

Washing Machine



Question 1

Everyone's clothes look so clean today.
Who washed them?



Question 2

Do you know how Mom washed the clothes?
Besides washing by hand, what else can we use to wash clothes?

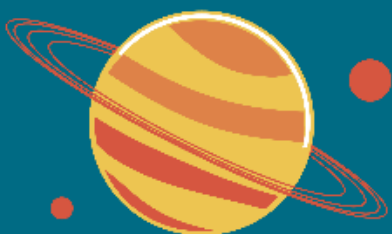


Washing Machine

The History of the Washing Machine

In 1874, the “hand-washing era” faced an unprecedented challenge: someone invented a wooden hand-cranked washing machine. The inventor was American William Blackstone. His washing machine was very simple in design: six blades were fitted inside a wooden tub, and a handle and gears made the clothes turn inside the tub to get them clean. The invention inspired people who had been striving to make everyday life more efficient, and the process of improving washing machines began to accelerate.



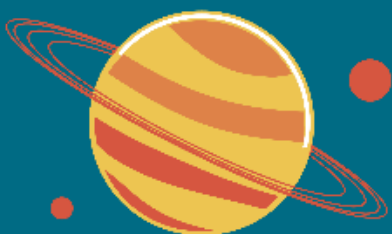


01



Learn About the Materials

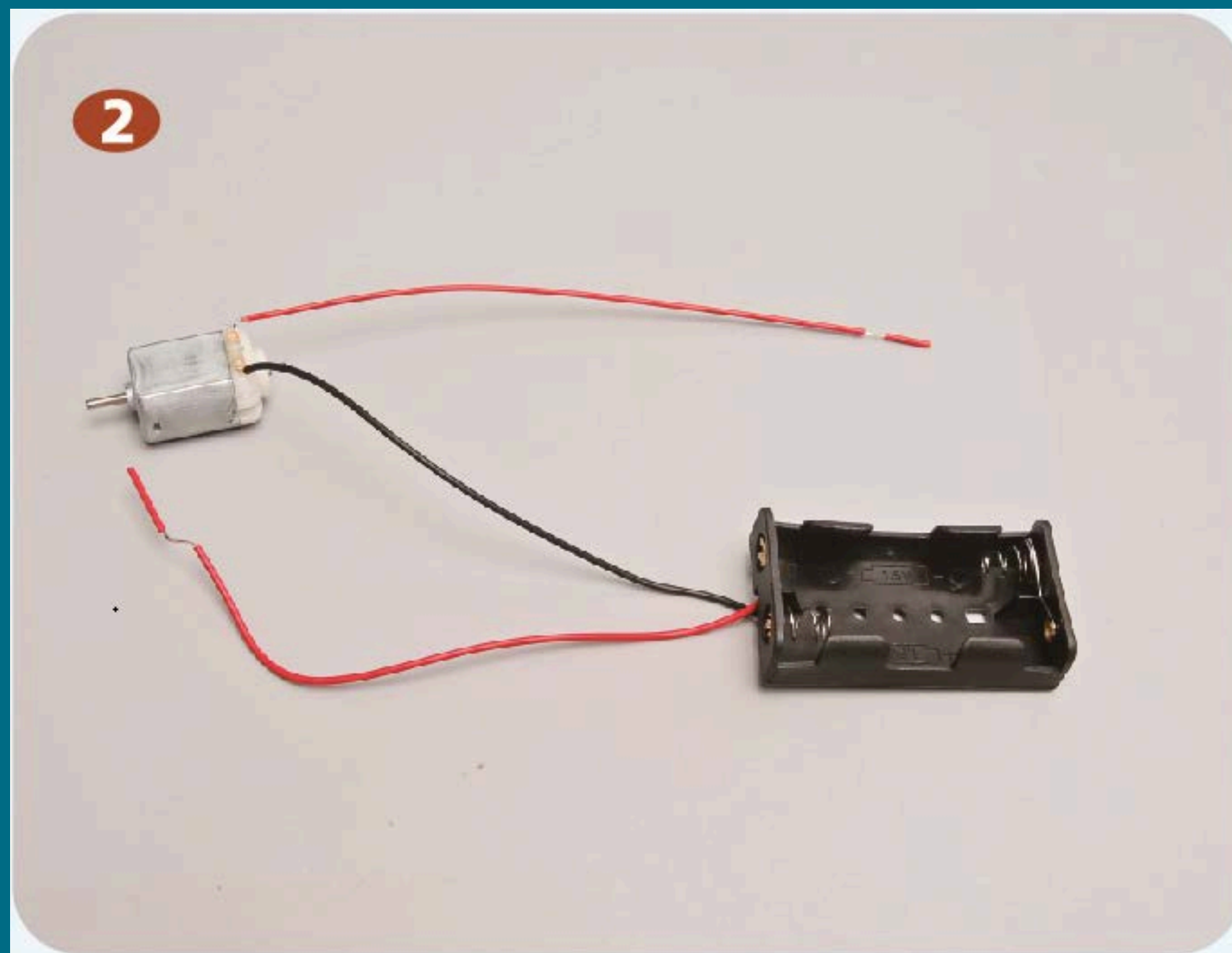


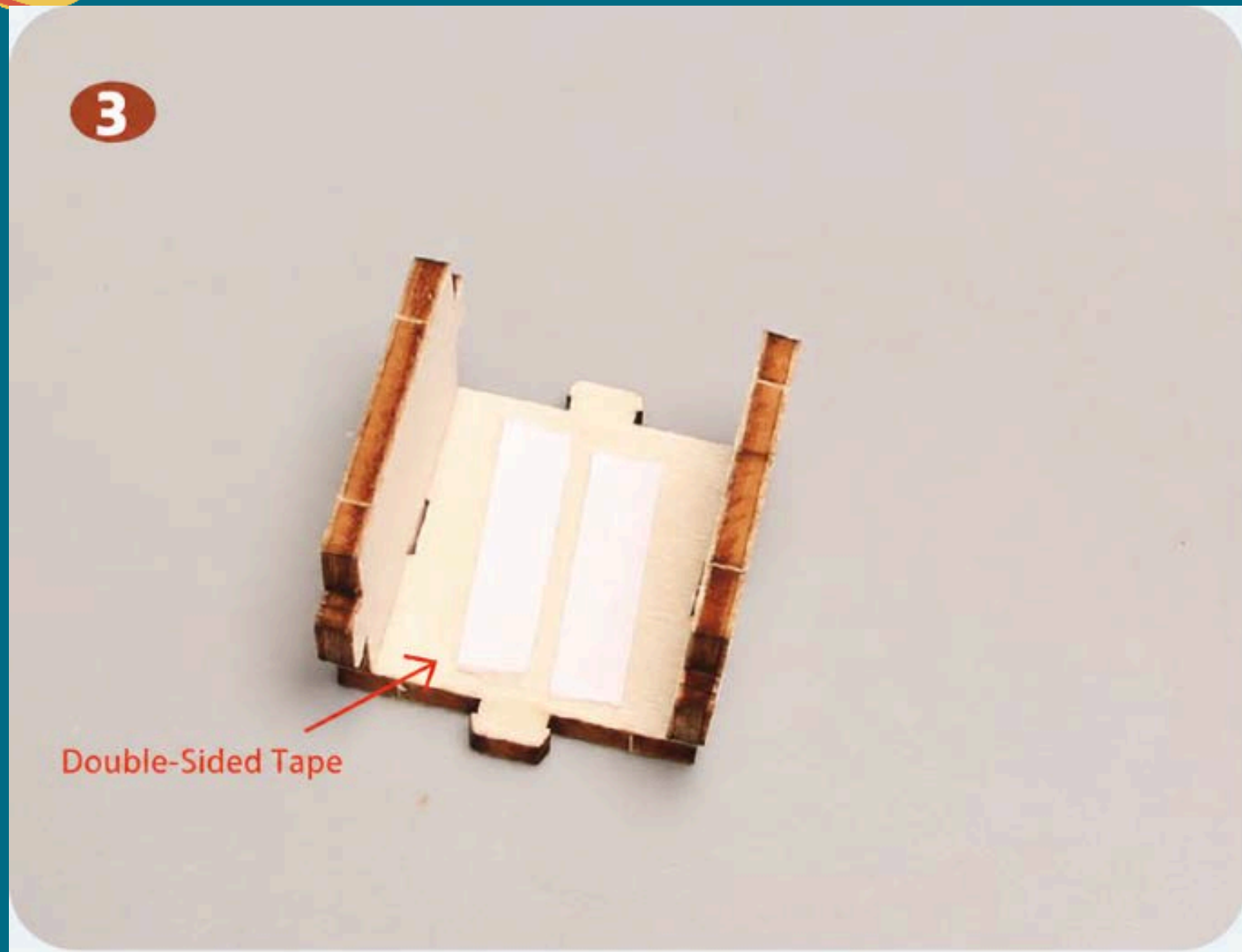


02

