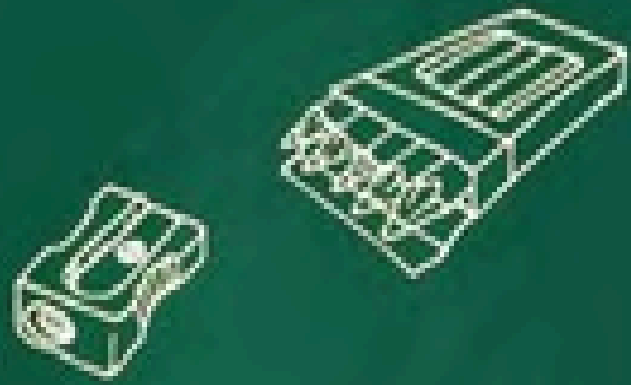


Mechanical Ankylosaurus





Guess



Roughly more than 200 million years ago, a huge family lived on our Earth. They ruled the oceans, lands and skies — they were true overlords of the planet.

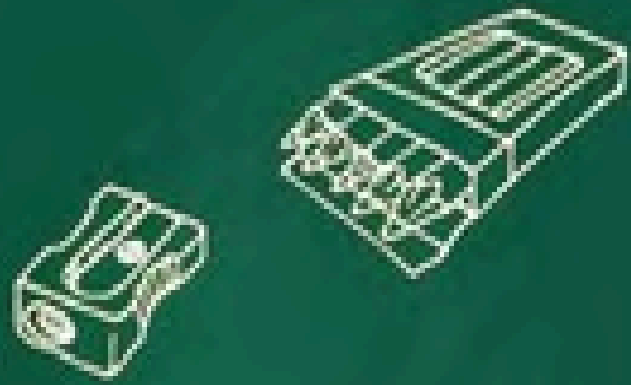
Who were they?





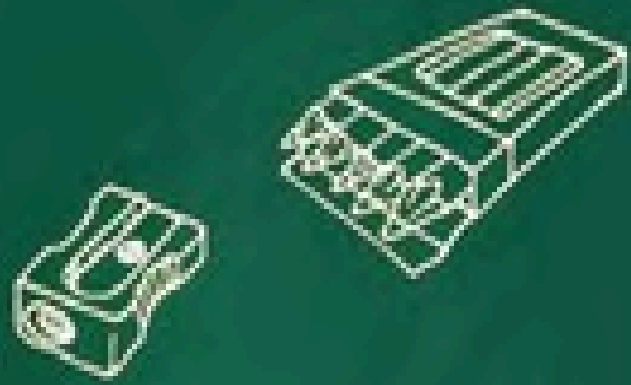
Dinosaurs were a group of reptiles that first appeared around 255 million years ago and lived on Earth for about 160 million years. Although dinosaurs have gone extinct, their descendants — birds — have survived and continue to thrive to this day.





Do you know what kinds of dinosaurs there were?





Dinosaurs of the Sky

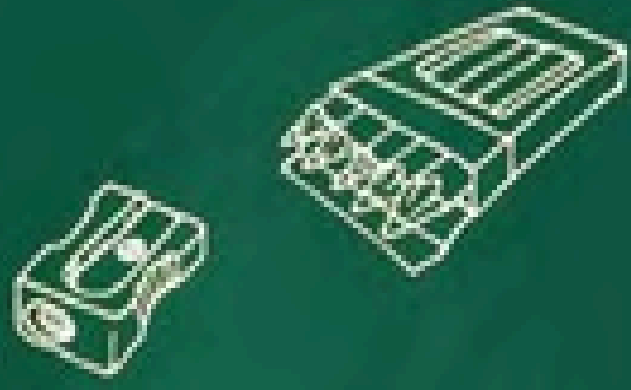


Pterosaurs lived during the Cretaceous Period; their fossils were discovered in Europe. Their wingspan was as wide as a public bus.



