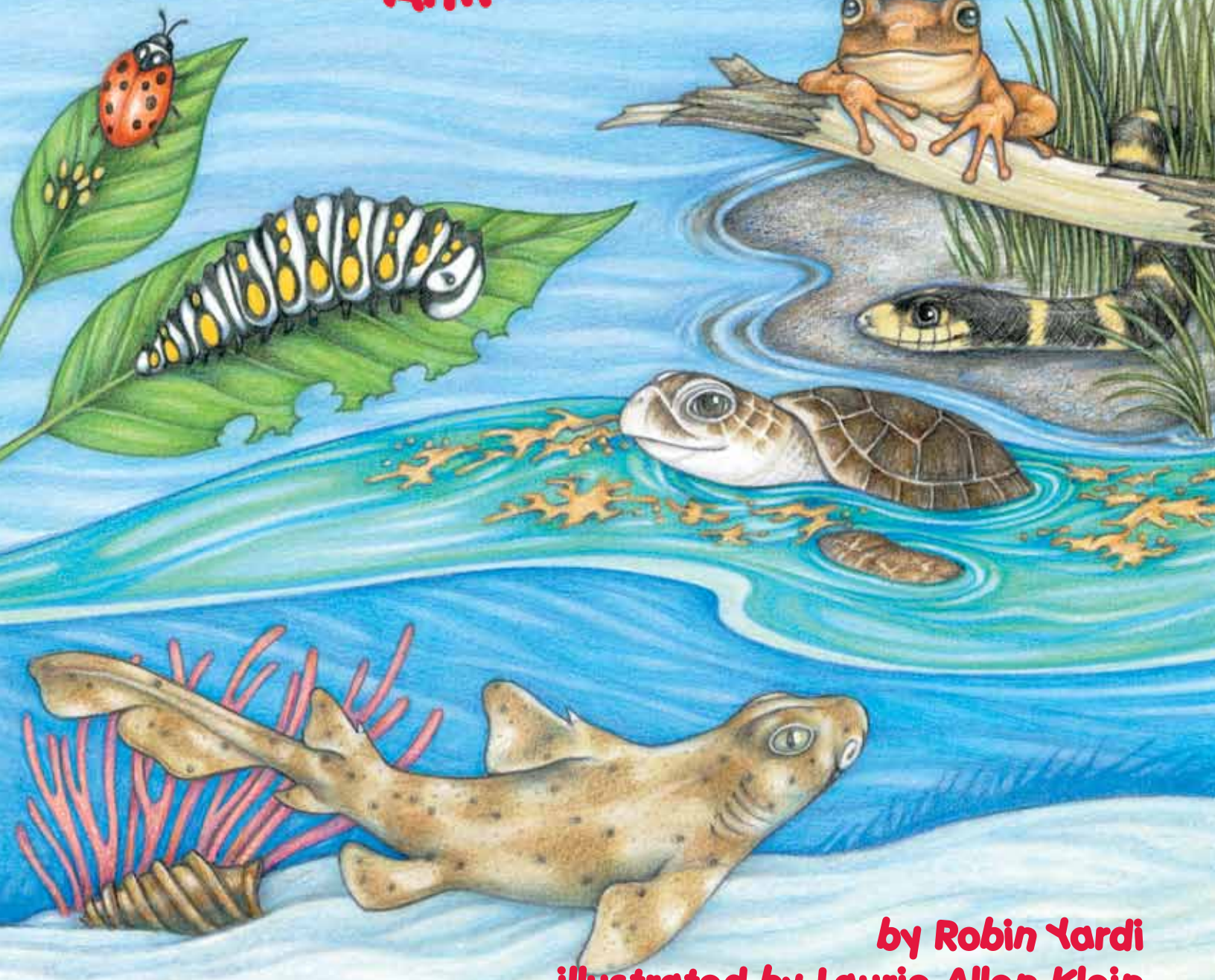


They Just Know

Animal Instincts



by Robin Yardi
illustrated by Laurie Allen Klein

They Just Know

Animal Instincts

How do some young animals know what to do and how to do it? Does someone teach a caterpillar what to eat? Who gives a baby shark swimming lessons? Sometimes young animals learn things from their parents, but other times . . . they just know! Explore animal instincts through engaging text and fanciful illustrations.

Animals in the book include: black swallowtails, horn sharks, kingsnakes, ladybugs, loggerhead sea turtles, and spring peepers.

It's so much more than a picture book . . . this book is specifically designed to be both a fun-to-read story and a launch pad for discussions and learning. We encourage adults to do the activities with the young children in their lives both at home and in the classroom. Free online resources and support at www.ArbordalePublishing.com include:

- For Creative Minds as seen in the book (in English & Spanish):
 - Instinct versus Learned Behaviors
 - Young and Their Parents
 - Life Cycles: Metamorphosis
- Teaching Activities (to do at home or school):
 - Reading Questions
 - Language Arts
 - Science
 - Math
 - Geography
 - Coloring Pages
- Interactive Quizzes: Reading Comprehension, For Creative Minds, and Math Word Problems
- English and Spanish Audiobooks
- Related Websites
- Aligned to State, Common Core & NGSS Standards
- Accelerated Reader and Reading Counts! Quizzes
- Lexile and Fountas & Pinnell Reading Levels

eBooks with Auto-Flip, Auto-Read, and selectable English and Spanish text and audio are available for purchase online.