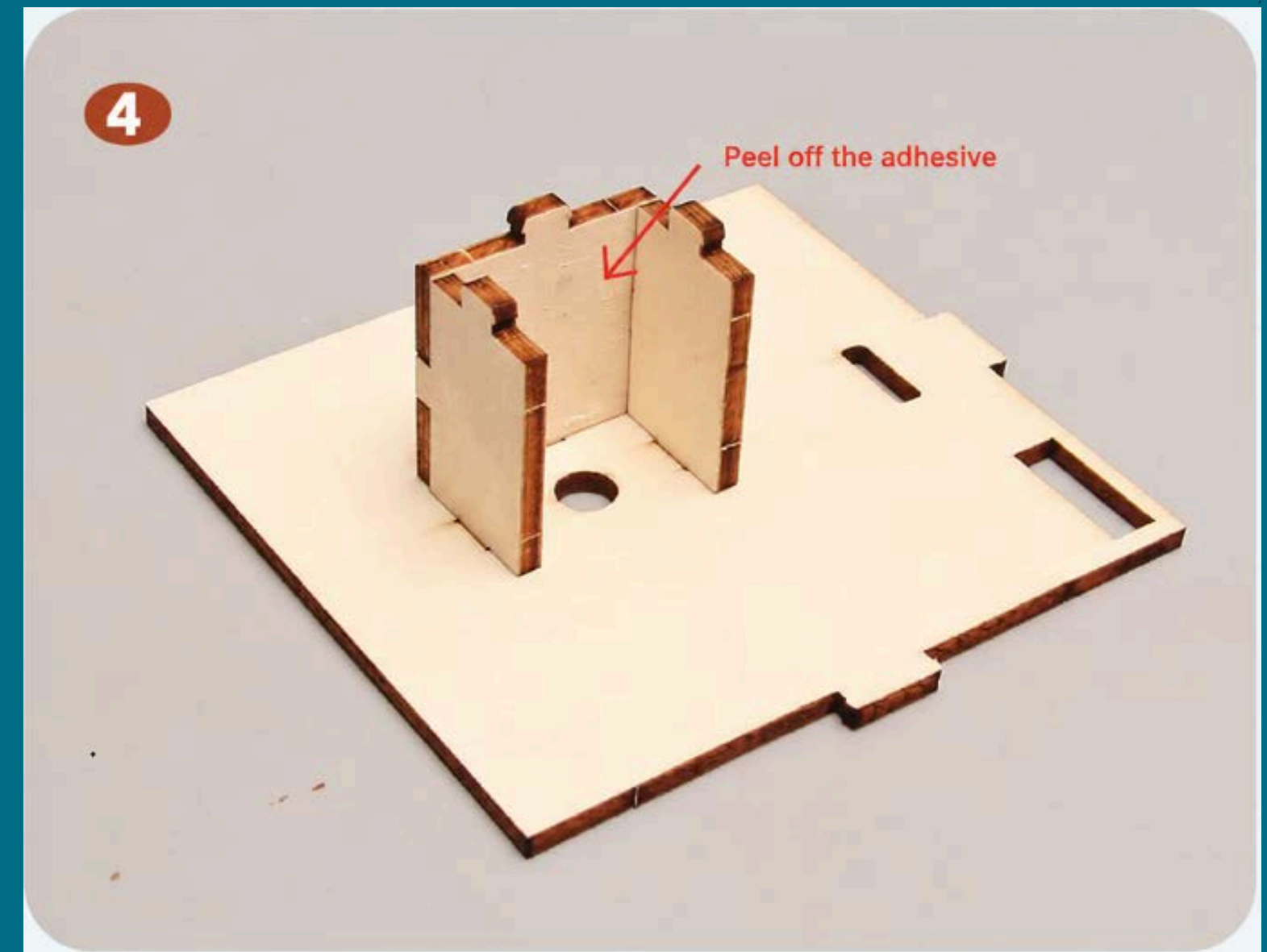


Install the Motor Wires
as Shown

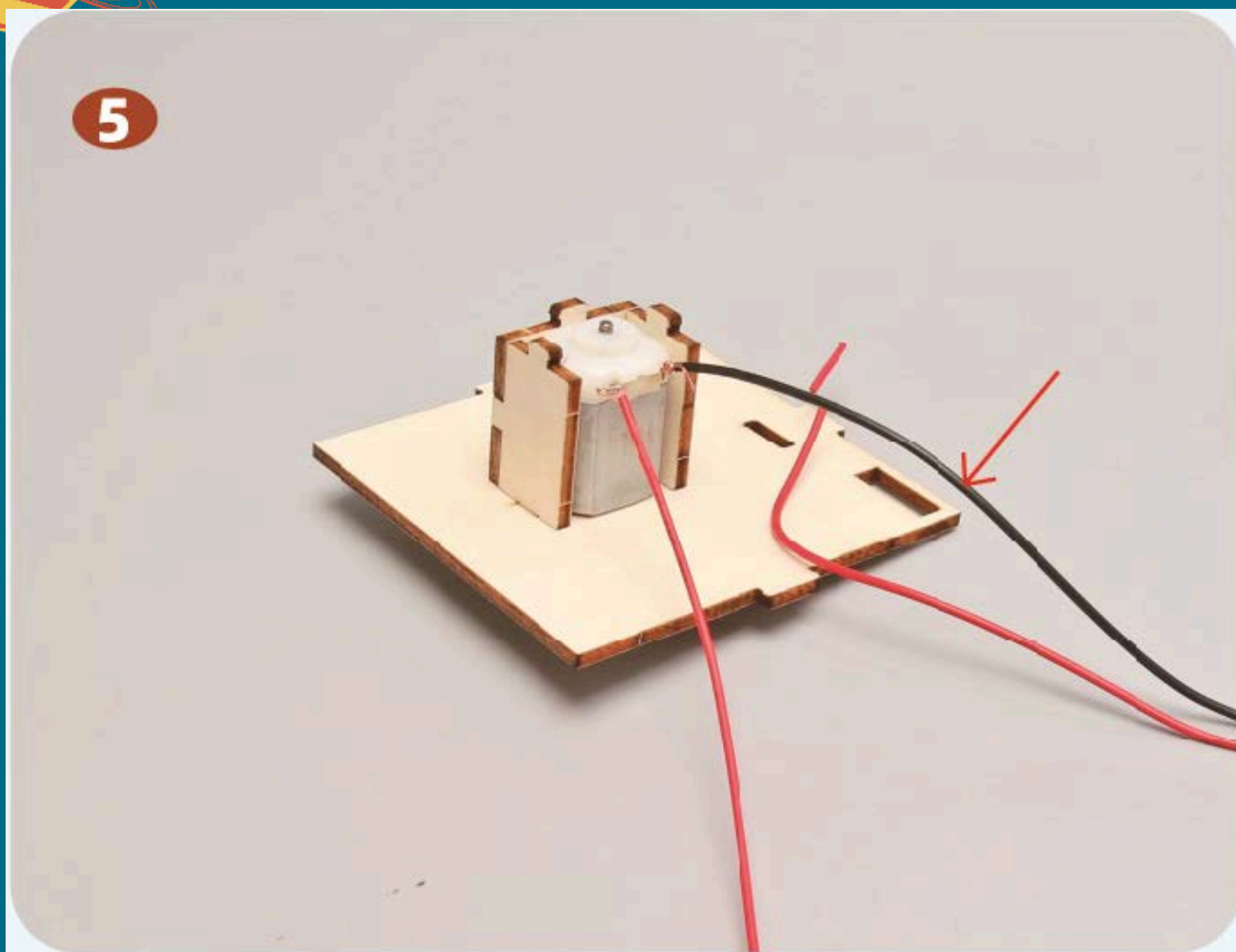




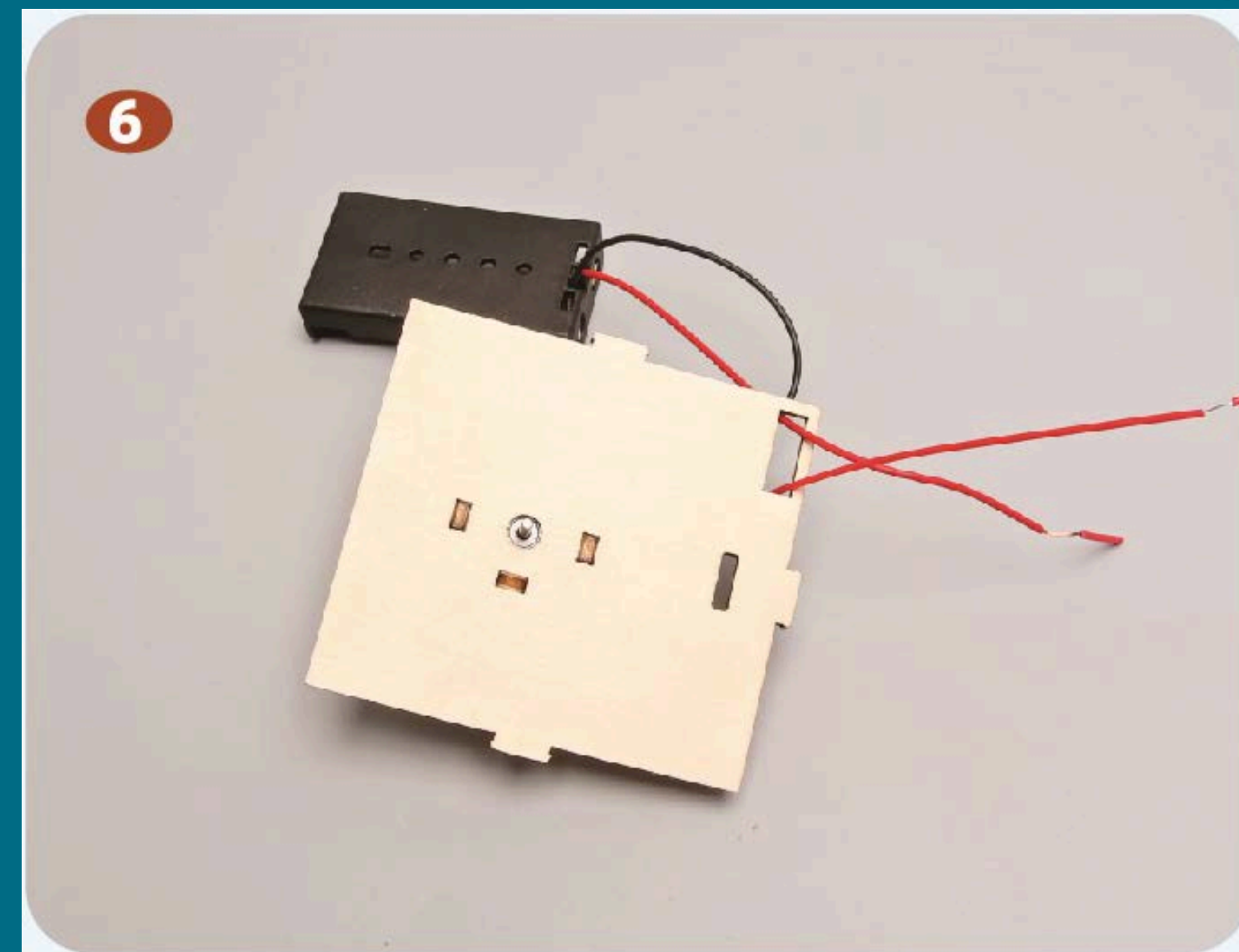
Combine boards 3 and 4 as shown, and attach double-sided tape.



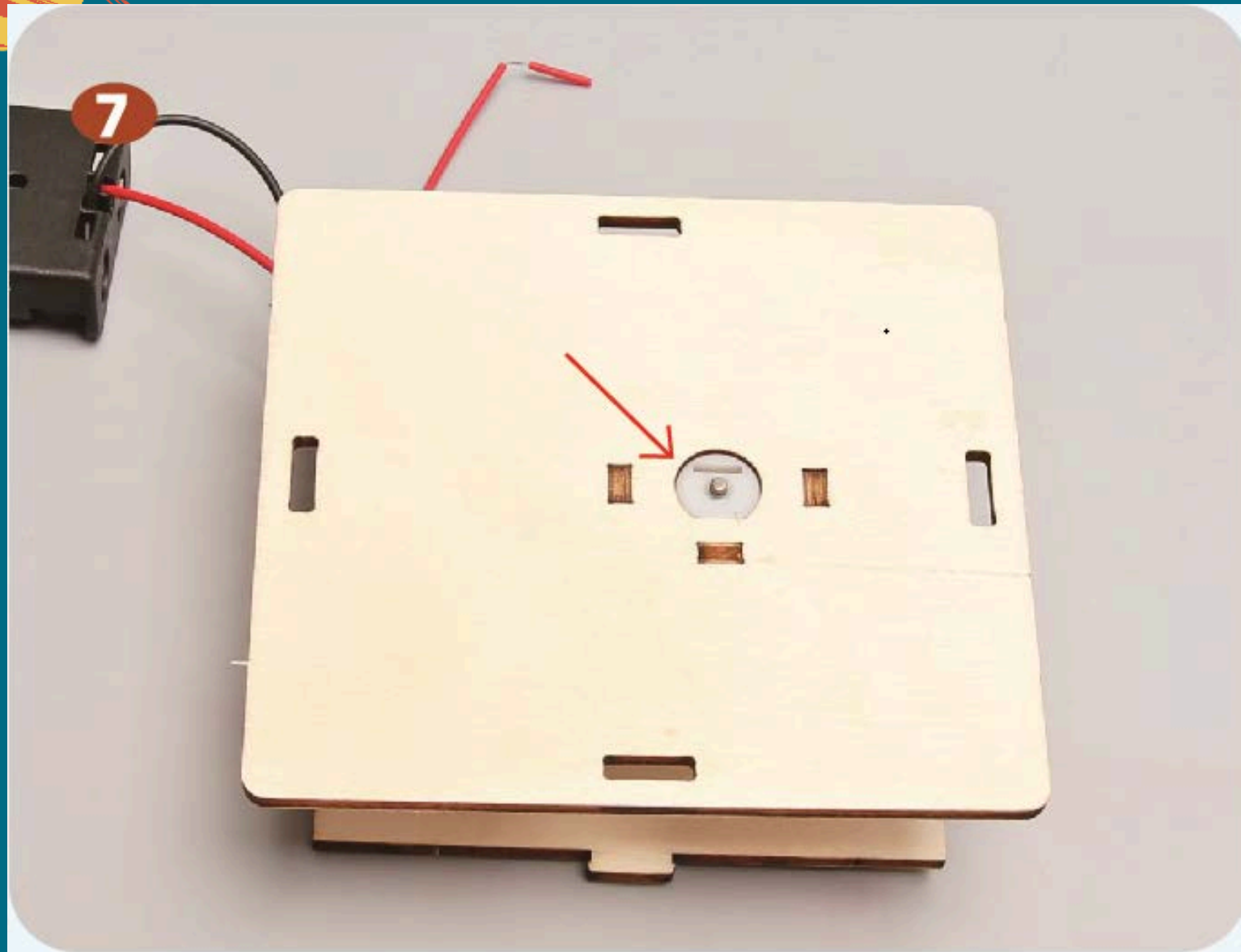
Install the combined pieces onto board 1 as shown.



