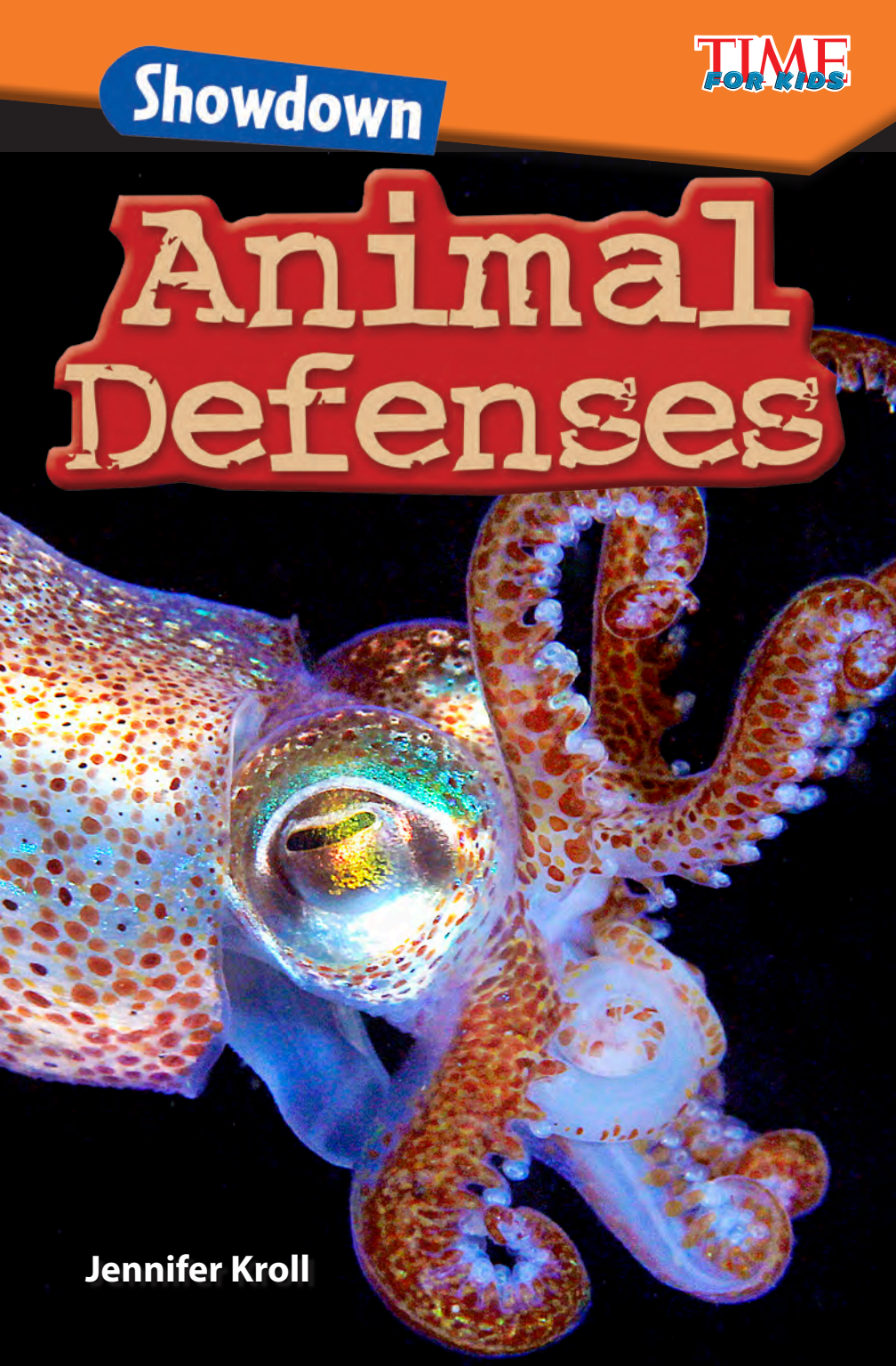
Showdown

Animal Defenses



Jennifer Kroll

For teachers' inspection ONLY

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Face Off!

Lions gather at a water hole in Africa. As a rhinoceros steps out of the water, a lioness springs. Her claws grip the rhino's back. But the rhino spins and shakes her off. With its horn lowered, it charges the lions. The lions back away and scatter.