Thanks to Dr. Carrie Kappel, conservation biologist and former youth educator at the Teton Science Schools, for reviewing the accuracy of the information in this book.

Robin Yardi approaches life with great wonder, a stack of field guides, and picture books nearby. She's a credentialed elementary school teacher who loves reading to her students and watching the wildlife that passes through her garden, but it was Robin's daughter that inspired her debut picture book *They Just Know*. Robin lives in Santa Barbara, California with one lovely husband, two muddy kids, a Sulcata Tortoise, eight chickens, and innumerable koi fish. Visit her website at robinyardi.com.

Laurie Allen Klein has been a freelance artist for nearly 25 years. Over the last several years, she has worked as the on-staff artist for a marine park, where she does everything from painting life-size sea animal murals, to illustrating children's activity books. Laurie has illustrated *Balloon Trees*, *Fur and Feathers*, *The Ghost of Donley Farm*, *If a Dolphin Were a Fish*, *Little Skink's Tail*, *Meet the Planets*, *Solar System Forecast* and *Where Should Turtle Be?* for Arbordale. She was the winner of the Outstanding Pennsylvania Author/Illustrator Award from the Pennsylvania School Librarians Association in 2008 and is a member of the Society of Children's Book Writers and Illustrators. Laurie lives in Florida. See more of her artwork at lauriekleinarts.com.



