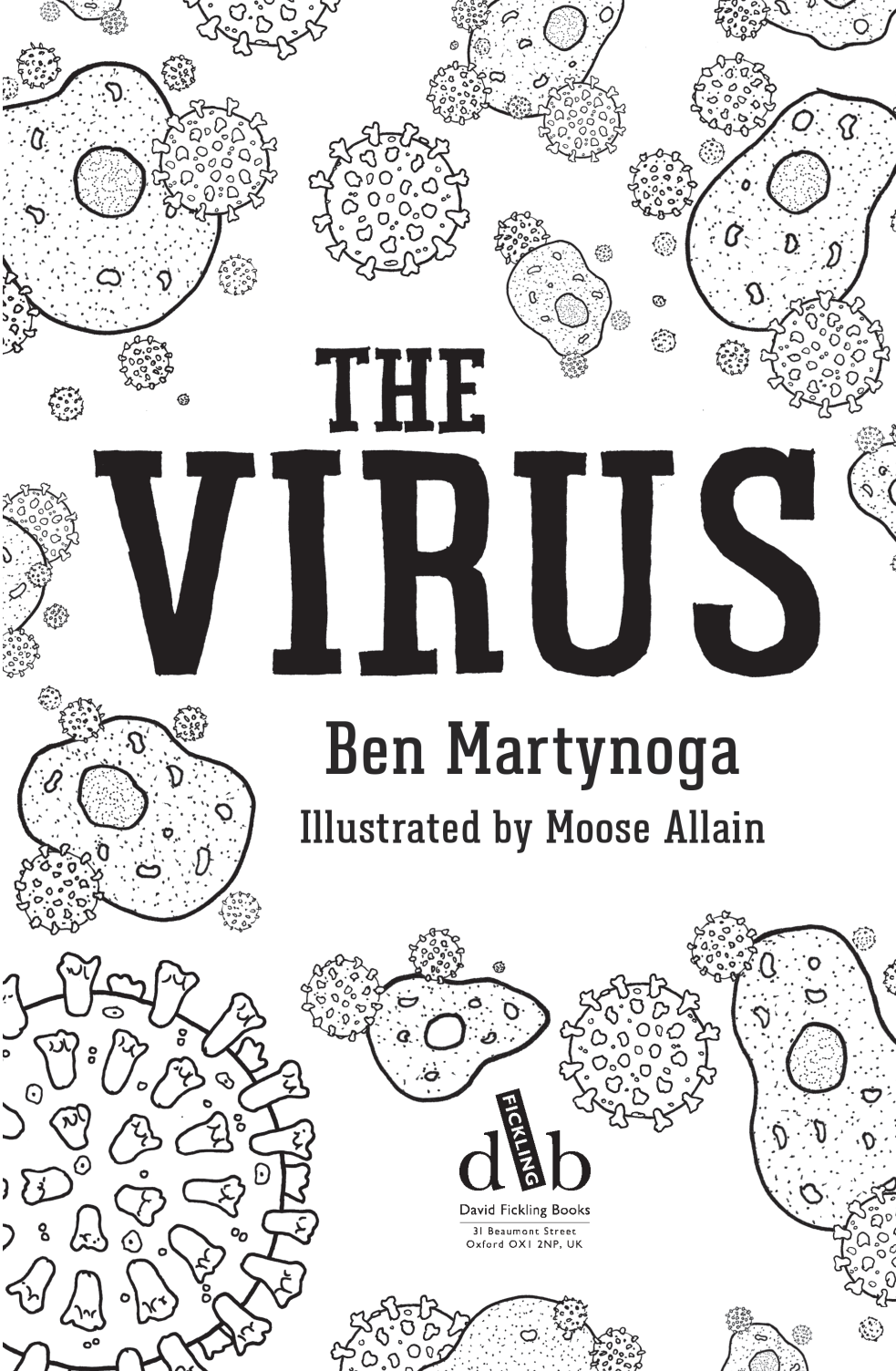

# THE VIRUS


## Ben Martynoga

Illustrated by Moose Allain



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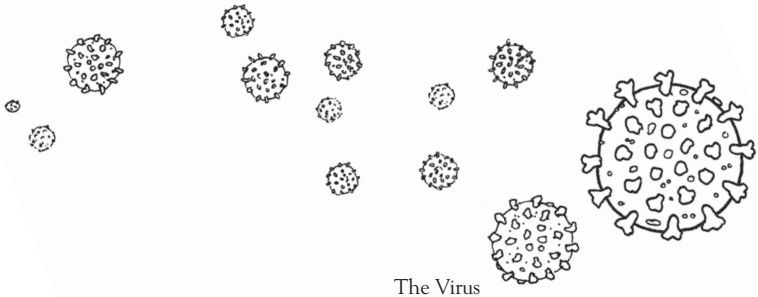

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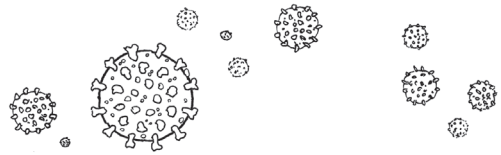
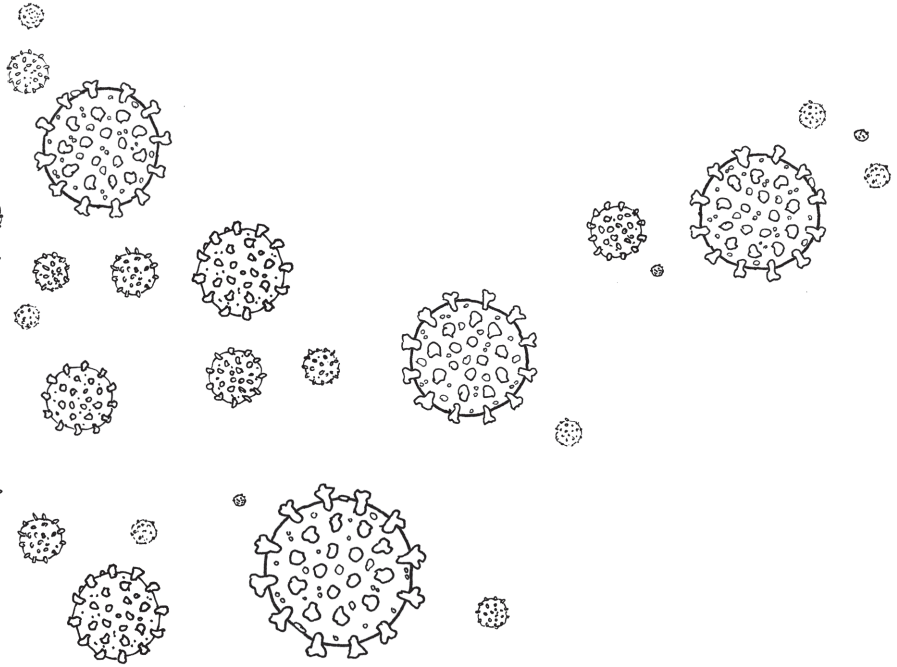
The SARS-CoV-2 coronavirus that causes the COVID-19 illness is totally new to our world. Until November 2019 it hadn't infected a single person, which means there's still a lot that we don't know about it. But scientists and doctors all over the world have launched a massive combined effort to find out how the virus works and – crucially – what they might do to stop it harming people. Knowledge about the virus really is changing all the time – which is exactly how science works – so while the facts in this book have all been carefully checked, some things may change before publication.



There are millions of different kinds of virus in the world, and only a very small fraction of them can infect humans. Coronavirus is a term used to describe a large group of different viruses that can cause diseases in mammals and birds.

SARS-CoV-2 is the full name for one specific species of coronavirus that causes the illness COVID-19.

