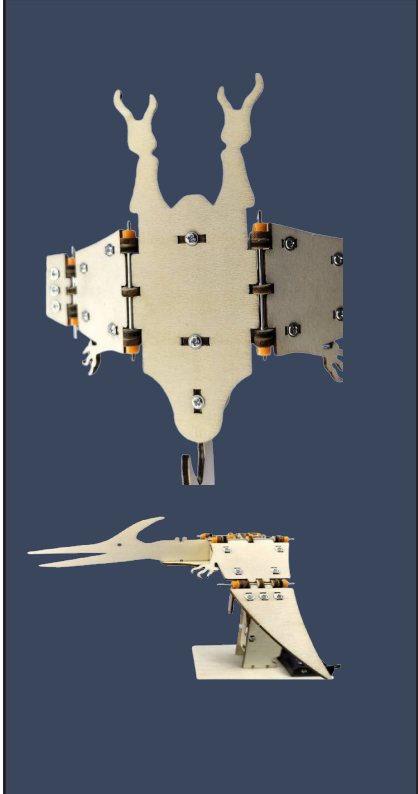
Step 13

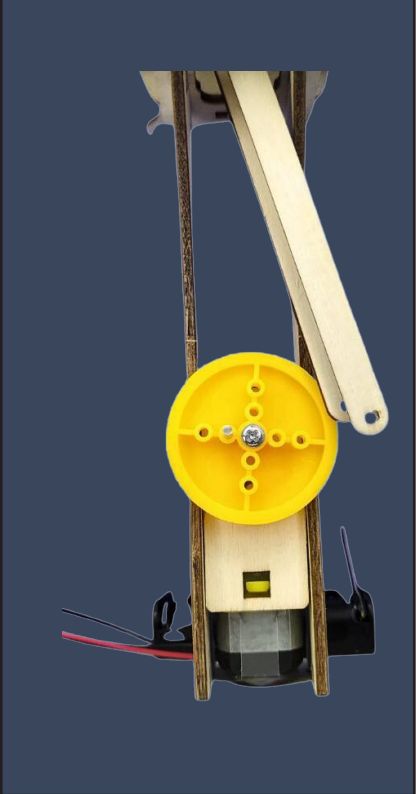
Put two 1.3cm shafts through the No. 3 board and the No. 10 boards. Use spacers to hold them in place. Make sure they go in different directions.

Step 14



Use the 4mm screws to attach the No. 14 board to the No. 12 board. Then, use the 7mm screws to attach the No. 15 board to boards 14 and 11.

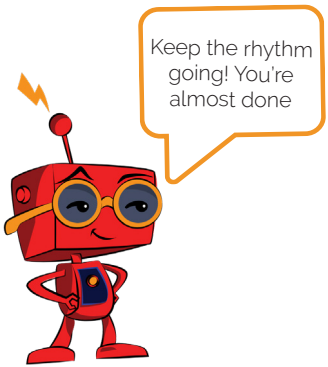




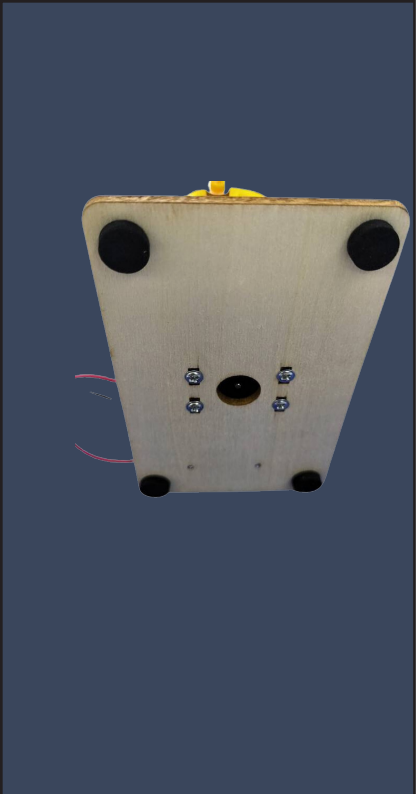
Step 15

First, put a 2.1cm shaft into the yellow pulley. Then, use a 7mm screw to attach the yellow pulley to the spinning part of the motor.

Step 16



Put a No. 13 board onto the 2.1cm shaft and use a spacer to hold it in place.

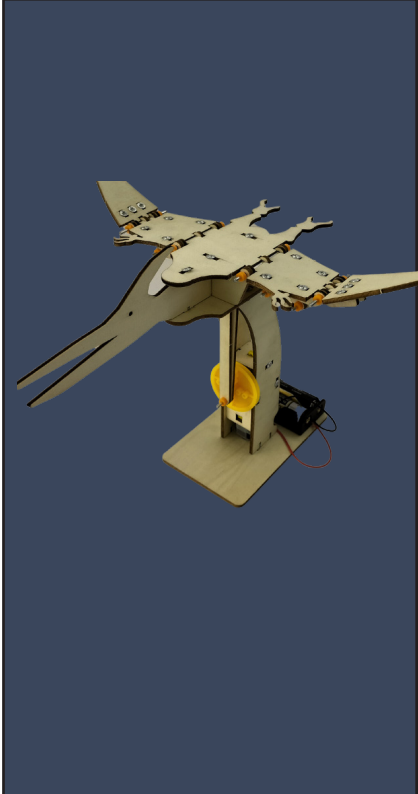


Step 17

Stick little pads on the four corners of board 4, and your mechanical pterosaur is ready!

Step 18

Put the batteries in the battery box, close it, and your Pterosaur will start moving.



Now you have
your very own Pterosaur!

Congratulations, adventurer, you have successfully completed your mechanical pterosaur project! Insert the batteries to see your Dino friend come to life. Get ready for an epic show of mechanical magic and have a roaring-good time!

If Trike doesn't want to move!?

- Check if the orange wheel is too tight. Loosen it a little bit.
- Try using new batteries.
- Make sure the wires are connected properly.
- Check if the No. 13 board is attached correctly. Fix it if needed
- If it still doesn't work, ask a grown-up for help.

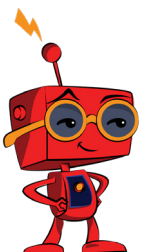
S Science

T Technology

E Engineering

A Arts

M Mathematics



STEAM kits - help kids learn many skills they'll need in a fun and practical way.

Here's how they help:

1. *Hands-On Learning:*
   Kids do experiments and projects, making learning fun.

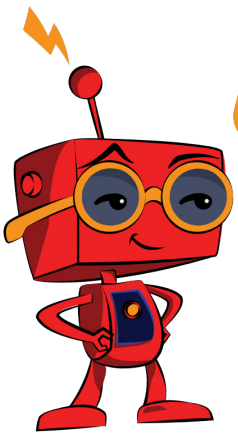
2. *Problem-solving:*
   They learn to solve problems by thinking and trying things out.

3. *Creative Thinking:*
   Arts and design are part of ***STEAM***, so kids get to be creative.

4. *Confidence:*
   Completing projects makes kids feel like they accomplished something

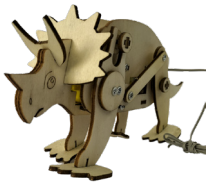
5. *Preparation:*
   STEAM skills are important for the future, so kids are ready for jobs.

Collect them all



With a bit of imagination you can create your own unique friends. Please share your creations with our community

Please ask your mom / dad / teacher or a grownup to help you to upload your creations to our community page on the website. We would love to see your creations and also share and inspire the little creator in you.



Trike
Triceratops

Rexzilla
T-Rex

Brian
Brachiosaurus