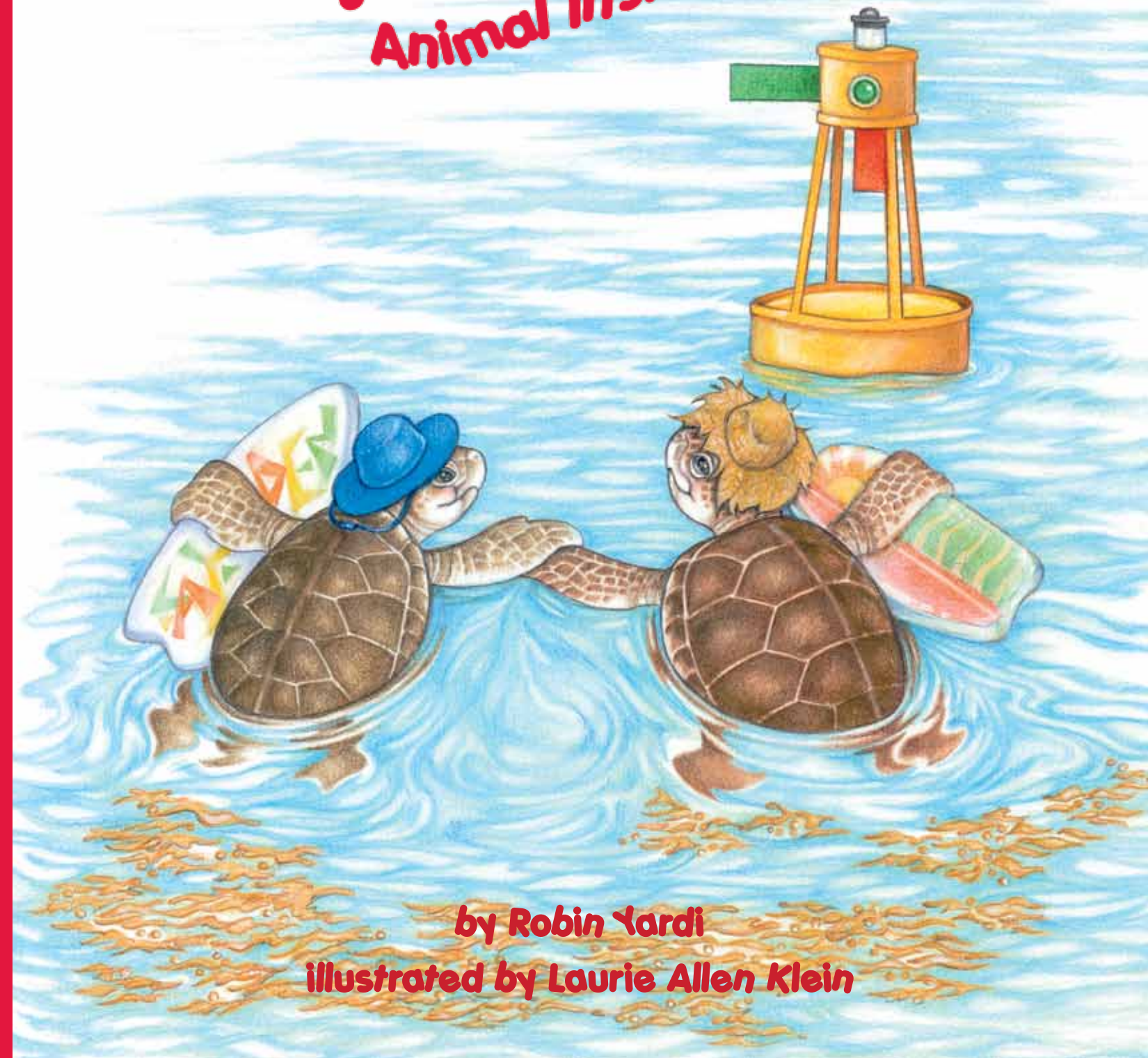
Robin Yardi



Laurie Allen Klein

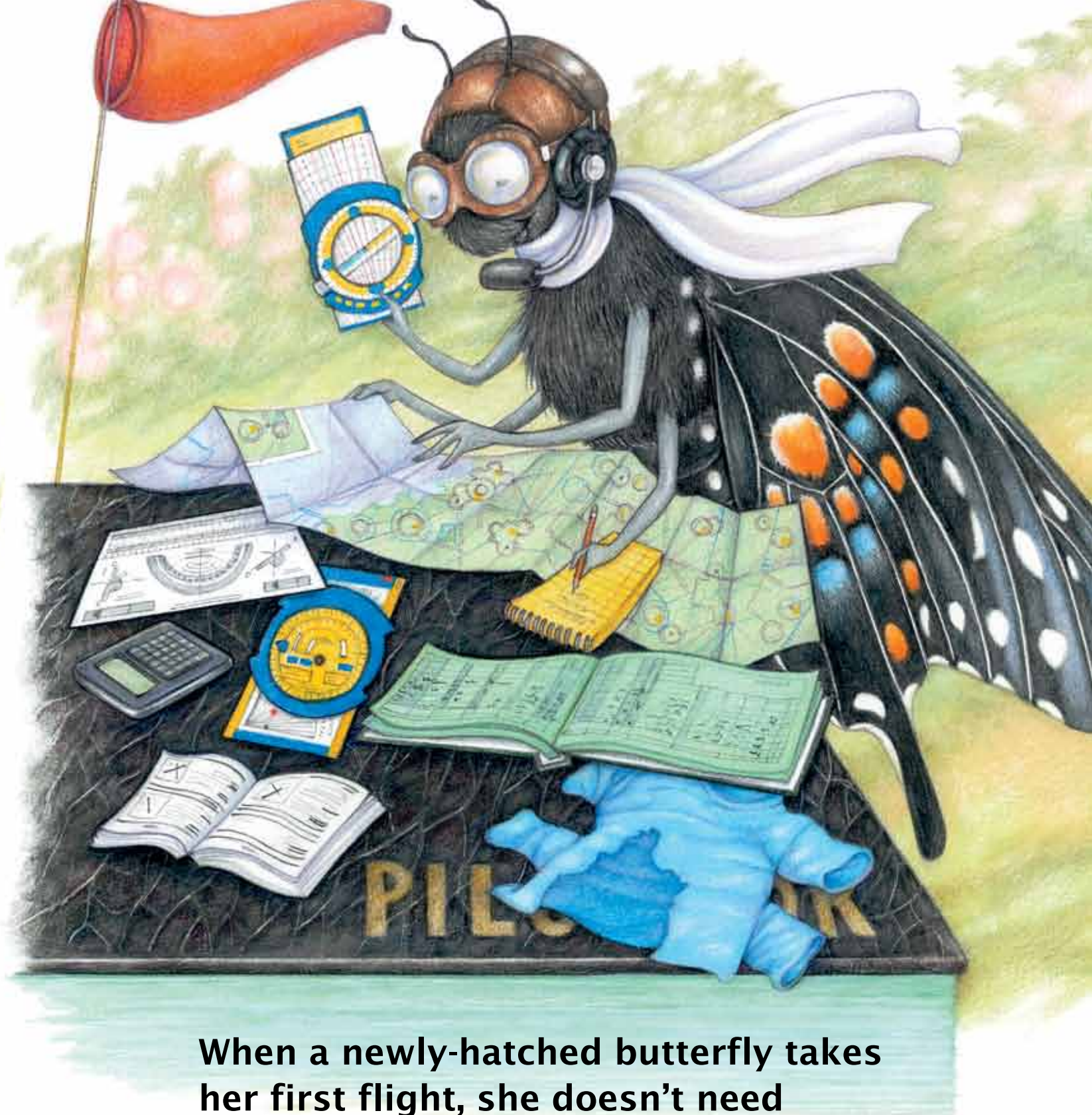