Getting Defensive

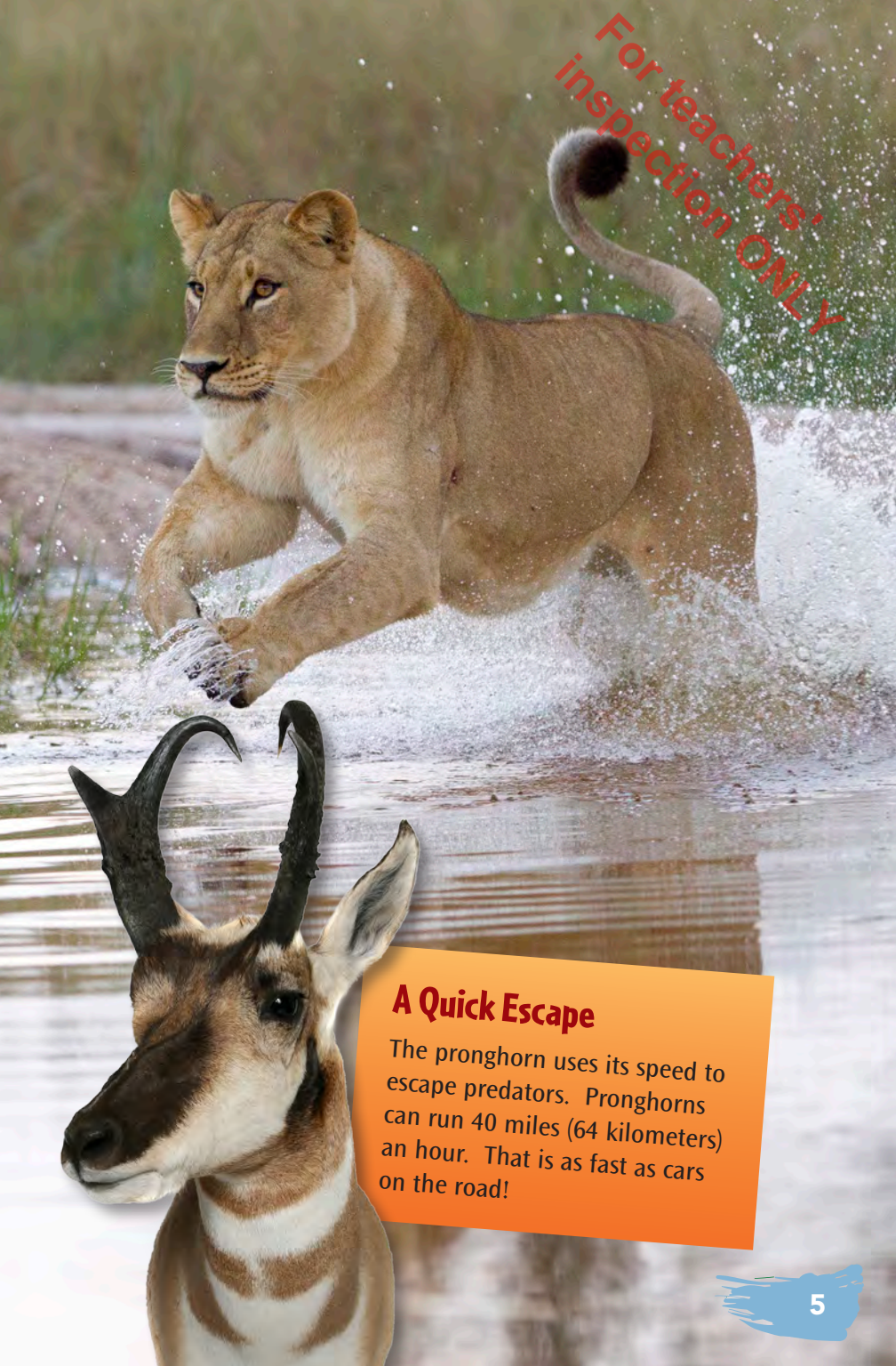
It is dangerous out there! Animals have amazing ways of surviving when faced with a scary showdown. Some creatures, such as rhinos, have powerful bodies and sharp horns. Other animals defend themselves with claws, teeth, or speed.



All Together Now

Many animals live and work in groups to stay safer. Musk oxen stand side by side in a circle when threatened by wolves or other **predators**. They keep their calves safe in the center of the circle.

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A Quick Escape

The pronghorn uses its speed to escape predators. Pronghorns can run 40 miles (64 kilometers) an hour. That is as fast as cars on the road!

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Armored Animals

It takes thick skin to shake off a lion attack. That is exactly what a rhino has. Its tough skin acts like a suit of armor. Rhino skin can be up to 2 inches (5 centimeters) thick. It is made of layers of collagen. This substance is also found in human skin, bones, and tendons. The collagen layers crisscross each other, making the skin super strong.

Other animals also sport "armor" of some kind. Turtles and tortoises have protective shells. A pangolin is covered in tough scales. It defends itself by curling up into a scaly ball. Armadillos use this same trick to **foil** predators.



Borrowed Armor

Hermit crabs are not born with shells. Instead, they find and move into abandoned seashells. When they outgrow a shell, they find a bigger one. Hermit crabs carry their shell homes around with them to stay safe.



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Outback Armor

A falcon circles over the Australian **outback**. It spots a small lizard. It's lunchtime! The falcon swoops. The would-be **prey** is no ordinary lizard. It is a thorny dragon, covered in sharp spikes. Under attack, the lizard puffs up its chest. The falcon decides that this lizard might be too much trouble. The bird flies off to seek its meal elsewhere.

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Many lizards have armor-like skin. Thorny dragons are a **striking** example. These Australian reptiles have another cool defense. Each dragon has a spiky, knob-like "false head" on its neck. When it tucks its head down, the false head sticks out. Predators see the false head and the tucked head and think the lizard is larger than it really is.

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Reader's Guide

1. What are four kinds of defenses discussed in this book?
2. What animals use armor as a defense?
3. What is a "warning coloration"?
4. Why do gecko tails have fracture zones?

