EST 2014

BOT SHOP

LET THE FUN BEGIN

Hello Rexzilla

T-Rex

Discover the Joy of a Mechanical Friend

NOT included

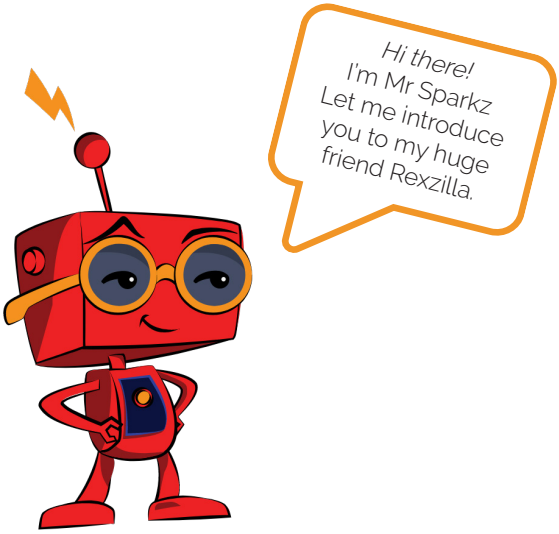
AA AA

level

Zexzilla

the wooden mechanical walking

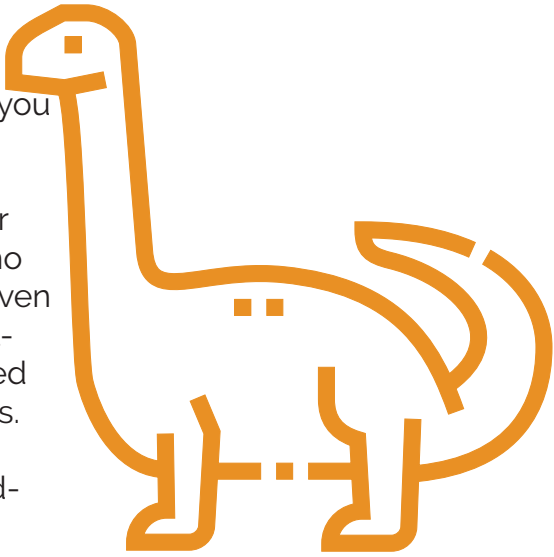
T-Rex



Hey there, little creator!

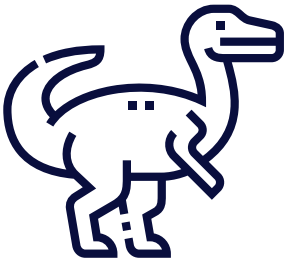
I'm Rexzilla, the T-Rex, but you can call me Rexzilla!

I'm based on a big dinosaur called Tyrannosaurus Rex, who lived a really long time ago, even before your great-great-great-grandparents were born! I used to be the king of the dinosaurs. I'm so excited to be your new friend and go on awesome adventures together.

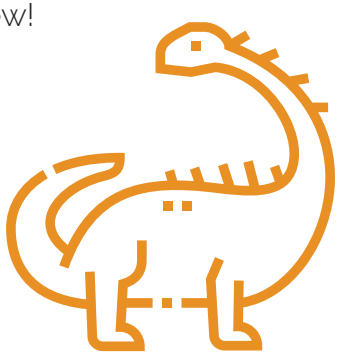


Now, listen up, i was a seriously big beast! Picture one school buses lined up, and a one-story house. Yep, that's how huge I was! I weighed as much as 3 elephants! Can you believe it?

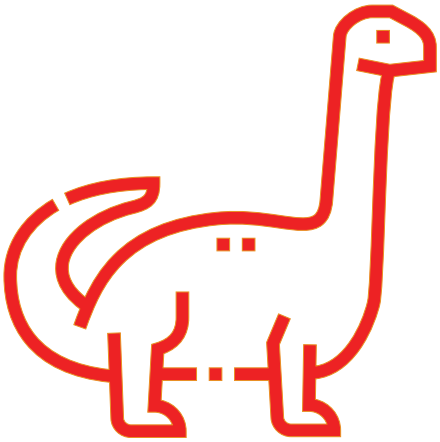
I lived a looong time ago, about 68 million years ago. That's even older than your great-great-great-great granny! Back then, the places I roamed were North America and Africa, you know when the world was still one big continent.



Oh boy, let me tell you about my nemesis, the Allosaurus! They always had their eyes on me for dinner. But guess what? I was so gigantic that they mostly left me alone! Phew!