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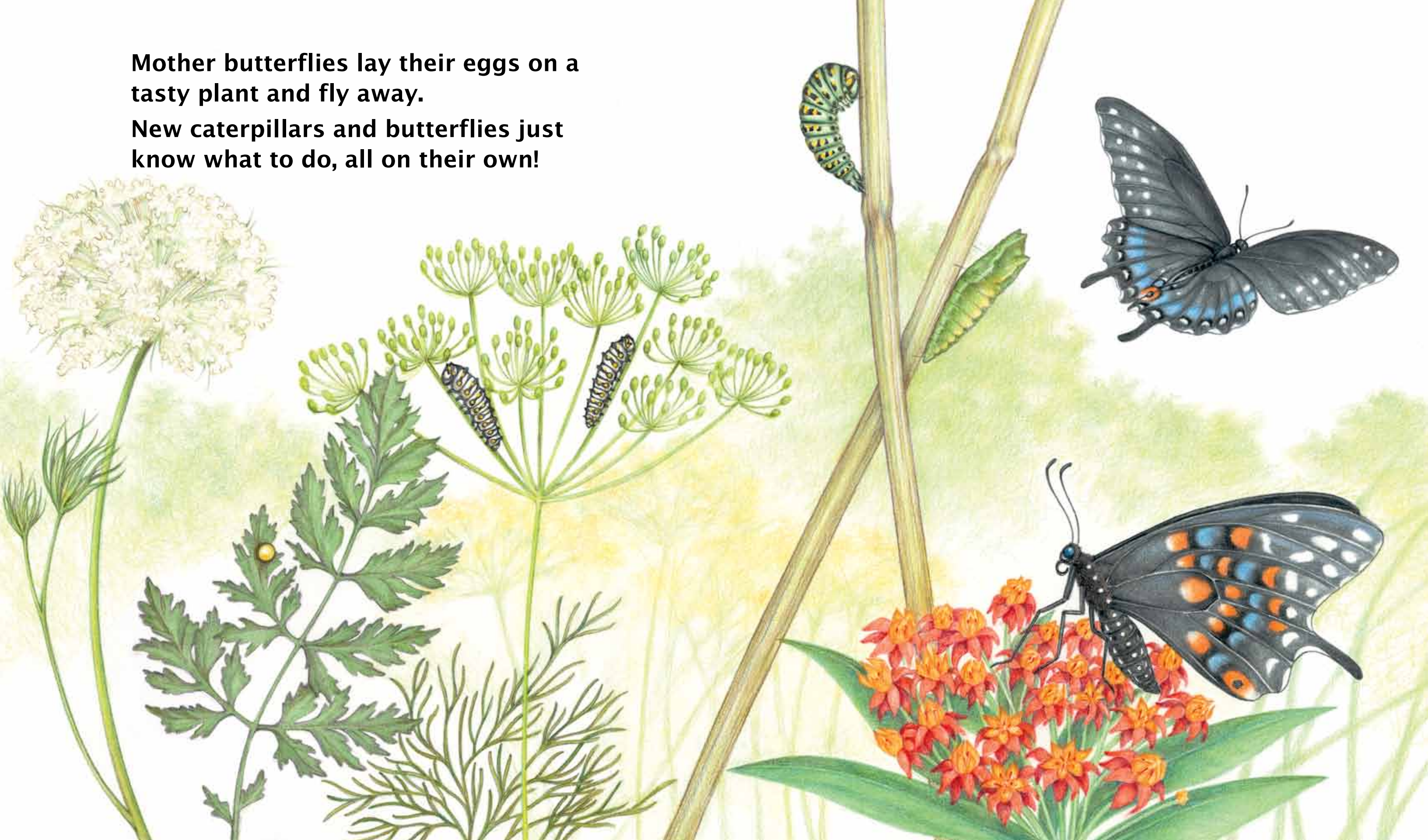
by **Robin Yardi**
illustrated by **Laurie Allen Klein**

