



*Alex's*  
First Seed



**Agriculture** in  
the **Classroom**

This book was donated for  
Agriculture in the Classroom by:

---

**Star Volunteer**

Written and illustrated by  
Vivid Communications

Published by  
Agriculture in the Classroom

Printed by:  
Transcontinental

Copyright© 2017  
Agriculture in the Classroom

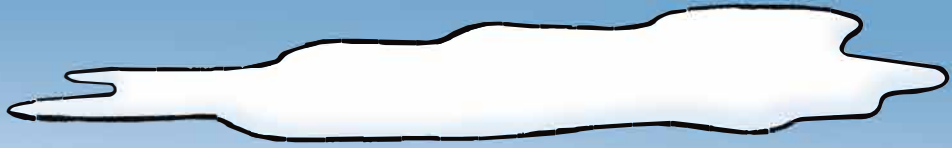
No section of this book may be reproduced in any form  
or by any means without the expressed written consent  
of Agriculture in the Classroom. All rights reserved.

ISBN: 978-0-9730461-4-4

# Alex's First Seed

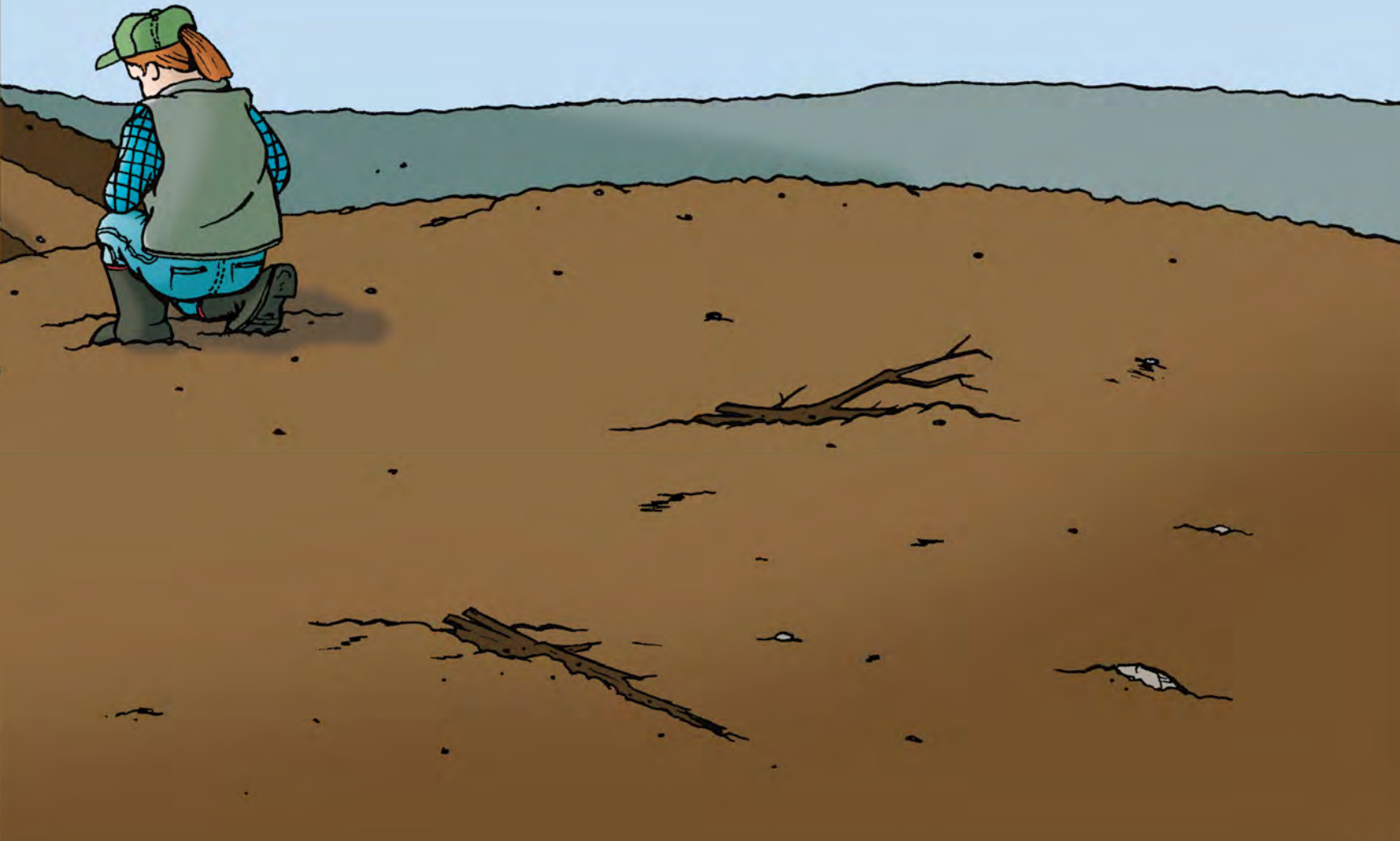
This book is dedicated to all the farmers  
who grow us yummy food to eat.





