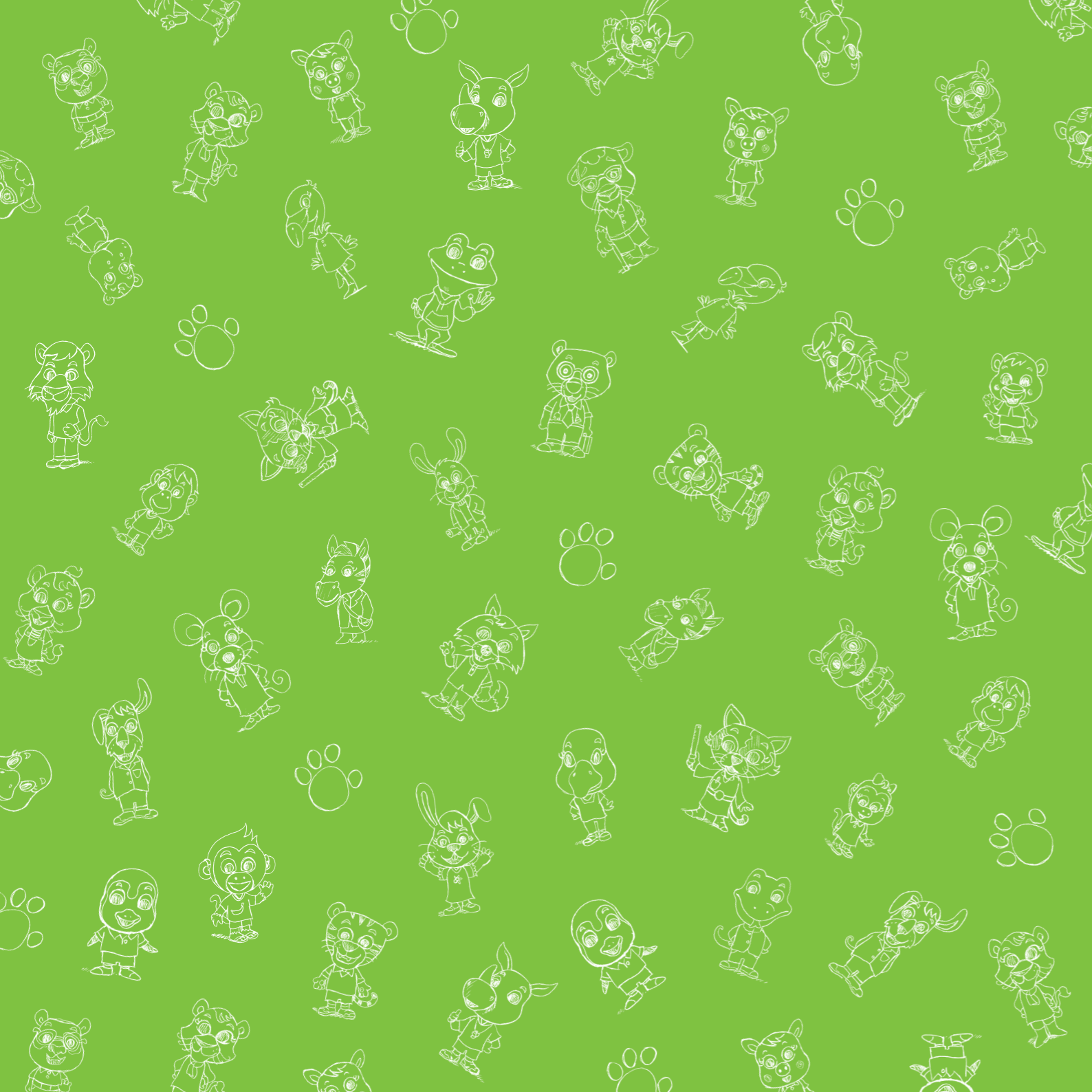




# Leo

gets hearing aids





"Leo gets hearing aids" is dedicated to my brother, Patrick, who is hearing impaired, and to the family, friends, and professionals who were involved in helping him. It was Patrick's hearing and speech professionals that shaped my career as a pediatric audiologist.