No one reminds a caterpillar to eat her leaves, or to make a chrysalis when she's old enough. Caterpillars just know.

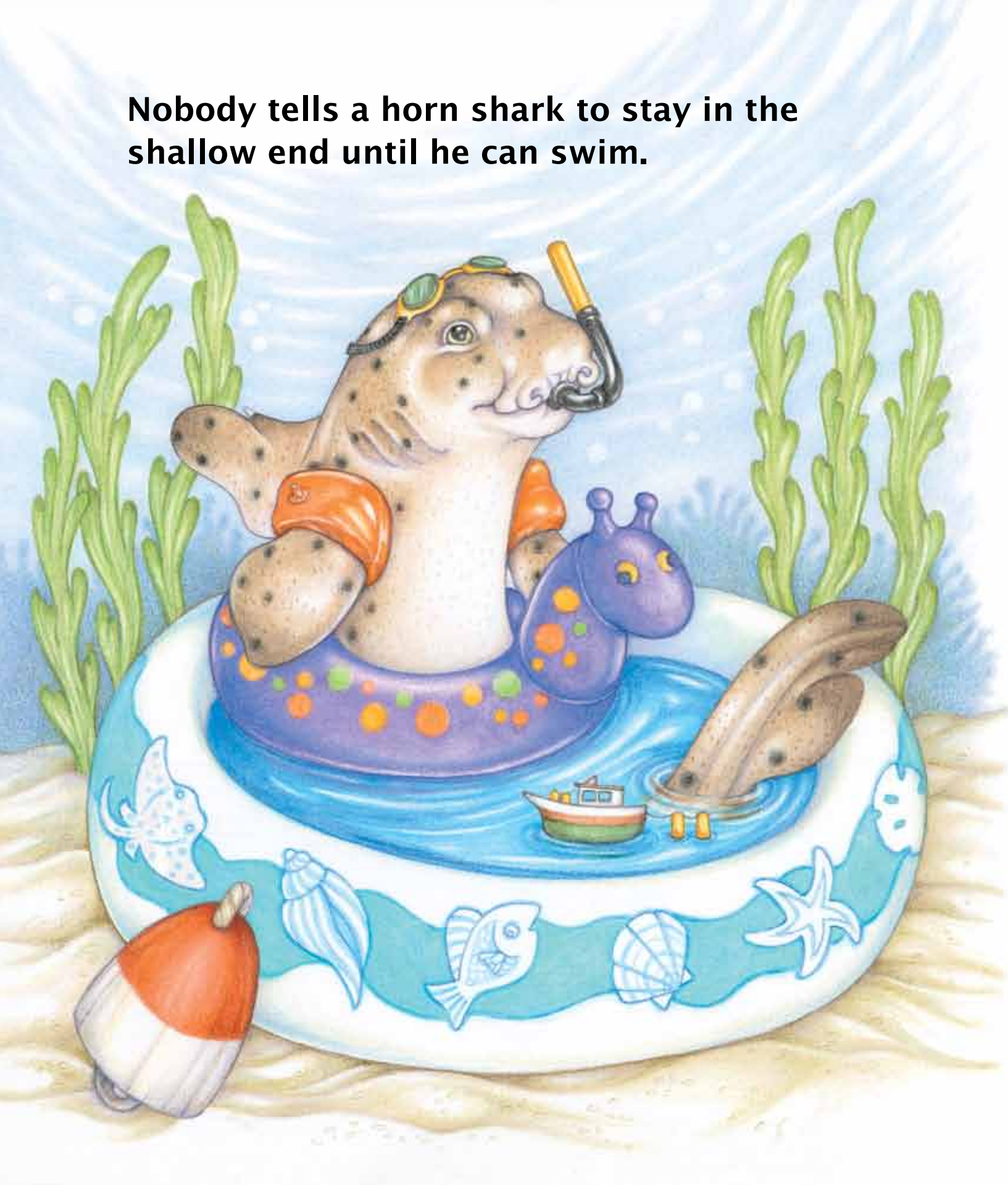


When a newly-hatched butterfly takes her first flight, she doesn't need anyone to hold her gently by the wing. Butterflies just know.

**Mother butterflies lay their eggs on a
tasty plant and fly away.
New caterpillars and butterflies just
know what to do, all on their own!**