On the other hand, my best buddies were the Sauropods. We were all huge like me, with long necks and tails. We had a blast together!



Now, it's been dino-fun sharing my story with you. But enough talk, let's get building! I can't wait to be your friend and hear all about you! Together, we'll discover so many amazing things!

Are you ready to bring me to life?

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

How to get ready:

- 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.

Have fun!

Some things to keep in mind:

- *Be careful:* When you open the package with the materials, be careful not to drop or lose any small parts. They are very important for your model. If you lose them, 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 your own
2 x AA batteries for Rexzilla!

What is in the BOX

- 17 x pieces of wooden parts
- 1 x remote control
- 1 x yellow motor
- Regular 7mm screws
- 1 x screwdriver

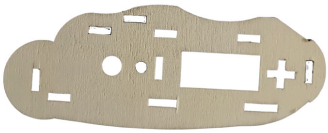
x 1 — 5

1 — 1 x

2 — 1 x

3 — 1 x

9 — 1 x



x 1 — 7

8 — 2 x

10 — 2 x

12 — 4 x

11 — 8 x

4 — 1 x

6 — 1 x

x 2 — 16

x 2 — 14

15 — 4 x

x 4 — 13

17 — 2 x

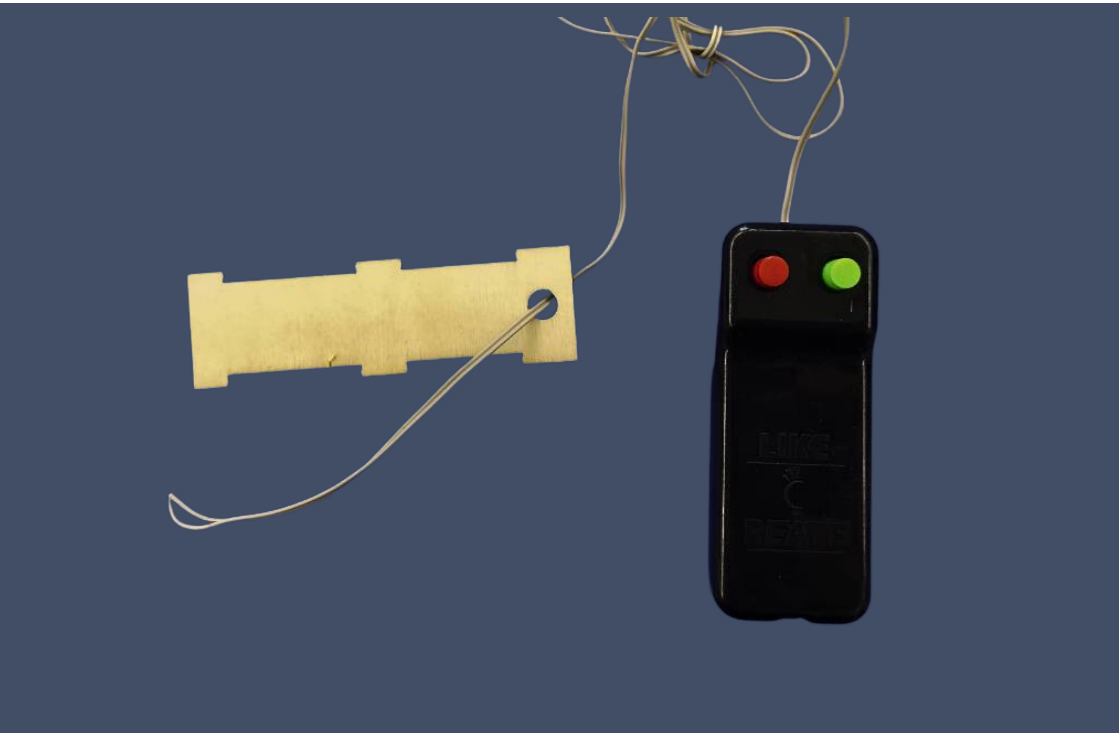
Step 1

You will need to strip the wire on the remote so about 1cm of 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!

