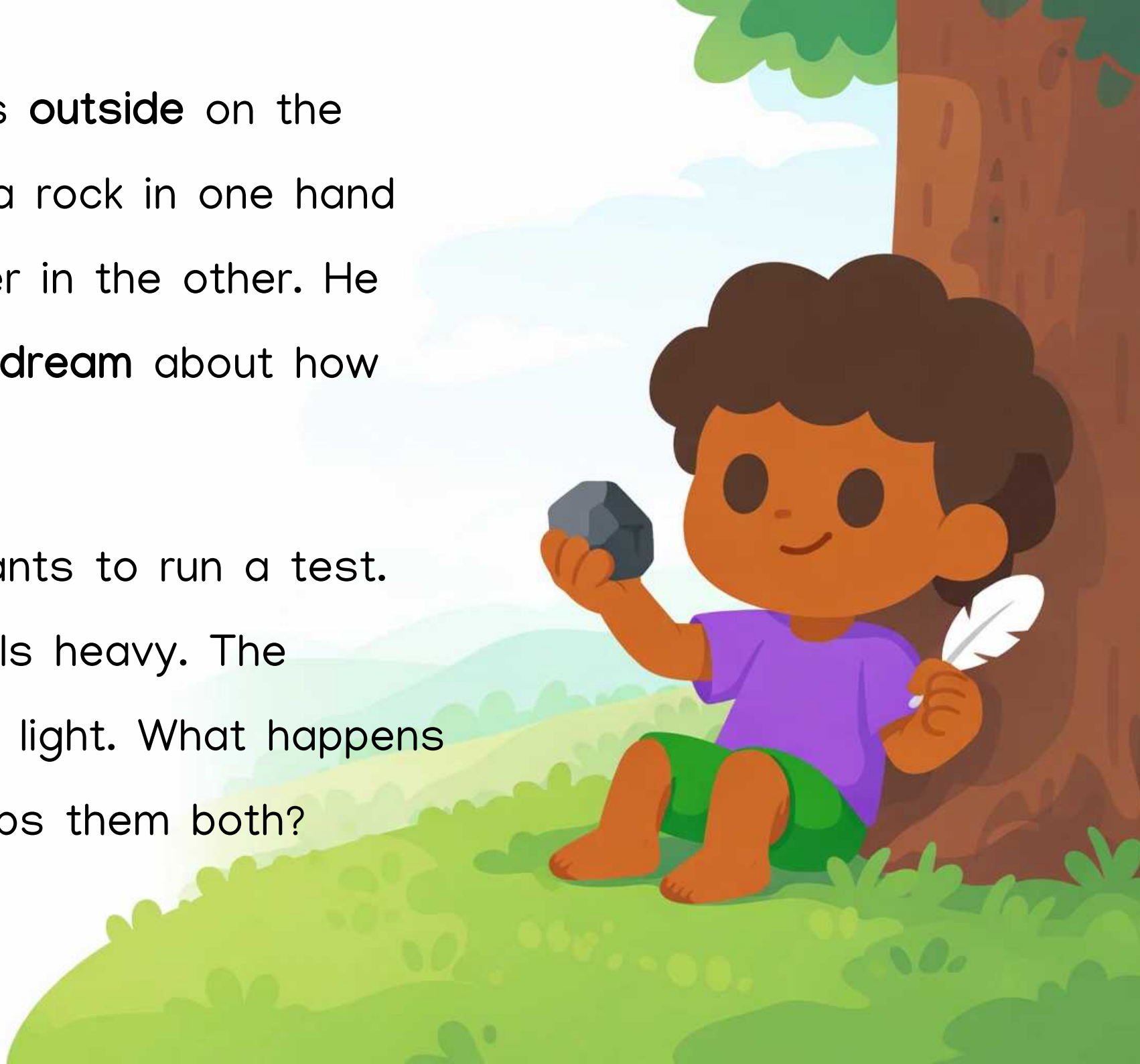
Drop
Them
Both!

This boy sits **outside** on the **hillside** with a rock in one hand and a feather in the other. He loves to **daydream** about how things work.

Today he wants to run a test. The rock feels heavy. The feather feels light. What happens when he drops them both?



A rock is strong and solid. Out in the hot **sunshine,** it stays cool all day long. A big beast grips it in the tight curl of its trunk, but **nothing** can crush a rock or make it bend.

Just then, a big beast walks up the **pathway** to say hello! A rock is a bit like it. Both have a lot of mass and stay put. Try pushing one down a **driveway** and you will not get far! The boy pushes with all his might, but the big beast will not move one inch.

A feather is **nothing** like a rock. It is so soft and light that it can float in a breeze.

The boy holds them both and starts to **daydream.** One could blow away in the wind. The other stays right where it is.

Now he wants to find out how heavy the rock is. It is hard to **forecast** that just by picking it up.

He lifts the rock high above his head. How heavy can it be? He will not find the answer **without** the right tool.

He asks his dad for help. Dad comes up the **driveway** with a set of scales. That is the right tool for the job!

The boy's eyes go wide. Now they can find out the real answer.

Dad fills a flask with water, right up to the top. 'One full flask is our **benchmark,**' he says with a grin. He draws it on a board with pride. Now they can set the rock on the scales and test it!