Throughout this book we refer to the SARS-CoV-2 virus as the COVID-19 virus.



# The Riddle

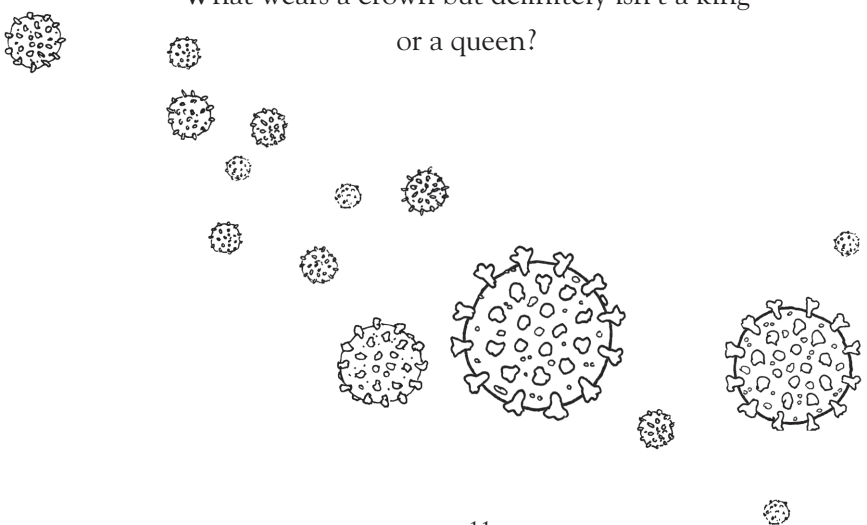
What is smaller than a speck of dust but more terrifying than any monster?

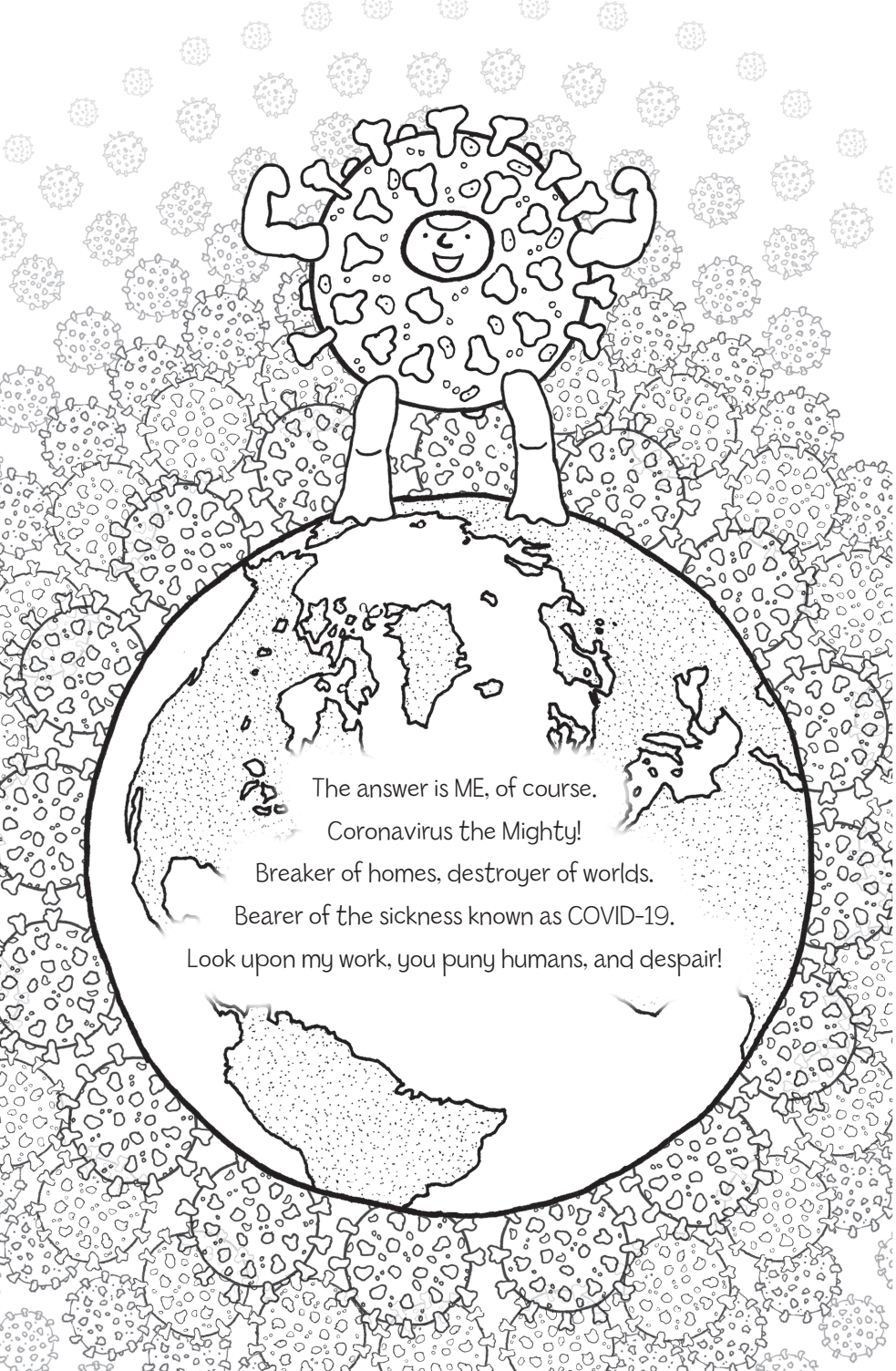
What doesn't have muscles but does have the power to stop all human activity?