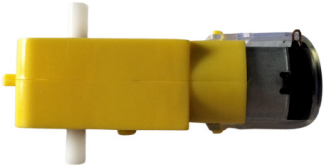


Step 2

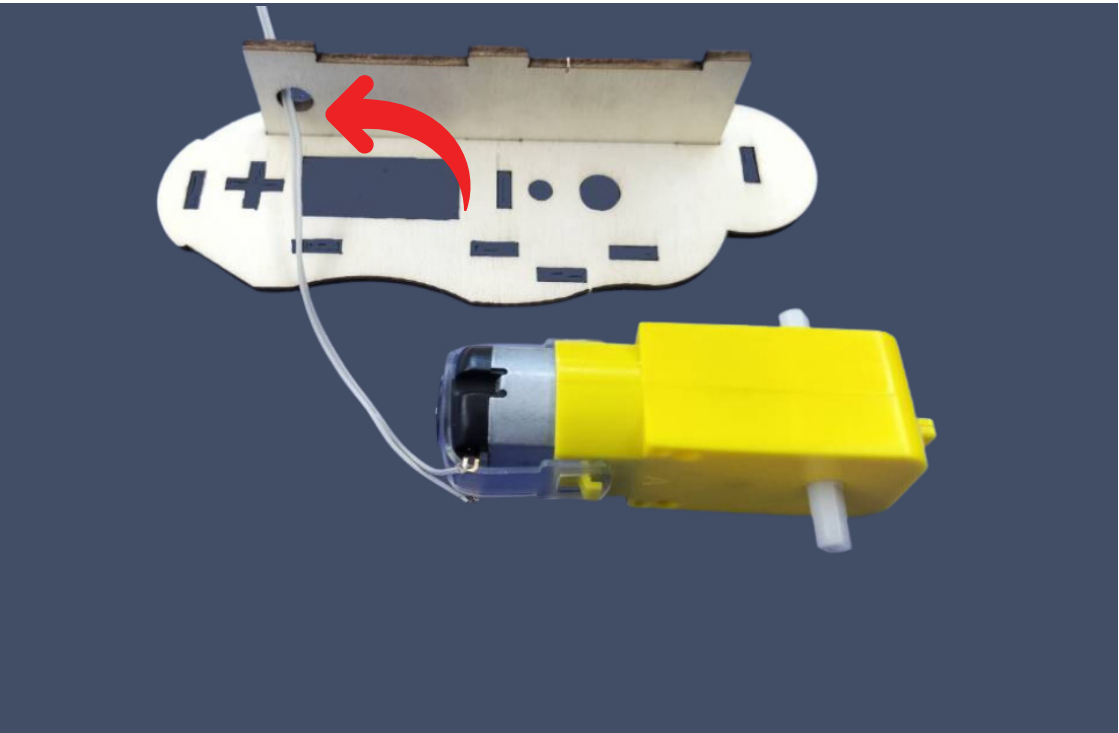
1

Use 2 x 7mm screws to attach board 1 to board 3

3



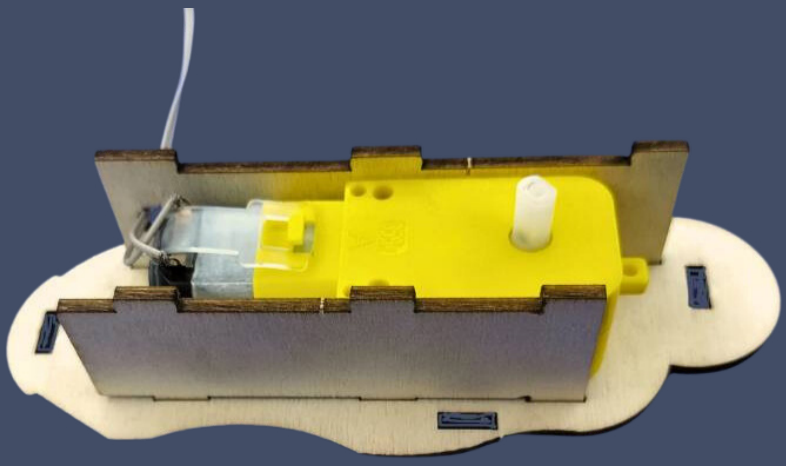
Make sure the boards are facing the right way as shown in the image below.



