



# WHAT MAKES DIFFERENT *Sounds?*



By **Lawrence F. Lowery**

Illustrated by **Susan Dolesch**





## Introduction

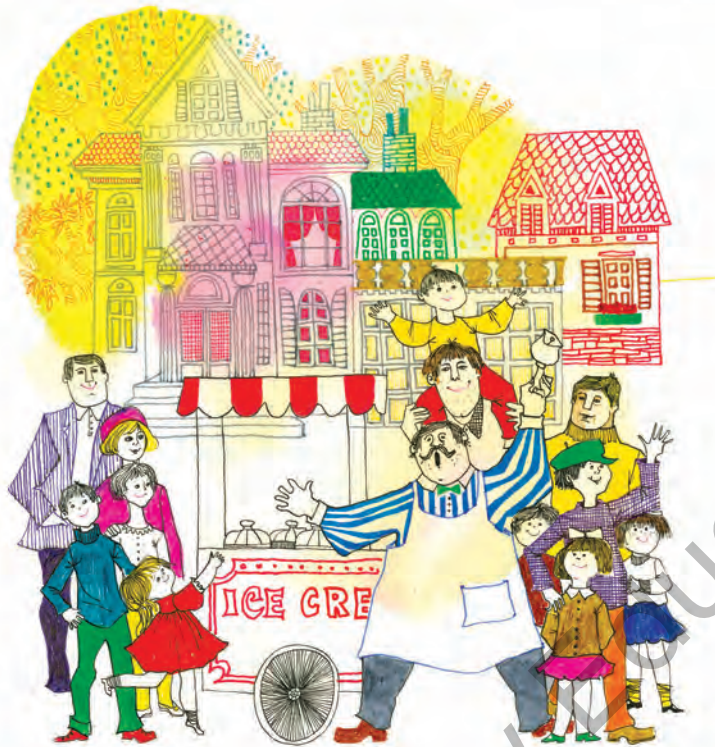
The *I Wonder Why* books are science books created specifically for young learners who are in their first years of school. The content for each book was chosen to be appropriate for youngsters who are beginning to construct knowledge of the world around them. These youngsters ask questions. They want to know about things. They are more curious than they will be when they are a decade older. Research shows that science is these students' favourite subject when they enter school for the first time.

Scientists learn by observing, comparing and organising. So do children. These thinking processes are among several inquiry behaviours that enable us to find out about our world and how it works. Observing, comparing and organising are fundamental to the more advanced processes of relating, experimenting and inferring.

The five books in this set of the *I Wonder Why* series focus on inquiry and various content topics: animal behaviour, plant growth, physical characteristics of sound, animal adaptations and mathematical measurement. Inquiry is a natural human attribute initiated by curiosity. When we don't know something about an area of our interest, we try to understand by asking questions and by doing. The five books are titled by questions children may ask: *How Does a Plant Grow?* *What Can an Animal Do?* *What Does an Animal Eat?* *What Makes Different Sounds?* and *How Tall Was Milton?* Children inquire about plants, animals and other phenomena. Their curiosity leads them to ask about measurements, the growth of plants, the characteristics of sounds, what animals eat and how animals behave. The inquiries lead the characters in the books and the reader to discover the need for standard measures, the characteristics of plant growth, sound and animal adaptations.

Each book uses a different approach to take the reader through simple scientific information from a child's point of view: One book is a narrative, another is expository. One book uses poetry, another presents ideas through a fairy tale. In addition, the illustrations display different artistic styles to help convey information. Some art is fantasy, some realistic. Some art is bright and abstract, some pastel and whimsical. The combining of art, literary techniques and scientific knowledge brings the content to the reader through several instructional avenues.

In addition, the content in these books correlates to criteria seen in common standards. Often the content is woven into each book so that its presence is subtle but powerful. The science activities in the Parent/Teacher Handbook section within each book enable students to carry out their own investigations that relate to the content of the book. 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 students have completed a science activity, rereading or referring back to the book and talking about connections with the activity is a deepening experience that stabilises the learning as a long-term memory.



Every day after school, twins Jane and Jim walk from their school to their home, passing the familiar busy streets, the calm park and the empty house. Jane and Jim see the same neighbours, workers, pets and even the same ice-cream man.

But one day ...

“Oh!” exclaimed Jane. “That sound scared me.”

“WOW. It was loud. I didn’t expect it,” said Jim. “It scared me, too.”

“Look.” Jane pointed. “All the people on the street were surprised by the sound. I think they wonder where it came from. They wonder what made the sound.”

“I wonder too,” Jim said.



Soon Jane and Jim heard the bang again, this time with honking and ringing.

“Listen, Jim,” said Jane. “That’s another sound! But it didn’t scare me.”

“The sound is telling us something,” replied Jim.

“It’s music,” said Jane. “The sound tells us there is a band playing music.”

“I like the sound of music. Let’s go and listen!” said Jim.