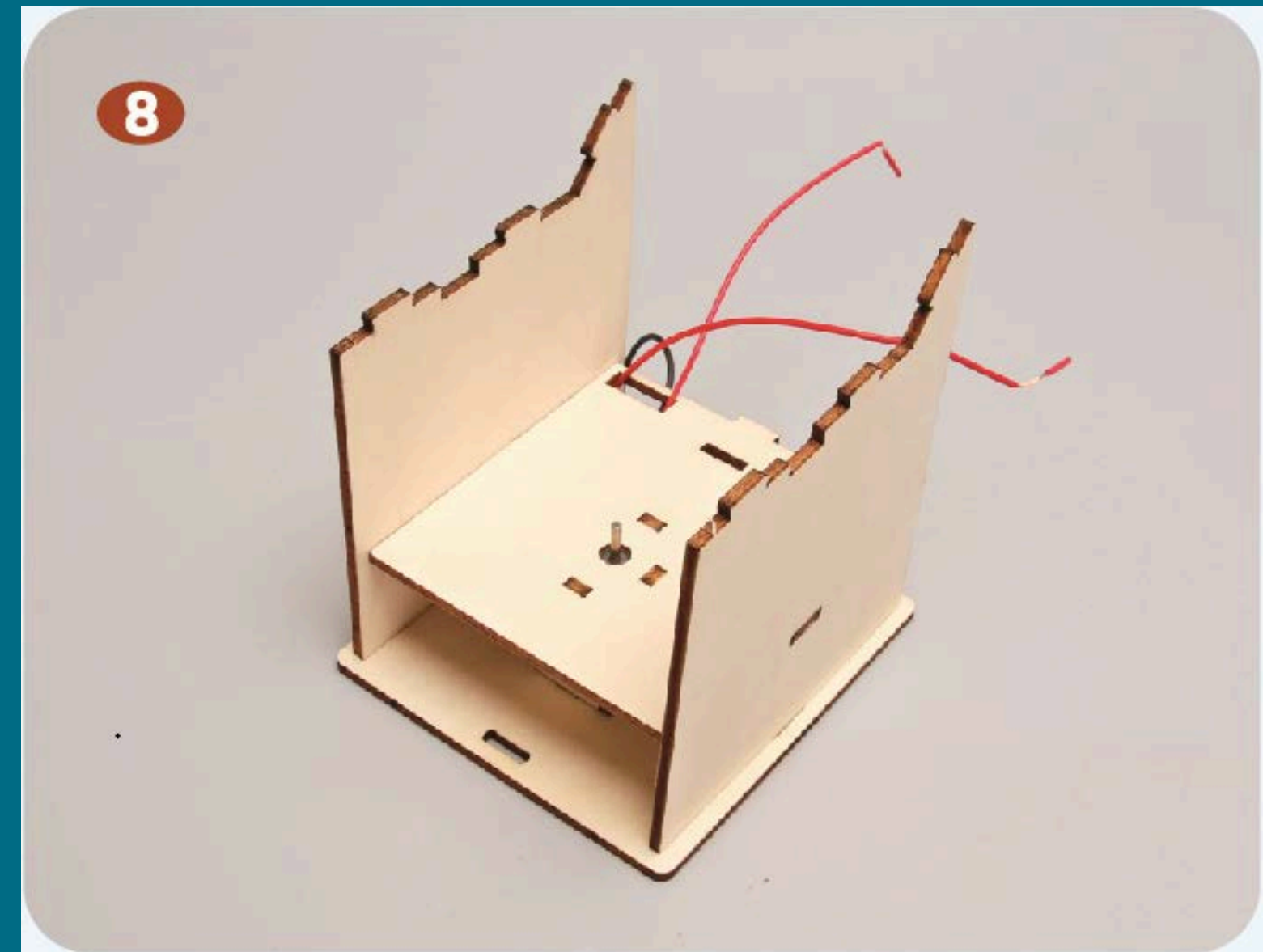
Fit it into the groove in the middle of board 1 as shown.



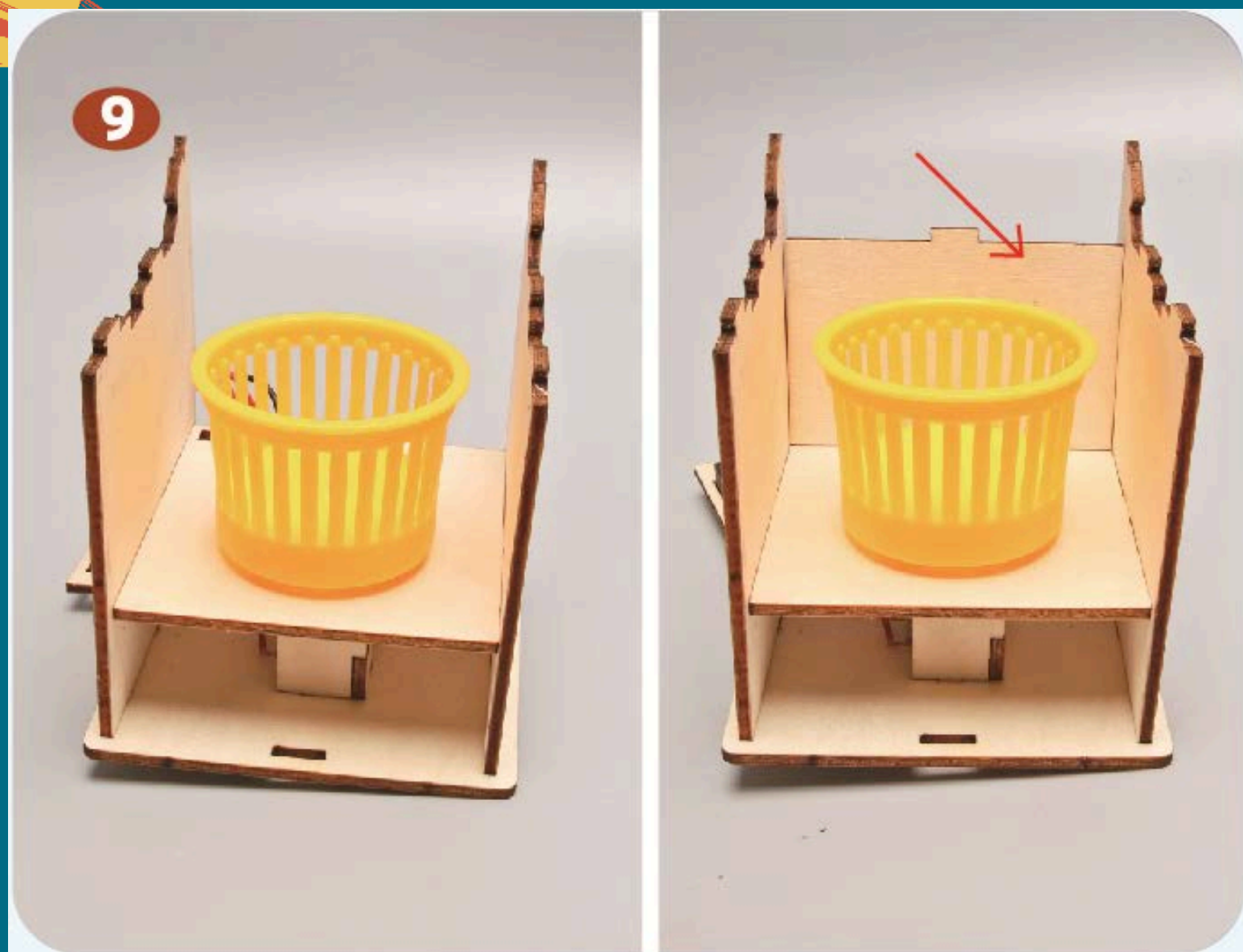
Thread the red wire through the square hole in board 1 as shown. The motor should be secured in the center round hole of board 1.