Dinosaurs of the Ocean

They were the overlords of the ocean



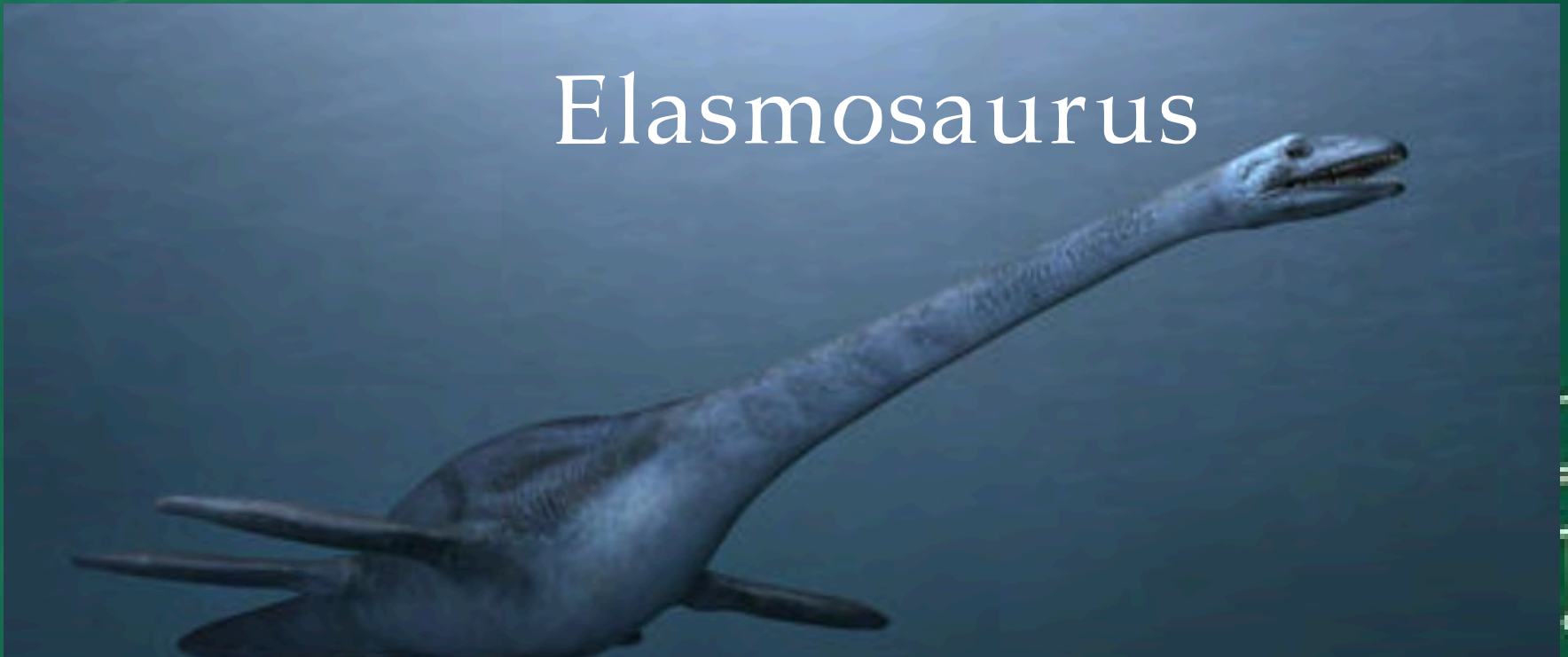
Ichthyosaur

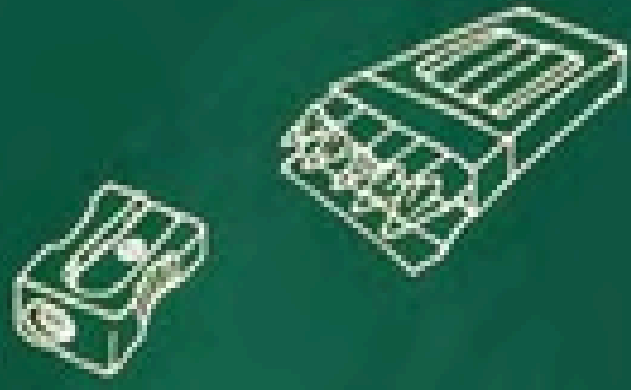


Kronosaurus



Elasmosaurus





Dinosaurs of the Land



Tyrannosaurus Rex

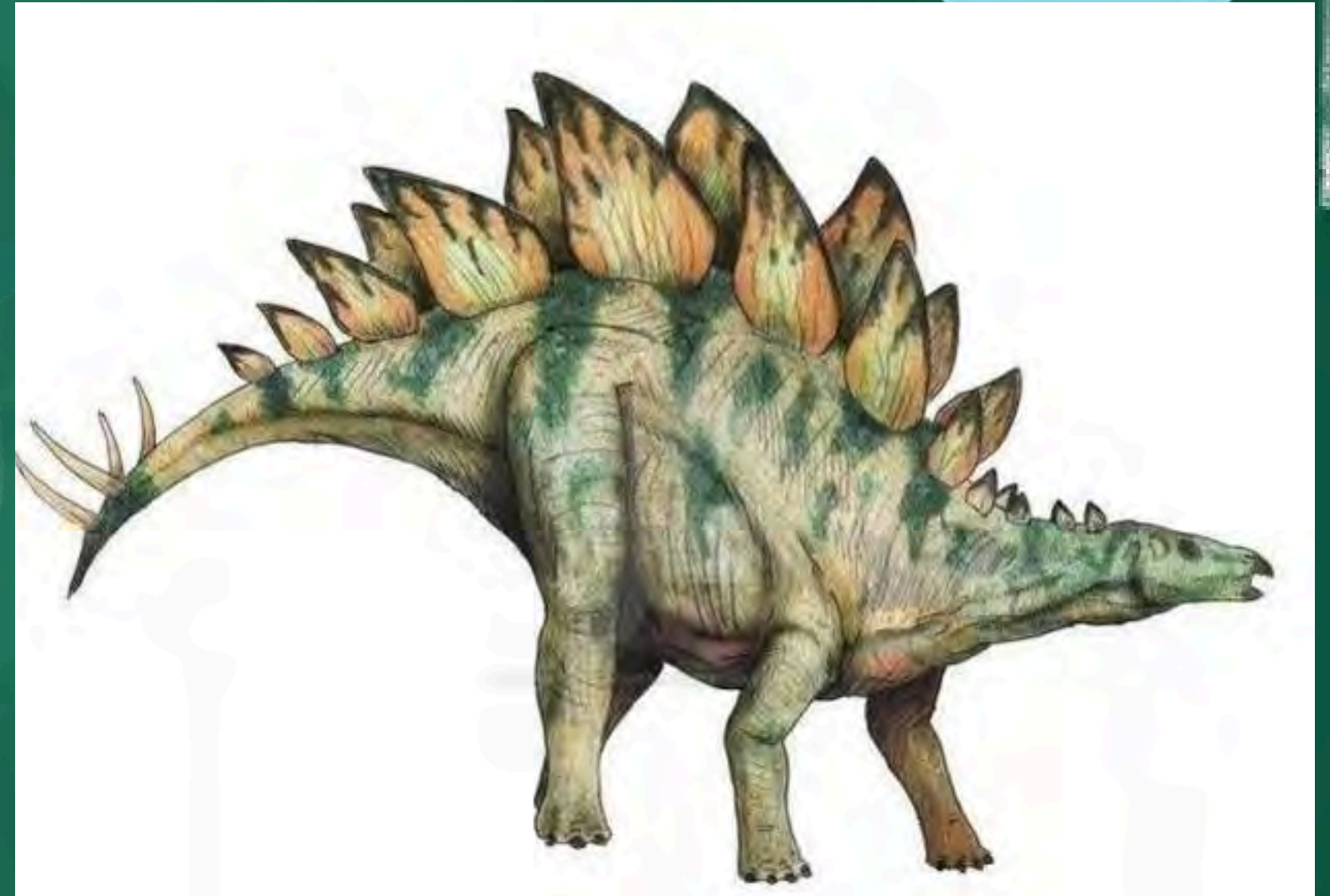
Also known as T-Rex, it was a large carnivorous dinosaur. It grew to around 14 meters in length and weighed roughly 6.8 tons. It had small forelimbs, but powerful and sturdy hind limbs.

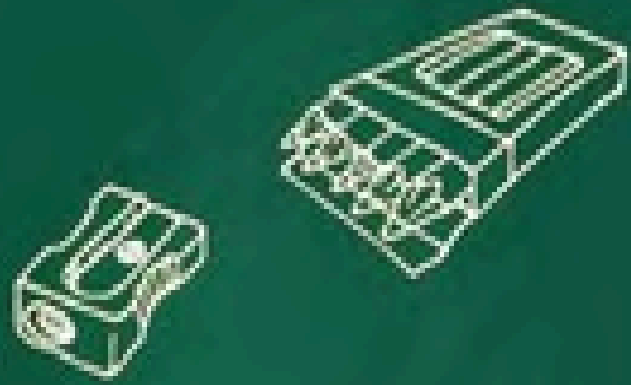




Stegosaurus

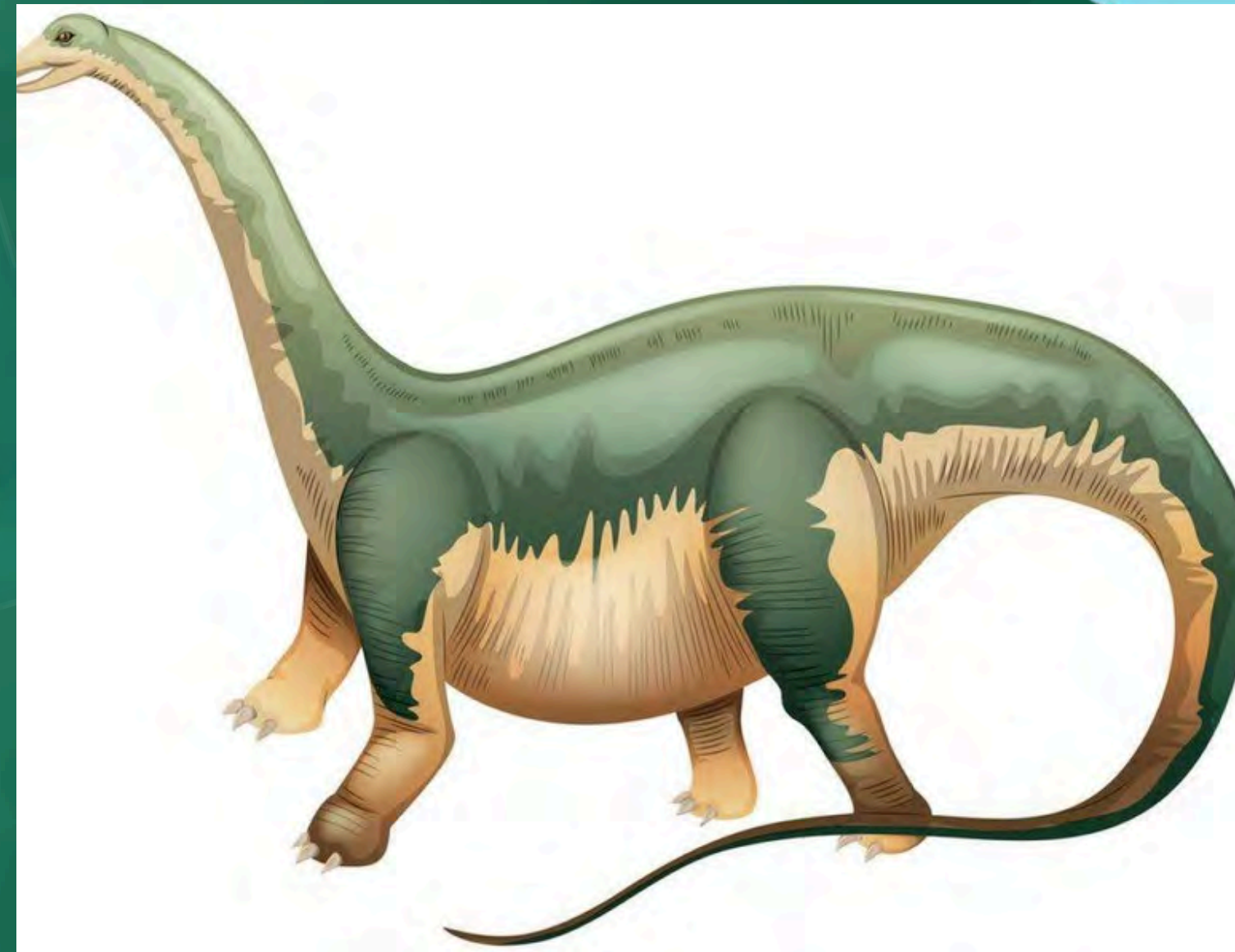
A large herbivorous dinosaur. It had a row of huge bony plates along its back, as well as a dangerous tail armed with four sharp spikes to defend itself from predators. It could reach about 12 meters in length and 7 meters in height, weighing up to 4 tons. Its whole body size was comparable to that of a modern elephant, yet it had only a very small brain.