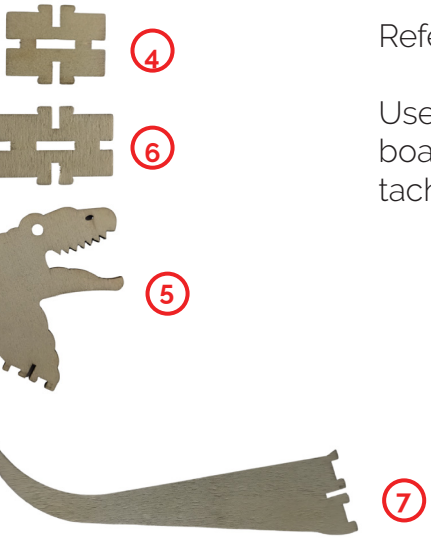
Step 3

2

Use 1 x 7mm screw to attach board 2 to board 3

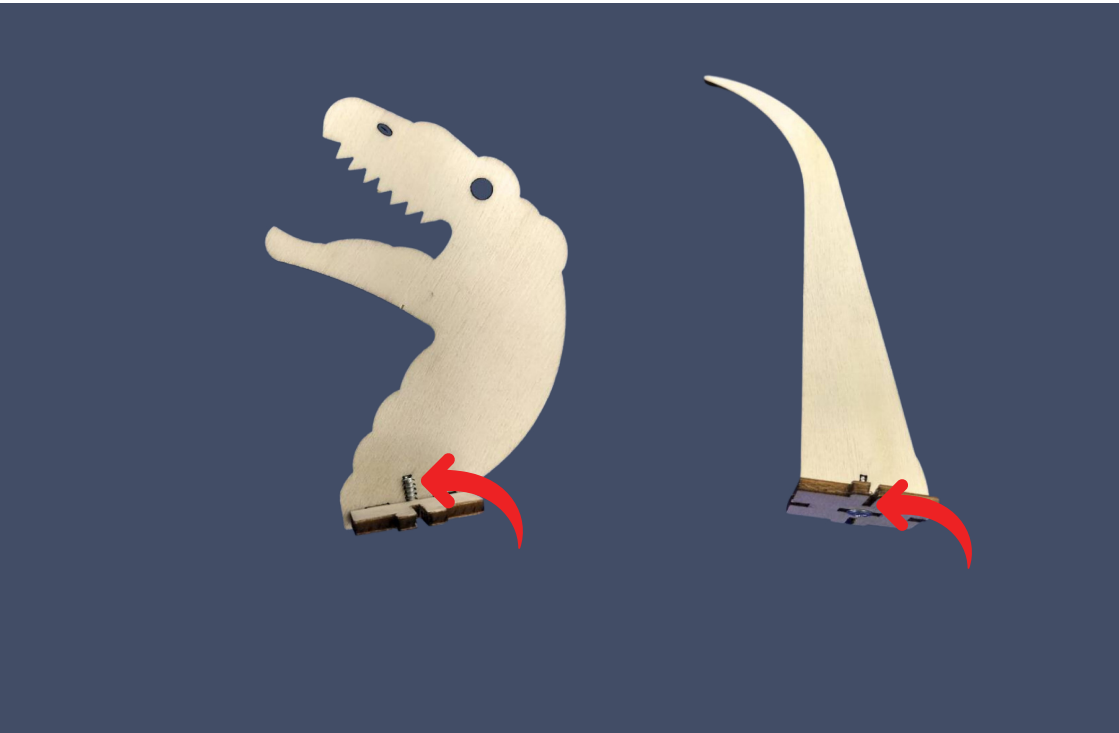


Step 4



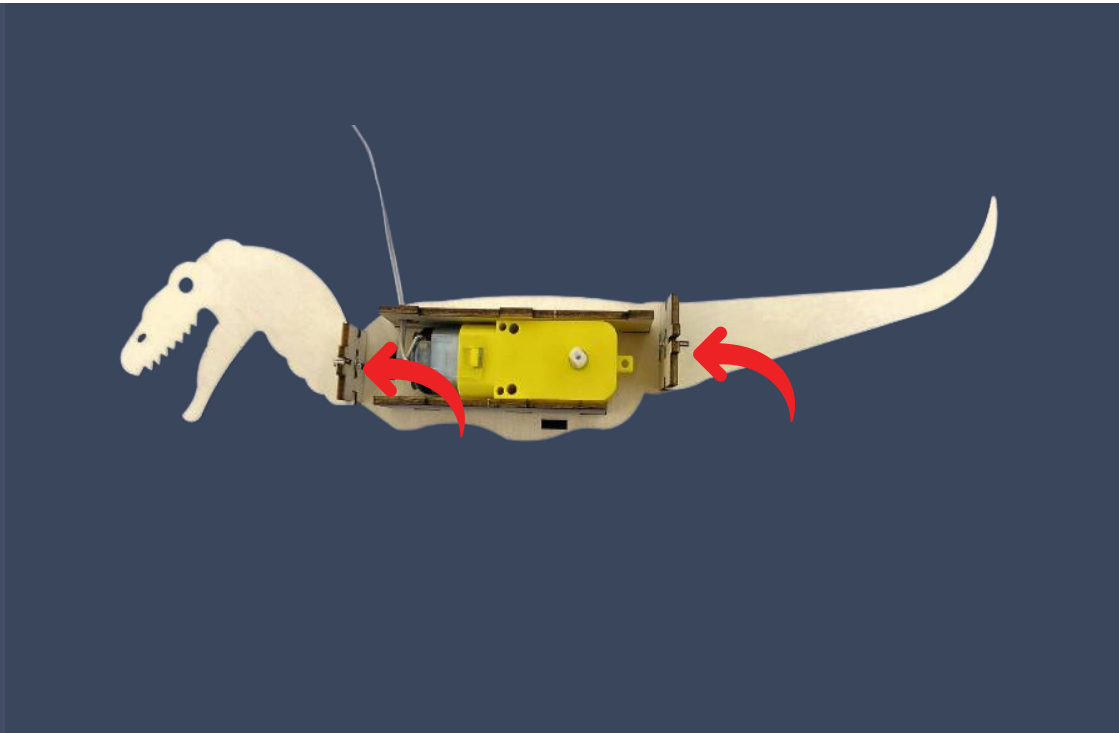
Refer to the picture below.

