EST 2014

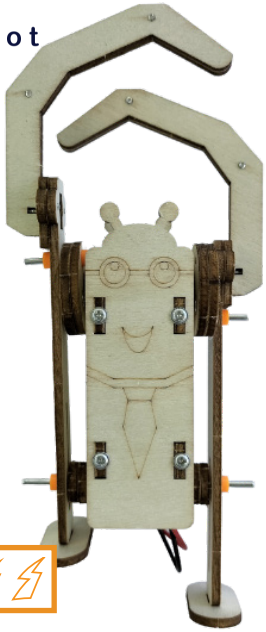
BOT SHOP

LET THE FUN BEGIN

Bennie

Climbing robot

Discover the Joy of a mechanical Friend



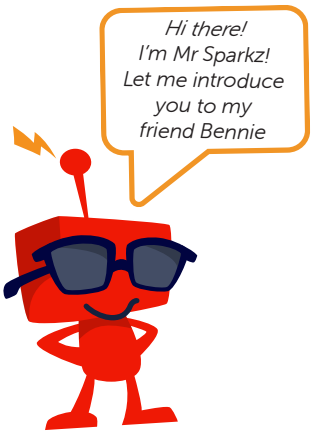
Includes:
paint and art stuff to create your own unique friend

NOT
included

AA AA

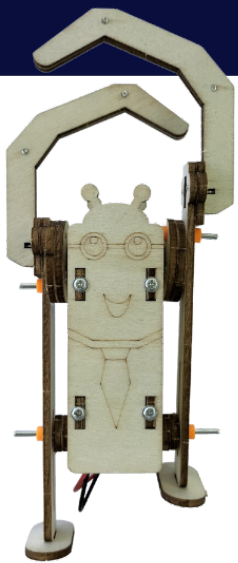
level

Bennie
the Climbing robot



Hello there, little friend!

I'm Bennie, the DIY Climbing Robot. I'm here to take you on a thrilling adventure into the world of robotics and bionic creatures!



You see, a rope climbing robot is a special kind of robot that imitates the movements of living creatures, just like monkeys. It's called a bionic robot because it tries to be like a living thing and performs tasks in a similar way.

Imagine a robot that can climb up ropes, just like a monkey swinging from tree to tree. It's fascinating! This robot uses special mechanical structures to mimic the movements of these clever animals. So, get ready, my little explorer, to dive into the world of robotics and bionic creatures with the DIY Climbing Robot. Let's learn, create, and have an exciting time together!

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

How to get 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.

Have fun!

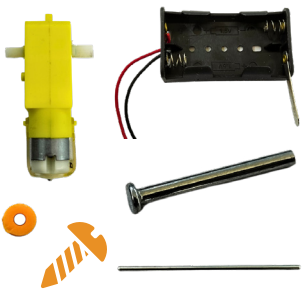
Some things to keep in mind:

- *Be careful:* When you open the package with the parts, be careful not to 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 Bennie!

What is in the BOX

- 11 different pieces of cut-out board
- 1 battery box
- 1 motor
- 1 long shaft
- 1 medium-length shaft
- 2 short shafts
- 6 spacers
- 4 7mm screws
- 2 4mm screws
- 1 fan



x 2 — 1

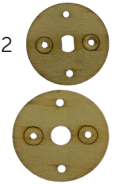
x 1 — 2

x1 — 3

x 2 — 4

x 2 — 5

6 — x 2



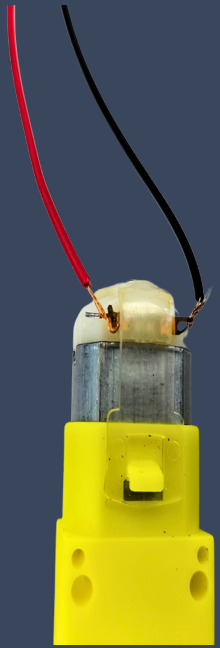
7 — x 2

8 — x 4

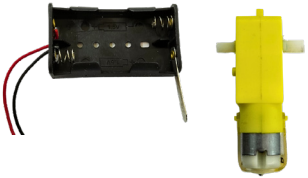
9 — x 2

10 — x 2

11 — x 2



Step 1

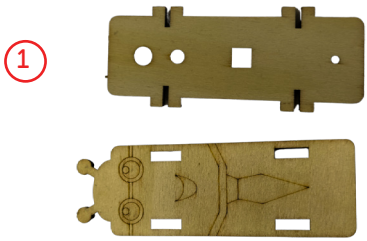


You will need to strip the wire on the remote so about 1cm of wire is exposed.