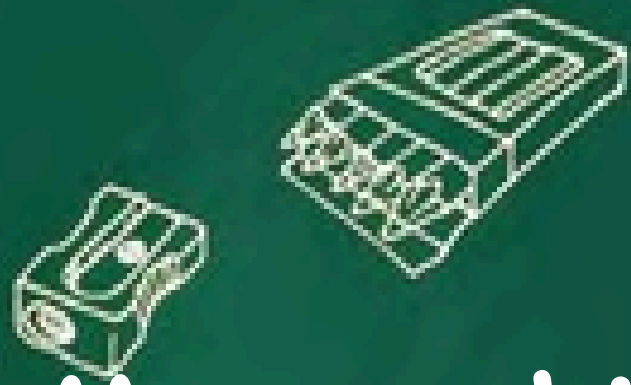




Brontosaurus

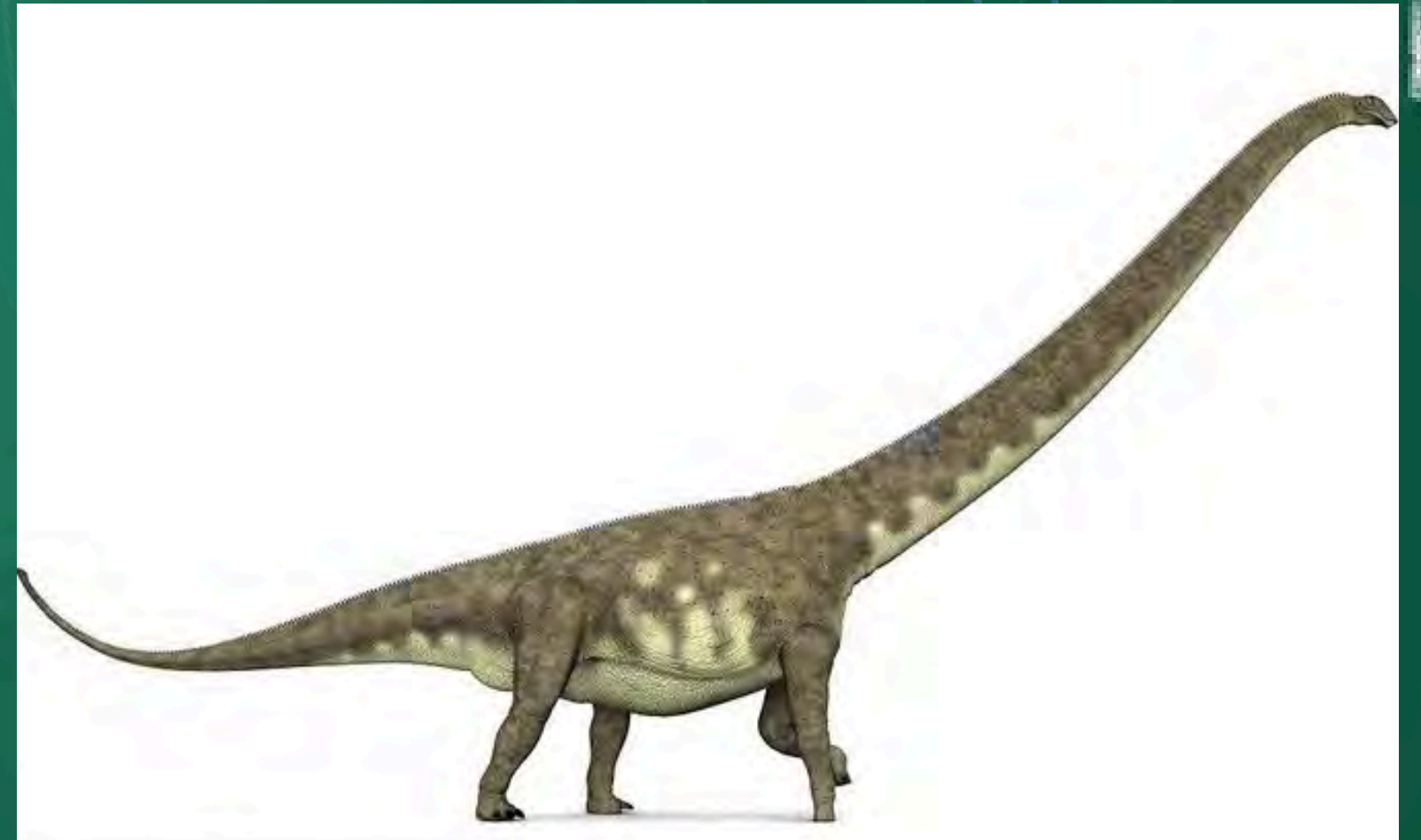
Brontosaurus was a colossal creature. Its body was heavier than six elephants combined. Every step it took produced a loud boom, sounding just like rolling thunder.

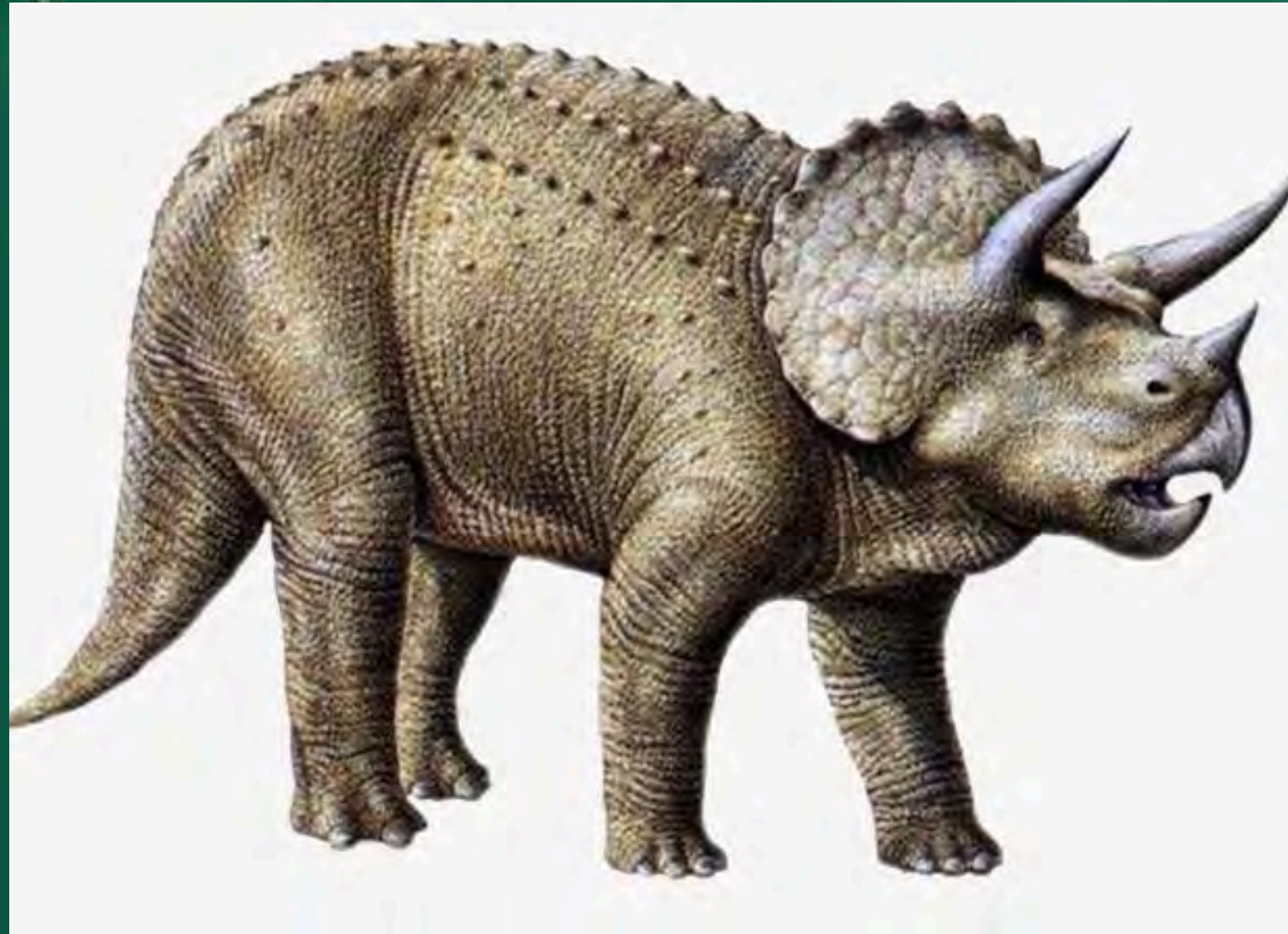
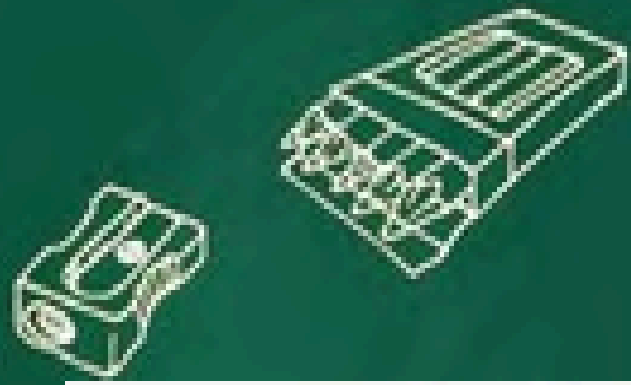




Mamenchisaurus

The largest sauropod dinosaur ever discovered in China. This species reached a total length of 22 meters, with a body height of nearly 4 meters. It had an exceptionally long neck — equal to half of its total body length. Its head could easily reach into the window of a room on the third floor of a building.

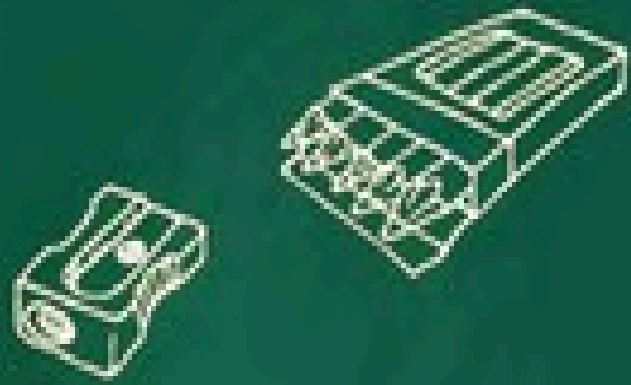




Triceratops

Triceratops had three large horns on its face: one above its nose, and the other two above its eyes. Each horn was one meter long — such facial features made every other animal shrink back in fear.

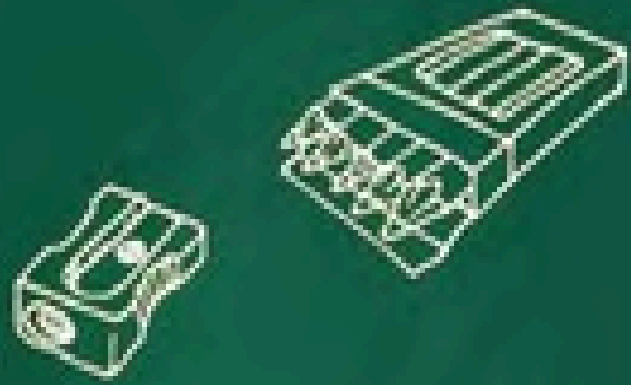




Ankylosaurus

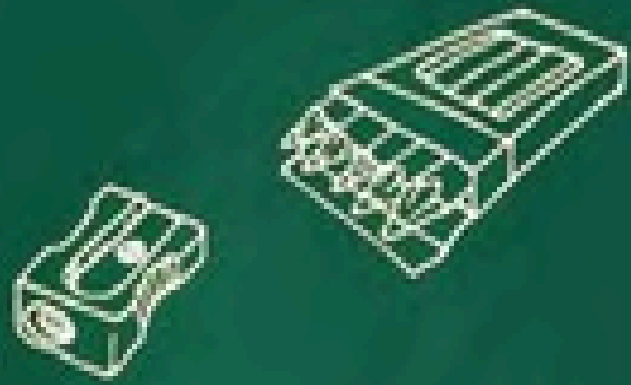
The upper part of Ankylosaurus's body was covered with thick scales, with two rows of spikes along its back and a pair of horns on top of its head. It had a tail shaped like a golf club. All four of its legs were short, its neck was also short, and its head was broad and wide.

