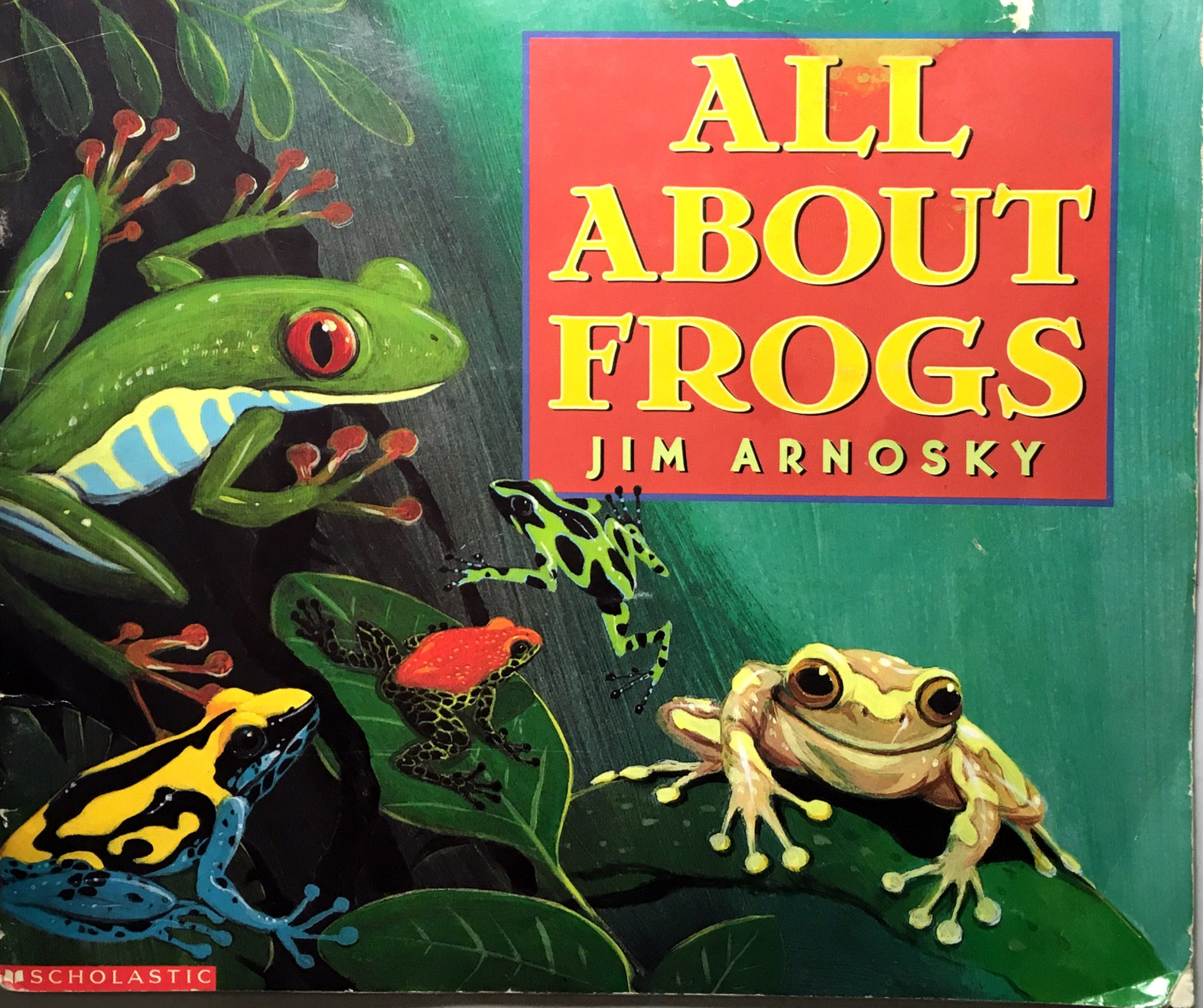