Spring has arrived on the farm and things are getting busy. Farmers Nick and Mandy are tending to their fields, preparing them for this year's crop.

As the tractor rides across the fields working manure into the soil, there are things happening deep down underground.

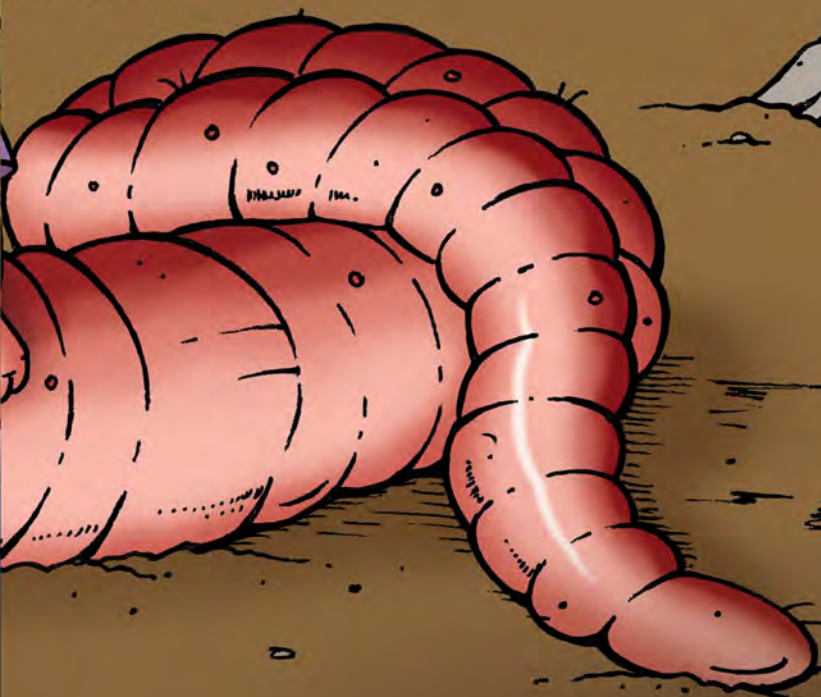




The earthworm family was awake and ready to start their day.

"Mom, what's that noise?" Alex asked.

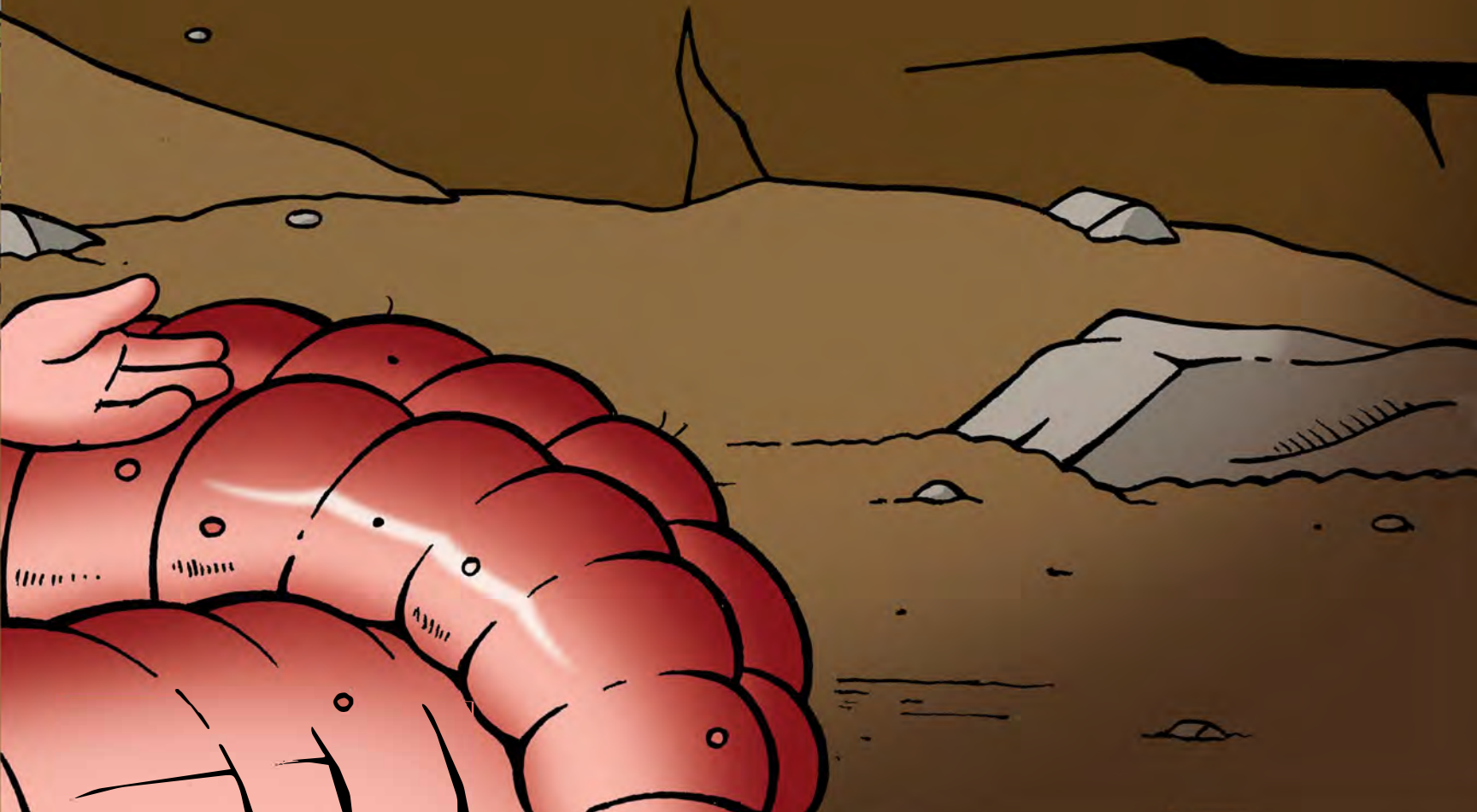
"Son, that's Nick and Mandy putting manure in the soil. We eat the organic matter in the manure to stay healthy, and it gives us the energy we need to help grow vegetables," Mom explained.







