

By Lawrence F. Lowery



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# Flower

# By Lawrence F. Lowery

## Illustrated by June Goldsborough





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Science is both *what* we know and *how* we come to know it. What we know is the content knowledge that accumulates over time as scientists continue to explore the universe in which we live. How we come to know science is the set of thinking and reasoning processes we use to get answers to the questions and inquiries in which we are engaged.

Scientists learn by observing, comparing, and organizing the objects and ideas they are investigating. Children learn the same way. The thinking processes are among several inquiry behaviors that enable us to find out about our world and how it works. Our five senses—sight, hearing, touch, smell, and taste—provide our brains with information about our world. The senses enable us to distinguish one object or event from another. They help us successfully navigate our world, interpret our environment, and understand what's happening around us. They warn us of dangers and provide us with pleasant memories.

Each of our senses has its own neural operating system. Each sense organ—the eye, the ear, the skin, the nose, and the tongue—takes in environmental information through specialized cells with sensory receptors. That information is transformed into electrical signals that can be read by the brain. These signals are processed in their own respective areas of the brain, which then integrates this sensory information and



# Introduction

puts the pieces together. The brain uses the information your senses provide to form useful representations that tell you how to best interact with your environment.

These books about our senses do not try to explain how senses work, but rather present information to sharpen the reader's awareness of his or her senses and help develop the skills that aid in gathering information and extending perceptions. *Fragrant as a Flower* explores smells. We smell with our noses, and smells can conjure memories of events and often involve emotions. *Quiet as a Butterfly* emphasizes that we hear and learn with our ears. *Look and See* introduces the richness of sight. Seeing with our eyes is a powerful sense for learning about the world around us. How and how well we know about something depend on the skill and thoroughness with which we use our senses.

Books in this series use different approaches to take the reader through simple, real-world information. One book is expository, providing factual information. A couple are narratives that take the reader on journeys of the senses. Different literary ways of presenting information bring the content to the reader through a variety of instructional avenues. The illustrations add detail and sometimes humor.

Unlike didactic presentations of knowledge, the content is woven into each book through the reader's point of view. The content is subtle but powerful and memorable, not memorizable. The science activities in the Parent/Teacher Handbook at the back of each book enable learners to conduct their own investigations related to the content. The materials needed for these activities are easily obtained, and the activities have been tested with youngsters to be sure they are age appropriate. After the reader completes a science activity, rereading or referring to the book and talking about connections with the activity can be a deepening experience that stabilizes the learning as a long-term memory. Dad said, "The air all around smelled a bit like the shore." A fish shop stood near, and he peeked through the door. There were codfish and sunfish and fresh lobster tails. He saw bluefish, butterfish, and glass jars of snails.

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As Dad walked, a sweet country smell was on every side. It came from a fruit shop with doors open wide.

Dad smelled apples and oranges, bananas and berries, peaches and melons, plums, pears, and cherries.

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# Fragrant Flower

ollow your nose! This book invites you to learn what your sense of smell can teach you as you amble around town. Go along as a little boy listens to his dad's tale about taking in the deliciousness of a pastry shop, the woodsy smells of a lumberyard, the nosewrinkling stink of street repairs, the sweet scents of flower and fruit markets, and the freshness of spring on its way. You'll agree when he says, "Everywhere I go, there is a new smell to know." Then you can go exploring with your own nose!

*Fragrant as a Flower* is part of the *I Wonder Why* book series, written to ignite the curiosity of children in grades K–3 while encouraging them to become avid readers. These books explore the marvels of the senses of smell, sight, and hearing and related phenomena. Included in each volume is a Parent/ Teacher Handbook with coordinating activities. The *I Wonder Why* series is written by an award-winning science educator and published by NSTA Kids, a division of NSTA Press.

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