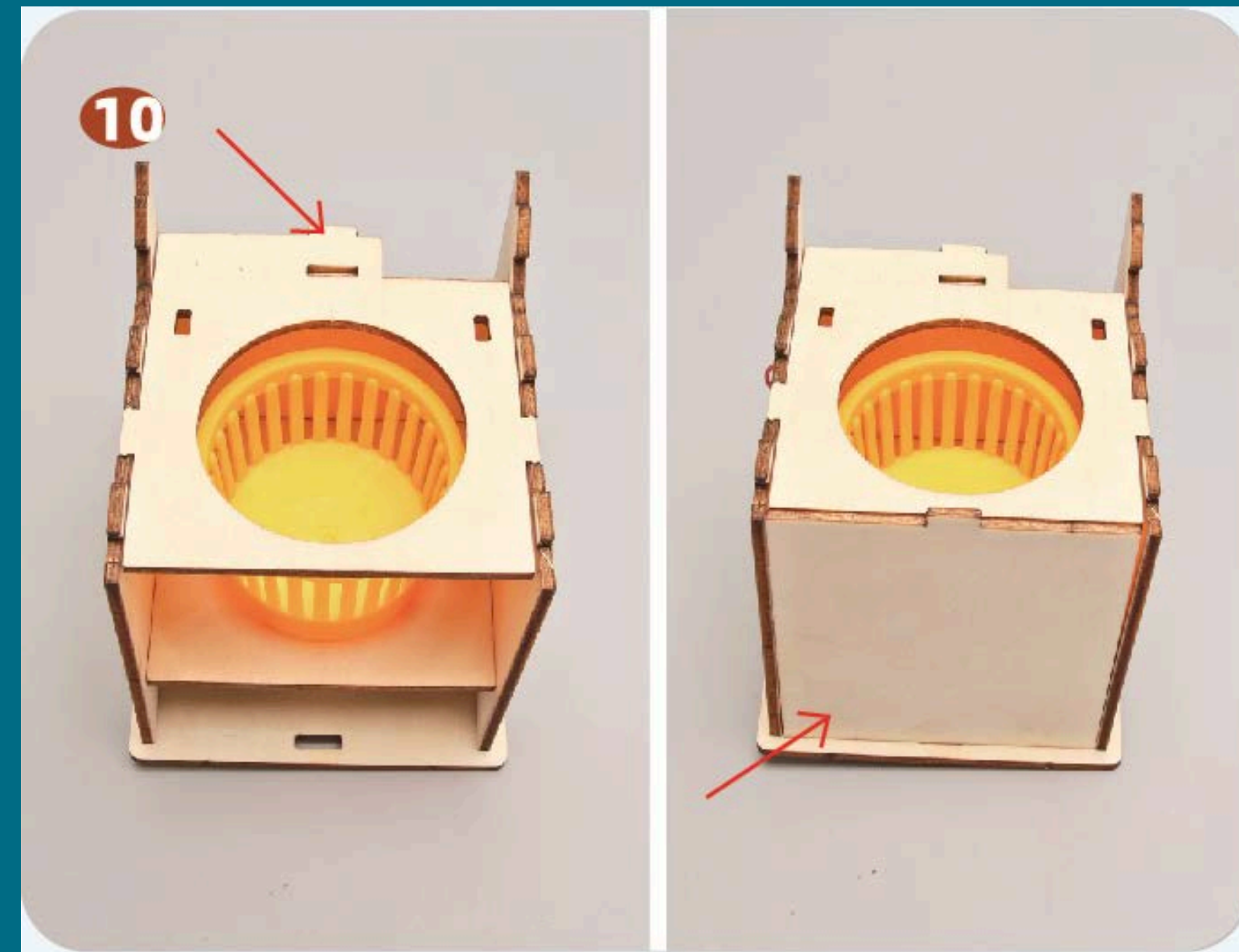
Fit board 2 onto the bottom of the motor as shown. Make sure board 2 is oriented correctly and centered with board 1.