"Tomorrow is the most exciting day of the year for worms! Tomorrow, Nick and Mandy will be putting seeds into the ground and that's when we start working to help the seeds grow into big healthy vegetables. Talking about food is making me hungry. Let's find something to eat."





On their way to the Compost Café Mom started to explain to Alex, "Alex, I think you are old enough to grow your own seed this year. It's going to take a lot of work before and after school and a lot of your time this summer. Do you think you can do it?"

"Yes, I would love to do that!" Alex exclaimed.



# Compost Café

- \* **dried leaves salad**
- \* **roots and gravy**
- \* **fungi and meatballs**
- \* **bacteria burger**
- \* **manure sandwich**



When they got to the Compost Café he saw his friend Rachel.

Rachel looked up and hollered, "These roots are the best."

Alex and Rachel were best friends and they were in the same grade in school.

"Hi Rachel," Alex said full of excitement. "Are you working with your Dad digging tunnels this summer?"

"Oh, yes," answered Rachel. "That is one of the most important jobs for a worm, because the tunnels let air and water get to the roots of the plant."





"Mom told me this morning that I can grow my own seed this year," Alex boasted.

"Wow! Your very own seed," Rachel gasped. "You are so lucky. Last year my Dad grew the best potato plant ever."

Alex proudly stood a little taller. "My seed is going to need lots of hard work to help it grow." Then, as he began eating, he immediately felt stronger and healthier.





