

Written by Camilla de la Bedoyere
Illustrated by Vasilisa Romanenko

Edited by Susannah Bailey
Designed by Zoe Bradley
Cover design by Angie Allison

First published in Great Britain in 2023 by Buster Books,
9 Lion Yard, Tremadoc Road, London SW4 7NQ

www.mombooks.com/buster Buster Books @BusterBooks @buster_books

Copyright © Buster Books 2023

All rights reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, without the prior permission in writing of the publisher, nor be otherwise circulated in any form of binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

A CIP catalogue record for this book is available from the British Library.

ISBN: 978-1-78055-824-0

2 4 6 8 10 9 7 5 3 1

This book was printed in August 2023 by
Shenzhen Wing King Tong Paper Products Co. Ltd.,
Shenzhen, Guangdong, China.

CONTENTS

Introduction	8
Down in the Deep	10
Built Like a Tank	14
The Secrets of Sand	16
Little vs Large	18
Patterned Shells	22
Ocean Soup	24
Night Flight	26
Flying Jewels	30
Stunning Seeds	32
Colossal Blossom	34
Going Underground	38
Lots of Frogs	40
Tiny vs Tough	42
Big Ears	46
Rainbow Diatoms	48
Here Be Dragons	50
Mini Mariners	54
Hovering Hummers	56
Flapping Bats	58
Hunter in the Cold	60
Eggstremely Small	64
Reach for the Sky	66
Remarkable Rodents	68
Hungry Fungi	72
Big Beak	74
Sparkling Crystals	76
Flutter By, Butterfly	80
A Giant of a Spider	82
It's Jumbo!	84
Beetle Collection	88
Silent Killer	90
Glossary, Units of Measurement and Imperial Measurements	92





INTRODUCTION

Big or small, mega or micro – size matters here on Earth.

In this book, you will learn lots about the miniscule and massive things and creatures that live on our planet. Nearly all the beautiful illustrations are shown at life-size with accurate measurements, meaning you will get a real sense of the amazing size and scale of the natural world.

Discover the biggest flower in the world, the enormous eye of a colossal squid, and the surprisingly large ears of a dinky fennec fox. Compare your hand to that of a silverback gorilla, an eagle owl's sharp talons and a tiger's mighty paw to get an awe-inspiring sense of these animals' strength and power. You will find huge mushrooms and giant beetles that are bigger than your foot. And beware the monster-sized spider and venomous viper – they can be terrifying at their real size!



The world of tiny things is also shown here, and you will be able to see them both life-size and zoomed in. Explore an almost invisible world of seeds and snowflakes, with their exquisite patterns and shapes. Dive into the ocean to find microscopic animals and plants and dig into the soil to see the marvellous mini-beasts that lurk beneath our feet.