What can't move itself an inch but can travel round the world in days?

What has no brain but is cleverer than any scientist?

What wears a crown but definitely isn't a king or a queen?




The answer is ME, of course.
Coronavirus the Mighty!
Breaker of homes, destroyer of worlds.
Bearer of the sickness known as COVID-19.
Look upon my work, you puny humans, and despair!

Hang on a minute. I'm not so sure about this riddle. You're tiny and brainless – and you can't even squirm or bite – why should we be scared of you?

Hey, less of the insults. I am scary. In 2020 I spread throughout your world and caused mass panic. I killed many thousands of people, overwhelmed hospitals and brought most of your world to a grinding halt.

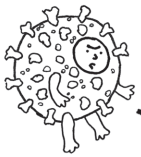
OK, good point. We should be scared of you. You're an evil little scumbag.

No need to get personal. I'm not actually evil. I'm just a virus, remember? I can't think. I don't *want* to hurt anyone. I can't really *want* anything at all. Compared to you, I'm not much more than a little collection of chemicals. Really, I just *am*.

If I'm totally honest, I'm pretty scared of you too. Rumour has it your bodies are expert at spotting us viruses, hunting us down and sending us packing.

Yup, that's all thanks to our incredible immune systems. Plus, we can destroy you before you even get inside us – all it takes is a bar of soap!

Sad but true. In fact, left out on my own I'm actually quite fragile. And that soap stuff . . . eughhh!



There's also that thing you humans call science. We humble viruses can't understand what that is. But we definitely don't like it.