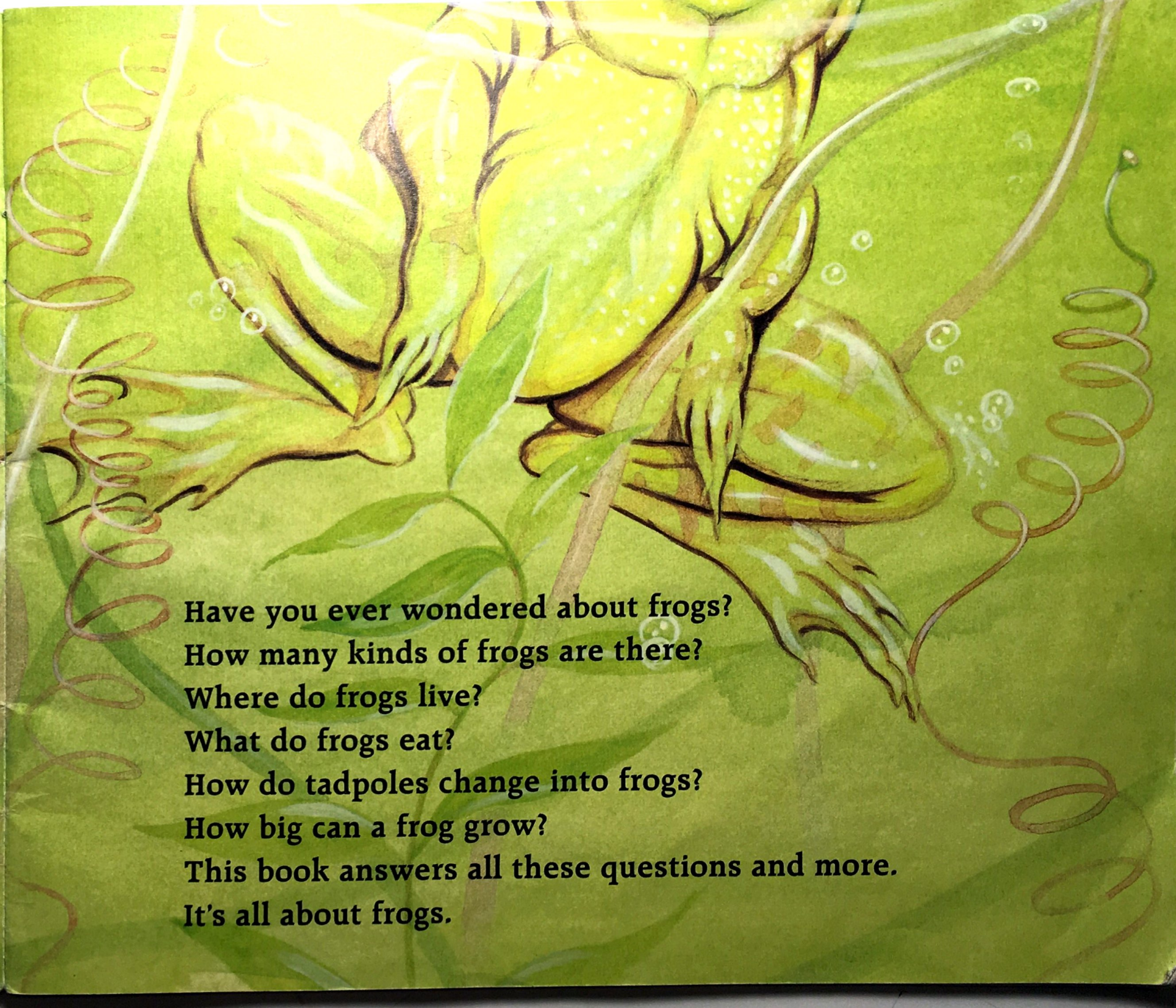


