For Creative Minds

The For Creative Minds educational section may be photocopied or printed from our website by the owner of this book for educational, non-commercial uses. Cross-curricular teaching activities, interactive quizzes, and more are available online. Go to www.ArbordalePublishing.com and click on the book's cover to explore all the links.

Painted Turtles

Tudley is a painted turtle. All turtles are reptiles. Reptiles have scaly skin, breathe air, and usually lay eggs. When a reptile hatches, it looks like a miniature version of the adult who laid the egg.

Reptiles are "cold-blooded," which means their bodies are warmed or chilled by the air or water around them. Painted turtles love to bask in the sun to get warm. Sometimes they lie with their arms and legs spread out (almost as if they are trying to fly). It takes them a while to warm up.

The shell offers a turtle protection, and a painted turtle can tuck its head, legs, and tail inside of it. Some turtles, like the box turtle, can completely close its shell. A sea turtle cannot pull in its head or flippers at all.

Ruby-throated Hummingbirds

There are 21 different kinds of hummingbirds in the United States. The bird in this story is a Ruby-throated hummingbird, the only hummingbird found in the northeastern United States. Males have shiny red feathers on their throats. They flash the bright colors to attract females. Their nests are often built near or over water and are made from spider webs, thistle, and dandelion down with the outside covered in lichen. Hummingbirds feed on nectar from flowers. They sip the sweet juice with a long tongue.

If you would like to see them up close, you can buy a hummingbird feeder. Hang the feeder near a window (so you can watch from inside). Fill the feeder with sugar water.

Here's how you make it: with the help of an adult mix 1 part sugar and 4 parts water. Boil the water and then mix in the sugar. Let it cool. This can be stored for up to two weeks in your refrigerator. Feeders should be cleaned about every 3 days during warm weather to prevent spoiling of the sugar water.









Fireflies

Fireflies are not flies, but beetles. They are also called "lightning bugs." Both names call attention to the fact that they glow. Not only do most adults blink with a bright, yellowgreen light, but the larvae and eggs can glow as well. Turn off the outdoor lights on a warm summer night and watch their show. You will notice some blinking in the air and some on the ground. The ones in the air are usually males who are trying to get the females to notice them. The females stay on the ground and flash their lights when they see a male they like. The male sees her signal and flies down to her.

Leopard Frogs

Leopard frogs are amphibians. The word amphibian means "two lives." One part of that animal's life is spent in the water. The other part is spent on land. When an animal changes form as it grows, it is called metamorphosis.

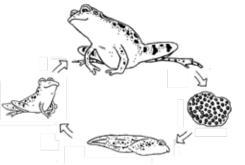
Frogs begin as eggs. The eggs hatch into tadpoles, or pollywogs. Tadpoles breathe under water through gills. They eat algae, dead plants, and animals. Back legs appear in time. Over the next few weeks the front legs appear. The tadpole grows larger and looks more and more like a frog. The tail slowly gets absorbed into the body, helping to feed the young amphibian while it is changing from a water-breathing animal to an air-breathing animal.

When the new froglet leaves the water, it still has a little stump of a tail left. It spends a few weeks around the water as it is growing up. If it is a leopard frog, it will then hop off to the nearest grassy meadow but will return to the water to mate and lay eggs.









True Katydids

The katydid in this story is a True Katydid. These insects are related to grasshoppers but they live up in the trees. They look like the leaves they live in and feed upon. This helps to keep them hidden from hungry birds and other animals.

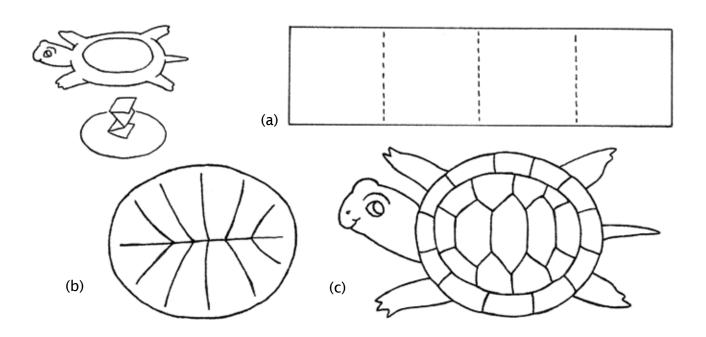
The males call all night long in the summer and fall. The females call, too, but not as much. The sound of a true Katydid's call is what gave all katydids their name. Some say it sounds like, "Katy-did.....katy-did." You can make a scratching sound similar to a Katydid by scraping a fingernail over a comb.





Make a hopping Tudley!

Copy, trace, or download (www.ArbordalePublishing.com) the three figures. Color in the top shell (**carapace**) and the bottom shell (**plastron**). Cut out the figures. Fold the strip of paper to make a spring. Tape or glue one end of the folded paper to the top of Tudley and one end to the bottom. Give his shell a tap and watch him hop!



Food for Thought: Would a turtle really be able to hop? Why or why not? **Creative Sparks**: Draw a picture of or write a story about an animal that borrows other animals' behaviors or adaptations.