Use the 7mm screws to attach board 4 to board 5, and then attach board 6 to board 7.



Step 5

Look at the picture below and use the 7mm screws to put boards 4 and 6 onto board 3.



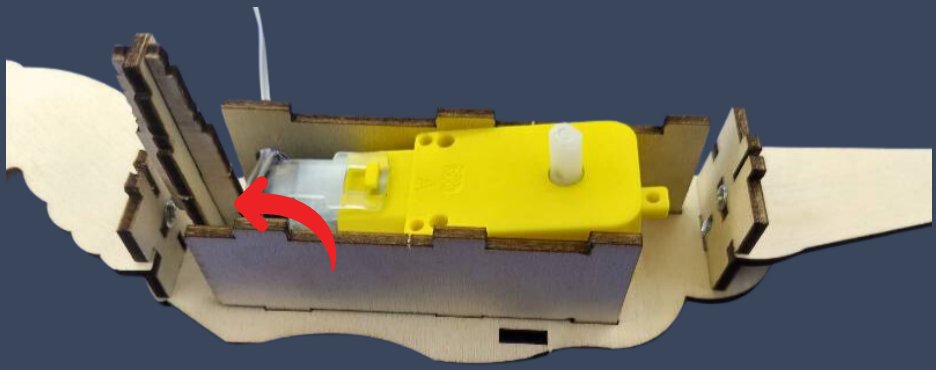
Step 6

8

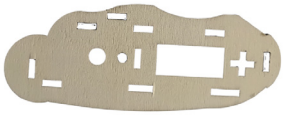
Make one clamping posts from the two no 8 boards.

Step 7

Attach the clamping posts to board 3.



