

# OUTSTANDING SCIENCE TRADE BOOKS FOR STUDENTS K—12:

2018



# WINNING TICLES

e invite you to explore this year's list of Outstanding Science Trade Books, which builds upon our 45-year history. In the award-winning books below, you'll find not only traditional science content but also elements of engineering and design. We hope you'll enjoy exploring science through this collection of outstanding children's books.

For further information, please visit WWW.NSTA.ORG/PUBLICATIONS/OSTB/
and WWW.NSTA.ORG/RECOMMENDS/



ABCs from Space

Adam Voiland

Simon & Schuster/Paula Wiseman Books

Stunning satellite photographs of the Earth from space, each representing a different letter of the alphabet, with descriptions at the back of the book providing additional information.

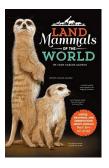


About Habitats: Seashores

Cathryn Sill Illustrated by John Sill

Peachtree Publishers

Illustrations are richly enhanced with a plethora of visual information for the young reader to quickly grasp the beautiful and diverse landscapes, animals, and plant life that are the essence of viable and productive seashores



Animal Journal *Juan Carlos Alonso* 

Quarto/Walter Foster Jr.

Fantastically illustrated, with specific animal statistics and factual information, showcasing the magnificent diversity of terrestrial animals.



Bat Count

Anna Forrester

Illustrated by Susan Detwiler

Arbordale Publishing

A beautifully told story about two families: Jojo's family and the bat family. Take your reader through this journey to understand the importance of bats and their recovery in nature.



Bees

Piotr Socha

Abrams Books for Young Readers

A rich, fun, and comprehensive history of the bee! From Cleopatra to pollination. From hives to world explorers.



Birds Make Nests

Michael Garland

Holiday House

In this beautifully illustrated book, explore the wide variety of nests made by birds.



Botanicum

Kathy Willis

Illustrated by Katie Scott

Candlewick Press/Big Picture Press

Stunning artwork gives the impression of being in an art gallery as the reader learns details of both exotic and common plants in this oversize picture book.



Can an Aardvark Bark?

Melissa Stewart

Illustrated by Steve Jenkins

Simon & Schuster/Beach Lane Books

Explore vocalizations that animals use to communicate in this question-and-answer format book with engaging, detailed collage illustrations by Steve Jenkins.



Cao Chong Weighs an Elephant

Songju Ma Daemicke

Illustrated by Chistina Wald

Arbordale Publishing

Six-year old Cao Chong faces the problem of weighing an elephant; he comes up with a creative solution using buoyancy in this beautifully illustrated picture book.



Caroline's Comets

Emily Arnold McCully

Holiday House

This book is filled with beautiful illustrations and narrates the inspirational story of Caroline Herschel. She overcame struggles to become the first woman to discover a comet and first-ever woman to get paid for her scientific research.

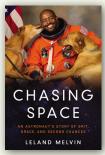
# **OUTSTANDING SCIENCE TRADE BOOKS**



Catching Air Sneed B. Collard III

Tilbury House Publishers

Book filled with absolutely stunning photographs accompanied by equally captivating information about animals around the globe that glide long distances through air.

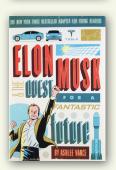


# Chasing Space, Young Readers' Edition

Leland Melvin

HarperCollins/Amistad

A memoir of Leland Melvin, former NFL wide receiver turned astronaut, who shares his personal journey and how he overcame adversity, developed a strong work ethic, and seized opportunities to reach his goals.



Elon Musk and the Quest for a Fantastic Future, Young Readers' Edition

Ashlee Vance

HarperCollins

This adaptation gives young readers access to Musk's story from his childhood in South Africa to becoming one of the world's most innovative business leaders.



# The End of the Wild

Nicole Helget

Little, Brown Books Young Readers

This thought-provoking story about an 11-year-old girl, her family, and her community embeds issues related to fracking, the environment, and poverty.



# Exploring Space

Martin Jenkins

Illustrated by Stephen Biesty

Candlewick Press

Beautiful illustrations and helpful diagrams reflect humankind's love affair with the night sky, space, and the quest to explore.



Feathers and Hair, What Animals Wear

Jennifer Ward

Illustrated by Jing Jing Tsong

Simon & Schuster/Beach Lane Books

Rhyming text woven with vibrant, colorful illustrations about different kinds of animal coverings, with more-extensive information about the animals featured in the end pages.



# Finding Wonders

Jeannine Atkins

Simon & Schuster/

Atheneum Books for Young Readers

This unique novel in verse shares compelling biographies of Maria Merian and her metamorphosis discoveries, Mary Anning and her fossil discoveries, as well as Maria Mitchell and her comet discoveries.