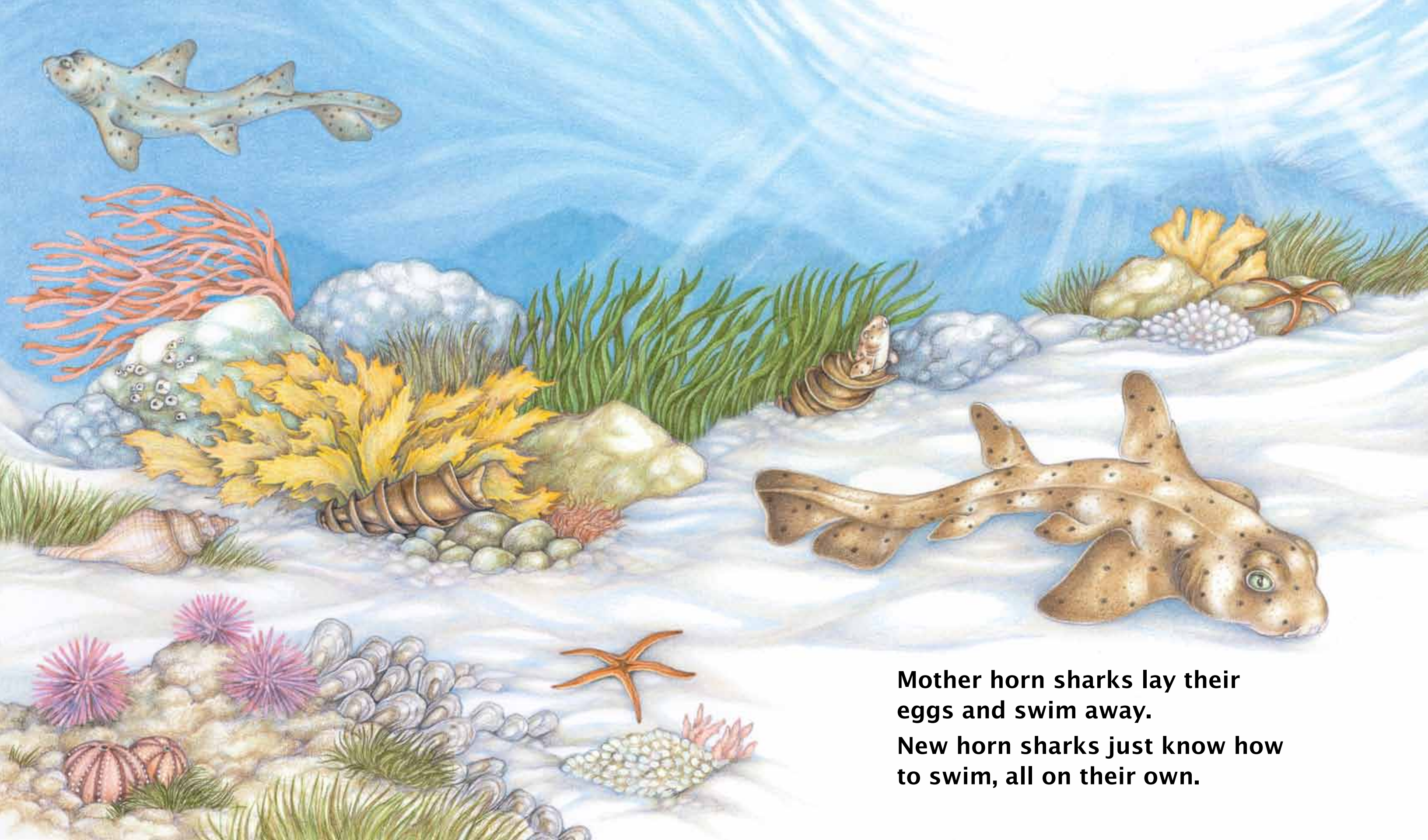


Nobody tells a horn shark to stay in the shallow end until he can swim.



When it gets dark, no one leaves a light on in the deep, dark sea so he won't get scared.

When he's hungry, the baby shark doesn't eat goeey baby food. But he doesn't need to wait for his teeth to come in, either.

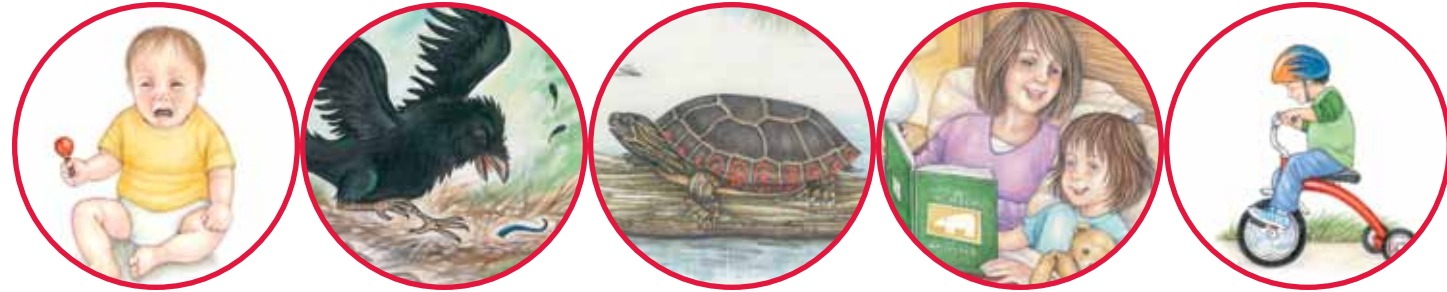


Mother horn sharks lay their eggs and swim away. New horn sharks just know how to swim, all on their own.

For Creative Minds

This For Creative Minds educational section contains activities to engage children in learning while making it fun at the same time. The activities build on the underlying subjects introduced in the story. While older children may be able to do these activities on their own, we encourage adults to work with the young children in their lives. Even if the adults have long forgotten or never learned this information, they can still work through the activities and be experts in their children's eyes! Exposure to these concepts at a young age helps to build a strong foundation for easier comprehension later in life. This section may be photocopied or printed from our website by the owner of this book for educational, non-commercial uses. Cross-curricular teaching activities for use at home or in the classroom, interactive quizzes, and more are available online. Go to www.ArbordalePublishing.com and click on the book's cover to explore all the links.

Instinct versus Learned Behaviors



Animals do some things without even thinking about it. These behaviors, called **instinct**, help animals live in their habitats. These behaviors come naturally to the animals and all animals of the same type will do them without being taught.

For example, if you have a baby brother or sister, you'll see that the baby cries when hungry and laughs or smiles when happy. Other examples of instinctual behavior include birds building nests, turtles (cold-blooded reptiles) basking in the sun to warm up, and skinks breaking off their tails to escape predators.