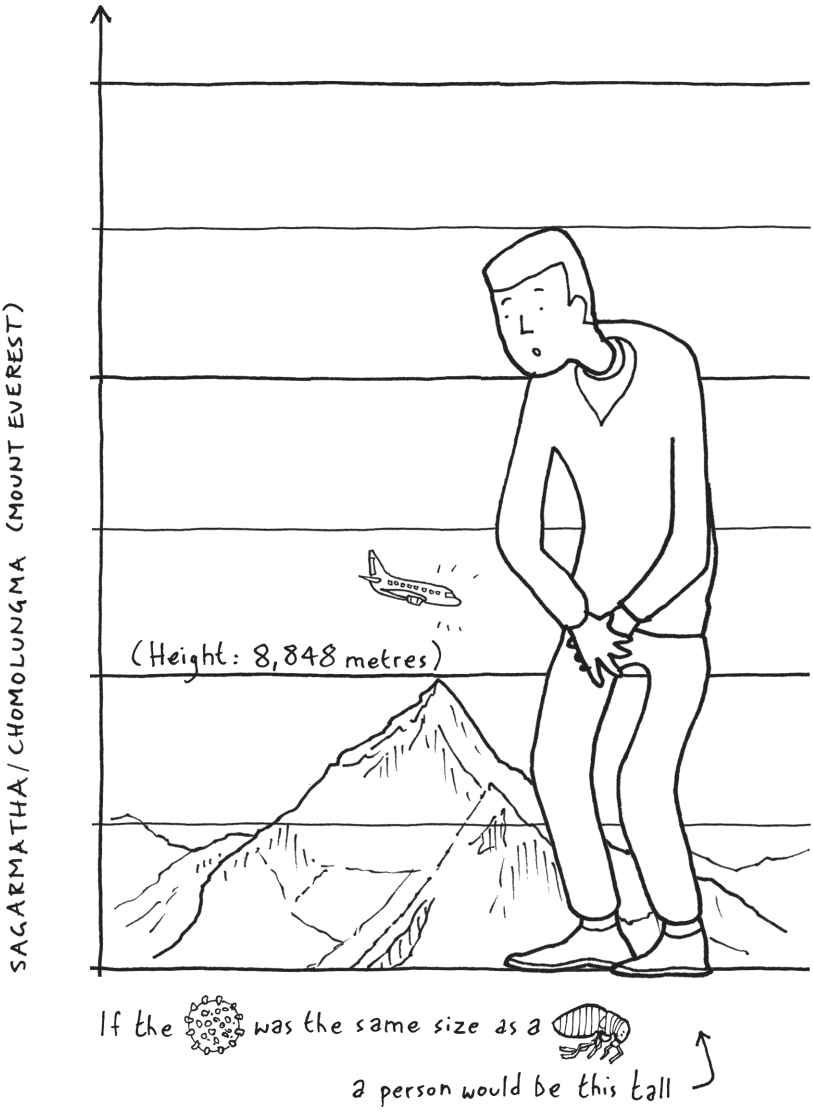
Yeah, too right. Once our scientists develop a vaccine, you'd better reconsider your 'plans' for world domination. And you can tell all those other little viruses that harm people – we're coming for the lot of you.

Now you're getting a bit carried away. First, we viruses are EVERYWHERE. Oceans? Check. Forests? Check. Parched deserts? Check. Boiling-hot volcanic geysers? Check. Your bedroom? Definitely. We can infect all kinds of living things and we've got them all surrounded and outnumbered - including you! And, believe it or not, we actually help make the air you breathe and the soil plants grow in. Get rid of us, and most of the living world would simply collapse.

Second, some viruses might do nasty and painful things to humans, and most other living things too, but don't panic too much, only a tiny fraction of the world's viruses can infect people and there are some viruses that actually help you stay healthy. And anyway, it's not in our best interests to wipe you pesky humans off the face of the Earth altogether.

Confused already? It's not surprising. Viruses really are a whole set of riddles. How can they be bad and good? Deadly and essential? If they're so small and fragile, how can they cause such havoc? And how can we call them clever when they're just a bunch of dumb little chemical molecules?

So let's try to make sense of these mysterious viruses. Since we really do have to share our world with them and the nasty diseases they cause, we'd better find out all we can about what they are, how they live and how they spread.


SAGARMATHA/CHOMOLUNGMA (MOUNT EVEREST)
(Height: 8,848 metres)
If the was the same size as a
a person would be this tall