# ALL ABOUT FROGS

JIM ARNOSKY

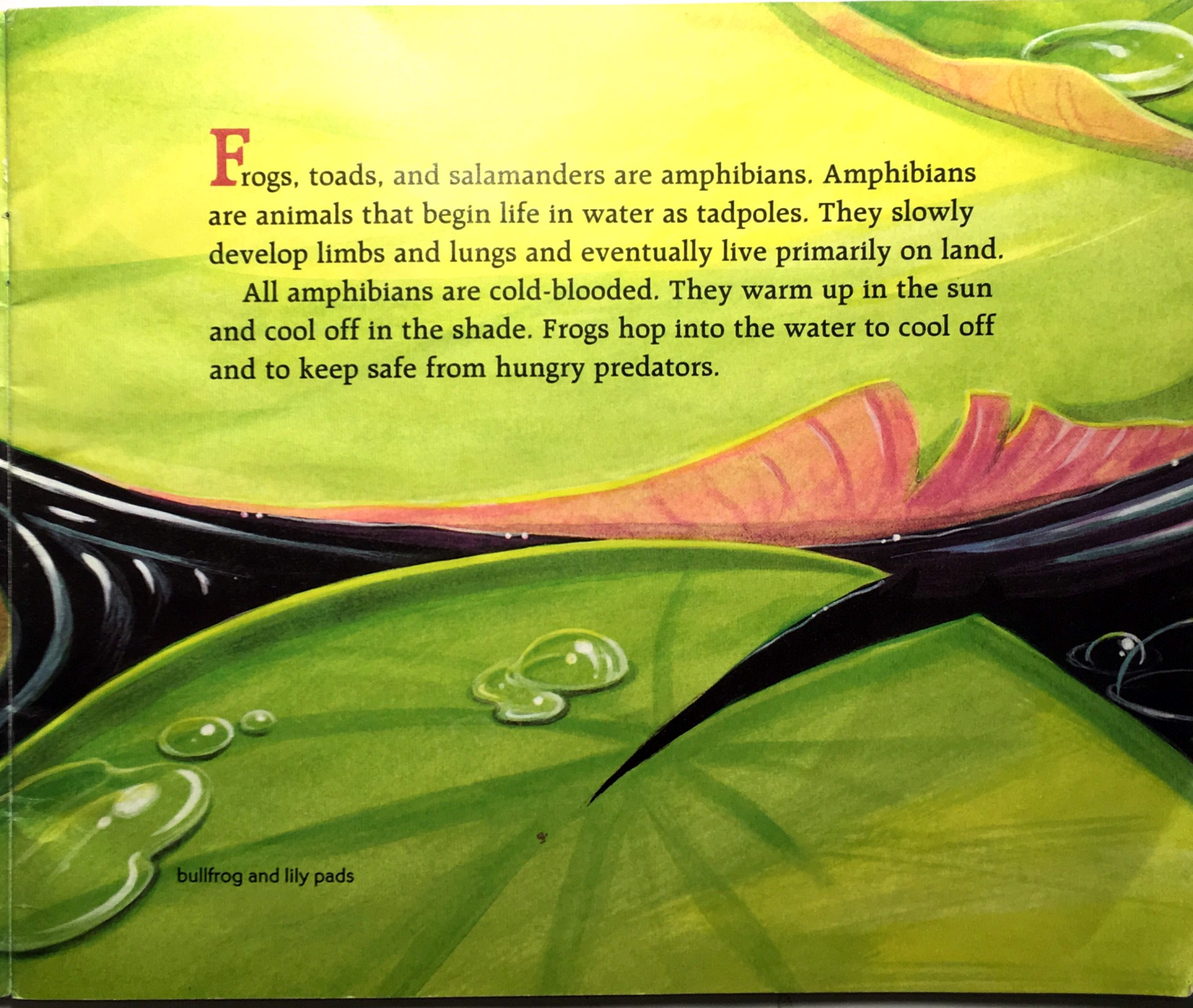






**Have you ever wondered about frogs?  
How many kinds of frogs are there?  
Where do frogs live?  
What do frogs eat?  
How do tadpoles change into frogs?  
How big can a frog grow?  
This book answers all these questions and more.  
It's all about frogs.**





**F**rogs, toads, and salamanders are amphibians. Amphibians are animals that begin life in water as tadpoles. They slowly develop limbs and lungs and eventually live primarily on land.

All amphibians are cold-blooded. They warm up in the sun and cool off in the shade. Frogs hop into the water to cool off and to keep safe from hungry predators.

bullfrog and lily pads



Frogs leap!



