

'These poems are the answers to every question you ever wanted to ask, and the question for every answer you wanted to question. Funny, informative and intriguing, this book will expand your brain to twice its size.'
MICHAEL ROSEN

For Jake, George and Evie, who have always asked such interesting questions, love Dad xx – B.B.

For Tils, Beabo and Marth, with huge love, Papa xxx – J.B.

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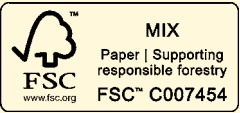
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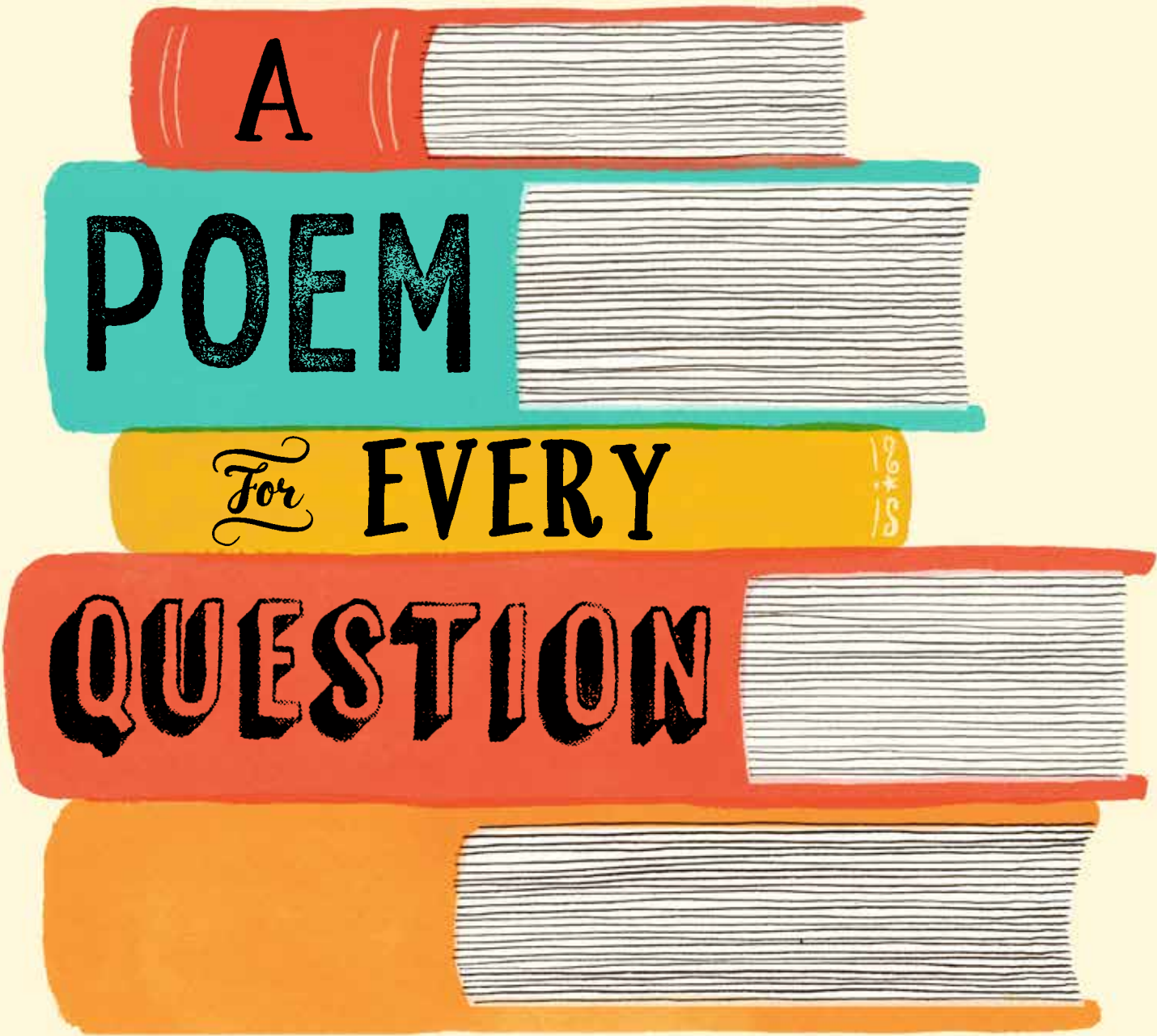