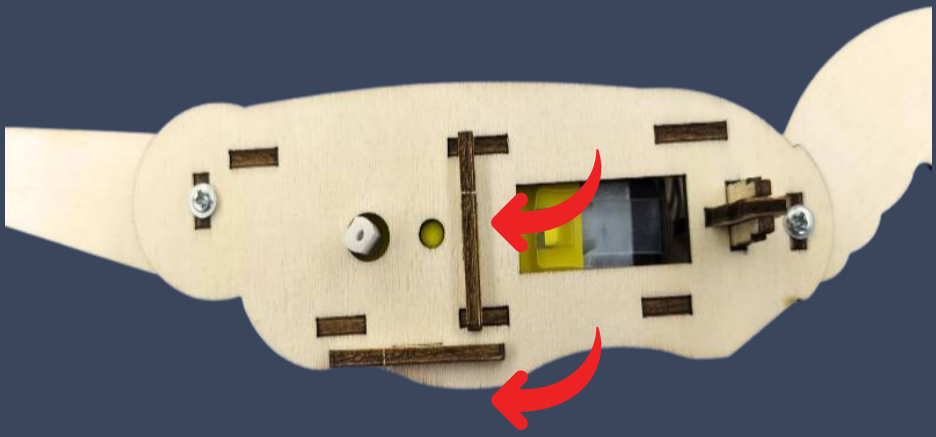
Step 8



9

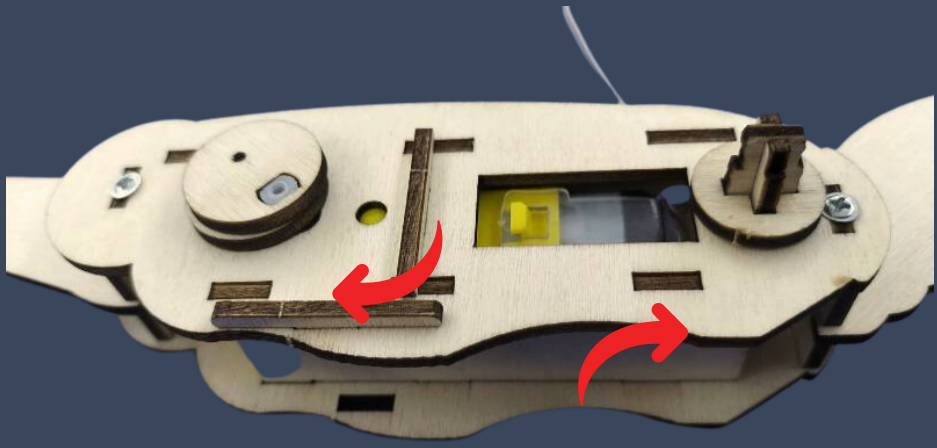
11

First, attach the no 9 board with 7mm screws. Also, add two no 11 pads. Do the same for the other side.



Step 9

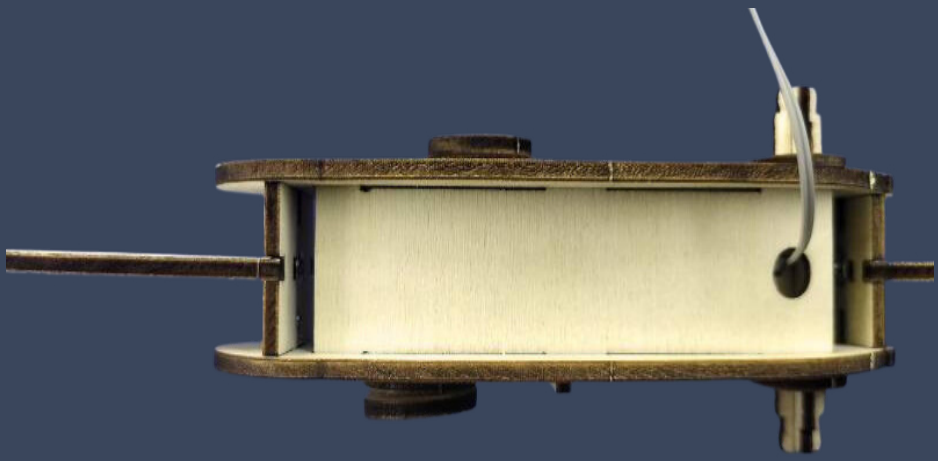
Now, put two no 12 round boards on the motor's shaft. Attach the no 10 board to the clamping post.