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

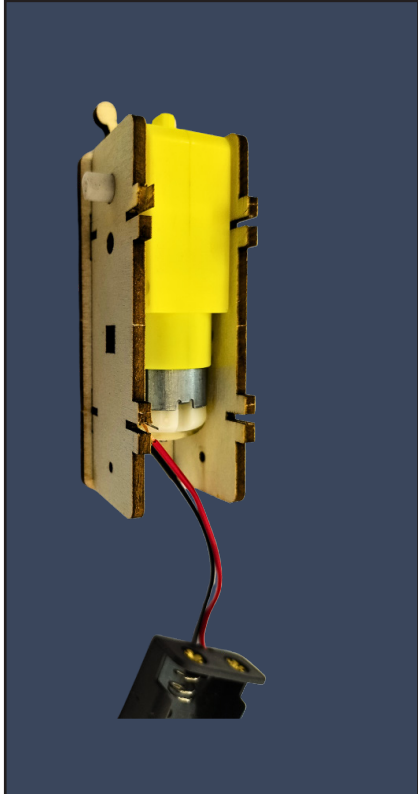
Connect the wire of the remote control to the copper tags on the yellow motor.

Step 2



Install the yellow motor between the two number 1 boards, then install board 3.

Make sure that board 3 is the right way around.

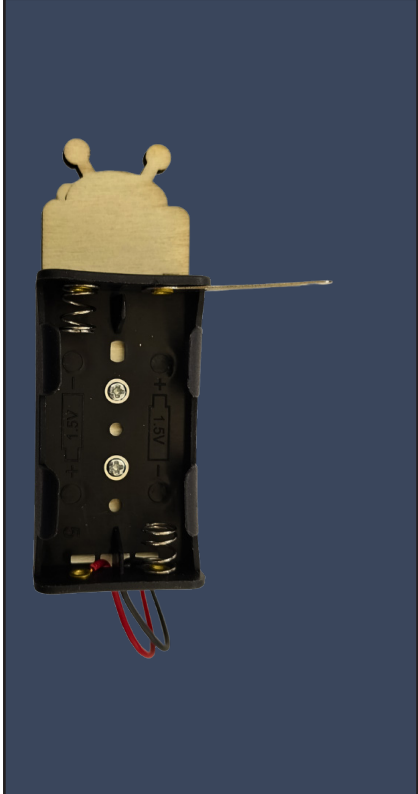


Step 3

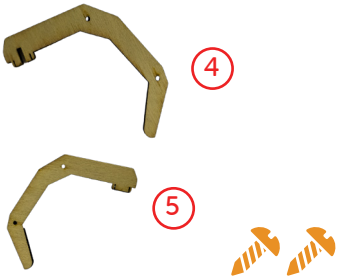
Install board 3 onto board 1s, and screw in four 7mm screws to keep it in place.

Step 4

Screw on 2x 4mm screws to secure the battery box set on board 2.

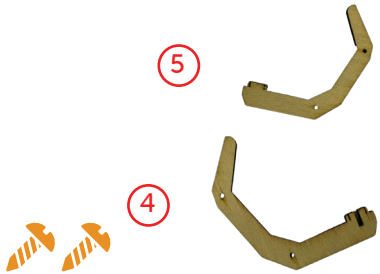


Step 5

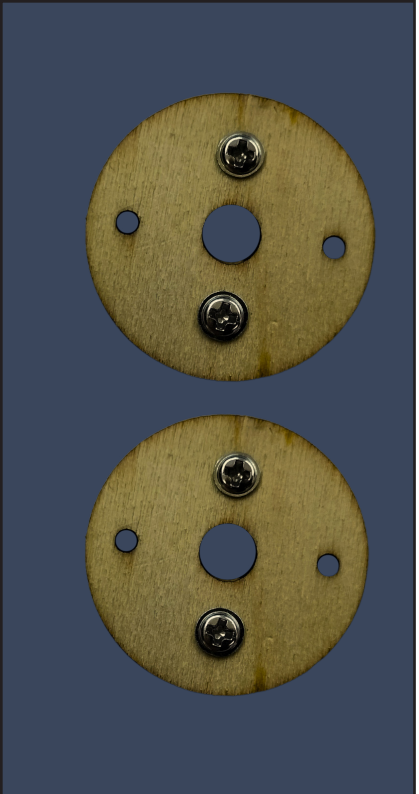


According to the position in the picture, the no board 4 is at the bottom and board 5 is at the top. Screw the two boards with two 6mm screws to fix them together.

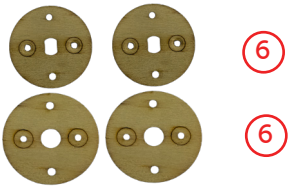
Step 6



Put one piece of each of the remaining number 4 and 5 boards together and hold them together using 6mm screws.



