How big was a T. rex compared to a human?

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How big was a T. rex compared to a human? About 40 to 43 feet long and as heavy as 8 to 9 tons, by the Forest Service's numbers. See it drawn beside a child.

A T. rex was about 12 to 13 metres long (40 to 43 feet) from nose to tail, which is roughly ten children lying head to toe, and it stood about 3.7 to 4.0 metres (12 to 13 feet) tall at the hips, which is about three children tall. Those numbers come from the USDA Forest Service's Dakota Prairie Grasslands page on prehistoric animals, and they are scientists' estimates, because nobody has measured a living T. rex.

When I drew Tyrannosaurus rex for Peabody's Animals section, I wanted a child standing right next to it, so that "40 feet" turns into something you can picture. Here is what I found.

The numbers, with where they came from

- What: Length, nose to tail · In metres and kilograms: 12.2 to 13.1 m · In feet and pounds: 40 to 43 ft · Where it came from: USDA Forest Service, Dakota Prairie Grasslands
- What: Height at the hips · In metres and kilograms: 3.7 to 4.0 m · In feet and pounds: 12 to 13 ft · Where it came from: same page
- What: Weight · In metres and kilograms: up to 7,260 to 8,160 kg · In feet and pounds: up to 16,000 to 18,000 lb (8 to 9 tons) · Where it came from: same page
- What: When it lived · In metres and kilograms: 66 to 68 million years ago · In feet and pounds: the same · Where it came from: same page

The page gives the weight as "up to", so those are the heaviest estimates, not a number for every T. rex. The children on Peabody's stage are drawn 1.2 metres (about 4 feet) tall, so the length works out to a little over ten of them, and the hips to a little over three.

T. rex next to an elephant

An elephant is the animal most of us think of when we need something big, so I put the two together on Compare Two. The Smithsonian's National Zoo gives the Asian elephant a shoulder height of 1.8 to 3.8 metres (about 6 to 12.5 feet) and a weight of 2,750 to 5,420 kilograms (about 6,100 to 12,000 pounds).

So the tallest elephant shoulder figure, 3.8 metres, is about level with a T. rex's hips. And even the heaviest elephant figure is well under the T. rex's estimate of 8 to 9 tons.

I used the Asian elephant, whose numbers come from the Smithsonian's National Zoo. The African elephant page now has a checked height and weight too, from a Smithsonian educator guide: adult males up to 13 feet (4 metres) tall.

T. rex next to a giraffe

A giraffe is the tallest animal on Peabody. Wikidata, quoting its own reference, gives a standing height of 5.5 metres (18 feet). Put it beside the T. rex and the giraffe's head is well above the dinosaur's hips, but that is a head-up height against a hip height, so it is not quite a fair match. Look at giraffe vs T. rex and decide for yourself. The length is where the dinosaur wins easily.

Was T. rex the biggest dinosaur?

No. Peabody's Argentinosaurus page uses the Smithsonian's educator guide: more than 36.6 metres (120 feet) long, which is close to three T. rexes nose to tail. Argentinosaurus vs T. rex shows it. The biggest dinosaurs Top 10 lines up the rest.

Why there is no race

If you tap two animals on the race page and one is a dinosaur, Peabody says nobody can time a dinosaur, so there is no race. Bones tell us how big an animal was, not how fast. Peabody races animals by speed only and never shows fights.

Try tonight

Take a ball of string outside and measure out 12 metres (40 feet), then lay a child's height, about 1.2 metres, along it ten times. Walk the length slowly. Then try the size sorter: three animals appear and you tap them from smallest to biggest, and a wrong tap stands the two side by side at true size. The bigger or smaller quiz is another gentle way to practise.

Say the name aloud, too: tie-RAN-oh-SORE-us REX, which means "tyrant lizard king". The dinosaur name guide helps with the rest of the wing.

Questions grown-ups ask

How do scientists know how big a T. rex was?

From fossil bones, compared with animals alive today. That is why the dinosaur numbers on Peabody carry notes like "scientists' estimate" and "up to", along with the page they came from.

Were its arms really tiny?

Peabody's page says the arms were tiny, but each one was strong. I haven't put a length on them, because Peabody has no checked number for it.

Does Peabody say how tall it was with its head up?

No. The Forest Service page gives the height at the hips, and that is what I show. Peabody has no checked number for the head-up height yet.

Peabody (peabody.kids) is free through the end of 2026 and has no ads. When the dinosaurs are done, the library has stories at your child's reading level, and the dinosaur facts page has more to read.

Free at peabody.kids/blog/how-big-was-a-t-rex-compared-to-a-human