The bony structure, plate-like protrusions and club-shaped tail provided excellent protection. Its fossils were excavated in Montana, USA, and it belonged to one of the last surviving branches of the dinosaur family before extinction.

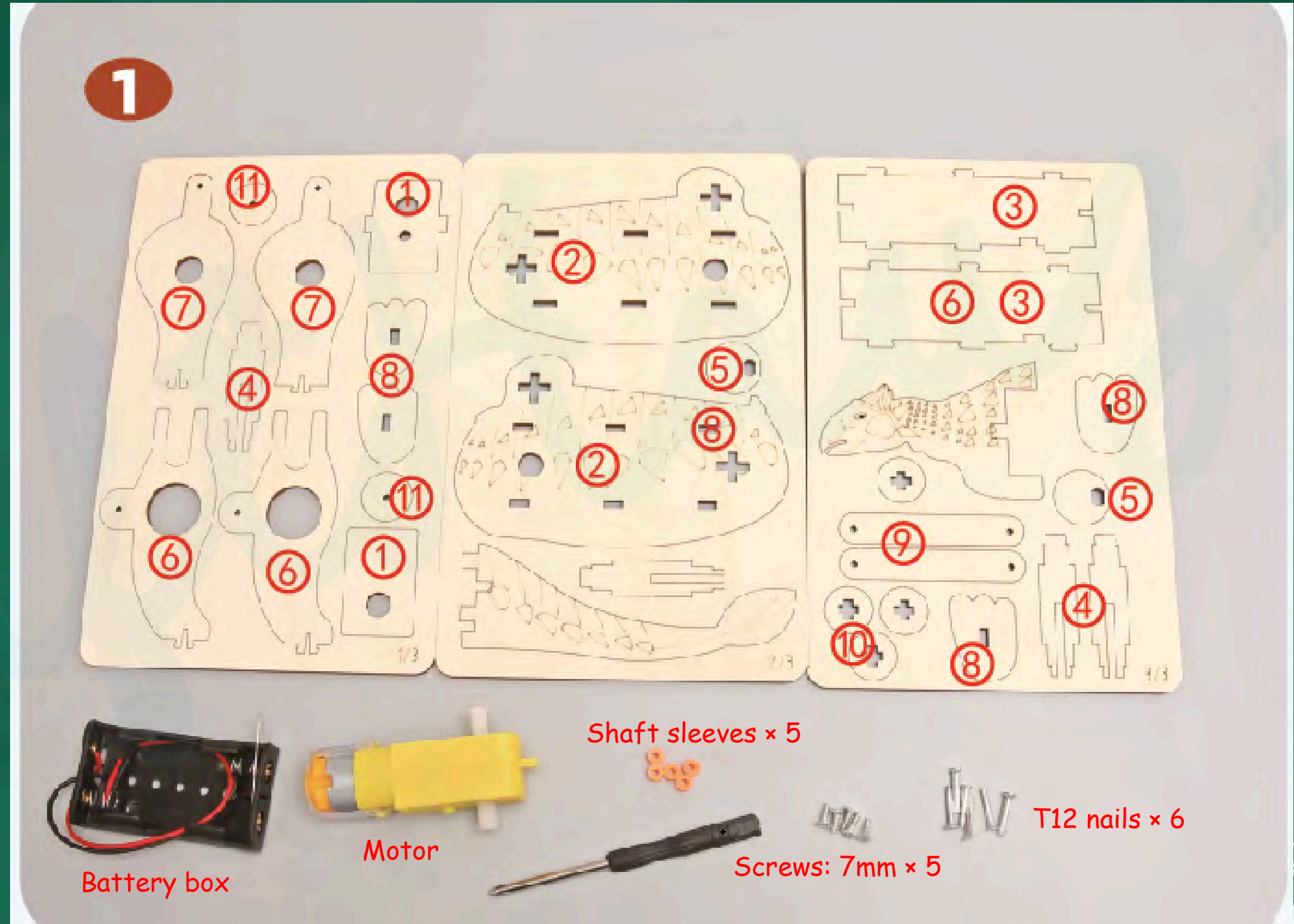


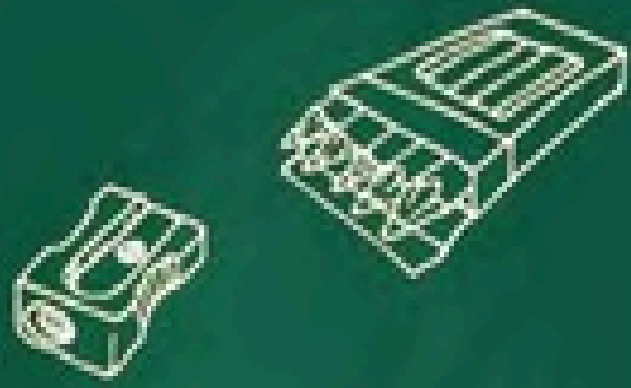
Experiment Steps





Experiment Materials

