

A Drop Of Water By Walter Wick

Introduction: The Magic of Water Through a Lens

Water is the most common yet most extraordinary substance on Earth. It falls from the sky, flows in rivers, boils in kettles, and freezes into ice. But how often do we truly see it? In "**A Drop Of Water: A Book of Science and Wonder**" by Walter Wick, readers are invited to pause and marvel at the everyday miracles of water. This isn't just a children's book; it is a visual and scientific journey that combines breathtaking photography with clear, accessible explanations. Wick, renowned for his work on the *I Spy* series, applies his meticulous eye to one of nature's simplest yet most profound subjects. The result is a timeless classic that has inspired young scientists, artists, and curious minds for decades. This article explores the brilliance of **A Drop Of Water**, its unique approach to science education, and why it remains a must-read for anyone fascinated by the natural world.

Who Is Walter Wick? The Creator Behind the Lens

Walter Wick is an American photographer and author best known for his intricate, visually stunning photographs in the *I Spy* book series, co-created with Jean Marzollo. However, Wick's personal passion has always been capturing the beauty of scientific phenomena. He spent years perfecting his craft, building elaborate setups in his studio to photograph everything from soap bubbles to snowflakes. **A Drop Of Water**, first published in 1997, was his first solo project and a labor of love. Wick's background in fine arts and his obsession with detail shine through every page. He didn't just want to teach science—he wanted to evoke wonder. By freezing motion, magnifying tiny droplets, and capturing the interplay of light and liquid, Wick creates images that are both educational and artistic. His work reminds us that science is not a dry collection of facts but a way of seeing the world with fresh eyes.

Overview of "A Drop Of Water" - Structure and Content

The book is structured as a series of double-page spreads, each focusing on a different property or state of water. Starting with the simplest form—a single droplet—Wick guides readers through concepts such as adhesion, cohesion, surface tension, evaporation, condensation, and the water cycle. Each spread features a large, full-color photograph on one side and a short, explanatory text on the other. The language is simple enough for early readers yet precise enough to satisfy older children and adults. Wick uses everyday objects to demonstrate scientific principles: a glass of water, a spoon, a leaf, a puddle. This approach makes abstract ideas tangible. For example, to show surface tension, he photographs a water strider's legs dimpling the water's surface without breaking it. To illustrate capillary action, he places a celery stalk in colored water and watches the dye travel upward. The book covers approximately 20 key concepts, each presented with the same reverence for detail.

The Photographic Art: How Wick Captures the Impossible

What truly sets **A Drop Of Water** apart is the photography. Wick's images are not just illustrations; they are the primary teaching tool. He often uses macro lenses, specialized lighting, and high-speed shutters to freeze water in mid-air, revealing shapes and textures invisible to the naked eye. For instance, a photograph of a splash looks like a crystal crown, with droplets suspended as if in amber. Another image shows a single drop of water clinging to a rose petal, its curvature perfectly reflecting the surrounding light. Wick also experiments with color: he backlights droplets with vibrant hues, injects food coloring into clear water, and uses black backgrounds to make every detail pop. These techniques transform mundane moments into spectacular visual events. The book's design is minimalist—white text on black or dark backgrounds—directing all attention to the photographs. This artistic choice reinforces the idea that science is a form of seeing, and that careful observation can reveal beauty in the ordinary.

High-Speed Photography and Precision

One of Wick's greatest achievements in this book is his use of high-speed photography to capture events that last mere milliseconds. In the 1990s, this required painstaking trial and error, custom-built triggers, and immense patience. For example, to photograph a drop of water splashing into a shallow pool, Wick might have set up a solenoid valve to release a

single droplet, synchronized with a camera flash at 1/10,000th of a second. The resulting image shows a perfect crown of water, its "spikes" reaching upward. Such images not only dazzle the eye but also serve as visual proofs of physical laws. Readers can see how momentum, gravity, and surface tension interact in real time. Wick's work anticipates the kind of slow-motion nature documentaries that have since become common, but his still photographs offer a unique benefit: they allow viewers to study the split-second moment in detail, noticing asymmetries, ripples, and reflections they would otherwise miss.

Science Concepts Made Simple and Memorable

The educational strength of **A Drop Of Water** lies in its ability to explain complex concepts without jargon overload. Each idea is introduced through a concrete observation. For example:

- **Cohesion and Adhesion:** Wick shows a spider web dotted with morning dew. The water beads up because water molecules stick to each other (cohesion) more strongly than to the web (adhesion). This simple image makes the concept intuitive.
- **Water Cycle:** A series of photographs follows a single drop from a lake into the air, forming a cloud, and falling as rain. Wick includes a clear diagram superimposed on a photograph, showing evaporation, condensation, and precipitation.
- **Surface Tension:** A paper clip gently placed on water floats, demonstrating the "skin" of water. Wick also shows a water strider insect, adding biological context.
- **Capillary Action:** The celery experiment is iconic. Wick photographs a stalk of celery with blue-tinted water climbing through its tubules, explaining how plants drink.
- **States of Matter:** Ice cubes, steam, and liquid water are all photographed in ways that highlight their molecular differences. Wick uses close-ups of frost crystals on a window to show how water molecules arrange themselves in solid form.