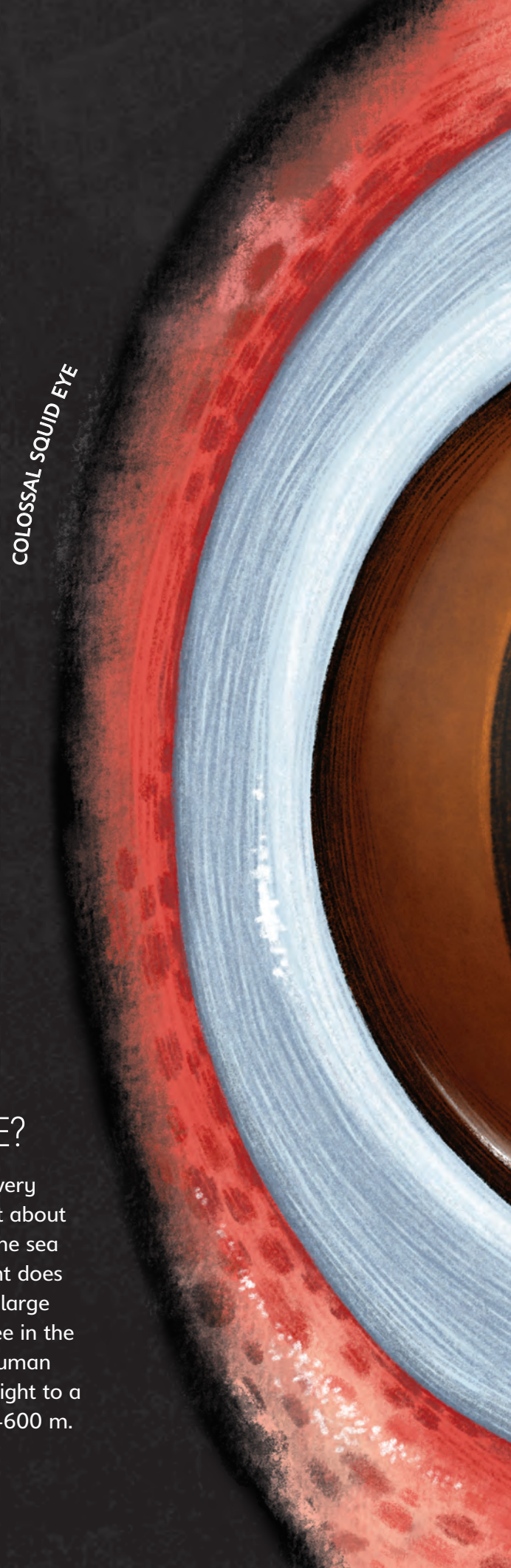
Make sure to look out for two symbols – a to show that a picture has been zoomed in, and a to show that a picture has been zoomed out. Both of these mean the particular images shown are not at life-size. You will also see pictures that compare humans to natural things or animals. There is a glossary at the back of the book containing helpful words, in case you don't understand something, along with information about measurements.

Enjoy your journey through an extraordinary world of big and small size-related facts and get wise to the size of all things.

DOWN IN THE DEEP

The colossal squid has the largest eyes of any animal currently known. They are possibly even the largest eyes that have ever existed in the animal kingdom, including those of the dinosaurs. They measure about 27 centimetres across – roughly the size of a football. In comparison, a human eye is only 2.2 cm across.