Toads make short hops.



wood frog



American toad



tree frog



Frogs and toads are similar but different animals. Frogs have moist, smooth skin. Toads have dry, bumpy skin. Frogs have large hind legs and can jump great distances. Toads have small hind legs and can only make short hops.

frog




toad



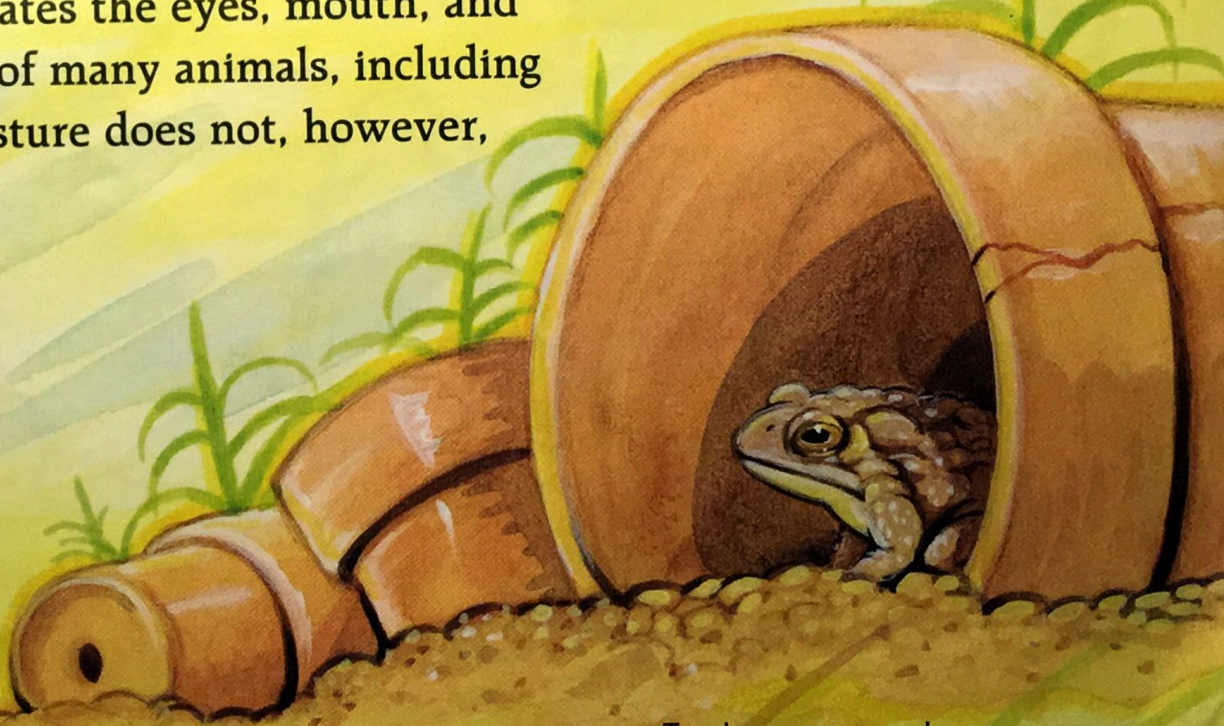
Frogs are slender in shape. Toads look fat.





Because of their jumping ability, frogs almost always try to flee from danger. Toads squat down and stay motionless. Many predators eat frogs. Few predators eat toads because when a toad is threatened its skin excretes moisture that irritates the eyes, mouth, and nasal membranes of many animals, including humans. The moisture does not, however, cause warts.

Frogs are mostly found in and around water.



Toads are commonly seen away from water.



Frogs live on every continent except Antarctica. Worldwide, there are more than one thousand species of frogs. Every one can be identified by its color and markings. Here are the most common North American frogs and their usual environments.

All of the frogs on these two pages are shown at normal adult size.