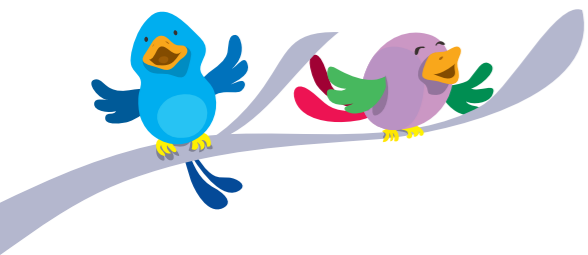
This book is written for children. I know from experience the need for awareness and understanding that must be developed, not only by children with hearing loss, but also by their peers. Additionally, I hope that this book will reduce anxiety in those children first being diagnosed with hearing loss and fit with hearing aids.

Maureen Cassidy Riski, M.Ed.

Knowing that education is the key to understanding, I believe that the publication of this book will promote better understanding of the challenges and importance of identifying and managing children with hearing impairment. We wrote about "Leo" to create a resource for parents, teachers, and children who want to learn about the process of hearing evaluation and habilitation.

Nikolas Klakow, M.S.

The authors would like to thank Dr. Rick Pillsbury, Dr. Amelia Drake, and the staff of the Department of Otolaryngology, University of North Carolina for the opportunities and support that they have provided.



# Leo

gets hearing aids



Written by: Maureen Cassidy Riski, Nikolas Klakow  
Illustrated by: Jörg/l'un & l'autre

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All the children were playing and having fun, except Leo.

Leo was sad because he couldn't quite understand what his friends were singing.



In school, because Leo couldn't hear his teacher, he often missed the directions she gave.





It was recess!  
Leo tried to play with the other children, but he couldn't always hear what they were saying to him. So Leo would just be by himself.



Once again, Mrs. Brown, Leo's teacher, had given him a note to take to his mother.

When Leo came home, he gave the note to his mother, and went to sit in front of the TV.



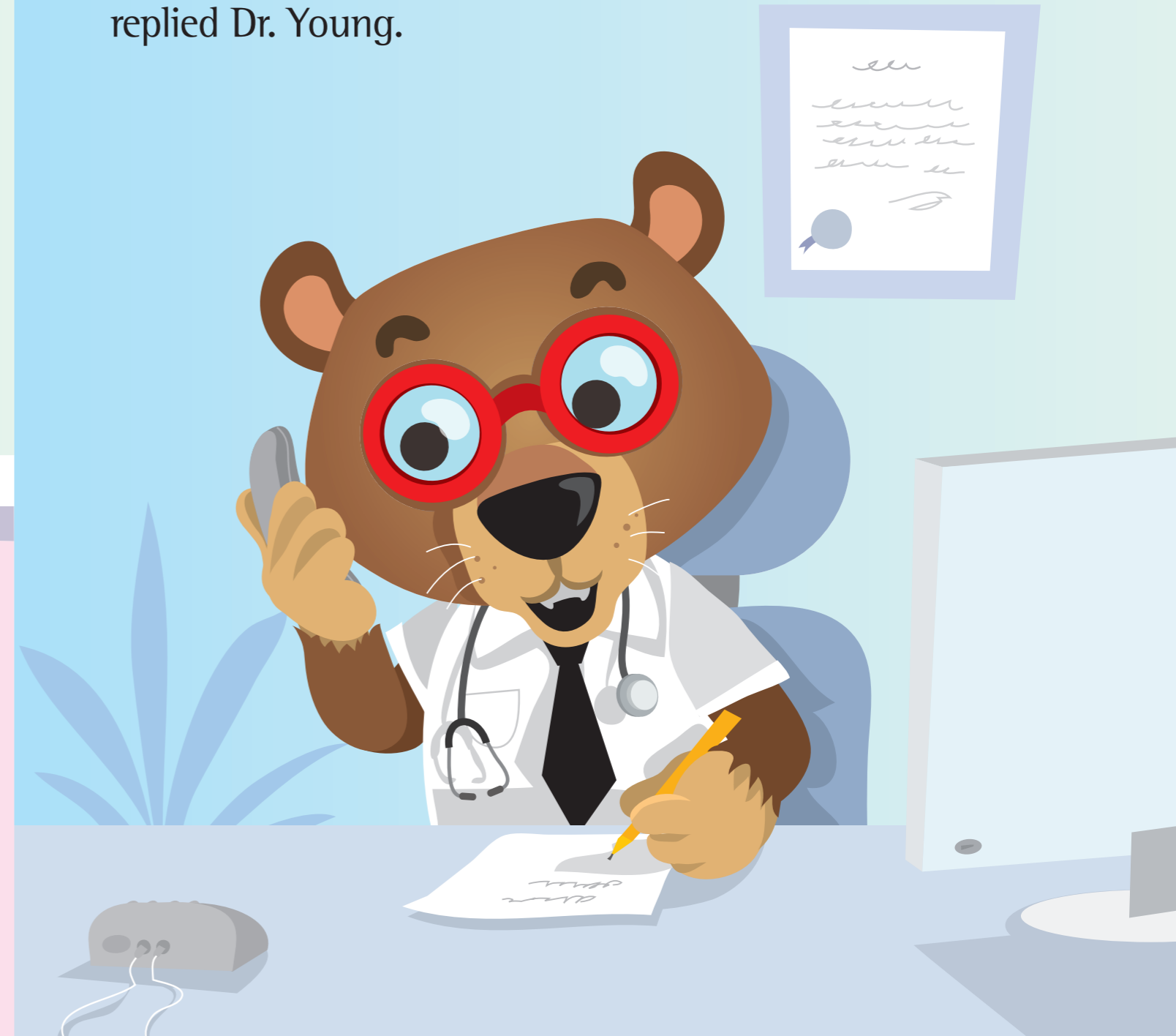
Leo liked watching TV.  
It was one of the few things  
he could make loud enough  
to understand.  
His brother and sister thought  
the TV was too loud!