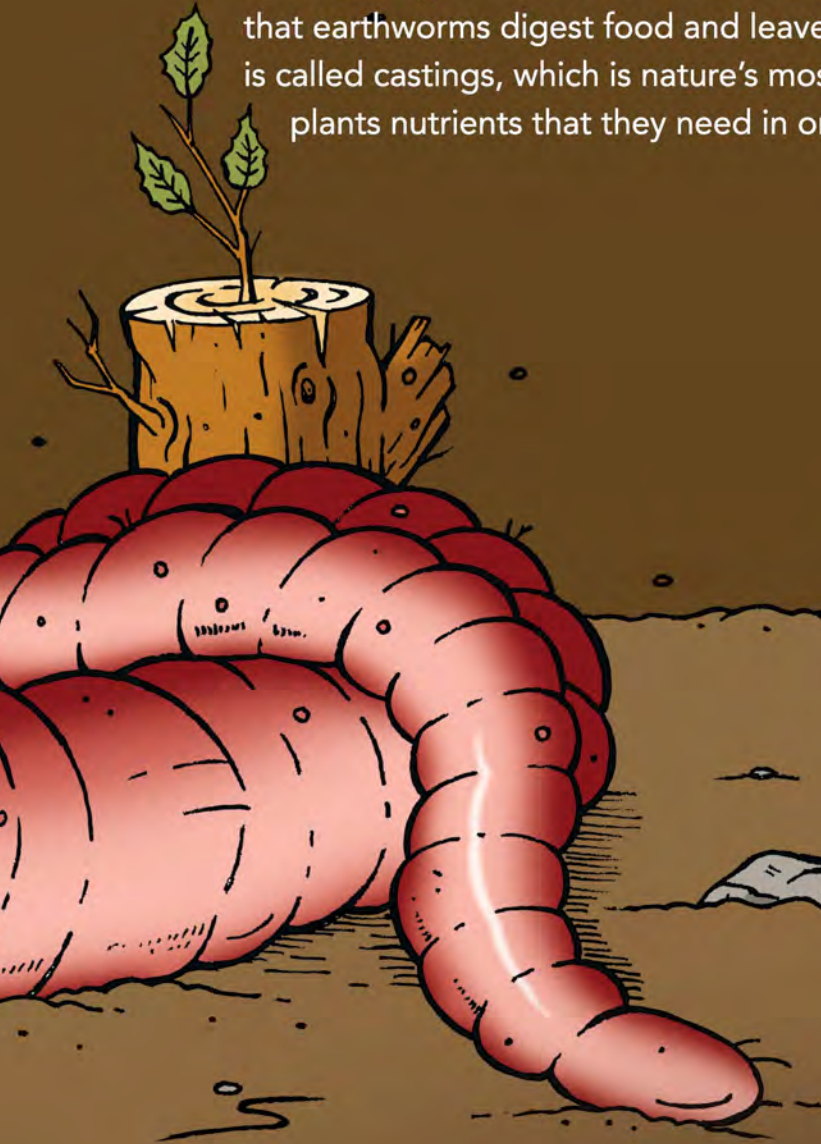


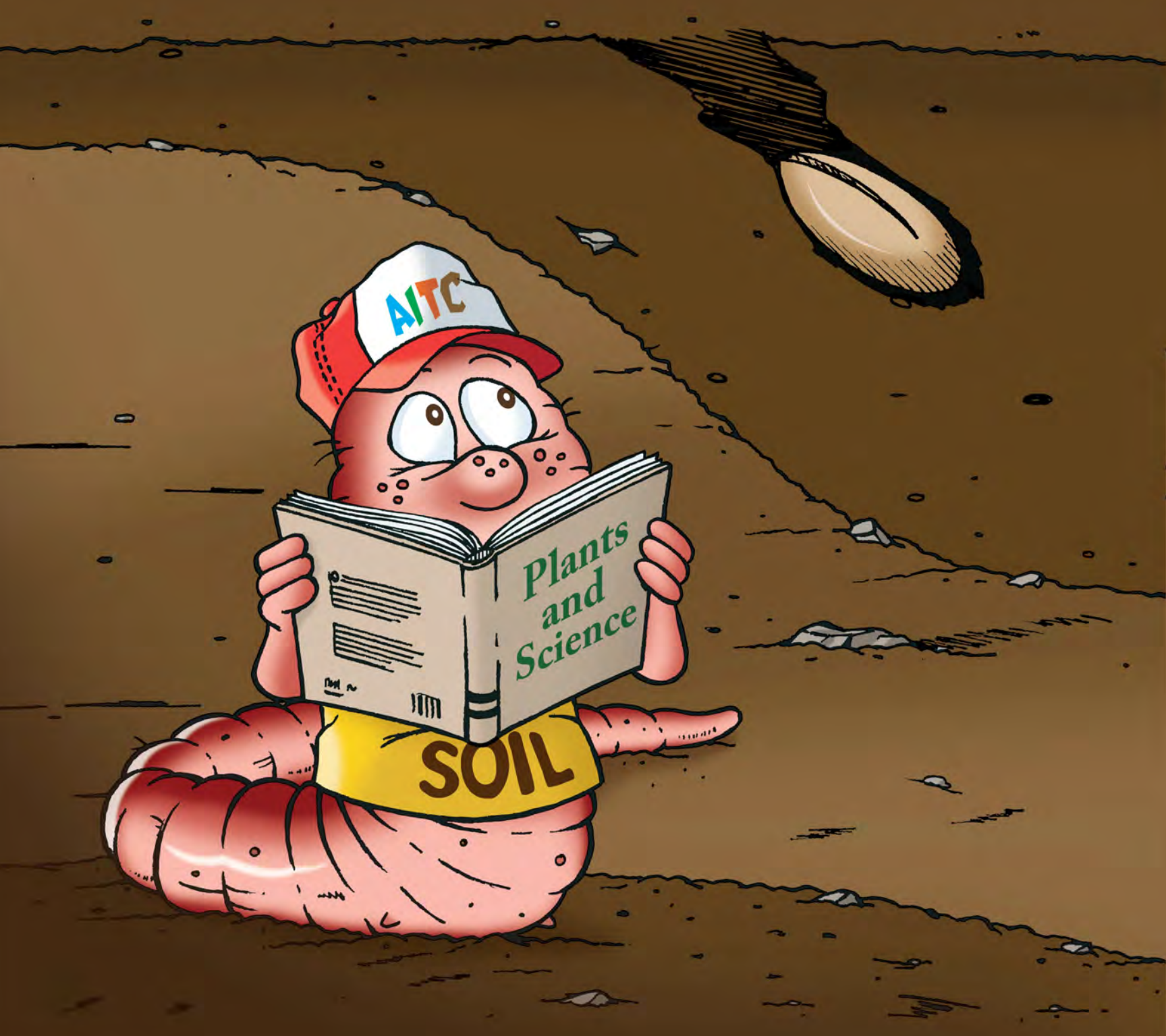
The next day, when Alex was getting ready for school, he heard Nick and Mandy planting seeds in their fields. Alex was so excited! During recess and lunch, all he could think about was having his own plant seed to tend.





