

Next Time You See a MAPLE SEED



BY EMILY MORGAN

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National Science Teachers Association

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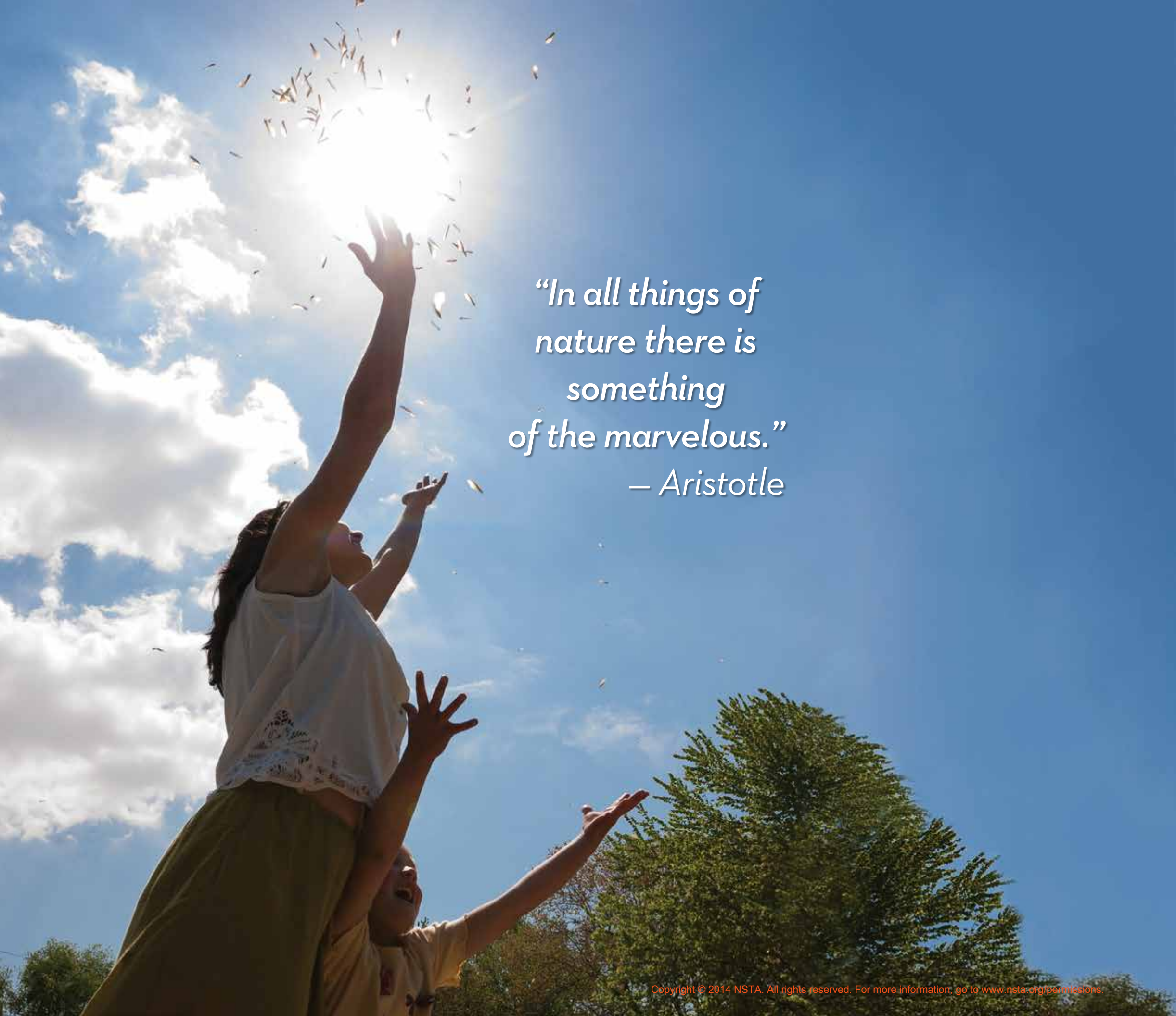
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*To my friend and mentor, Dr. Diana Hunn.
Thanks for helping me grow.*



*“In all things of
nature there is
something
of the marvelous.”
— Aristotle*

A NOTE TO PARENTS AND TEACHERS

The books in this series are intended to be read with a child *after* he has had some experience with the featured objects or phenomena. For example, go outside together on a spring day and look for maple tree samaras (which we commonly call maple seeds). Gather a pile of them and toss them up in the air. As they fall to the ground, watch them spin through the air like tiny helicopters. Look around to see if you can find the tree that made them. Drop one samara at a time and count the seconds it takes to reach the ground. Look closely at a samara and talk about its shape. Feel the delicate, feathery wing. Break open the round end and discuss what you find inside.