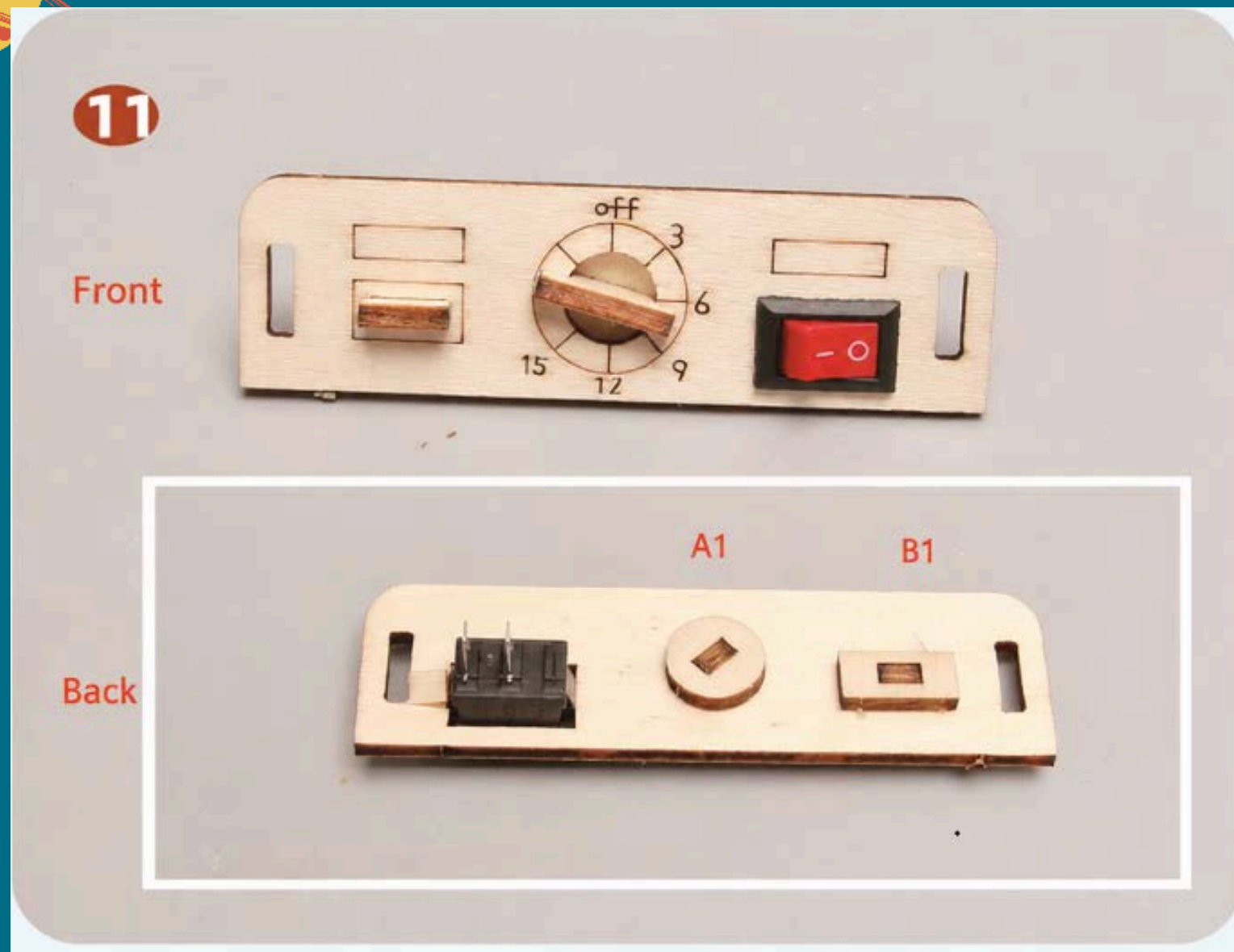
Install the two board 5 pieces.



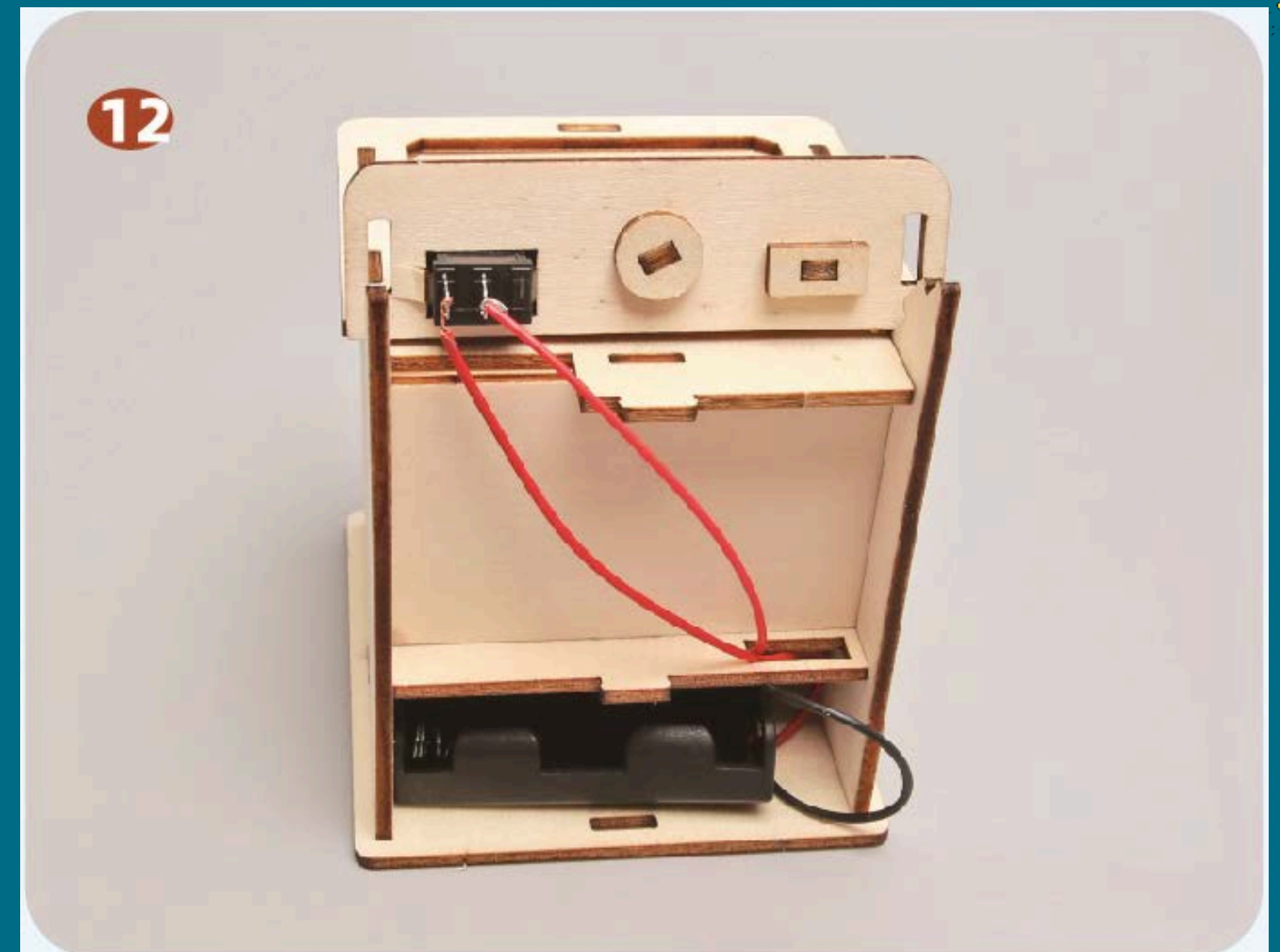
Fit the basket onto the motor shaft as shown, then install board 6.