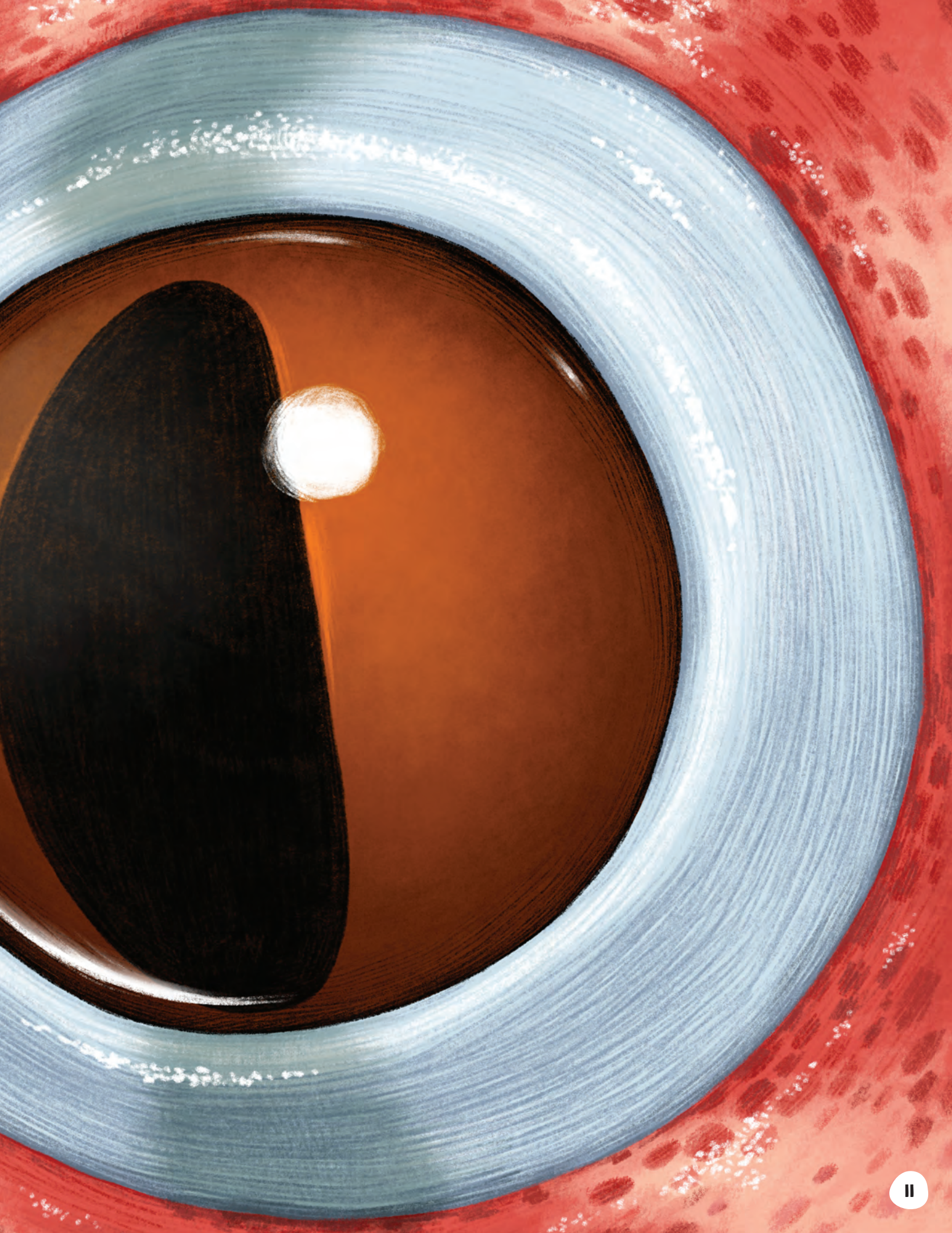


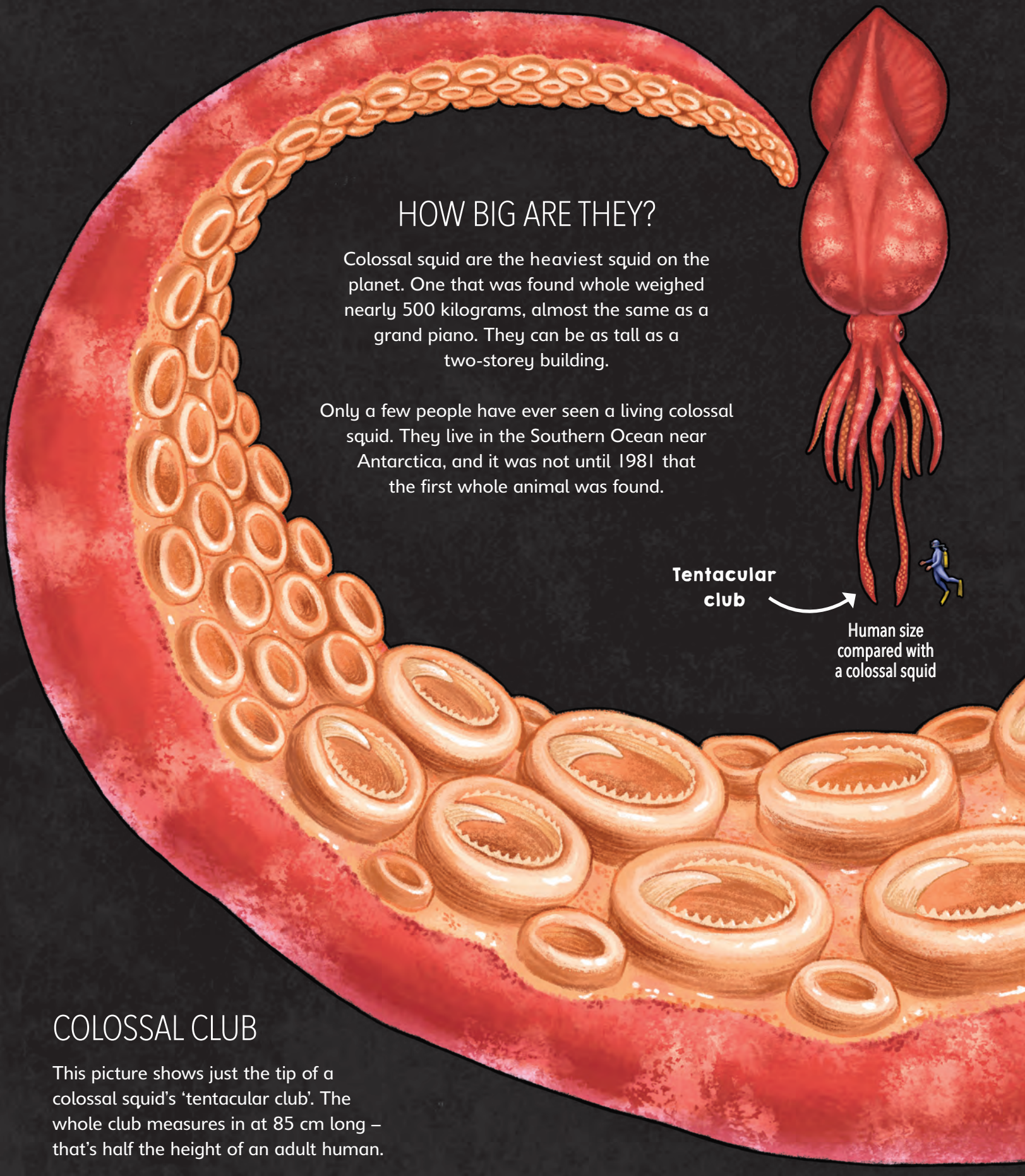
SEEING IN THE DARK

A colossal squid's eyes, as well as being ginormous, also have built-in headlights that help them see in the dark. These headlights are called 'photophores'. When their eyes turn inwards to focus on objects directly in front of their arms and tentacles, the photophores provide enough light for the squid to see its prey.

WHY SO HUGE?

Colossal squid live in very deep ocean waters, at about 1,000 metres below the sea surface, where sunlight does not reach. They need large pupils to help them see in the dark ocean depths. Human eyes can only detect light to a depth of around 500–600 m.





HOW BIG ARE THEY?

Colossal squid are the heaviest squid on the planet. One that was found whole weighed nearly 500 kilograms, almost the same as a grand piano. They can be as tall as a two-storey building.

Only a few people have ever seen a living colossal squid. They live in the Southern Ocean near Antarctica, and it was not until 1981 that the first whole animal was found.