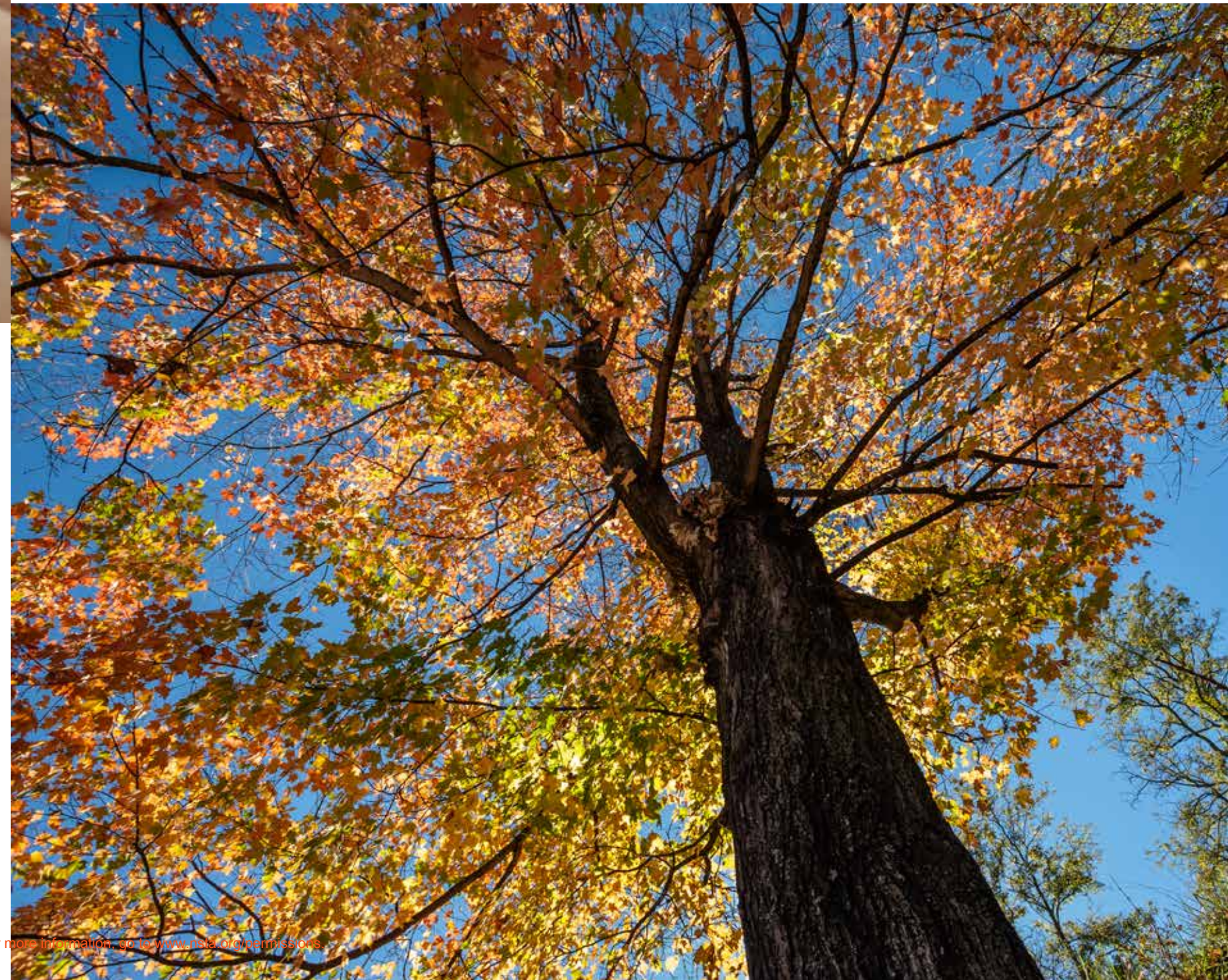
Ask your child what he is wondering about the samaras, and share what you wonder. Then read this book together and discuss new learnings. You will find that new learnings often lead to new questions. Take time to pause and share these wonderings with each other.

The *Next Time You See* books are not meant to present facts to be memorized. They are written to inspire a sense of wonder about nature and foster a desire to learn more about the natural world. Children are naturally fascinated by twirling maple tree samaras, and when they learn about what’s inside and why they spin, these whirling springtime regulars become much more remarkable. My wish is that after reading this book, you and your child feel a sense of wonder the next time you see a maple seed.

—Emily Morgan



When you look up at a mature maple tree, it is astonishing to think that tree was once a tiny embryo that fit inside a feathery, winged samara. Have you ever wondered how a small seed becomes a towering tree?



Inside the round, hard part of the samara is the seed, and inside of that seed is an *embryo*. The embryo is the part of the maple seed that can grow into a tree. You might think of it as a baby tree. If you take a samara apart carefully, you can actually observe the tiny tree that is waiting to grow. First, pull off the wing and remove the seed. Then, carefully divide the seed in half and look closely for the tiny maple tree embryo inside.



To begin to grow, a maple seed just needs water and a warm environment. Like most seeds, a maple seed does not need sunlight to sprout. Most seeds sprout in darkness underground. While underground, the embryo uses the material in the rest of the seed for food and grows roots to soak up water. When the leaves finally break through the surface, something truly amazing begins to happen.

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It's fun to toss maple seeds up in the air and watch them spin down to the ground like nature's own helicopters. This book prompts inquisitive kids to learn about these marvels of aerial engineering, including their real name (no, not *whirlybird*), the work they do for maple trees, and how to uncover the little trees waiting to sprout from the seeds. *Next Time You See a Maple Seed* is a mini class in how tall trees grow from these tiny, twirling winged fruits.



Awaken a sense of wonder in a child with the *Next Time You See* series from NSTA Kids. The books will inspire elementary-age children to experience the enchantment of everyday phenomena, such as maple seeds, Moon phases, pill bugs, fireflies, seashells, and sunsets. Free supplementary activities are available on the NSTA website.

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