Step 10

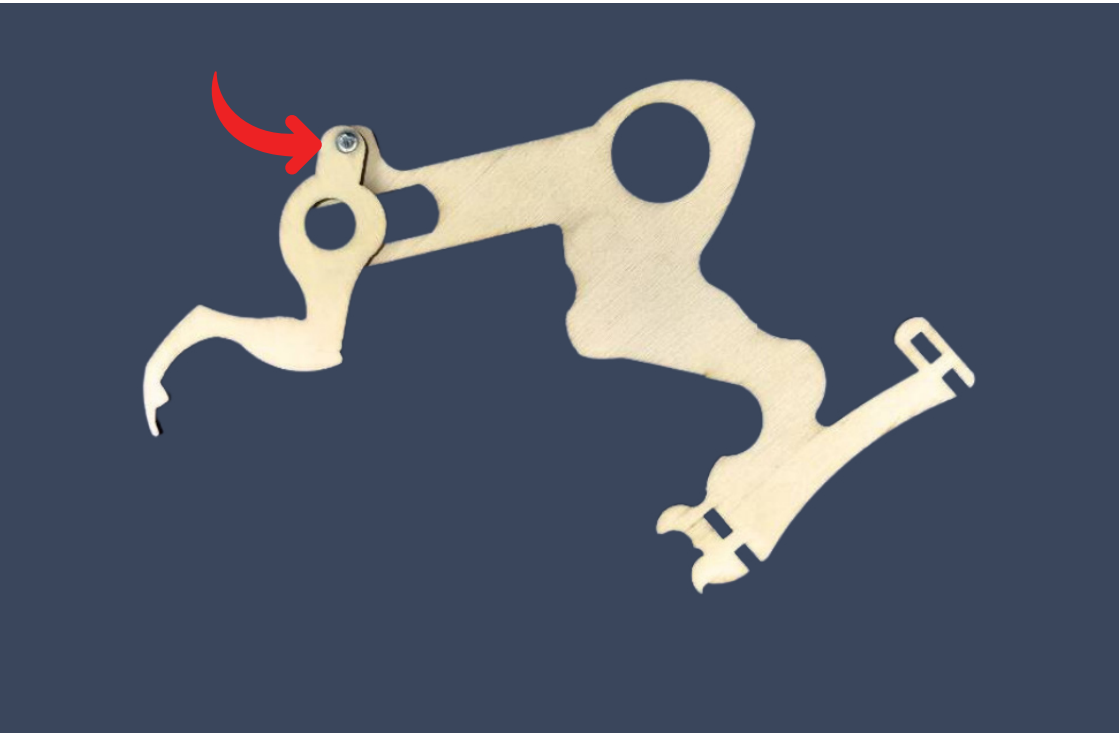
12

Follow the same method as step 10 to put the other side. Make sure they face in different directions.



Step 11

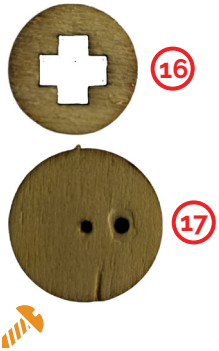
Use the 7mm screws to connect plates 3 and 4 together. But don't tighten them too much; leave a tiny 1mm space between boards 3 and 4. This space is important for Rexzilla to move. Do the same for the other leg.



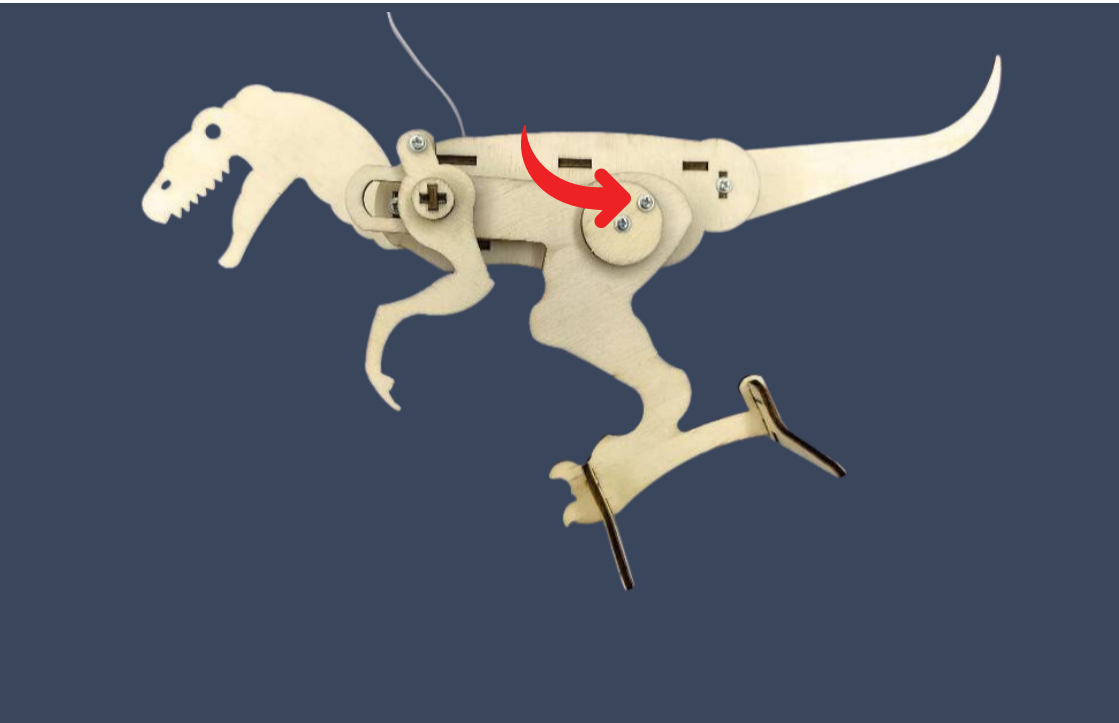
Step 12

Put board 5 onto board 19 using 7mm screws. Attach the side legs the same way. Make sure the long end faces board 3.