“Who can I see for help?”  
Mrs. Lion asked Dr. Young,  
the family doctor.



“Leo needs to see an ear doctor,”  
replied Dr. Young.



The next day Leo's parents picked him up early from school, and they went to the ear doctor.



The doctor's waiting room was full!  
There was Tony who had a sore throat,  
and Sammy with an earache...





“Leo,” the nurse called.  
It was Leo’s turn to see the doctor.

“Let’s see what we have here,”  
Dr. Dog said, while looking into  
Leo’s ear. Leo was very brave,  
and let the doctor look into his ear.

“You need to have your hearing  
tested by the audiologist,”  
said Dr. Dog.



“Hello,” said the audiologist,  
as Leo walked into the test booth.



“I’m going to test your hearing. Are you ready  
to play my hearing game?”

This is an easy game, Leo thought, as he threw a block  
in a bucket each time he heard a beeping sound.

“Good listening Leo – look at all those blocks!”



“Here are the results,” the audiologist explained to Leo’s parents. “He has a hearing loss in both of his ears. That is why he has been having so much trouble hearing.”



“Leo needs hearing aids, so he will be able to hear clearly,” said the audiologist.





“He will need earmolds to connect the hearing aids to his ears.”

SQUIRT... the cold material the audiologist put in his ear was drying quickly.



A week later Leo returned to the audiologist's office to try on his new hearing aids. What a big day!

"You don't need to shout!" he told his parents when they asked him if he liked the hearing aids.





Leo was surprised at the songs coming from the birds! And the noisy cars! There was so much to hear.

It didn't take Leo long to get used to his new hearing aids.  
He liked being able to hear better.



Leo liked singing the most and music class soon became his favorite.







“Here’s the ball!”  
shouted Patrick the tiger,  
as he passed the ball to Leo.

“Great shot!” everyone yelled,  
as Leo scored a goal.

Leo was careful with his hearing aids. He learned how to change the batteries and at night he put them in their special case. He took good care of them so they would last for a long, long time.



Leo was happy that he could hear better.  
He lay in bed that night, dreaming.  
His next birthday would be the best ever.



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## Speech and hearing checklist

This checklist outlines behaviors which may be expected of a child at various ages. If your child consistently does not respond as the checklist suggests, further evaluation may be needed. You should contact your local physician if you feel there is any cause for concern.

### 3-6 months

Children awaken or quiet to the sound of their parents' voices. They typically turn their eyes and their heads in the direction of a sound.

