

One Tiny Bubble:

The Story of Our Last Common Ancestor

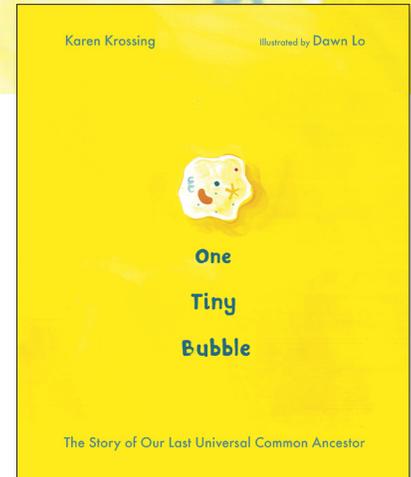
Discussion Guide by Karen Krossing and Dawn Lo

Dear Reader,

Over 3.5 billion years ago, a few ingredients bubbled together to create LUCA—our Last Universal Common Ancestor. No big deal? Think again! I was inspired to write *One Tiny Bubble* to celebrate the true story of how LUCA sparked all life on Earth—including yours. Dawn Lo brought LUCA to life by painting illustrations with gouache paint and pencil crayon. We hope the book will ignite many wondrous conversations.

Happy reading,

Karen Krossing, Author



Written by Karen Krossing and
illustrated by Dawn Lo

About the Book

Meet LUCA, the microscopic organism that every unique life-form on Earth can be traced back to. This tiny blob was formed from the dust of exploded stars, water, and a lot of heat. LUCA was a single cell that split into two, and these cells multiplied into more organisms that grew and changed. Over the billions of years that followed, the descendants of LUCA evolved into bacteria, mushrooms, sharks, fir trees, lions – and humans! All the extraordinary life on Earth began with LUCA, through a miraculous process that could also occur on other planets.

This vibrant and poetic informational picture book breaks down scientific concepts using simple, engaging language. Striking illustrations bring LUCA to life and reveal how readers are connected to one another, and every life-form on our planet, through one tiny bubble.

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CURRICULUM LINKS
Science: Understanding Life Systems; Needs and Characteristics of Living Things; Plants; Understanding Earth and Space Systems

READING LEVELS
Grade: 5
Fountas & Pinnell: S
Lexile® Measure: AD920L

COMMON CORE
RL.1, W.5, SL.5, L.5



Before Reading

- An ancestor is any life that came before you in your family, such as a grandparent or great-grandparent. Who are some of your ancestors?
- What is a family tree?
- Family trees come in all shapes and sizes. Could every living being on your street belong to one family? Or every being on this planet?
- Narrative nonfiction tells a true story or experience, while expository nonfiction explains or informs on a topic. Based on the title, what type of nonfiction do you think this book will be?

After Reading

- What does the author mean when she says, “You belong to the oldest family on Earth”?
- Before reading this book, how would you draw your family tree? After reading this book, how would you draw it?
- To evolve means to slowly change over a long period of time. Can you name some life-forms that the descendants of LUCA evolved into?
- What life-forms can you identify in the illustrations?
- Scientists wonder if life may have formed on other planets or moons in the same way it did on Earth. What do you imagine life might look like on a faraway planet or moon?
- Now that you’ve read the book, do you think it is narrative or expository nonfiction?