Many animals are born without ever knowing their parents. They don't have anyone to teach them how to find food or how to survive—they survive purely on instinct. These behaviors are inherited from parents, even if the animals never know their parents. Any behavior that is not learned is considered instinct.

Most mammal and bird parents raise their young. Adults teach so that the young **learn** how to do things. Young humans learn to read, ride bikes, and write. Young birds learn to fly. Young wolves learn to hunt for food.

Some behaviors are a combination of instinct and things they learn. For example, between 6 and 9 months old, human babies instinctually start to babble to communicate. Their parents will teach them a language, like English or Spanish.

Sometimes animals learn things by observing other animals or by figuring something out. A young bear might learn where to go to find juicy berries. Eagles may figure out that salmon swim upstream at certain times of year and are easy to catch. A young human might learn that it's easier to make friends by being nice than by being mean.

What are some things that you have learned how to do? Who taught you or how did you figure it out?

Identify which behaviors are instinct and which are learned.
Can you explain why?



1

A caterpillar spins into a chrysalis. After a few weeks, it emerges as a butterfly.



2

Sharks are born knowing how to swim.



3

Humans take swimming lessons to learn how to swim.



4

Ladybugs know how to fly.



5

Tadpoles know how to swim.



6

Children sing songs.



7

Sea turtle hatchlings move towards the brightest light to get to the ocean.



8

Kingsnakes know how to hunt for food.

Young and Their Parents

Some young animals look like small versions of the adults they will become. Other young look very different from adults. They may undergo a complete change as part of their life cycle, their eye color might change, or the color of their fur or feathers might change as they get older. Can you match the young (numbers) to the adult animals (letters)?



Answers: 1D: sea turtle, 2C: horn shark, 3B: frog, 4E: snake, 5A butterfly

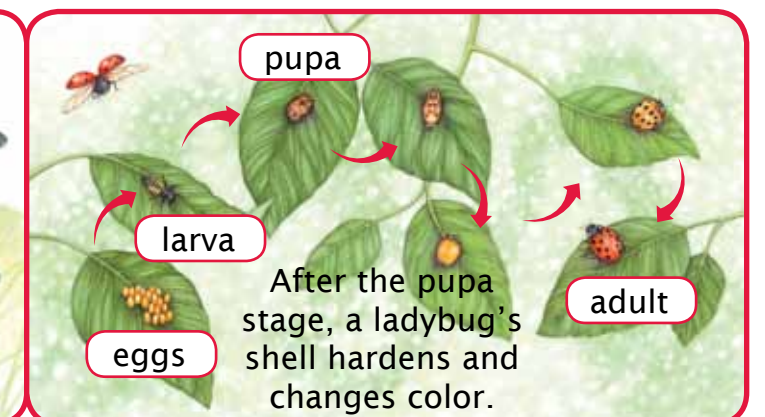
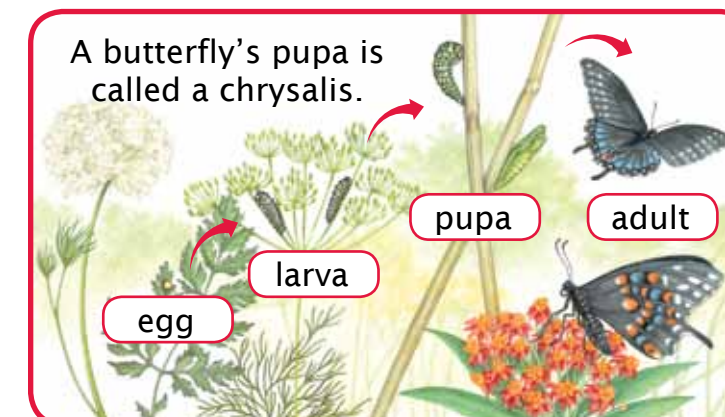
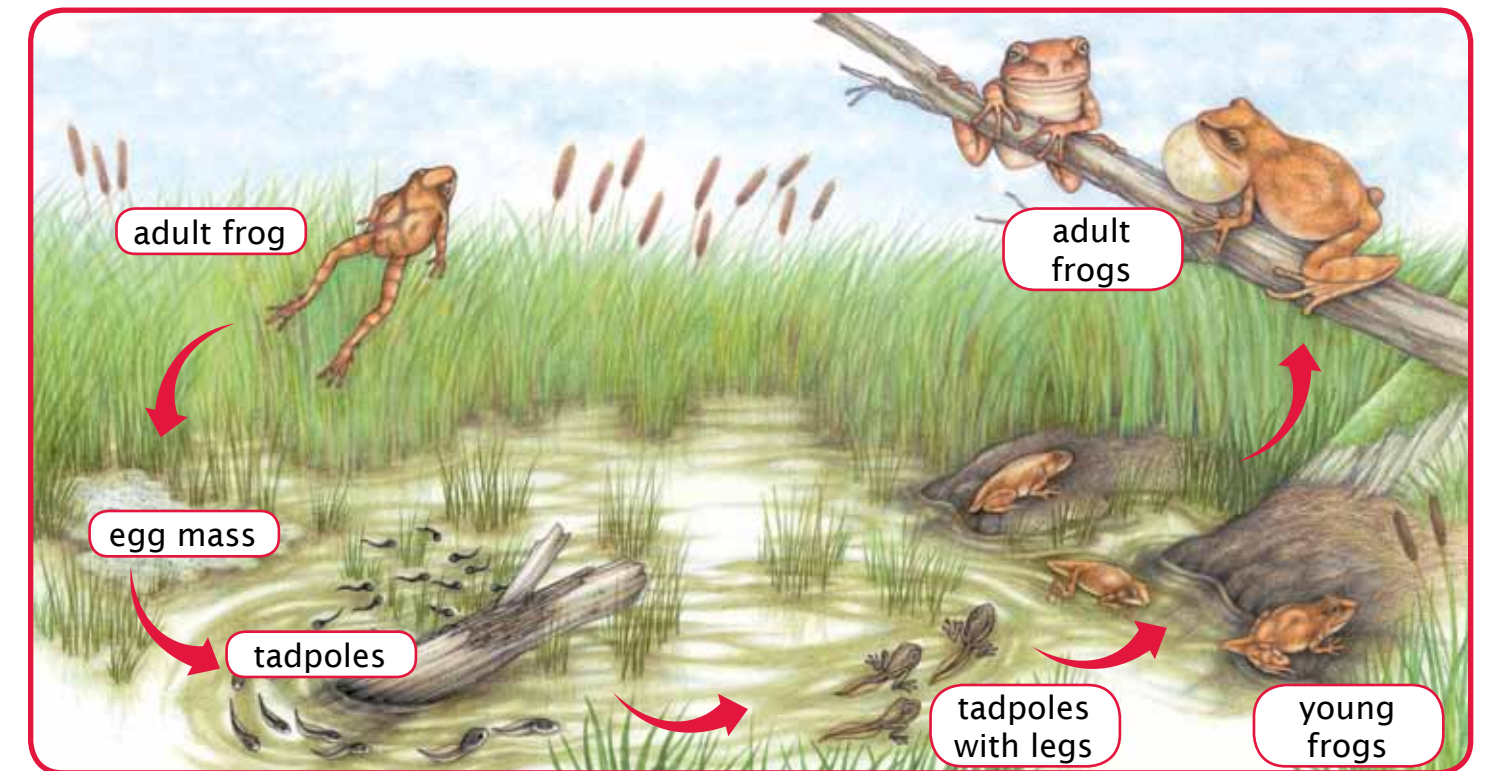
Life Cycles: Metamorphosis