#### Girl Code

Andrea Gonzalez and Sophie Houser

HarperCollins

The inspiring true story of two high school girls who met at a summer coding camp for girls, created a Tampon Run video game that went viral, and got an inside look at the tech industry. An excellent example of girls finding their voice and using technology to address social issues.



# The Girl Who Thought in Pictures

Julia Finley Mosca
Illustrated by Daniel Rieley

The Innovation Press

A compelling story about the way Dr. Temple Grandin used her visual thinking to invent groundbreaking improvements in farming, especially animal care.

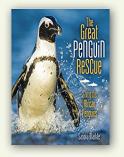


# Grand Canyon

Jason Chin

Macmillan Children's Publishing Group/Roaring Brook Press

Hike with a dad and daughter to the bottom of the canyon while they explore the rock layers, the history that created them, and the animals that call this place home.



## Great Penguin Rescue

Sandra Markle

Lerner/Millbrook Press

Examines the history and causes of the declining African Penguin population—and shares the hope to be found in the innovative conservation methods being used to try to restore their numbers.



Hawk Mother

Kara Hagedorn

Web of Life Children's Books

Sunshine, an injured red-tailed hawk, will never have babies of her own. Beautiful photographs delight the reader as Sunshine's story of (nevertheless) becoming a mother of two chicks unfolds.



# Helloflo: The Guide, Period

#### Naama Bloom

Penguin Young Readers/Dutton Books for Young Readers

A fun, approachable guide through puberty with real-life facts about a young woman's changing body.

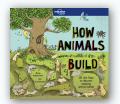


# Honey Girl

Jeanne Walker Harvey
Illustrated by Shennen Bersani

Arbordale Publishing

This touching true story shares how a well-known seal mom, who was injured by a fishhook, was saved by local scientists and veterinarian, and released back on the beach--to the delight of the local people.



#### How Animals Build

Moira Butterfield
Illustrated by Tim Hutchinson

Lonely Planet

Fold out pages and lift flaps to discover the extraordinary diversity of animal homes and how they are built.

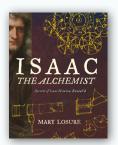


# How to Be an Elephant

#### Katherine Roy

Macmillan Children's Publishing Group/David Macaulay Studio

Follow a baby elephant and its herd to discover, through beautiful illustrations and words, how its unique body features are perfectly designed for life in the savanna.



# Isaac the Alchemist

# Mary Losure

Candlewick Press

The story of Isaac Newton's childhood and how an interest in alchemy and magic led him to become an accomplished mathematician, the father of physics, and an inspiring scientific revolutionary.



## It Starts With a Seed

Laura Knowles
Illustrated by Jennie Webber

Quarto/Words & Pictures

The life cycle of a tree told through poetic text with beautiful illustrations and supplemented by an informative endnote about the sycamore tree.



# It's a Fungus Among Us

# Carla Billups and Dawn Cusick

Quarto/MoonDance Press

Everything one wants to know about fungi, such as their influence upon the making of foodstuffs (bread), medicines, and human diseases (ringworm), as well as providing habitats for other living organisms. While some fungi are good to eat, there are also many that are poisonous to humans.



# Living Things and Nonliving Things

Kevin Kurtz

Arbordale Publishing

Provides a simple and accurate comparison of living and nonliving things, accompanied by beautiful photographs and questions that promote critical thinking.



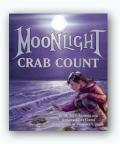
## Margaret and the Moon

Dean Robbins

Illustrated by Lucy Knisley

Random House/Alfred A. Knopf Books for Young Readers

The story of Margaret Hamilton, who was instrumental in writing the computer programs that allowed for one of the greatest technological events in human history to occurthe successful flights of the Apollo missions.



## Moonlight Crab Count

Dr. Neeti Bathala and Jennifer Keats Curtis Illustrated by Veronica V. Jones

Arbordale Publishing

Join Leena, her mom, and their dog Bobie as they spend their summer as citizen scientists helping in the effort to conserve horseshoe crabs.



# Mosquitoes Don't Bite Me

Pendred Noyce

Tumblehome Learning

This realistic science fiction tale exposes young readers to conducting scientific research while thinking about social issues, such as health disparities and subtle racism.



My Journey to the Stars *Scott Kelly* Illustrated by *André Ceolin* 

Random House/Crown Books for Young Readers

This memoir is a story of an average boy who was inspired by a book about test pilots and astronauts to dream and set goals for his future. Scott Kelly ultimately went into space!



Seagrass Dreams

Kathleen Hanes
Illustrated by Chloe Bonfield

Quarto/Seagrass Press

Beautifully illustrated counting book introducing readers to life in the world's seagrass environments. More detail about the animals and a map of their locations around the world are included in the end pages.