When Alex got home from school he was so excited. "Mom, teacher said that earthworms digest food and leave their poop in the soil. Worm poop is called castings, which is nature's most perfect plant fertilizer. It gives plants nutrients that they need in order to grow healthy and strong!"





Alex dropped off his book bag, picked up his plant book, and hurried off to work. He couldn't wait to work at growing his seed. He dug tunnels to make sure that his plant seed would have lots of air and water for its roots. He wanted to learn about the castings he produced and how they help his seed to grow. So he read out loud some pages from his plant book.

Every day after school, Alex worked hard to help his seed grow.



Then one day, Alex noticed that his seed  
sprouted a tiny little root. Alex was ecstatic!  
His seed was growing! Every day it kept  
growing, and growing,  
and growing,  
and growing.

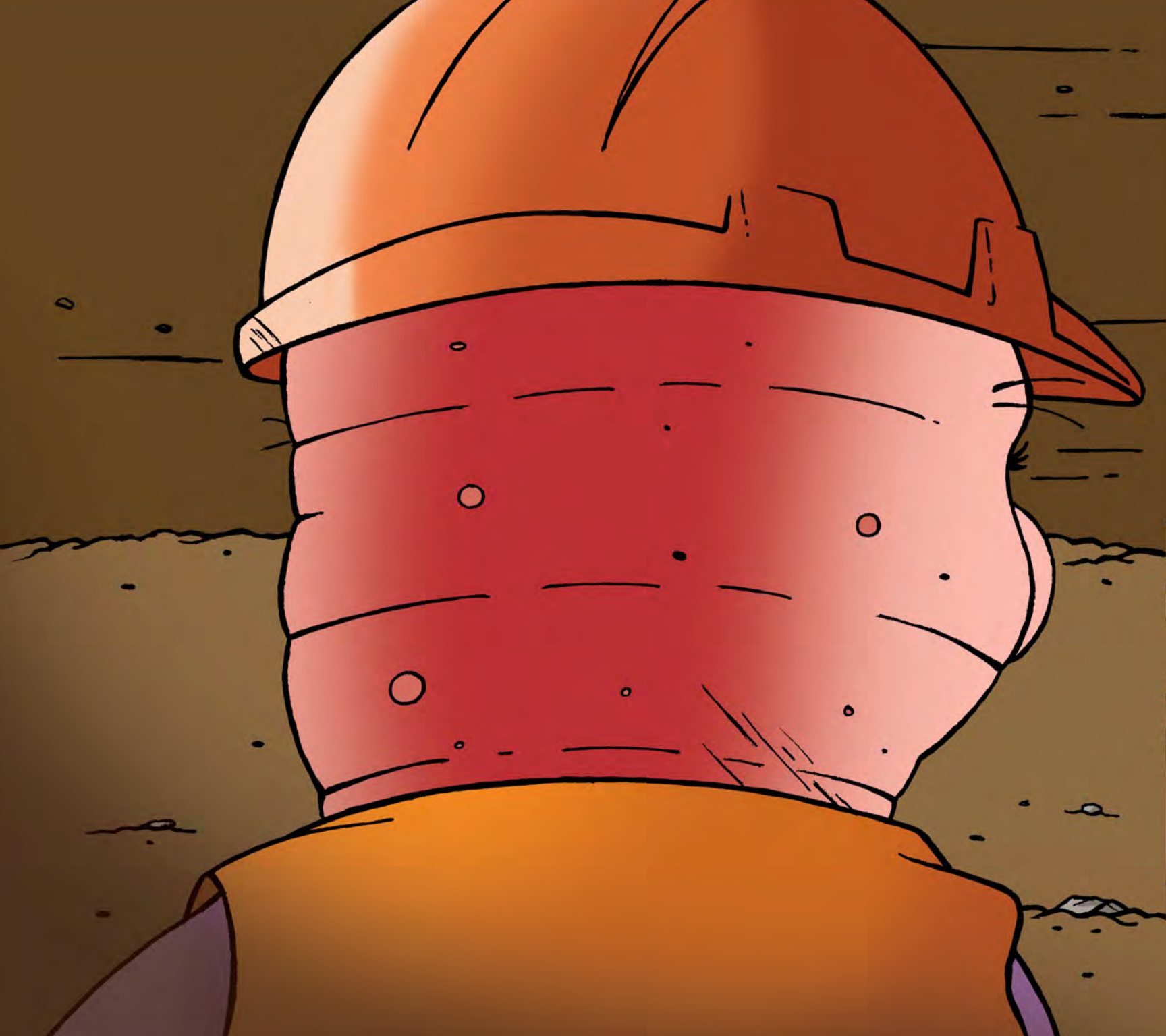


As fall approached, this little brown seed turned into a big, beautiful orange healthy carrot... the biggest carrot in Nick and Mandy's fields.

"You have worked really hard, Alex, and I am so proud of you." Mom smiled.

"I think Nick and Mandy will be so thrilled when they harvest these carrots next week."



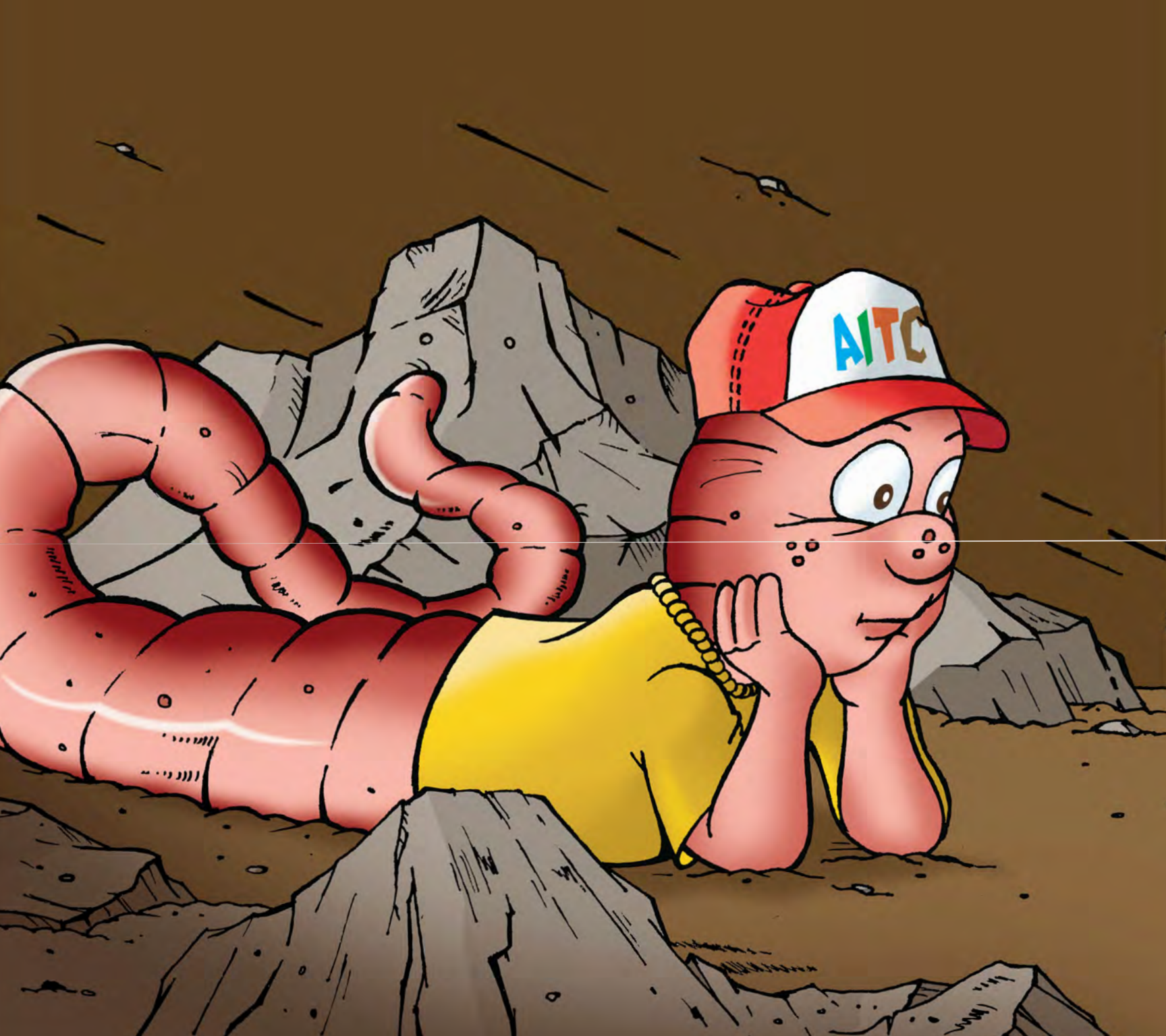




"What do you mean?? That's my carrot! I did all that hard work!" cried Alex.