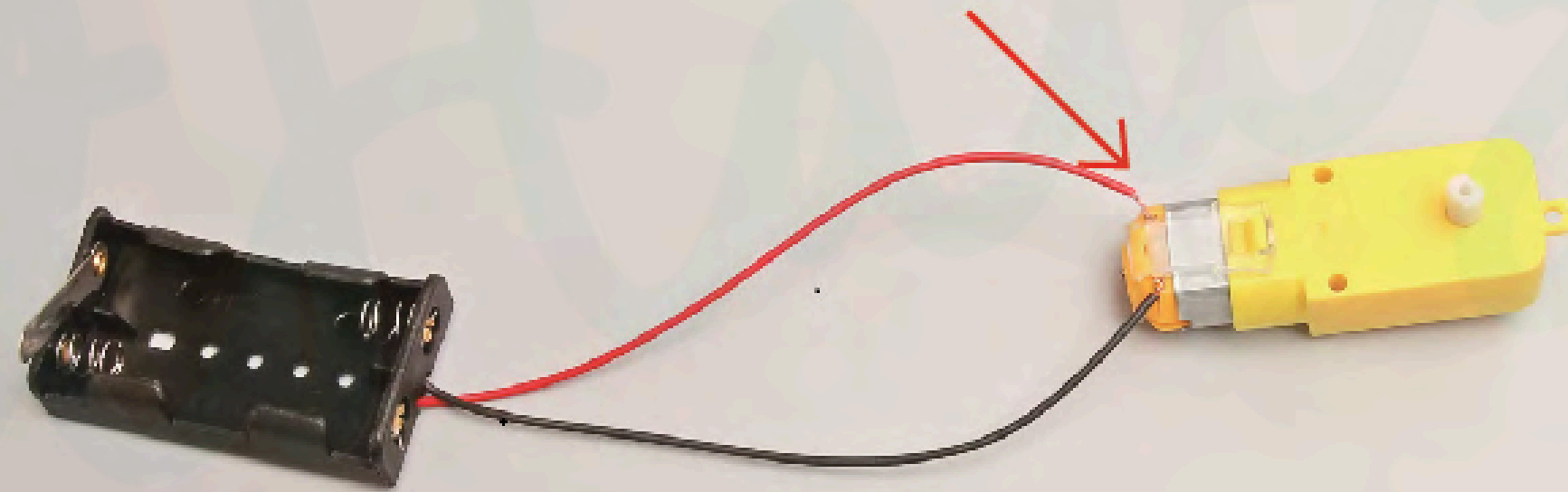


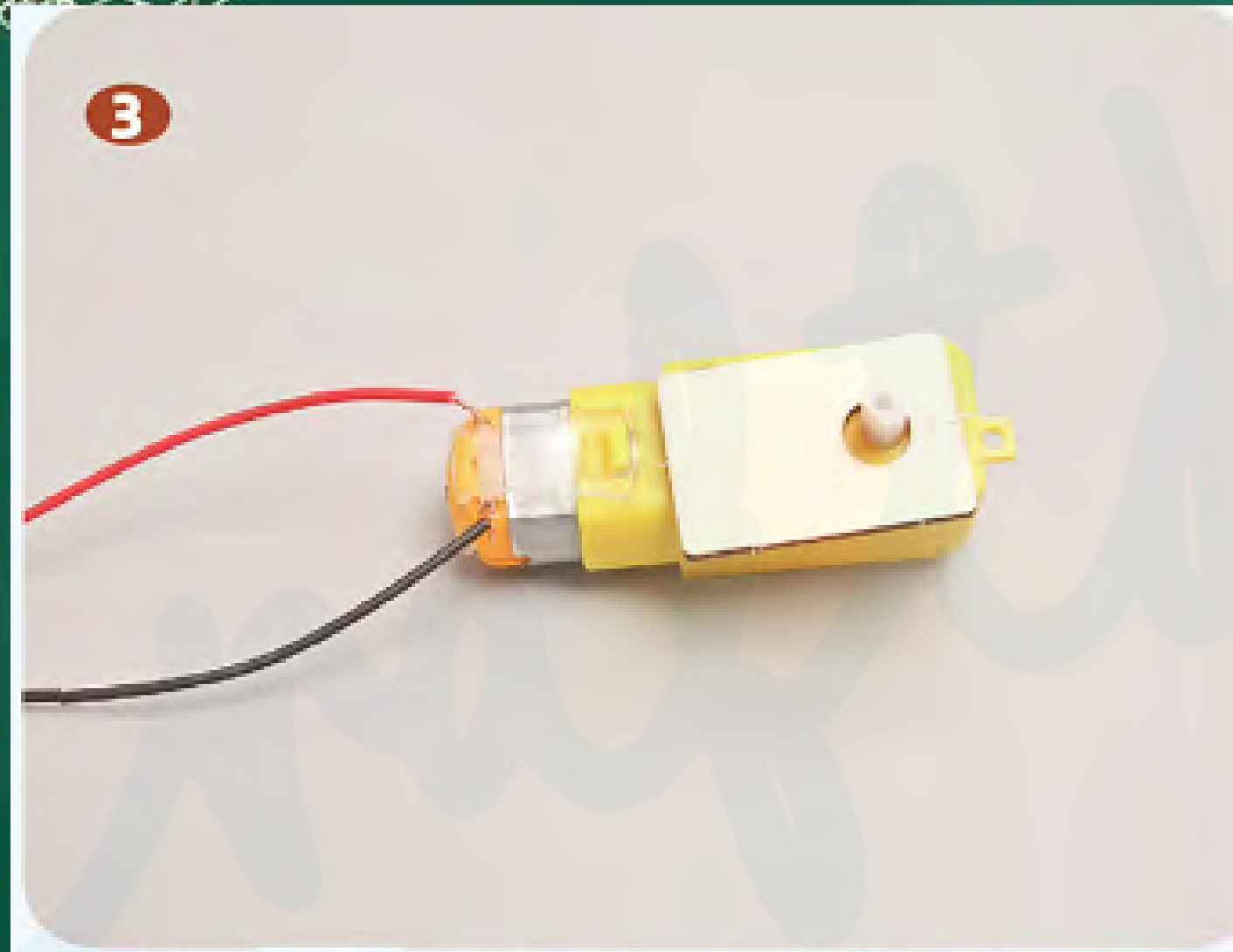
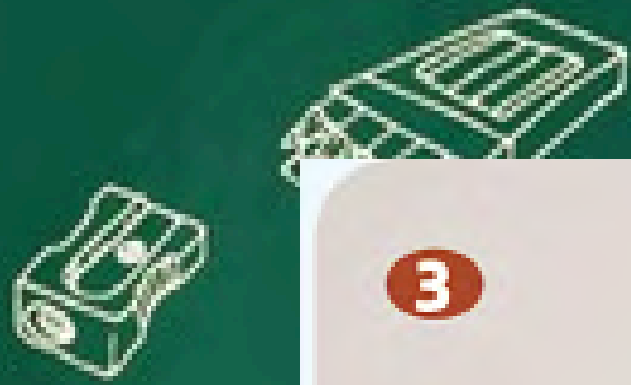


Install the motor as shown in the diagram; do not reverse the positive and negative poles.

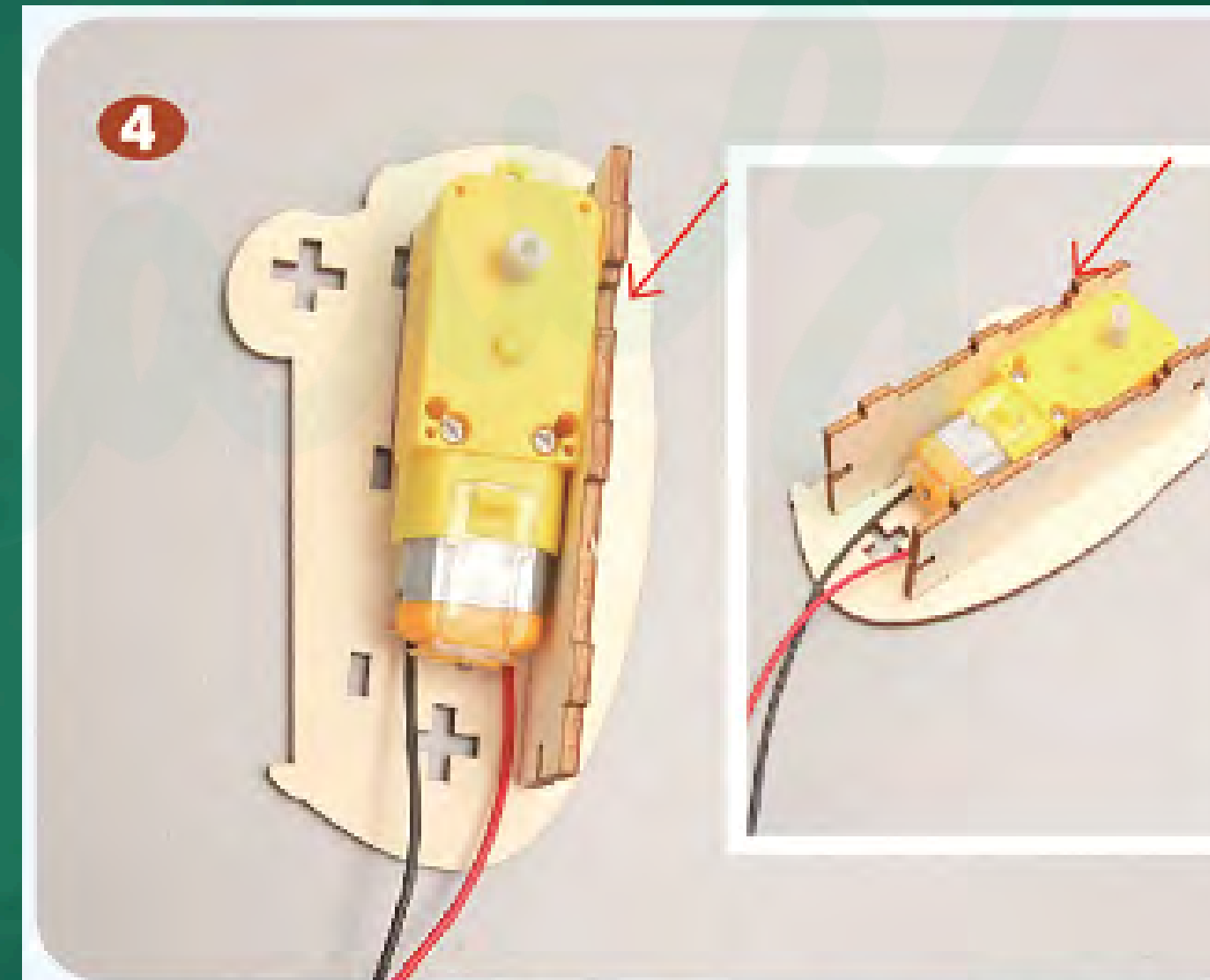
2

(Red wire = positive pole)

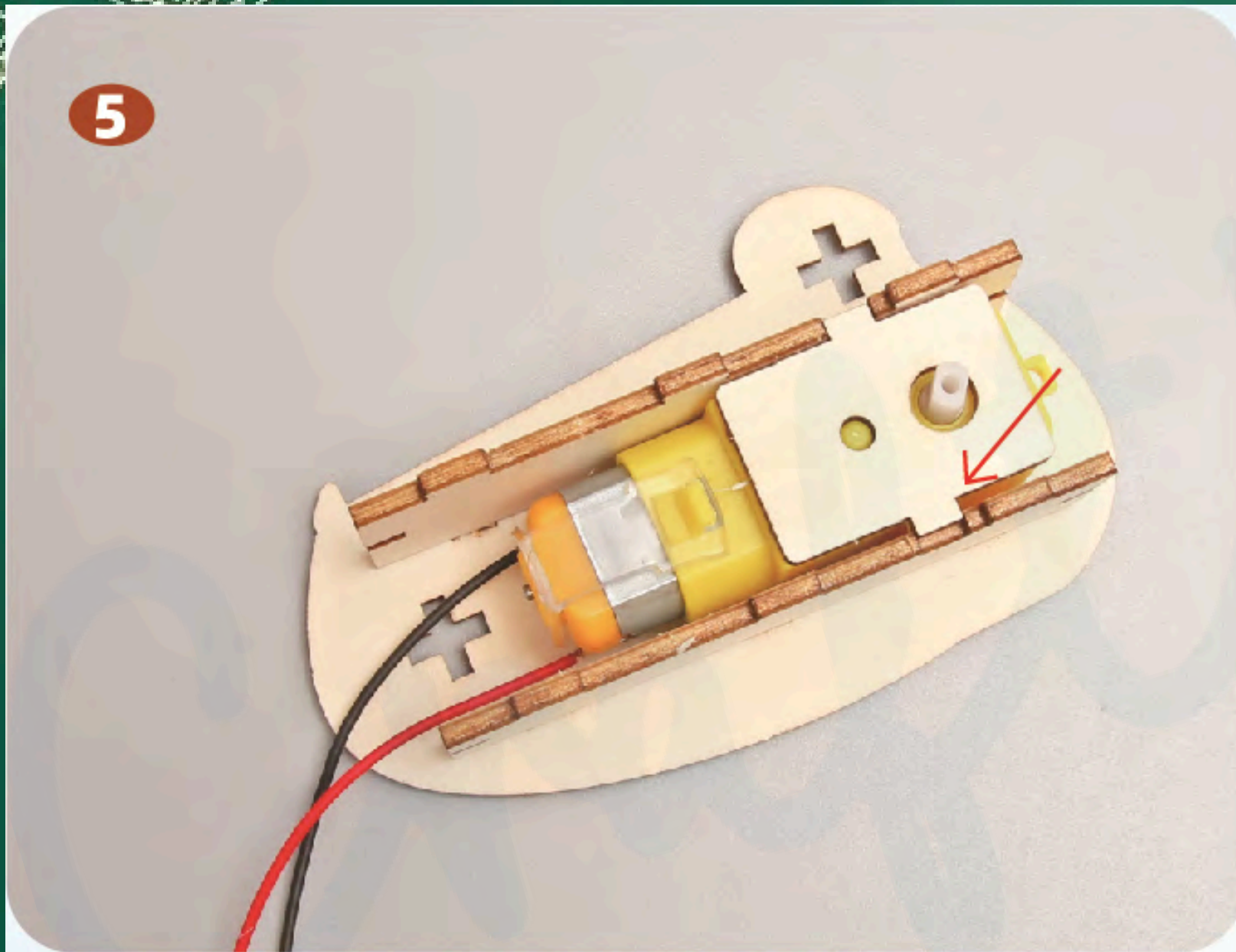
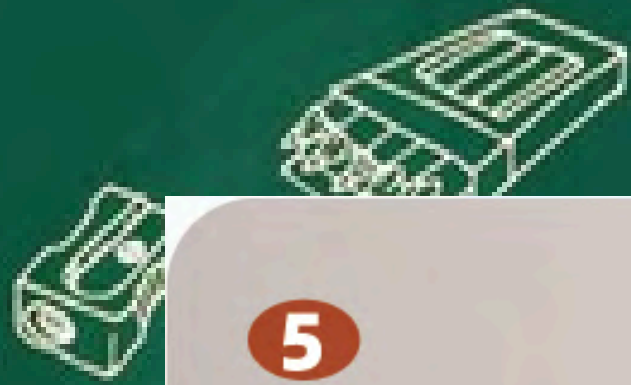