### 7-10 months

Children turn their heads and their shoulders toward familiar sounds, even when they cannot see what is happening. Sounds do not have to be loud to cause them to respond.

### 11-15 months

Children show understanding of some words by appropriate behavior. For example, they point to or look at familiar objects, on request. They jabber in response to a voice, are apt to cry when there is thunder, or may frown when scolded.

### 1 1/2 years

Some children begin to identify parts of the body. They should be able to show their eyes or toes and should be using a few single words. The words are not complete or pronounced perfectly but are clearly meaningful.

### 2 years

Children should be able to follow a few simple commands without visual cues. They should be using a variety of everyday words heard at home. Most 2-year-olds enjoy being read to and shown simple pictures in a book and will point them out when asked.

### 2 1/2 years

Many children say or sing short rhymes or songs and enjoy listening to music or singing. If children have good hearing, and these events bring them pleasure, they usually react to the sound by running to look or telling someone what they hear.

### 3 years

Children should be able to understand and use some simple verbs, prepositions, adjectives, and pronouns such as go, in, big, and me. They should be able to locate the source of a sound. They should be using complete sentences some of the time.

### 4 years

Children should be able to give connected accounts of some recent experiences. They should be able to carry out a sequence of two simple directions.

### 5 years

A child's speech should be intelligible, even though some sounds may still be mispronounced. Most children this age can carry on a conversation if the vocabulary is within their experience. They should use pronouns correctly.







# Leo

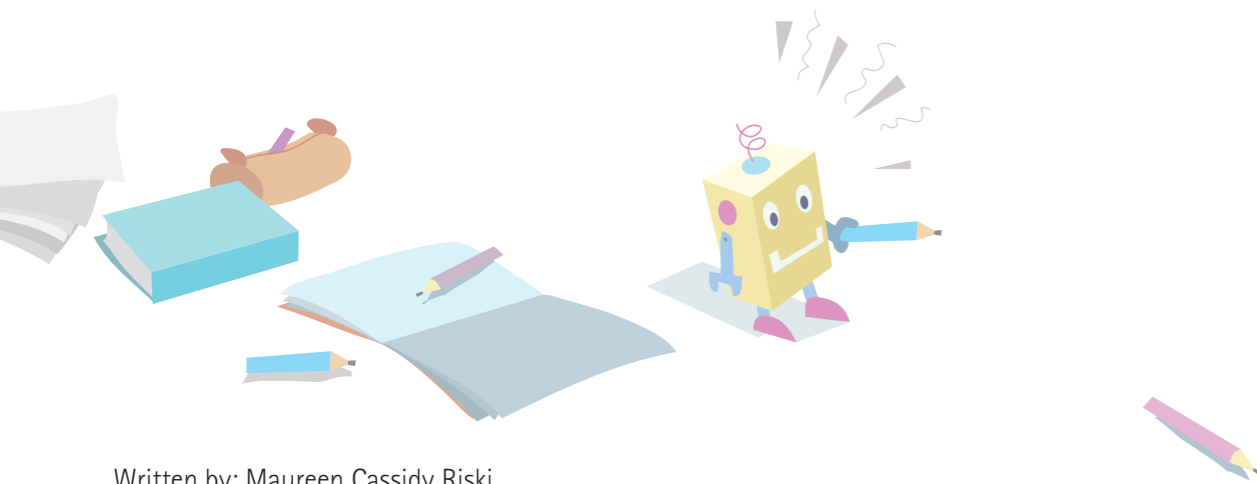
gets a Roger system





# Leo

gets a Roger system



Written by: Maureen Cassidy Riski  
Illustrated by: Jörg/l'un & l'autre



“Here are your test scores.  
Some of you did very well,  
and others, well, there is  
room for improvement.”





“Oh my!” said Leo,  
“I studied so hard.”





In gym class, all of the children were playing basketball, except Leo.

Leo sat on the sidelines because he could not hear the coach's instructions.

Leo was not having a good day.  
He was having a hard time understanding  
what people were saying, even with  
his hearing aids.



Mrs. Brown, Leo's teacher,  
called a parent-teacher conference.

"I am concerned about Leo's  
hearing abilities. Are his hearing aids  
working properly?"