Then he ran off to his alone place by the big rocks. He was disheartened.  
He wanted to keep the carrot that he had worked hard to help grow.





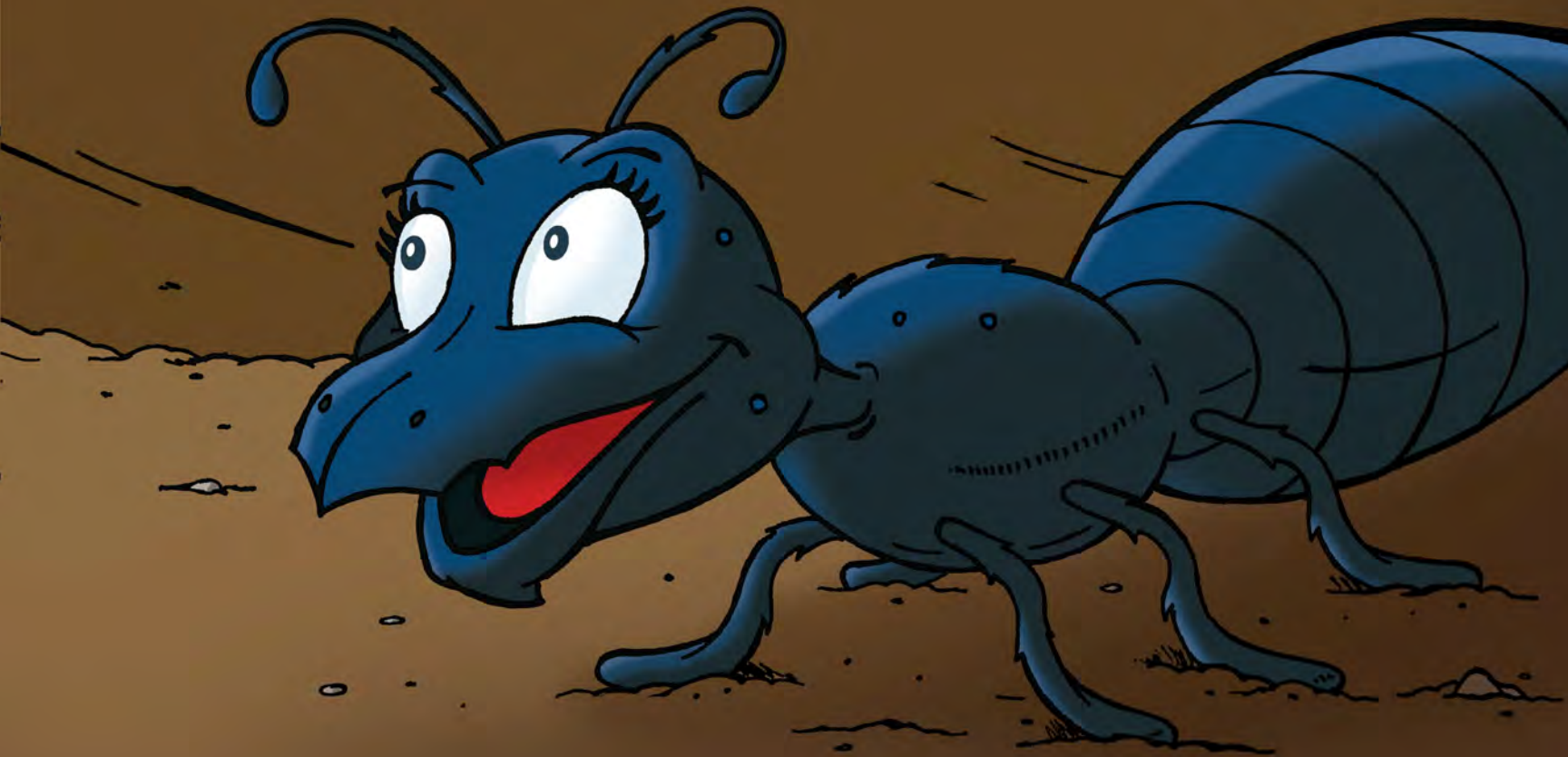
"Why are you so sad?" The question startled Alex. He quickly looked up and saw his friend, Jordon the ant.

Alex told Jordon about growing the carrot. "I did all the hard work and next week farmers Nick and Mandy will take that carrot away from me. It's not fair!"