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BRIAN
BILSTON

JOE
BERGER



CONTENTS

How many different bugs are there in your house?	10
When did Tyrannosaurus live?	12
What causes a tornado?	13
Can fire cast a shadow?	14
Can poo heat your home?	16
How many stars in the Universe exploded today?	17
Who had the first holiday?	18
What was the biggest gift ever?	20
Why does an onion have layers?	21
How many times a day do we laugh?	22
Which is the biggest country in the world?	24
Are the Egyptian pyramids the only pyramids?	25
How much rubbish is there around Earth in space?	26
How many bones does a baby have?	27
What are nightmares?	28
Why do my fingers and toes wrinkle in water?	30
Why don't trees burst in winter like cold pipes?	31
Which is the biggest animal?	32
How do clouds work?	34
Why do we fart?	35
What were the seven wonders of the ancient world?	36
Are unicorns real?	38
When was the internet born?	40
How deep is Earth's crust?	41
Which animals have more than one brain?	42



What is the largest single living organism on Earth?	43
What does gravity do?	44
Why can't I roll my tongue?	44
What is the world's oldest instrument?	45
Who carved the faces of four US presidents in a mountain?	46
Which bird's wings beat the fastest?	47
Will a great white shark eat me?	48
How far away is Mars?	50
Why do people hug?	52
Can you see the Great Wall of China from space?	53
How did the ancient Egyptians make a mummy?	54
If a coin fell from the Empire State Building, would it kill you?	56
Could a woman be a gladiator?	58
How do planes fly upside down?	59
How many teeth does a crocodile have?	60
Where is the hottest place on Earth?	62
What is a primary colour?	64
Why does thunder rumble?	66
How did Beethoven compose music when he was deaf?	67
How many astronauts have gone to the Moon?	68
Is zillion a real number?	69
Why does milk go bad?	70
Is there a monster in Loch Ness?	71
What's inside a tennis ball?	72
Did dinosaurs have feathers?	74
Why does my heart beat?	76





Where is the deepest place in Earth's oceans?	77
What is the difference between an emigrant and an immigrant?	78
How does a honeybee build its hive?	80
Why do things float?	81
How far away is the Sun?	82
What is a black hole?	83
How long can you survive in a desert if you drank your own pee?	84
What is a right angle?	85
Who invented football?	86
When were the first Olympics?	88
What are rainbows made of?	89
Why does a lion have a mane?	90
Why do clouds float?	92
How do animals survive in freezing seas?	93
Are bats the only flying mammals?	94
Do elephants really hold each other's tails?	96
Which country first used paper money?	97
How young can the US President be?	98
Which sport was played on the Moon?	100
Why do we get bruises?	101
Why does the Leaning Tower of Pisa lean?	102
Why should we recycle?	103
Are Olympic gold medals made of real gold?	104
What was the first animal to be cloned?	105
Who invented the first car?	106
Who made the first trip around the world?	107



Why do animals migrate?	108
Why do I need to eat a lot of fruit and vegetables?	110
What wood is a cricket bat made of?	111
Which animal hides the best?	112
What is the difference between a stalactite and a stalagmite?	114
What are animals without a backbone called?	116
What is a dimension?	117
Was Blackbeard a real pirate?	118
Do cats always land on their feet?	119
Are horses even or odd-toed?	120
Are coal and diamonds the same thing?	121
What is the jet stream?	122
What is absolute zero?	123
Can it rain fish?	124
How long is the marathon?	125
How did people make the first tools if they did not have tools?	126
Why do some animals have pouches?	127
Which country has the most bicycles?	128
How many dimples are there on a golf ball?	130
Which mountain is the highest in the world?	131
Which river is the longest?	132
Can you say the alphabet in code?	134
Who is the champion weightlifter of the animal world?	136
Glossary	138
About the author and illustrator	141



WHAT DO YOU
THINK OF HUMAN
MANNERS?