#### Newton's Rainbow

Kathryn Lasky Illustrated by Kevin Hawkes

Macmillan Children's Publishing Group/Farrar, Straus and Giroux (BYR).

This biographical story of Isaac Newton traces his curiosity and growing love of science as a child through school experiences that shaped the scholar he became.



# Out of School and Into Nature

Suzanne Slade Illustrated by Jessica Lanan

Sleeping Bear Press

This picture book is a biography of Anna Comstock, an artist and naturalist who chose to pursue a career in science despite what was considered the social norm for women during her era.



## Over and Under the Pond

Kate Messner

Illustrated by *Christopher Silas Neal* 

Chronicle Books

Discover the secrets of a mountain pond's ecosystem from over and under the pond.



Pup the Sea Otter

Jonathan London

Illustrated by  $Sean\ London$ 

Graphic Arts Books

An enchanting story with fetching illustrations portrays the life of a young otter as he grows from a baby to a bachelor.



Ribbit

Jorey Hurley

Simon & Schuster/Paula Wiseman Books

Do not let the simplicity of this book fool you—the life cycle of the frog is beautifully illustrated. Great for young readers as well as budding biologists.



#### The Secret Life of the Red Fox

Laurence Pringle

Illustrated by Kate Garchinsky

Boyds Mills Press

Travel alongside the red fox as this book takes the reader through its the amazing life, season by season. Fun read and great informational text.



# The Secret Project

Jonah Winter

Illustrated by Jeanette Winter

Simon & Schuster/Beach Lane Books

Through simple text structure and captivating illustrations, this book tackles the controversial, sensitive, and gloomy topic of the Manhattan Project. It provides a glimpse of the secret nuclear laboratory at Los Alamos as well as the creation and testing of the first nuclear bomb.



Secrets of the Sea

Kate Baker

Illustrated by *Eleanor Taylor* 

Candlewick Press/Big Picture Press

Beautifully illustrated with colorful drawings of sea life not often observed by humankind--such as swordtail squid, sea butterfly, or the purple sea urchin. Great book for any home or school library.



# Seven Wonders of the Solar System

David A. Aguilar

Penguin Young Readers/Viking Books for Young Readers

Explore the seven wonders of the Solar System from our Earth to Pluto and Charon, nestled at the edge of the Kuiper Belt. Beautiful illustrations and captivating text transport the reader through space and time.

# **OUTSTANDING SCIENCE TRADE BOOKS**



Shark Lady

Jess Keating

Illustrated by Marta Álvarez Miguéns

Sourcebooks/Jabberwocky

As this young girl's passion for sharks grew as she got older, she broke the mold for women in science to become a renowned shark scientist who helped change public opinion on this misunderstood animal.



The Street Beneath My Feet

Charlotte Guillain

Quarto/Words & Pictures

Illustrated by Yuval Zommer

Explore the world that exists beneath our feet, all the way to the inner core of Earth, as this book literally unfolds to 8 feet (2.4 meters)! Packed as thick as soil, *Street* will capture the imagination of any young scientist.

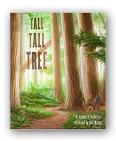


Super Women

Laurie Lawlor

Holiday House

The inspiring stories of six female scientists who faced discrimination, persevered, and made significant contributions. Specific examples of sexism illuminate historical struggles in important ways.



Tall Tall Tree

Anthony D. Fredericks
Illustrated by Chad Wallace

Dawn Publications

Explore the wildlife in a redwood tree through counting, rhyme, and some hidden surprises!



This Book Stinks!

Sarah Wassner Flynn

National Geographic Kids

Through bright photographs and simple text structure, this book takes a deep look into the hefty problem of trash, offering fun facts and creative solutions for its management.



Tide Pool Secrets

Narelle Oliver

Candlewick Press

Lift flaps to reveal the hidden sea life in tide pools--and learn how animals there keep themselves moist when the water recedes, leaving them exposed.



When Planet Earth Was New

Iames Gladstone

Illustrated by Katherine Diemert

Owlkids Books

Simple text paired with colorful illustrations that briefly tell the nearly five-billion-year history of our Earth.



When The Sky Breaks

Simon Winchester

Penguin Young Readers/Viking Books for Young Readers

A well-written and -researched book for young readers concerning current dangerous weather phenomena that affect us daily--such as hurricanes, tornadoes, and climate change.



#### When the Sun Goes Dark

Andrew Fraknoi and Dennis Schatz Illustrated by Eric Freeberg

**NSTA Kids** 

Two curious children create models of solar eclipses in their living room with their astronomer grandparents, later going outside to learn how to safely view them. Readers could easily reproduce their hands-on experiments.

