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And now I present: a thread based on my love of [#science](#), [#scicomm](#), and [#animals](#), and the fact that I'm a huge [#nerd](#):

1/?

The other day at the library, I got this book by Ann Tompert for my 2yo (2/?)  
[amazon.com/Just-Little-Bi...](https://www.amazon.com/Just-Little-Bi...)

The premise: an elephant and a mouse want to ride a see-saw. [#Physics](#) has other ideas, so some other animals come to help. (3/?)

Eventually, mouse is joined by a giraffe, zebra, lion, bear, crocodile, mongoose, monkey, ostrich, and beetle, and the scales tip. (4/?)

So obviously I had to ask: How accurate is this?  
Here's what I found. (5/?)

(Full disclosure: I've taken mass estimates from [@Wikipedia](#), not primary sources) 6/?

[#Elephant](#) is referred to as "he" in the story. In all species of elephants, males are bigger than females. [#sexualdimorphism](#) (7/?)

Male African [#elephants](#) weigh up to 15,400 lb, while their Asian counterparts weigh up to 11,000 lb. (8/?)

Based on giraffe, zebra, & lion being at the playground, I'll presume the story happens in Africa. I'll say elephant weighs 12000 lb. (9/?)

Mouse's genus is unknown, so I have randomly selected one from Wikipedia's category 'Rodents of Africa.' (10/?)

Mouse in the book is also male. The typical striped grass mouse (*Lemniscomys stratus*) weighs up to 68g, or .15 lb. (11/?)

So Elephant weighs roughly 80,000 times as much as Mouse. Like I said, physics is against them. (12/?)

The first animal to come to Mouse's aid is Giraffe, who is female. The average adult female [#giraffe](#) weighs 1,825 lb. (13/?)

Next up: [#Zebra](#). Zebra's species and sex are unspecified in the book (and its jaunty orange scarf gives away nothing). (14/?)

Grevy's Zebra (*Equus grevyi*) is the largest species, weighing up to 990 lb. But the Plains Zebra (*Equus quagga*) is much more common. (15/?)

The Plains Zebra weighs roughly 400-850 lb (M are about 10% bigger than F). The weight of the jaunty orange scarf is negligible. (16/?)

So if we assume a large male zebra, we now have 2675.15 lb on one side (zebra+giraffe+mouse) & 12,000 lb on the other (elephant). 17/?

The next animal to climb on is a [#Lion](#), identified as male. According to Wikipedia, a large male weighs approx. 550 lb. (18/?)

And now a bit of a mystery. The next animal to climb on the seesaw is "Bear." However, there are no extant [#bears](#) in Africa. (19/?)

As best I can figure, Bear must be an exchange student. He is identified as male, and is a brown color. (20/?)

Personally, I don't think Bear is a grizzly, a species in which males average 600-900 lb but can weigh up to 1500 lb. (21/?)

He is clearly smaller than Lion and Zebra, so I think he's more likely a North American black bear (not always black!). (22/?)

Grr....[#parenting](#) duty calls! Thread will be resumed ASAP. (23/?)

Ok, so the weight of male black bears ranges from approx. 125-550 lb. I'll put this one in the middle of that range, at 325 lb. (24/?)

Mouse & co. now weigh 3550.15 lb vs. Elephant's 12,000 lb. (25/?)

[#Crocodile](#) is the next to climb on. Neither sex nor species is specified, but I will assume it is a Nile croc based on its friends. (26/?)

Nile crocs have a huge range of sizes. An average female Nile croc weighs 90-550 lb, while males are typically 330-1540 lb. (27/?)

Some Nile crocs can be significantly larger - up to 2400 lb - but this one appears relatively small. I estimate its weight at 500 lb. (28/?)

Mongoose, by contrast, appears rel. big. Its sex and species are unclear, but the largest mongoose species weighs only 11 lb. (29/?)

So the far side of the see-saw is now at 4061.15 lb. This is not looking promising. (30/?)

Ostrich is the larger of the remaining climbers-on. I don't know if this one is M or F, but size differences are small. (31/?)

An average male common [#ostrich](#) weighs about 250 lb, compared to 220 lb for

an average female. For our purposes, 250 will do. (32/?)

Ostrich is accompanied by Monkey, identified as female. To me, Monkey looks like a chimp, but she has a tail, so clearly is not. (33/?)

This monkey appears to be at arboreal and does not look like a colobus, so is likely in the Family Cercopithecidae. (34/?)

Correction: SUBfamily CercopitheciNae. (Isn't [#taxonomy](#) fun?) 35/?

Most [#monkeys](#) in this group have weights ranging from 10-45 lb. Again, to be generous, I will presume this one is at the upper end. (36/?)

And finally we have the "small brown [#beetle](#)" that literally tips the scales for our motley crew. (37/?)

Given that there are roughly 400,000 species in the Order Coleoptera, I will not try to guess the specific type. Darwin I am not. (38/?)

However, I feel confident that it is less than .22 lb, the weight of the Goliath beetle. (39/?)

.1 lb seems like a reasonably generous estimate, especially for a "small" beetle. (40/?)

So we now have a grand total of....

Elephant: 12,000 lb.

Mouse & co: 4,356.25 lb.

(41/?)

All of those animals together don't weigh even half as much as an [#elephant](#).

Conclusion: elephants are \*really\* big! (42/?)

And have we learned anything else from this little exercise? (43/?)

Obviously, children's books about [#animals](#) don't (and shouldn't) always have [#scicomm](#) as a primary goal. (44/?)

But they can spark curiosity about the natural world and lead to some nifty learning opportunities! (45/?)

Especially those of us who love [#science](#), [#scicomm](#), and [#animals](#), and are huge [#nerds](#). ☺ (46/46)