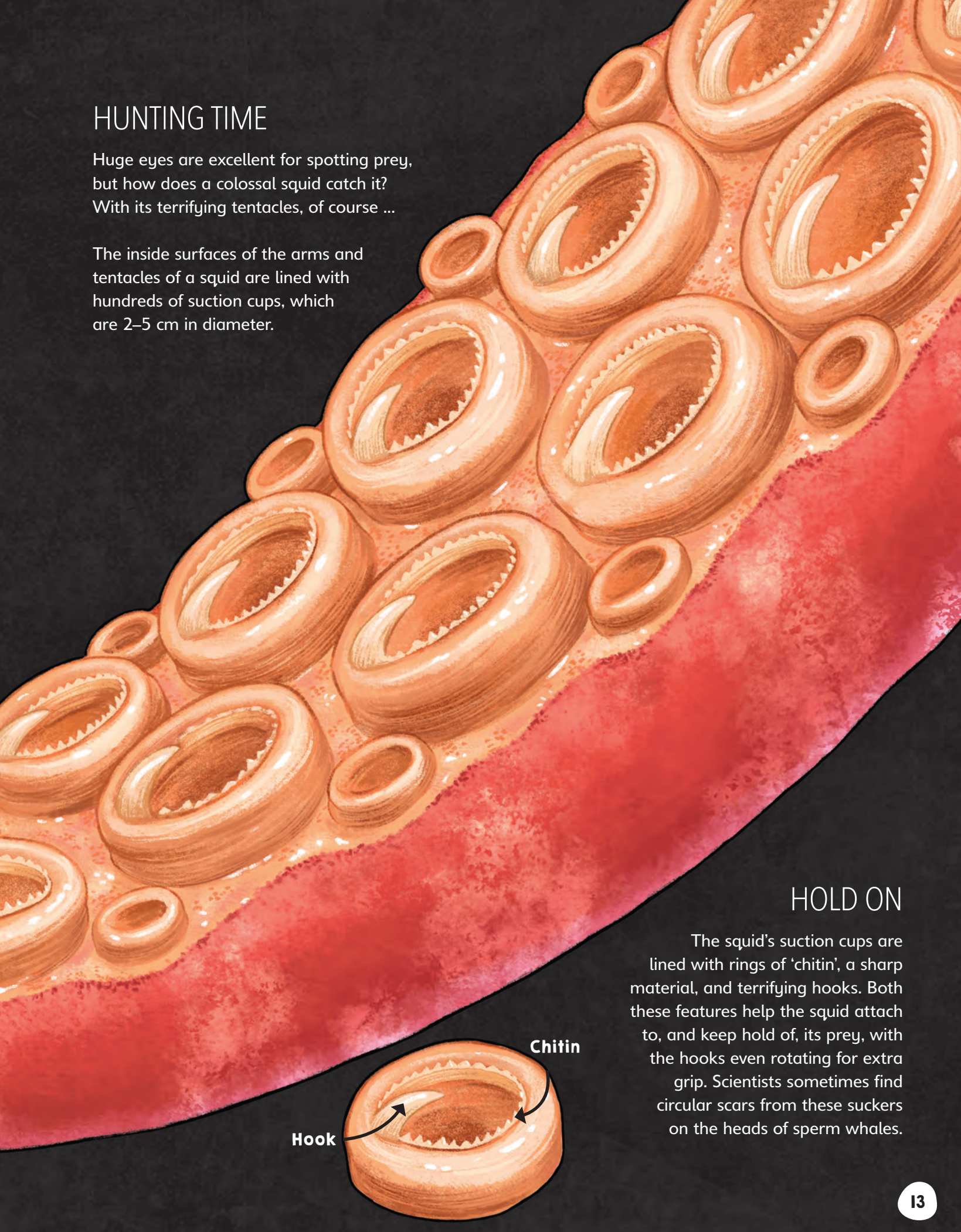
COLOSSAL CLUB

This picture shows just the tip of a colossal squid's 'tentacular club'. The whole club measures in at 85 cm long – that's half the height of an adult human.

HUNTING TIME

Huge eyes are excellent for spotting prey, but how does a colossal squid catch it? With its terrifying tentacles, of course ...

The inside surfaces of the arms and tentacles of a squid are lined with hundreds of suction cups, which are 2–5 cm in diameter.



HOLD ON

The squid's suction cups are lined with rings of 'chitin', a sharp material, and terrifying hooks. Both these features help the squid attach to, and keep hold of, its prey, with the hooks even rotating for extra grip. Scientists sometimes find circular scars from these suckers on the heads of sperm whales.