Each concept is reinforced by a hands-on activity suggestion at the end of the book, encouraging children to replicate the experiments. This combination of visual demonstration and active learning makes the science stick.

Educational Value: Why Teachers and Parents Love This Book

For decades, **A Drop Of Water** has been a staple in elementary school libraries and homeschool curriculums. Its cross-disciplinary appeal is remarkable. In science class, it introduces the scientific method: observing, hypothesizing, testing. In art class, it inspires discussions about composition, light, and color. In language arts, the concise yet poetic text models how to write descriptive nonfiction. The book also aligns with common core standards for reading informational texts. Teachers appreciate that it can be used with a wide age range—kindergartners can simply look at the pictures, while fifth graders can delve into the explanations. Furthermore, Wick's approach encourages children to ask their own questions: "Why does water form drops?" "What happens if I add soap?" This curiosity-driven learning is the foundation of real scientific thinking. The book's enduring popularity is a testament to its ability to spark that curiosity in generation after generation.

Encouraging STEM and STEAM Learning

In recent years, educators have emphasized the importance of STEAM (Science, Technology, Engineering, Arts, and Mathematics). **A Drop Of Water** is a perfect example of the "A" in STEAM. Wick's photographs are undeniably art, yet they are also precise scientific documents. By blurring the line between art and science, the book shows that creativity is essential to discovery. Many young readers who might not see themselves as "science kids" are drawn in by the beauty of the images and then naturally absorb the scientific concepts. This can be a gateway to deeper interest in physics, chemistry, or environmental science. The book also inspires children to try their own photography or drawing, observing nature more carefully.

Why "A Drop Of Water" Stands Out Among Science Books

There are many children's books about water, but few achieve the balance of rigor and wonder that Wick's book does. Some common comparisons include:

- **"The Water Hole" by Graeme Base** – Beautiful illustrations but less scientific explanation.
- **"Water Is Water" by Miranda Paul** – Excellent verse but not as photographically immersive.

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- **"The Snowflake" by Kenneth Libbrecht** – Focuses only on ice crystals; Wick covers all states.

What makes Wick's book unique is his ability to capture the same molecule of water in multiple forms. The reader follows a drop from a faucet to a puddle to a cloud. This narrative thread gives cohesion to the whole book. Additionally, the book is remarkably durable for a paperback—the high-quality glossy pages resist fingerprints and stand up to repeated classroom use. The photography is timeless; even with digital advances, Wick's images remain unsurpassed in their artistry and clarity. Finally, the book includes a glossary and index, making it a useful reference tool.

How to Use This Book for Deeper Learning

To get the most out of **A Drop Of Water**, educators and parents can combine the book with simple experiments. Here are a few ideas:

1. **Observe a Drop:** Use an eyedropper to place a drop of water on wax paper. Watch how it beads up. Compare with a drop on a paper towel. Discuss cohesion and adhesion.
2. **Create a Splash:** Fill a shallow dish with water, then drop a small object (pebble, coin) and try to sketch or photograph the splash. Compare with Wick's high-speed shots.
3. **Grow Crystals:** Dissolve salt or sugar in warm water, tie a string into the solution, and observe crystals forming over several days. Relate to ice crystal images.
4. **Make a Cloud:** Fill a glass jar with hot water, place a metal lid with ice on top, and watch condensation form. This demonstrates the cloud formation process from the book.
5. **Water Cycle in a Bag:** Seal a ziplock bag with a blue water patch, tape it to a sunny window, and watch evaporation and condensation occur. This is a direct follow-up to the water cycle spread.

These activities transform reading into doing, reinforcing the idea that science is not just something we read about—it's something we can experience at home with simple materials.

Critical Reception and Awards

Upon its release, **A Drop Of Water** received widespread acclaim. It was named an American Library Association Notable Book, a *School Library Journal* Best Book of the Year, and won the prestigious **Boston Globe-Horn Book Award** for nonfiction. Reviewers praised Wick's ability to "make the ordinary extraordinary" and noted that the book "sets a new standard for photographic non-fiction." The book has remained continuously in print for over 25 years, a rare achievement. It has also been translated into multiple languages, bringing its message of wonder to children around the world. Even in an age of digital videos and interactive apps, the book's stillness invites contemplation in a way that moving images often cannot replicate.

Conclusion: A Timeless Invitation to Wonder

In a world saturated with fast-paced media, "**A Drop Of Water**" by **Walter Wick** offers a quiet space for observation and curiosity. It is more than a science book; it is a meditation on beauty, patience, and the interconnectedness of all natural processes. Every page reminds us that the most profound truths are often hidden in the smallest things—a drop of water, a breath of steam, a fragile frost feather. Wick's masterful photography and clear, respectful text empower readers of all ages to see the world with new eyes. Whether you are a teacher looking to inspire your students, a parent hoping to nurture a love of nature, or simply a curious adult, this book is an essential addition to your library. Pick it up, turn the pages slowly, and let yourself be drawn into the miniature universe that exists in a single, ordinary drop of water.