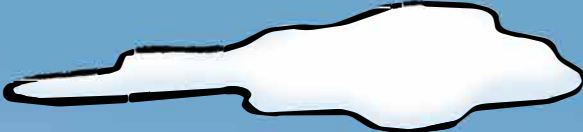
Jordan calmly asked Alex, "Do you know why the farmers want that carrot?"

"No," answered Alex in a sad voice.

"Come with me," Jordan said. "You need to see something."







Jordan took Alex up through a hole to the surface. Alex had never been this high up before. Alex peeked through the carrot plants. His mouth dropped! As far as he could see, there were carrot plants everywhere.

“Remember how you worked hard to dig tunnels for your carrot seed, and how you gave it castings so that it could grow big and strong?” Alex nodded.

“Well, now Nick and Mandy will use all these carrots to help feed humans,” explained Jordan.







Then, Alex saw a human family for the very first time. They were buying carrots from Nick and Mandy. Alex felt so proud!

“See, your carrot will be eaten by a family who depends on farmers like Nick and Mandy to provide them with healthy vegetables. The nutrients in the carrot you grew will help that child to grow healthy and strong.” Alex thought about what Jordan was saying.

All of his hard work meant something after all. He now understood that his work underground helps to feed families.

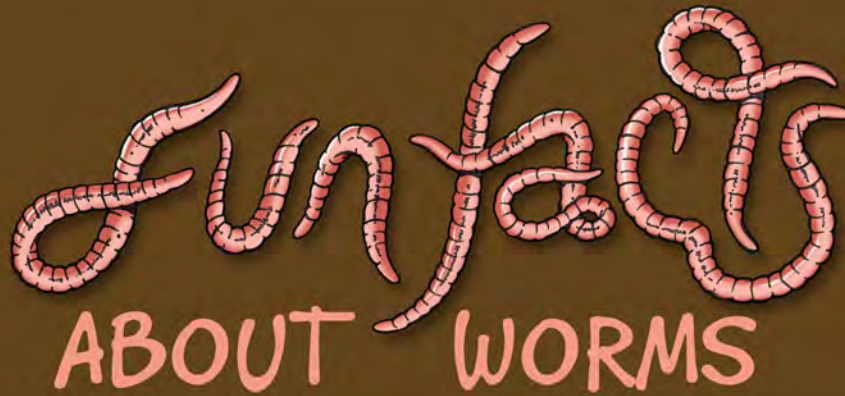






Later that day, Alex told his Mom, "Now I understand why farmers like Nick and Mandy needed my carrot." His Mom smiled. Alex continued. "Guess what? Next year, I'm going to grow two carrots!"

His Mom laughed, "I'm sure you will, Alex. I'm sure you will."



# Fun facts ABOUT WORMS

The Agriculture in the Classroom program has vermicomposting happening in classrooms across Newfoundland and Labrador!

- 1. Worms do not have eyes,** but they have receptor cells. This lets them know that they are in, or too close to, light. They don't like the light and will die if left in sunlight for too long.
- 2. Worms do not have lungs,** they breathe through their skin. Worms must remain wet at all times so dissolved oxygen can be absorbed into their skin.
- 3. Worms do not have teeth,** but they do have a mouth. Since they don't have teeth, they suck food through their mouths by the use of a powerful pharynx. They have a gizzard, much like a chicken, which helps them grind their food.

## Food List

Worms like their food chopped as small as possible!

- All vegetables (table and preparation scraps, peels, and veggies that are past their time)
- All fruits (table scraps, peels, and cores)
- Starches: pancakes, pasta, rice, pizza crusts, cereal, crackers, stale bread. No sauce or butter!
- Fiber: shredded paper, egg cartons, peanut shells, magazines, Kleenex, napkins, cardboard and junk mail

## Healthy Snacks:

Coffee grounds and filters, crushed egg shells, tea bags (without staples), dead flowers and plants, leaves and plant trimmings.

# Agriculture in the Classroom

March 1<sup>st</sup> to 31<sup>st</sup> is...



Agriculture in the Classroom-Canada (AITC) member organizations celebrate Canadian Agriculture Literacy Month (CALM) every March in classrooms across the nation. Agriculture comes alive in Canadian classrooms as students participate in activities to learn about, connect to and understand this important industry. Events and activities run throughout the month to celebrate the fact that agriculture is all around us, every day!

To learn about our school programs and teaching resources visit:

Agriculture in the Classroom Program

P.O. Box 1045

Mt. Pearl, NL A1N 3C9

Website: [www.aitcnl.ca](http://www.aitcnl.ca)



**Agriculture** in  
the **Classroom**

[www.aitcni.ca](http://www.aitcni.ca)