LOUSY.

HOW MANY DIFFERENT BUGS ARE THERE IN YOUR HOUSE?

Or more to the point,
as we were discussing at last month's Bug Club Meeting
in the downstairs loo,
how many *humans* are there in *our* house?

Nigel, one of the woodworms
who's been busy munching his way through the desk
in the first-floor back bedroom,
claims he's spotted three of the things,

whereas Chloe, the carpet beetle
who lives under the sofa in the sitting room,
reckons there's at least seven.
Craig, the fruit fly, disputes that; he says there are four,

but then again, he's only been here for a few days,
and seems to spend most of his time
flitting around that bunch of mouldy bananas
in the fruit bowl on the counter.

Daphne the flea, on the other antenna,
calculates there may be as many as twenty of them;
she's been hanging out with the cat for the last few weeks
and has been all over the house,



I'M MAKING A
DOCUMENTARY
ABOUT THEM.

but Boris the bedbug thinks we shouldn't count humans
who don't live here permanently,
like that man who came to fix the dishwasher
and squashed poor Leonard.

Marjorie, the clothes moth, says it's not so much
about how *many* humans there are
but what we should do about them; she's scared
to leave her favourite cardigan these days.

So, that's the topic for next month's Bug Club.
We're expecting more than a hundred different species to show up.
Frankly, I've no idea how we're going to get rid of those humans –
some of those walkie-talkies are huge!

LOOKS LIKE A
SQUISH AND RUN...

The answer, of course, is . . . it depends; particularly according to which part of the world you happen
to live in. One US study found that the average household had about 100 different species of bugs, while
some households had up to 200. Personally, I rather like the thought of cohabiting with all those little guys,
although I do wish they would help out around the house a bit more; my bedroom won't tidy itself, you know.