“Yes, we just had a check up at the audiologist’s office,” said Mrs. Lion.

“Leo dear, what do you think is the problem?”

“My hearing aids really help me but sometimes when everyone is talking at the same time, or the teacher turns her back, or is far away, it’s hard to understand.”





The educational audiologist knew just what to do!  
“Let’s try a Roger system,” she said.  
“Hearing aids work well, but sometimes you need  
extra listening help.”

A Roger system can help those students who  
have hearing loss hear better in a noisy room,  
or when the teacher is at a distance.”





“What is a Roger system?” asked Leo.

“It’s like a radio that brings the speaker up close to your ear. A receiver fits on to your hearing aids and the teacher wears this transmitter. The microphone is close to the speaker’s mouth. A Roger system helps the student hear the speaker and is great for classroom instruction.”

“Let’s play a secret word game.  
Go down the hallway.”

Leo repeated the words the  
audiologist had said into  
the microphone.

“Ice cream and chocolate chips!”  
said Leo.

“I can hear you very clearly,  
all the way down here!”



Leo couldn't wait to show his Roger system to his class.

"Mrs. Brown wears this microphone and I can hear her really, really well. Kind of like a walkie-talkie."

"That's cool," said his friends.

"Oh, is that all there is? It's small!"





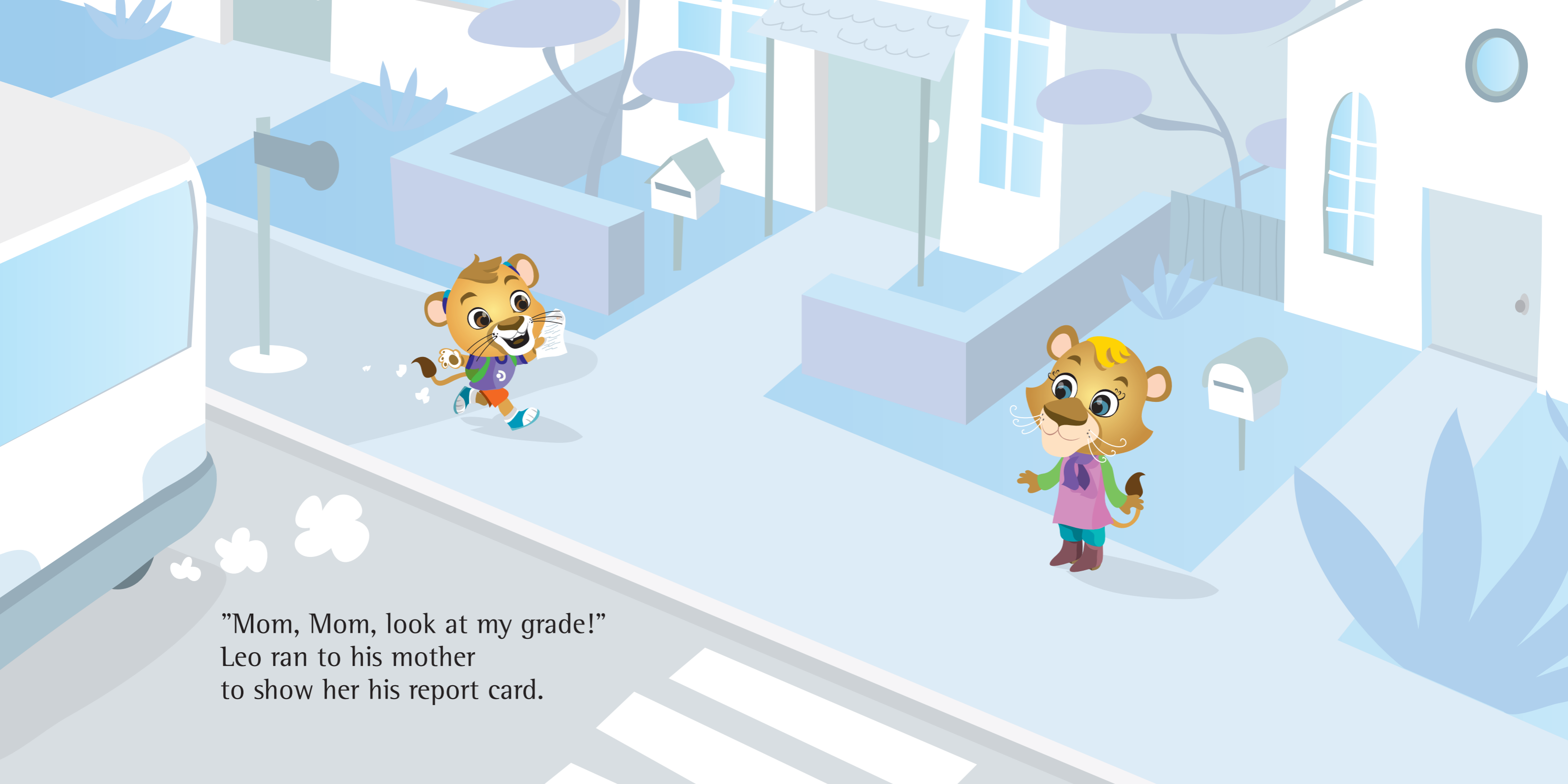
Leo loved being able  
to hear better.  
He couldn't wait until  
Friday's spelling test.