Install the side with the motor onto Board No.1 (the board with one hole), as shown in the diagram.



Install Board No.3 onto Board No.2 in the orientation of the groove, as shown in the diagram.

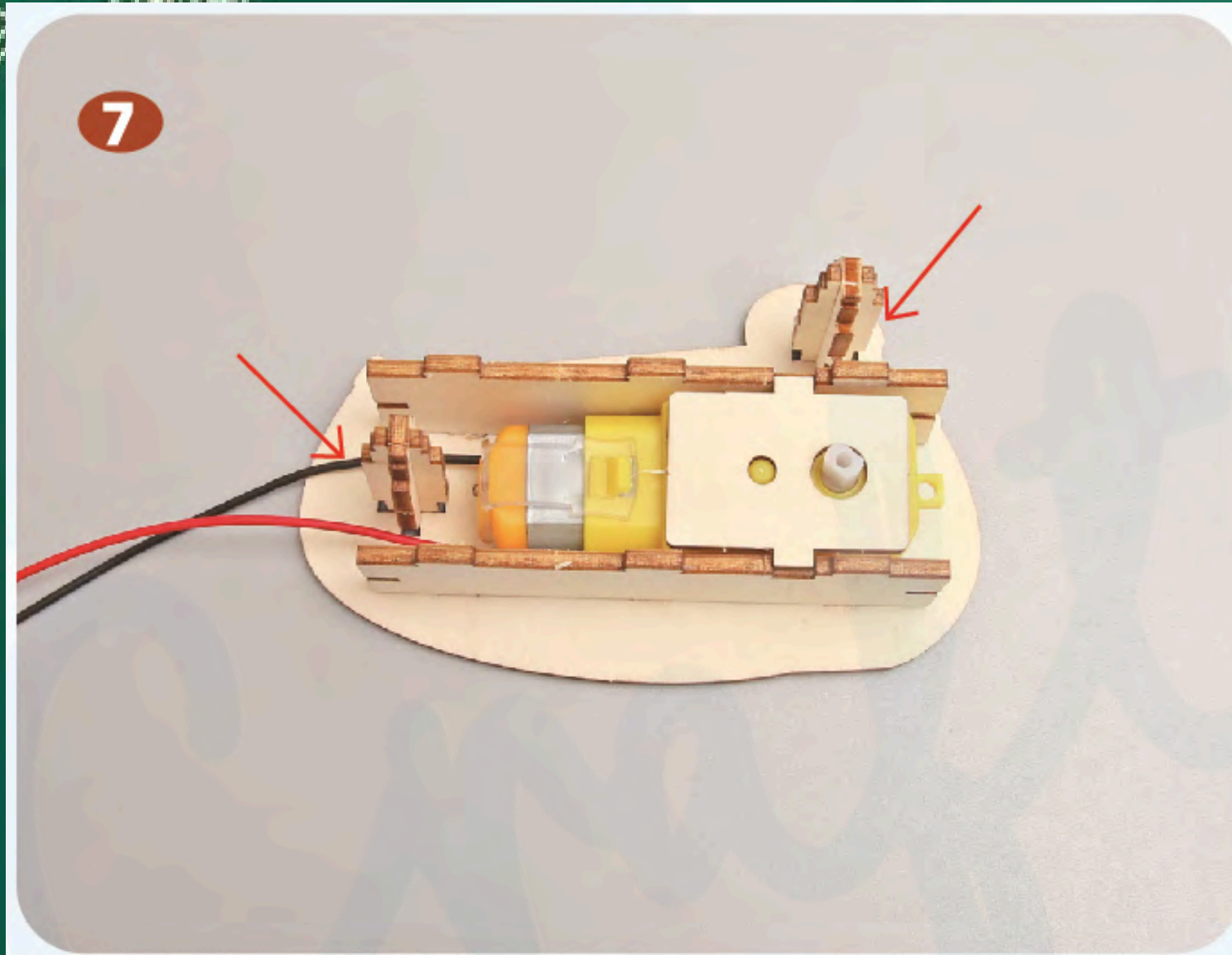


Install the other Board No.1 and slot it into the groove on Board No.3, as shown in the diagram.

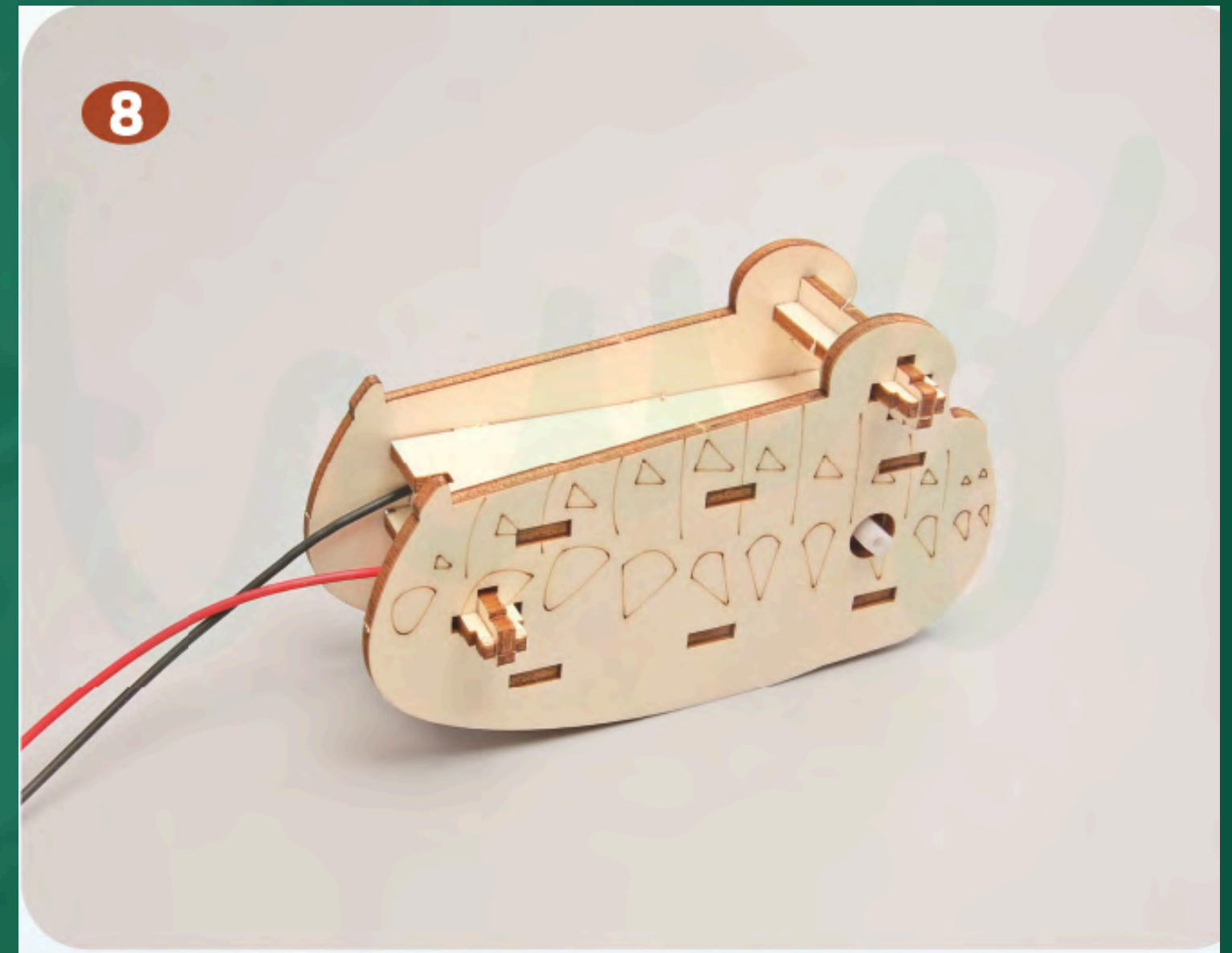


Cross-assemble the two pieces of Board No.4, as shown in the diagram.