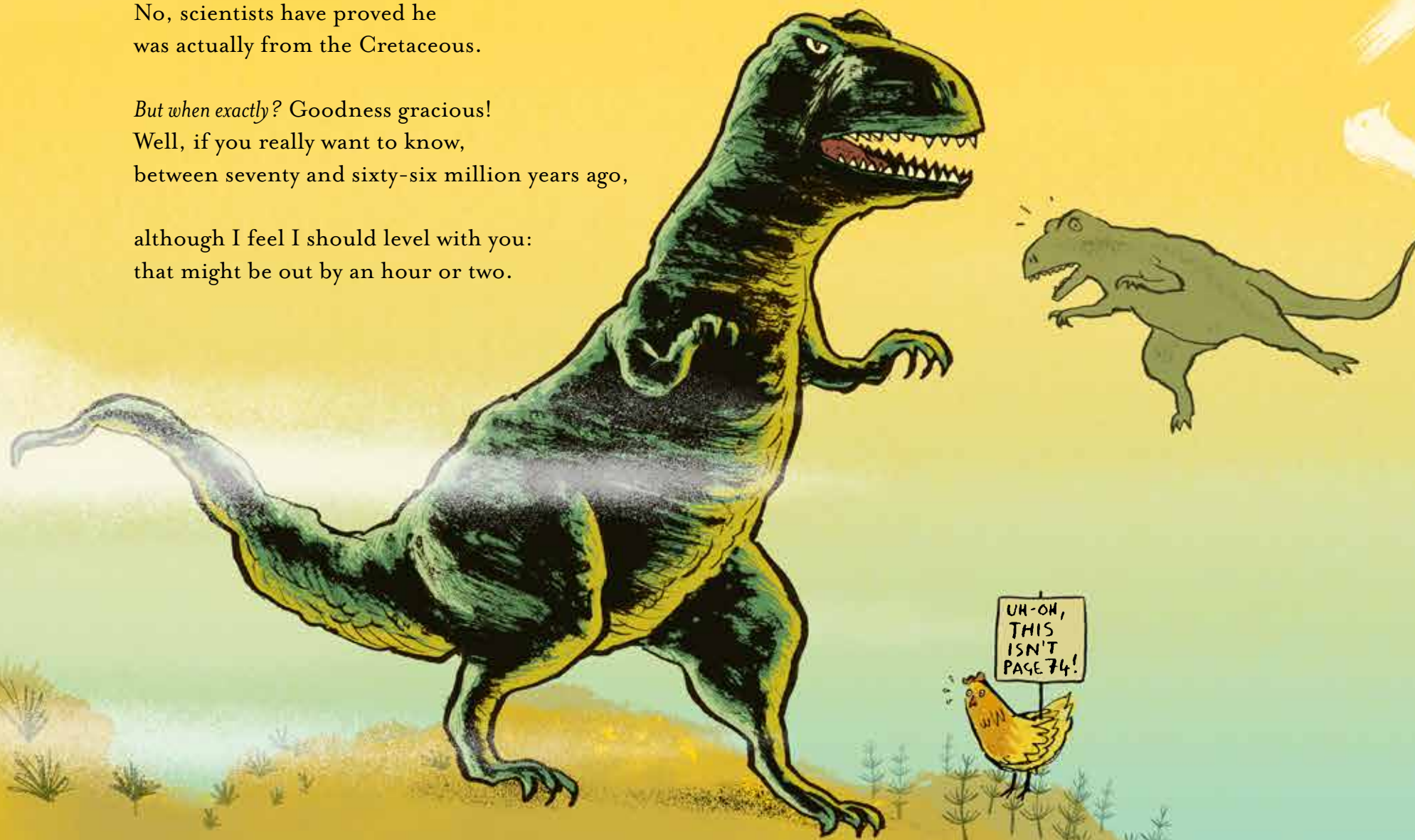
WHEN DID TYRANNOSAURUS LIVE?

What's that? You think the *Jurassic*?
Nah, mate, that's a classic
mistake, that is, because of the movie.

No, scientists have proved he
was actually from the Cretaceous.

But when exactly? Goodness gracious!
Well, if you really want to know,
between seventy and sixty-six million years ago,

although I feel I should level with you:
that might be out by an hour or two.



Yes, Tyrannosaurus lived in the Cretaceous period, although it often gets mistaken for belonging to the Jurassic period, thanks to the appearance of REXY in the film *Jurassic Park*.

With its 1.2 metre-long jaws and 30 centimetre-long teeth, Tyrannosaurus was the top predator in town. It's estimated that about 20,000 of them roamed Earth at any one time, and they lived in what is now western USA. There was a lot going on in the Cretaceous: there were more dinosaurs than ever before, insects and flowering plants were everywhere, new types of mammals came on the scene, and the first birds appeared.

WHAT CAUSES A TORNADO?

So then, where best should I begin
to tell you how **TORNADOES** spin?
One starts, I guess, with a thunderstorm –
a supercell – in which a vortex forms,
a **whizzing, whirling, swirling** tunnel
that siphons warm air like a funnel,
UP and out, with cold air **DOWN**,
until the vortex tilts; it **SPINS** around,
an ever-faster spiralled cloud,
stretching out, down to the ground,
and sets off on its deadly course,
a wild, unstoppable,
untamed
force.

I hope that gives you the basic gist.
They tend to get you in a twist
and so one more thing before we're done . . .
should you see one, you'd better run.

Tornadoes start from violent thunderstorms, known as 'supercells'. Inside these supercells, a whirling funnel of air is created with high-level winds pushing it from behind and surface winds from in front. The vortex (a funnel of air) lifts upright and pulls away from the supercell to become a tornado that can leave behind a trail of devastation. Tornadoes happen all over the world, but the USA has the most: more than 1,000 a year. The wildest ones have wind speeds of more than 480 kilometres per hour.