Step 7

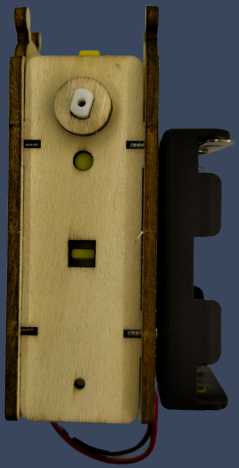


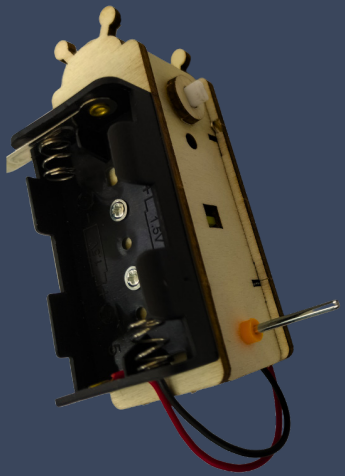
Overlap boards 4 and 6 in pairs to obtain two double layer number 6 boards, and screw on four 6mm screws to hold them together.

Step 8

7

Install board 7 on both sides of the motor shaft.



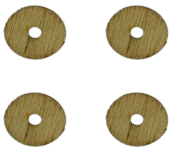


Step 9

Pass the shaft through the number 1 boards and install 1 spacer on each side.

Step 10

8



Install the number 8 boards on both sides of the shaft.

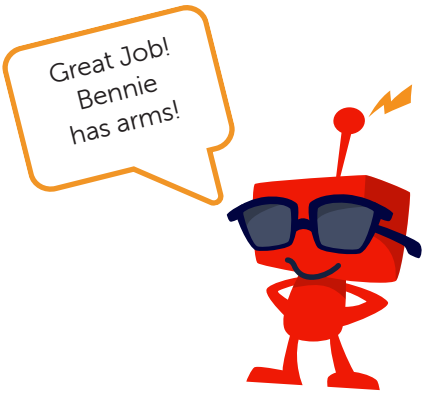
Step 11

Install board 9 onto board 10 and use two 6mm screws to hold them in place.

Step 12

Install the boards that you put together in step 6 by using 7mm screws, then add board 11 at the bottom.

Step 13



Follow steps 12 and 13 and do it with the other arm as well.

Step 14

Take the shaft and a spacer.
Next, add two number 6 boards and slide them onto the stick.

Finally, slide the head shaft through board 10 and add another spacer to keep everything in place.

Step 15

Do the same thing again as you did in step 14.

Step 16

Now, attach what you did in step 15 on both sides of the main body.

Use a special screw to tighten the two round wheels that are on the sides of the motor stick.

After that, pass the feet through the special stick and use a bushing to hold the wooden board in place.

Now you have
your very own Bennie Buddy!

Congratulations, adventurer! Our mechanical climbing robot is now complete. Open the battery cover on the back of the controller, insert the battery, close the cover, and press the red or green button to see our monkey come to life. Get ready for an epic show of mechanical magic and have a good time!

If Trike doesn't want to move!?

- 1. Check whether the battery power is sufficient Check if the battery is low on power.
- Check whether the iron piece of the battery box is closed.
- The two pieces of the two arms in step 16 and step 8. The parts must be as shown in the picture, one side is an iron shaft facing up, and the other side of the iron shaft facing down.

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.

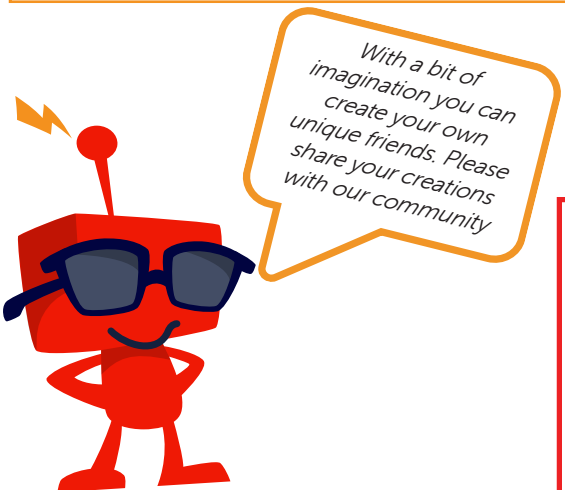
2. *Problem-solving:*
   They learn to solve problems by thinking and trying things out.

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.

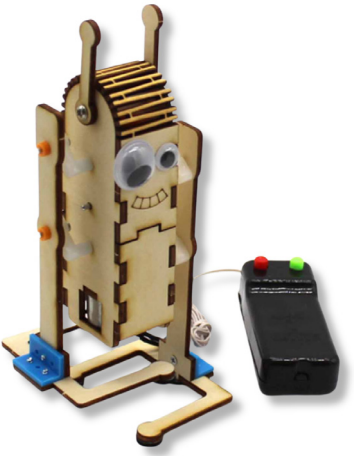
Collect them all



Please ask your mom / dad / teacher or a grown up 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.

Worm
Robot

Walking
Robot



Coin stealing
Robot