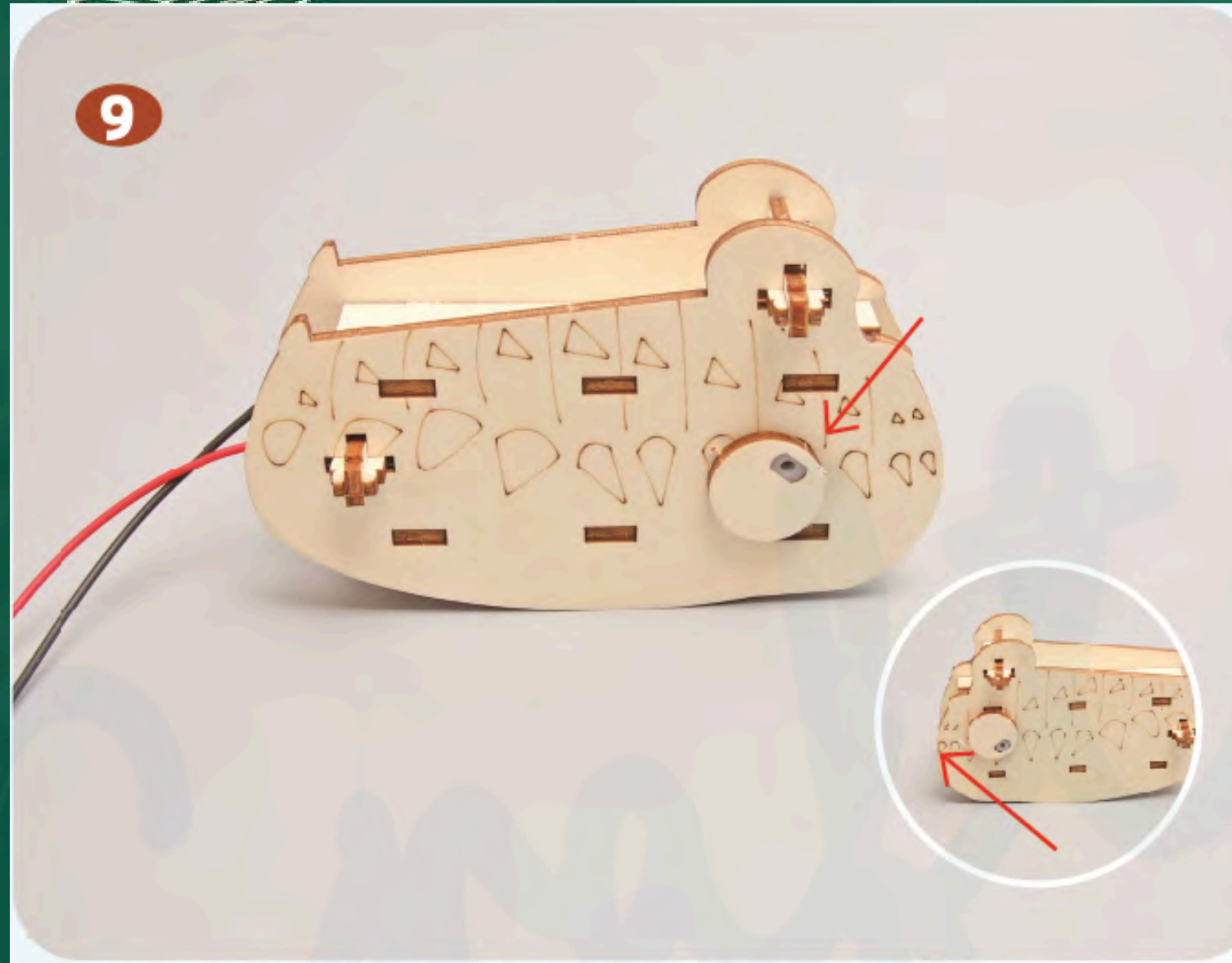




Slot Board No. 4 into the cross-shaped grid on Board No. 2, as shown in the diagram.



Attach and assemble the other Board No. 2, as shown in the diagram.



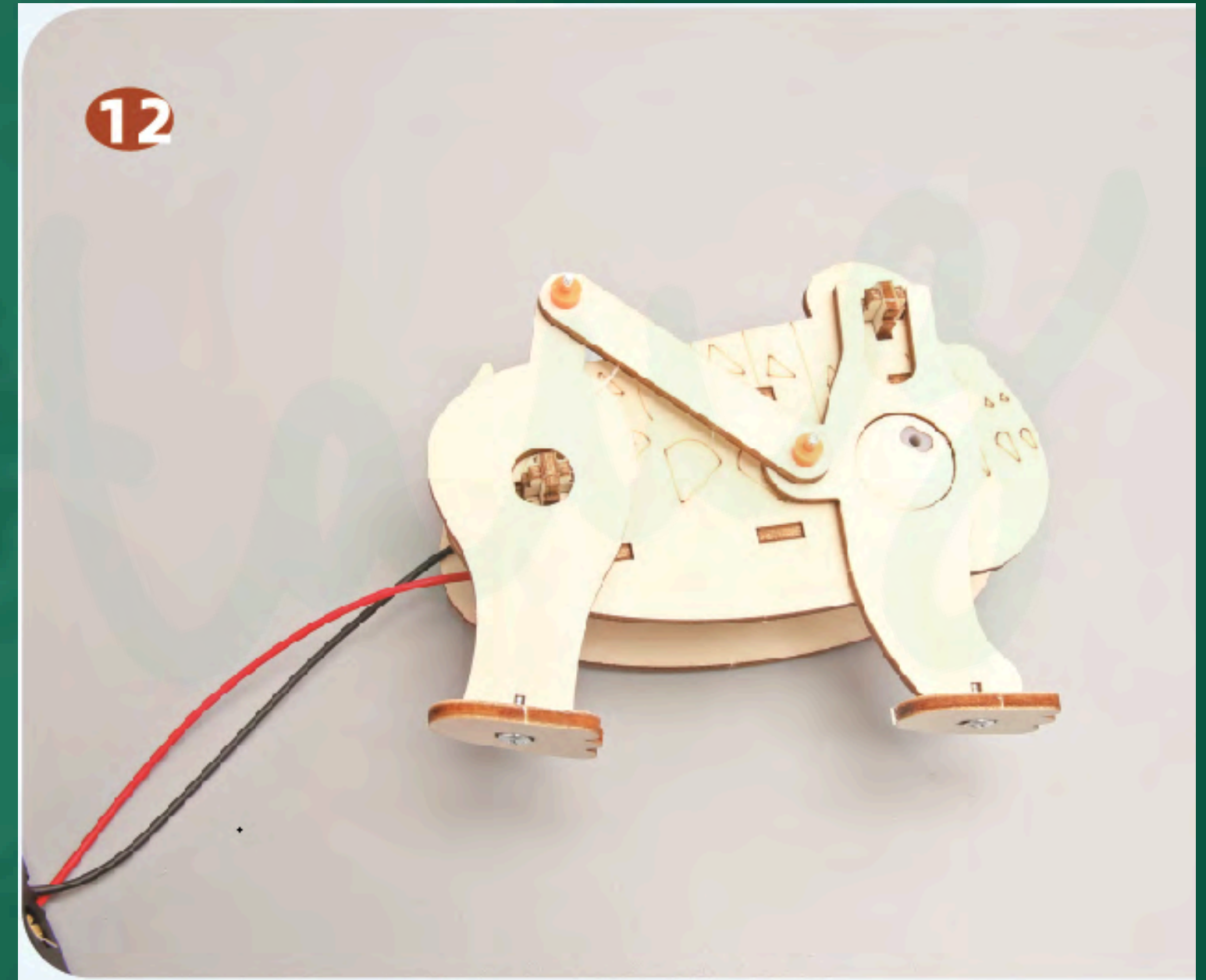
Slot Board No. 5 onto the motor brackets respectively; install them in an offset arrangement.



Assemble Boards No. 6, No. 7 and No. 8 together. Pay attention to the installation direction of Board No. 8, and fix in place with screws.



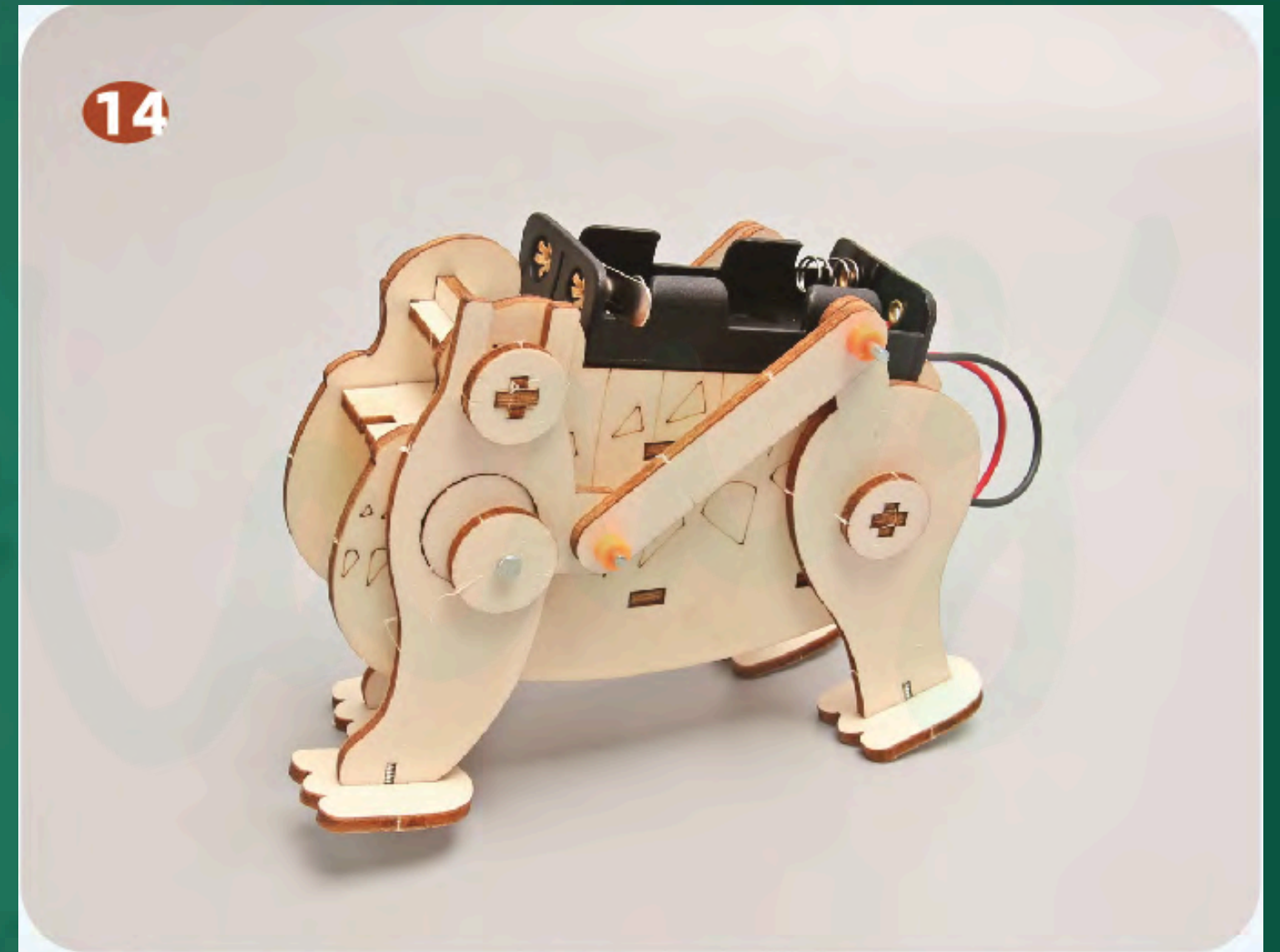
Connect Board No. 9 using T12 nails, and secure with shaft sleeves, as shown in the diagram.