CAN FIRE CAST A SHADOW?

Or rather, how Fire lost its shadow . . .

Once upon a very long time ago, Fire and Shadow were inseparable, the very best of friends.

Whenever Fire would awaken from her bed of sticks and twigs, her red and orange flames flickering into life to dance merrily in the air, Shadow would copy her movements shyly in the darkness.

‘How magically you dance!’ Fire would say as she whirled with her friend to the crackle and hiss. ‘That is because I have such a wonderful teacher,’ Shadow would blush in reply, as light and dark locked in warm embrace.

But one day, when Fire was blazing more intensely than usual, she looked at her friend to see her only half there. ‘Shadow!’ Fire exclaimed in alarm, ‘Whatever has become of you? You are disappearing before my eyes!’

And Shadow replied, ‘It is your flames, my faithful, fiery friend. They are too hot for me. I am slowly melting in their heat.’

At this, Fire began to cry but her tears were not enough to stop the flames from growing even larger, and she watched on helplessly as poor Shadow shrank, then disappeared from sight.

Overcome with grief and anger, Fire rampaged across the countryside for seven days and seven nights, until her rage wore itself out and she could burn no more.

And from that day forward, whenever Fire is stirred from her slumbers, she no longer dances the merry dance of old, but her flames sway sadly in the air around her, or flicker with anger at the loss of her friend.

And that is the story of how Fire lost its Shadow . . .

except for the other story that is, the one put about by scientists, which says that Fire never had Shadow in the first place – because Shadow is formed only when light is blocked. And Fire, being a source of light itself, cannot do this.

But, you know, whatever.

The scientists are right: fire cannot typically cast a shadow. Shadows are formed when an object blocks light; the flames of a fire, though, are not solid enough to do that and light is able to pass through. So we must thank science for shedding light on the matter, although that shouldn’t stop us from loving some of the old stories either, whether or not they happen to be true.

CAN POO HEAT YOUR HOME?

Ten Campaign Headlines Commissioned by the Poo Marketing Board

1. Help to put the planet straight –
To heat your home, just defecate!
2. It's the energy source you can renew.
There's nothing like a number two!
3. It's reusable. It's excellent.
Power your house with excrement.
4. Want the fossil fuels to stop?
The answer's in you. The answer's plop.
5. To save the Earth we must make haste –
Don't let your waste go to waste.
6. 'Because we're worth it' is our refrain.
It's methane-rich. It's worth the strain.
7. Want to light a room? Or heat your soup?
All you need's a little poop.
8. It's a beautiful world. Let's not spoil it.
Harness the power of the toilet.
9. It's the wonder that never ceases –
Fabulous, fertile, fuel-filled faeces!
10. Make the change. Don't be dumb.
Use what comes out yer bum.

Poo absolutely can be used for heating and scientists are working on ever better ways to process and use it. A renewable, methane-rich source of energy called 'biogas' can be produced from poo. This can be used as a natural gas, to supply homes and businesses with heat and energy for cooking; to power engines and machines; and to run vehicles as an alternative to petrol and diesel. So come on, everyone, shout it loud and shout it proud . . . POWER TO THE POO-PLE!

HOW MANY STARS IN THE UNIVERSE EXPLODED TODAY?

Dear Sun,

We thought we would write you this ode to ask if you'd kindly please not explode, because eight thousand stars blew up today – we're glad you weren't one.

Please keep it that way.

With thanks and best wishes,
(whatever that's worth),

Your good friends and neighbours,
The People on Earth



A star is a large ball of gas that produces its own light and heat. The nearest star to us is the Sun. It's been calculated that every day about 8,640 stars across the Universe reach the end of their lives and explode, but this is only an estimate. The brightest and largest of the explosions are known as supernovas and these create more heat when they explode than our Sun will in its lifetime. In our galaxy, the Milky Way – and other galaxies of the same size – supernovas occur every 50 years or so. Supernovas are a good thing, though: their explosions spread star material across the galaxy, out of which our own planet was created.