← chorus frog  
marshes, swamps



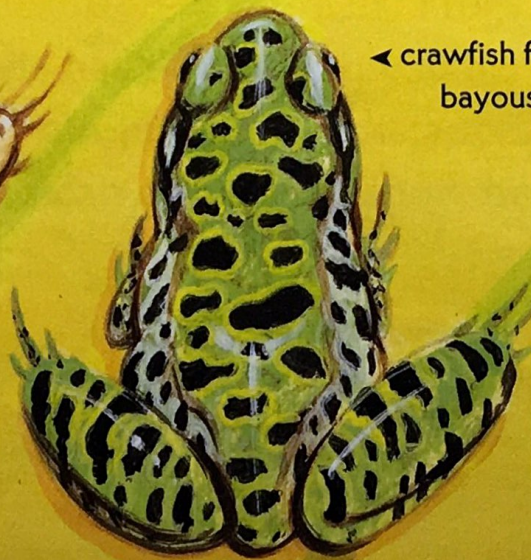
← pickerel frog  
swamps, bogs,  
small streams



wood frog ▶  
moist woods,  
near brooks



carpenter frog ▶  
sphagnum bogs  
(sphagnum is a  
kind of moss)



← crawfish frog  
bayous, riverbanks





◀ western and eastern leopard frogs  
meadows, lawns, lakeshores

bullfrog ▶  
rivers, lakes,  
ponds, marshes,  
desert oases

bronze frog ▶  
southern  
swamps



◀ green frog  
springs, creeks,  
ponds, lakes





Here are some  
North American  
tree frogs.



spring  
peeper



gray tree frog



canyon tree  
frog



The Pine  
Barrens tree  
frog is found  
only in a wild area  
of New Jersey known  
as the Pine Barrens.

This spring peeper is shown actual size.

Tree frogs are small, slender frogs with large, sticky toe pads for climbing on branches and leaves. Because of their small size and plant-climbing lifestyle, tree frogs are much harder to spot than other frogs. Some, like the spring peeper tree frogs, are so small that you cannot find them even when you follow the sound of their call!

Tree frogs can quickly change their colors to blend with their surroundings. Different species are usually identified by markings. The pattern of a frog's markings never changes.



barking tree frog




There are more tree frogs in Central and South America than in any other place on Earth. Tree frogs living in tropical places are more brilliant in color and have bolder markings than tree frogs living anywhere else.


The spectacularly colorful tree frogs known as poison frogs excrete a poisonous fluid through their skin. Their colors and markings serve as warnings to predators: **DO NOT EAT!**



red-eyed tree frog




green-and-black  
poison frog



red-backed  
poison frog



golden palm tree frog



dyeing poison frog  
(dyeing is the species  
name)



A frog's squatting position, with all limbs tucked in, conserves moisture.



topside view of a typical frog

snout and nostrils

eyeballs

eardrums

folds of skin

dorsolateral ridges

sacral hump

leg muscles

rump

A frog's body is mostly skin and muscle on a small skeleton. A frog's most powerful muscles are its leg muscles and the muscle that rapidly thrusts its tongue out to snap up insects.

Frogs absorb moisture through their skin. The folds of skin around a frog's limbs help retain the moisture.



The base of a frog's tongue is attached at the front of its mouth. A powerful muscle flips the tongue forward.

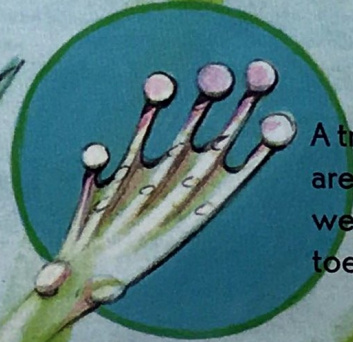


This is what a frog looks like underneath.



Because a frog's skeleton has no rib cage, its internal organs are not protected and can become damaged if squeezed too tightly. When holding a frog, always grip it across its bony back. When a frog leaps, it always touches down on its hands. Its ribless breast and soft belly help to cushion the landing.

A frog's hind feet are webbed between the toes.



A tree frog's hind feet are only slightly webbed between the toes.

When swimming, frogs use their large, webbed hind feet to move them through the water . . .



. . . and their hands to push away obstacles.