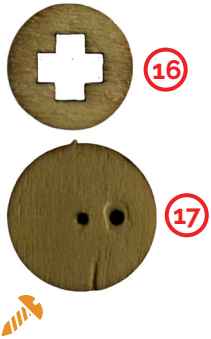
Step 13



First, attach the legs, then use the no 16 card plate to hold board 3, and finally, use 7mm screws to attach board 3 to the no 2 rotating shaft card plate.



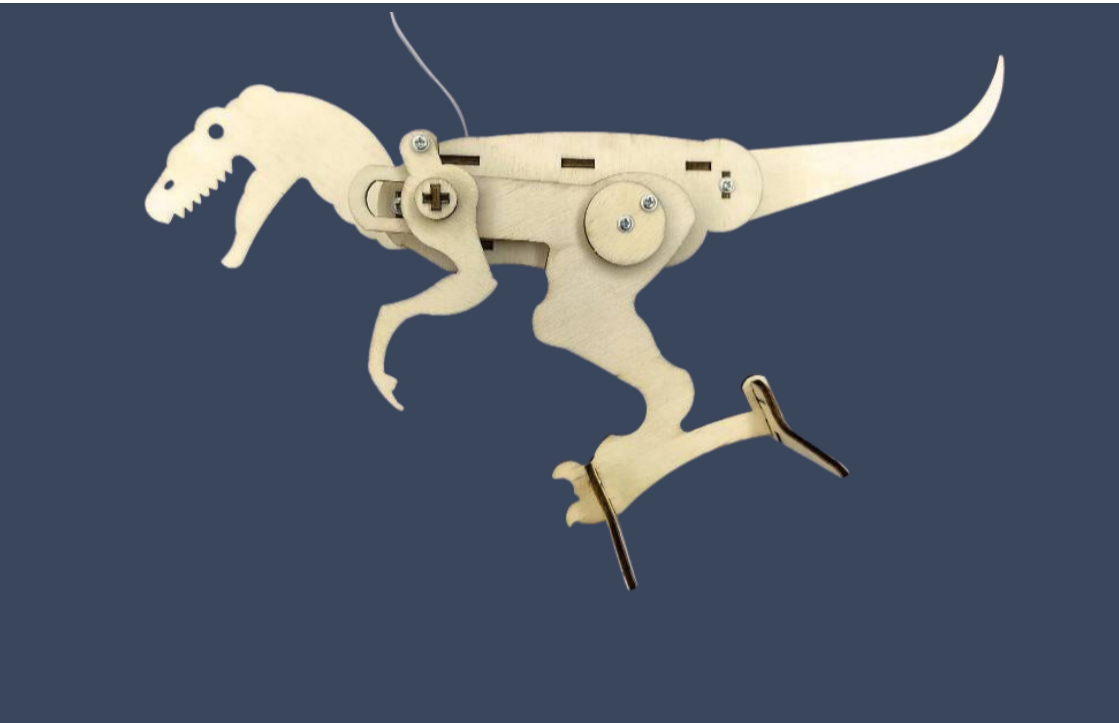
Step 14



Look at the picture below, and use 7mm screws to make a left leg with boards 12, 13 and 14. Make sure that there is a small gap of 1mm between boards 12, 13 and 14.

Now use the screws to add the feet.

Then do the same to make a right leg, but make sure it is a mirror image of the left leg.
If there is no gap between the boards, your dinosaur model will not be able to move.



Step 15

Now that your mechanical T-Rex, Rexzilla, is ready, open the battery cover on the control, put in the batteries, close the cover, press the red or green button, and watch Rexzilla start moving back and forth!

Now you have
your very own T-Rex!

It's time to take Rexzilla for a walk.

Now you're ready to have loads of fun with your very own mechanical dinosaur friend, Rexzella!

Brian doesn't want to move!?

- Check if the wires are connected properly. You can fix them if they're not.
- Try using new batteries; the old ones might be tired.
- Make sure the no 12 axis card in step 11 is facing the opposite way.
- Check if there's a tiny 1mm space between boards 3 and 10 in step 12. Rexzilla needs that space to move!

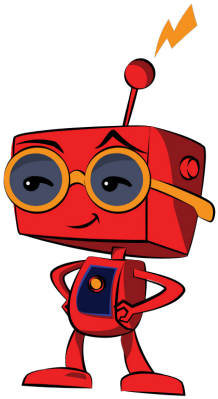
S Science

T Technology

E Engineering

A Arts

M Mathematics



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
5. accomplished something

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

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