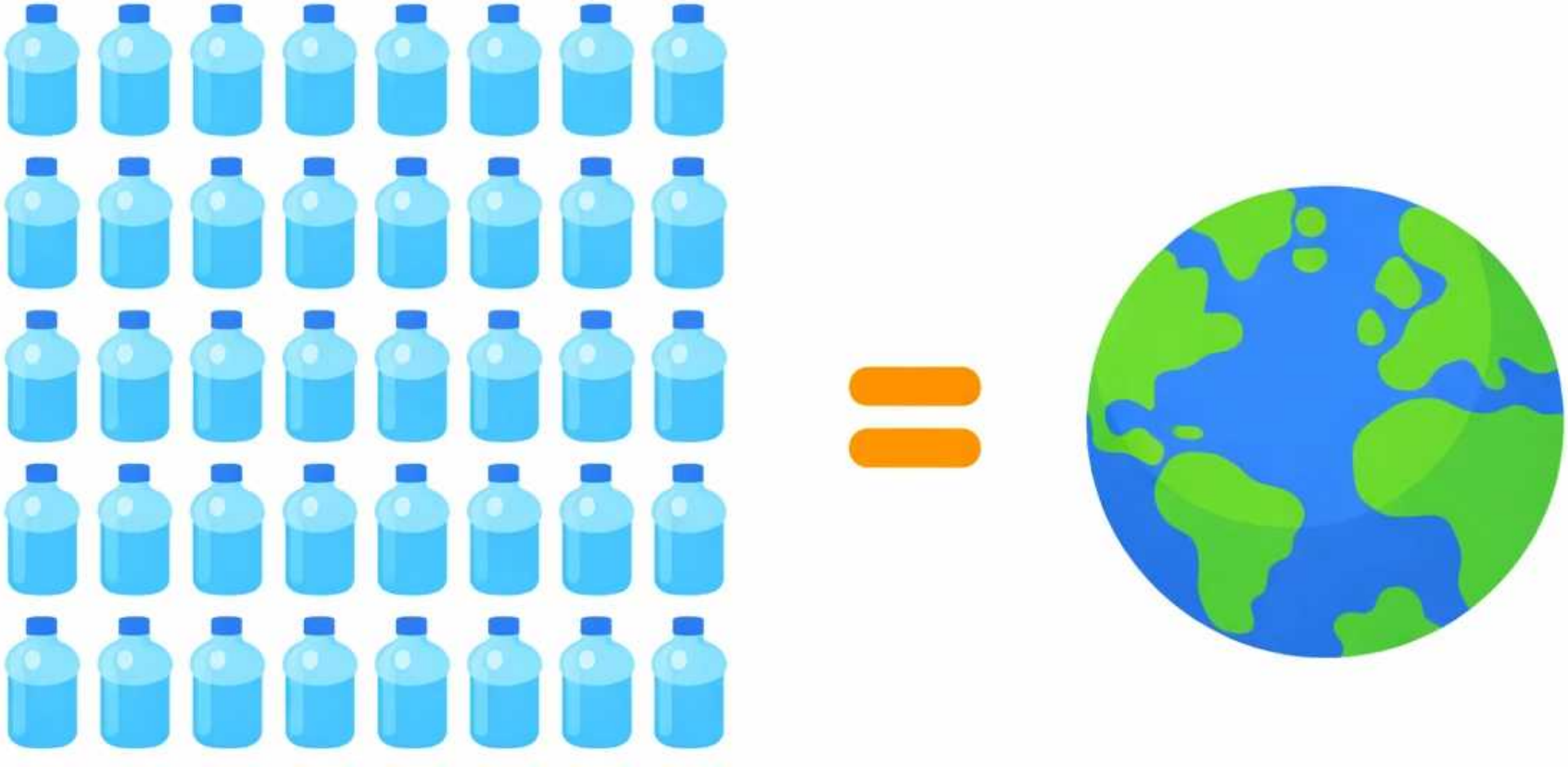
'But Dad, does more stuff always have more mass?' The Boy asks.

'Nope!' Dad says. 'Ten cows can **outweigh** two hundred dogs in a **cardboard** box. Mass is about the stuff packed **inside**, not how many things you have.'

The world is far too big for any set of scales. But can we still find out how heavy it is?

Yes! This is not just a **daydream.** We can use maths to work out the mass of the whole Earth.

Look at all those big tubs of water! It would take more than five billion billion of them to match the mass of the Earth. That number is so big it is hard to say out loud. No matter how you look at it, our planet is very heavy.



Now look at how many feathers it takes to match our water flask. The pile is as tall as an **airport** tower! Yet the scales sit even. The two sides match, but one is tiny and one is so tall.

One **raindrop** is so light you can hardly feel it on your hand. But when **raindrop** after **raindrop** falls, they fill the whole sea! Next time the **sunshine** comes out after rain, think about all those drops. Small things can add up to **something** big.

The boy sits on the scale and smiles. He can **outweigh something** small, like the pan up high. But **something** very big can **outweigh** him by a lot! Go grab your **notebook** or a toy and guess how heavy it is.

S1

Drop Them Both!

On a sunny hillside, a curious boy holds a heavy rock in one hand and a soft feather in the other. Which one will hit the ground first? And just how much heavier is that rock, really? With Dad's help, a flask of water, and a set of scales, he sets out to weigh everything from feathers to the whole planet Earth! This decodable reader practises compound words such as 'hillside,' 'driveway,' 'sunshine,' 'raindrop,' and 'outweigh.'

Reading Skills: Compound

airport, benchmark, cardboard, daydream, driveway, forecast, hillside, inside, notebook, nothing, outside, outweigh, pathway, raindrop, raindrops, something, sunshine, textbook, without

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