Install the front section, fitting the round holes onto the motor shaft, as shown in the diagram.

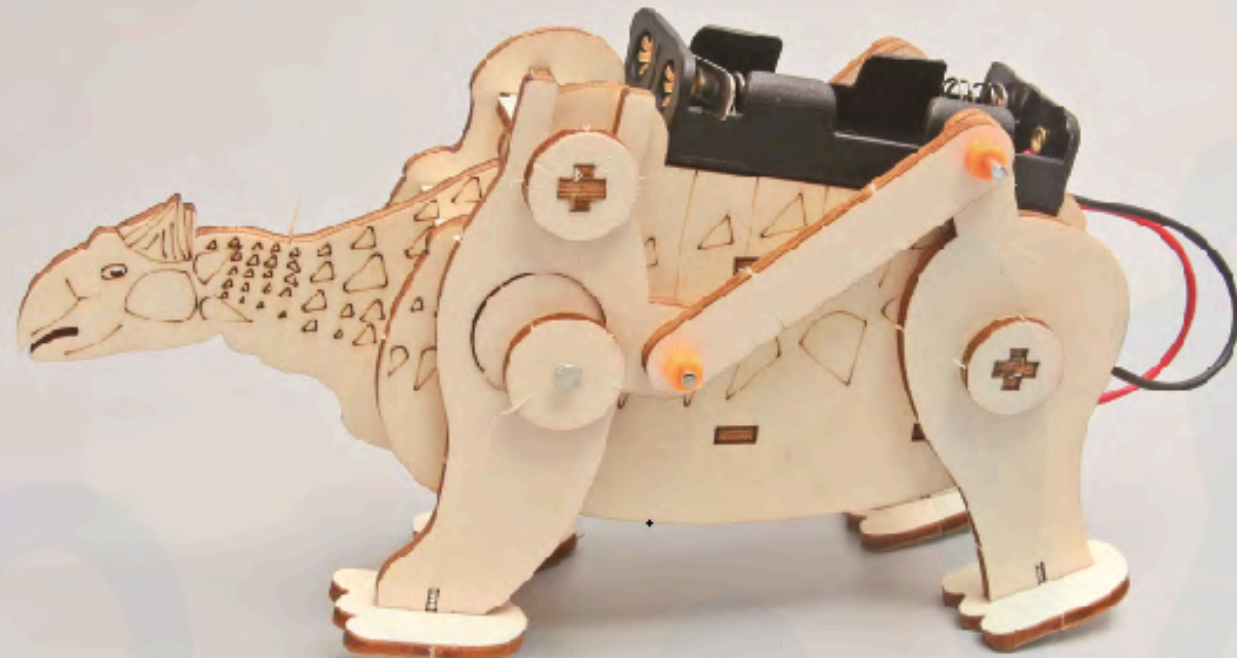


Install the front section, fitting the round holes onto the motor shaft, as shown in the diagram.



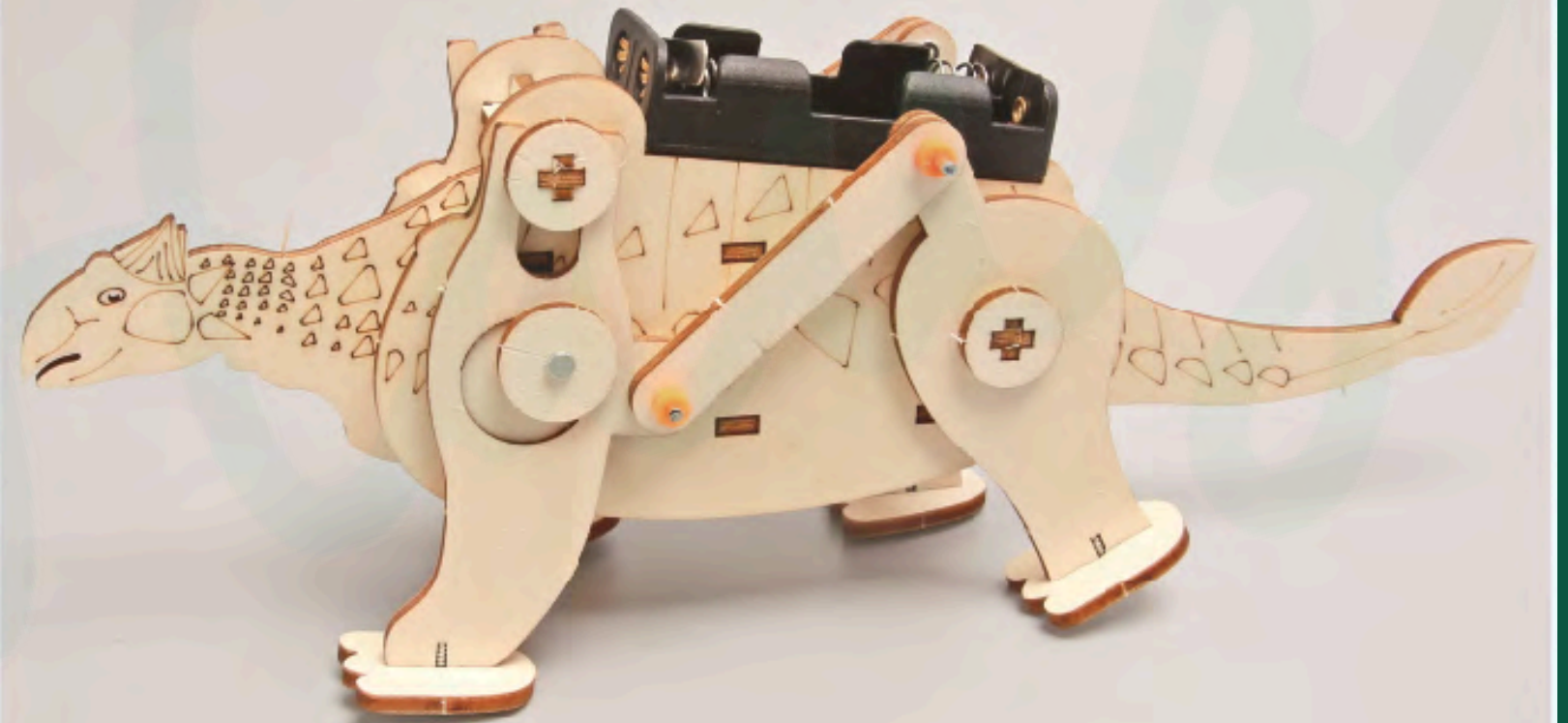
Install the assembly on the opposite side in the same way, and slot the battery box into the top position.

15

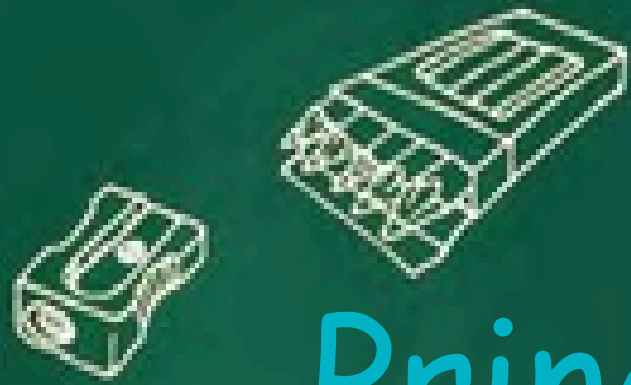


Install the head section as shown in the diagram.

16



Install the tail section as shown in the diagram — the assembly is now complete!



Principles

This model kit is designed and developed based on Ankylosaurus fossil records. It is a popular toy model among children, featuring a sturdy build. The upper part of its body is covered with thick scales, two rows of spikes run along its back, and it has a pair of horns on top of its head.

Ankylosaurus was a medium-sized, four-legged dinosaur. It measured about 6.25 meters long, 1.5 meters wide and 1.7 meters tall, weighing around 3.48 tons.