Assemble and install boards 7 and 8 as shown.



Assemble board 9 with clips A and B as shown, then install the switch.



Connect the red wire to the switch as shown.



Install board 10 as shown, and secure the push pin to board 11.



Fit board 9 onto the top as shown, then install board 12.



Use thick double-sided tape to attach the battery box to board 11 as shown.



Install board 12 and clip C, then install board 15.

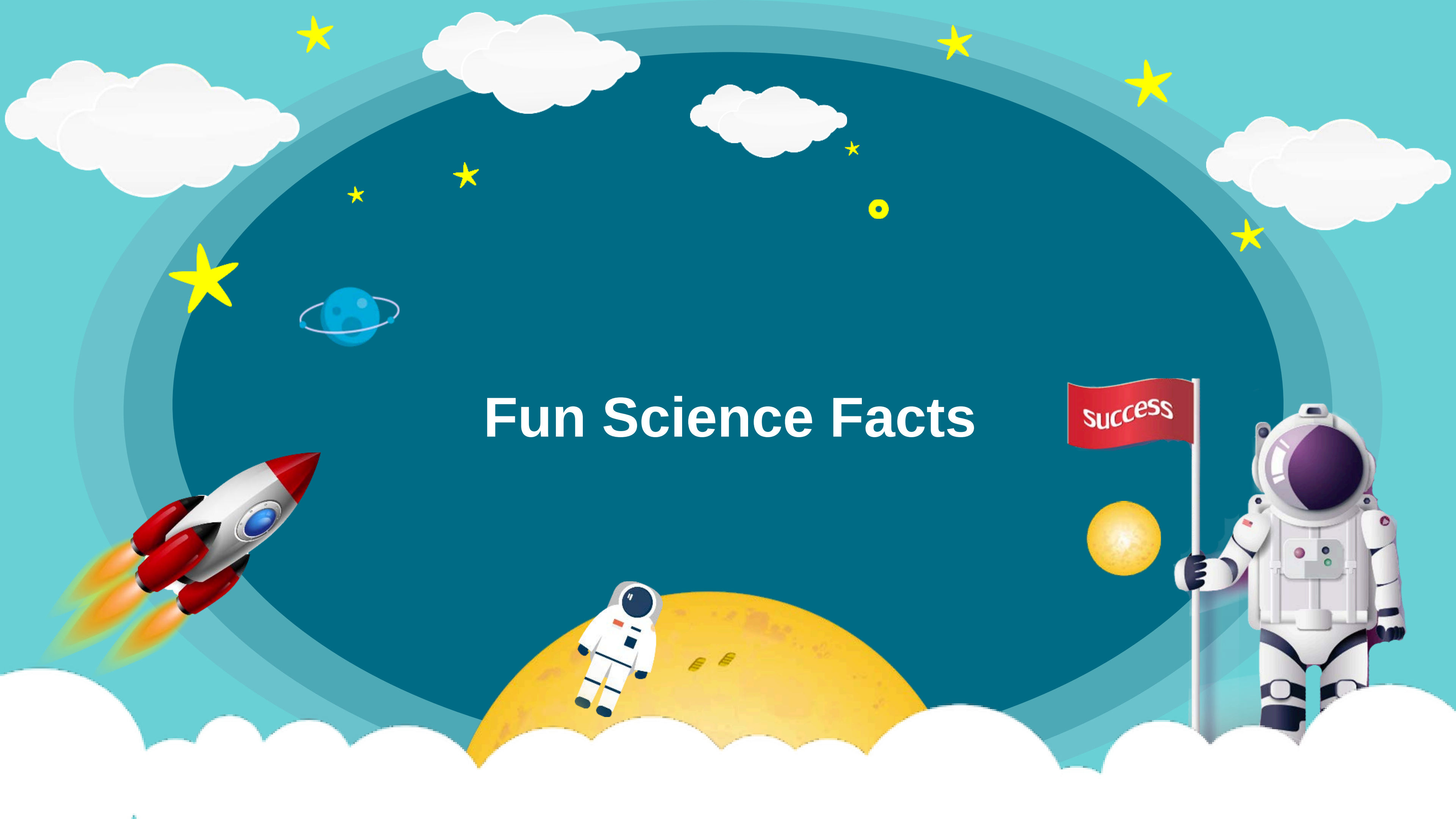


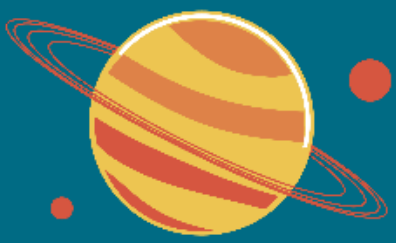
Apply double-sided tape to both sides and the edges of the acrylic sheet. Attach it to board 14, then attach it to board 13.



Install the feet on the bottom to finish. Insert the batteries and start experimenting!

Fun Science Facts





Principle

A washing machine uses the mechanical work of an electric motor to rotate the drum. The clothes repeatedly rub against the drum walls as they move inside, making them clean.