All living things have life cycles. Plants grow from seeds. Animals are born or hatch and grow into adults. Some animals go through a complete change, called **metamorphosis**, from the time they hatch or are born to what they eventually look like as adults.

Butterflies, frogs and ladybugs all undergo a complete metamorphosis.

- Eggs hatch into larvae that don't look anything like the adults.
- The larvae eat, grow, and molt. When they are grown, they turn into pupae.
- The pupa stage is a time of change.
- Adult insects emerge from pupae.
- The adults lay eggs to start the process all over again.

Can you find some life-cycle changes in the illustrations?



For all our little ones, who will learn to do so much!—RY
To BK and JK, through every stage and transition, thank you for sharing every adventure—LAK
Thanks to Dr. Carrie Kappel, conservation biologist and former youth educator at the Teton Science Schools, for reviewing the accuracy of the information in this book.

The author donates a portion of her royalties to Wilderness Youth Project (wyp.org).

Library of Congress Cataloging-in-Publication Data

Yardi, Robin, author.
They just know : animal instincts / by Robin Yardi ; illustrated by Laurie Allen Klein.
1 online resource.
Audience: Ages 4-8
Description based on print version record and CIP data provided by publisher; resource not viewed.
ISBN 978-1-62855-649-0 (English Download) -- ISBN 978-1-62855-659-9 (Eng. Interactive) -- ISBN 978-1-62855-654-4 (Spanish Download) -- ISBN 978-1-62855-664-3 (Span. Interactive) -- ISBN 978-1-62855-634-6 (english hardcover) 1. Instinct--Juvenile literature. 2. Animal behavior--Juvenile literature. 3. Adaptation (Biology)--Juvenile literature. I. Klein, Laurie Allen, illustrator. II. Title. QL781 591.5'12--dc23

2015010427

Translated into Spanish: *¡Ellos ya saben! Instintos de los animales*

Lexile® Level: AD 870L
key phrases for educators: animal life cycles, instinct versus learned behaviors

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Manufactured in China, June 2015
This product conforms to CPSIA 2008
First Printing

Arbordale Publishing
Mt. Pleasant, SC 29464
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