"Now I'll understand  
all the words!"



It was Friday.  
All the students in Mrs. Brown's  
class were taking the spelling test.  
Everyone had studied so hard.





"Mom, Mom, look at my grade!"  
Leo ran to his mother  
to show her his report card.

“Good work, good listening,  
Leo,” said Mrs. Lion.



Mrs. Lion liked using a Roger system at home too. She could call Leo outside and he could hear her.

“Leo, time for dinner.”





“What was the best part of the day?”  
asked Leo’s father.

“Music class,” said his sister.

“Everything,” said Leo.



After dinner, Leo and his family were watching TV.



“RING, RING!”  
the telephone was ringing.  
Leo could hear it, through his Roger system.

Leo rushes to the telephone.

“Hello? Oh, Grandma! I can hear you clearly with my new Roger system. You wouldn’t believe how great school was today. I did really well on my spelling test! I got a Very Good Grade!”



After Leo and his Grandma talked he hung up the phone.

“It’s time for bed,” called Leo’s Mom.



Leo takes care of his hearing aids  
and his Roger system. He wants to hear  
better in school and at home.  
He can't wait to go to school tomorrow.





A Roger system is important  
at school, at home and at play



## Roger technology – helping your child hear, talk and belong

A child's life is one of action. If they're not in school then they're outdoors, playing games, enjoying multimedia, in the car, or chatting with family and friends on the phone. Many of these situations can pose a listening challenge – one where sometimes, even the most advanced hearing aids need an extra boost.

That's where Roger comes in.

As highlighted in the story you just read, Roger wireless microphone systems overcome the problems associated with noise, distance and echo (a problem in large rooms). Roger microphones pick-up the speaker's voice and transmit it directly to tiny Roger receivers, which click onto the child's hearing aids. By bringing words directly into the ear in this way, your little listener can hear much more of what you have to say, even in noisy rooms and over short distances. The result is effective communication where previously it may have been impossible.

This approach also offers two important, proven benefits:

- The improved clarity of speech has a positive effect on children's language development, speech understanding and academic attainment.<sup>1</sup>
- Using technology to emphasize speech sounds over background noise – improving the 'signal-to-noise ratio' – also increases a child's attention span, reduces their distractibility and increases their awareness and discrimination of sound.<sup>1</sup>

Perhaps most importantly, the greatest benefits occur when systems like Roger are considered early in the hearing aid fitting process.<sup>1</sup> Roger microphones are fully automatic, making them really easy to use. Plus they are proven to help children understand up to 54% more speech than their nearest competitors.<sup>2</sup> To learn more, talk to your child's hearing care professional/educational audiologist or visit [www.phonak.com/kids](http://www.phonak.com/kids)

<sup>1</sup> American Academy of Audiology Clinical Practice Guidelines (2008, Updated 2011) Remote Microphone Hearing Assistance Technologies for Children and Youth from Birth to 21 years.

<sup>2</sup> Thibodeau, L. Roger and hearing instruments, Phonak Field Study News, April 2013.

