

For Creative Minds

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Match the Bat Adaptations

Match the bat's adaptations to the letters on the picture. Answers are upside down on the bottom of the page.

- 1 Bats' wings are their "hands." Each wing has five digit (finger) bones, just like our hands. Bats belong to the order, *Chiroptera*, a Latin word that means "hand-wing."
- 2 Bats use their large ears during echolocation. They make clicking noises with their mouth or nose, then listen for the echoes to bounce back. This lets them know where things are.
- 3 Long toes with sharp claws make it possible for bats to hang upside down from their roosts (where they sleep).
- 4 The saying "blind as a bat" is not true! Bats have very good light vision but use echolocation in the dark because it is easier than carrying a flashlight!
- 5 The bat's "thumb" has a claw at the end for climbing and holding food.

Bats are not birds—they are mammals like us. They are warm-blooded, have fur, give birth to live babies, and produce milk to feed them. Bats are the only mammals that fly.

Answers: 1D, 2C, 3E, 4B, 5A

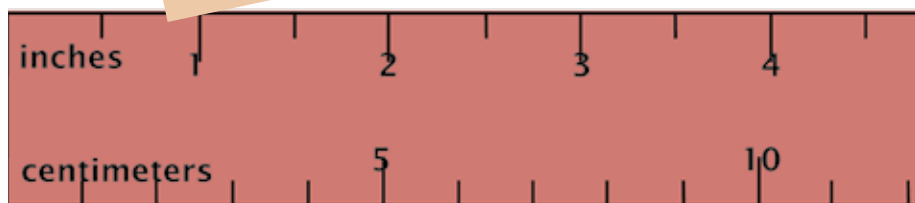


Bats can get rabies just like any mammal, but it's rare. Never touch any animal you do not personally know.

Some bats eat fruit and seeds. Bananas, cashews, and saguaro cactus are some of the plants that rely on bats for seed dispersal or pollination.

Most bats (including red bats) eat insects. A single little brown bat (*Myotis lucifugus*) can eat 600 mosquitoes in an hour!

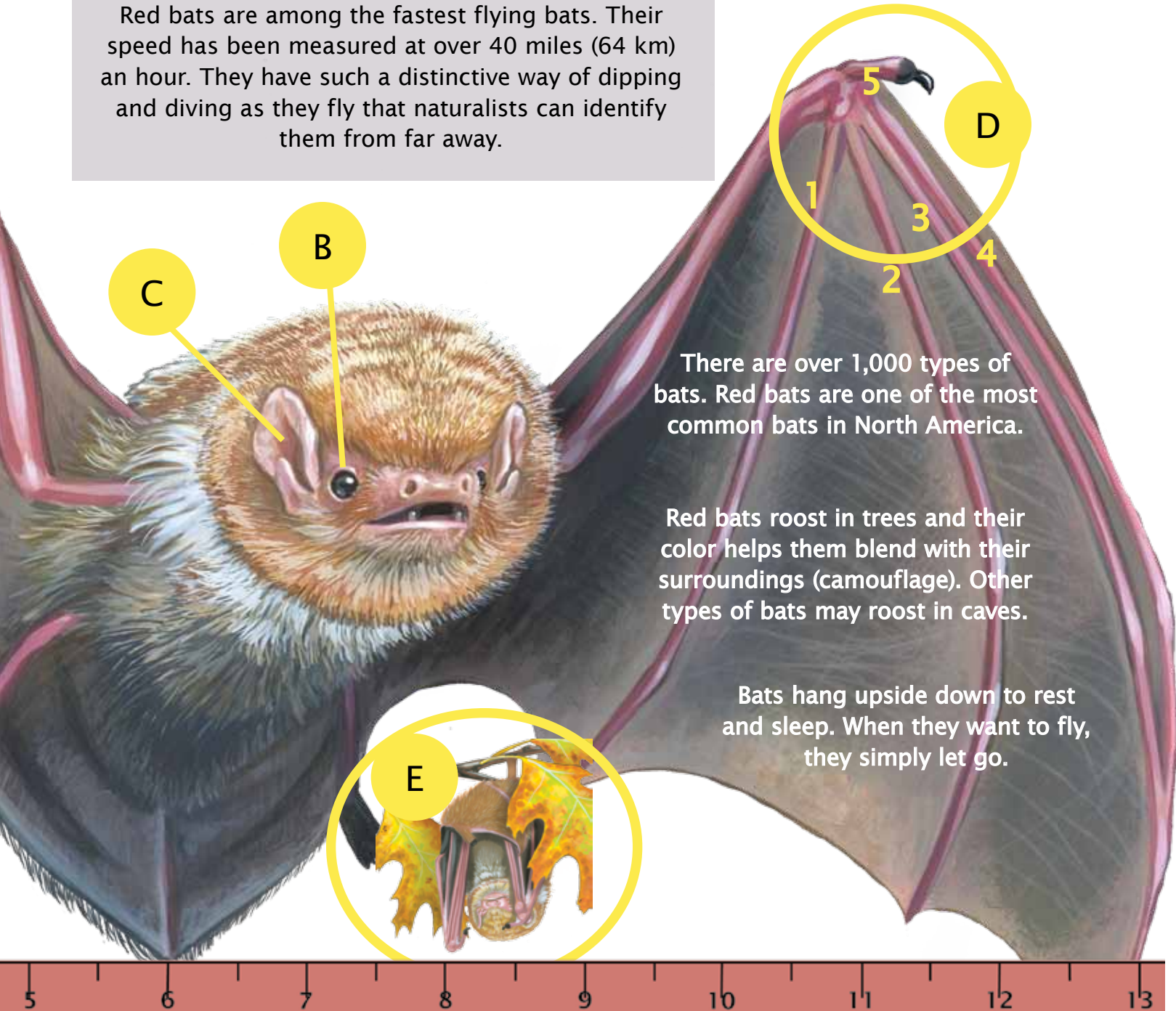
Except for the polar regions and isolated islands, bats live all over the world.



There are two types of red bats: Eastern Red Bats (*Lasiurus borealis*) and Western Red Bats (*Lasiurus blossevillii*).

Red bats are solitary creatures. Except for females raising their young, these bats live alone.

Red bats are among the fastest flying bats. Their speed has been measured at over 40 miles (64 km) an hour. They have such a distinctive way of dipping and diving as they fly that naturalists can identify them from far away.



There are over 1,000 types of bats. Red bats are one of the most common bats in North America.

Red bats roost in trees and their color helps them blend with their surroundings (camouflage). Other types of bats may roost in caves.

Bats hang upside down to rest and sleep. When they want to fly, they simply let go.

Red bats are tiny! They grow to be 4 or 5" (10-12 cm) with a 13" (33 cm) wingspan.

15

20

25

30

How Animals Deal with Seasonal Changes

Animals survive cold-weather winter in one of three ways: they adapt, migrate, or hibernate. How will each of the animals in the book spend their winter?

ADAPT: Animals either store food, as squirrels do, or eat the less tasty food that's available in winter and grow thicker coats that help them stay warm.

MIGRATE: Animals travel to a warmer place where their usual food supply is available. They return each spring when the earth warms and there is once again plenty to eat.

HIBERNATE: Animals stay put, their body temperature drops, and their breathing slows. The fat they have stored in their body keeps them alive through the winter.



Animals are not to scale.

Red Bats and Seasonal Changes

Red bats may migrate, hibernate, or do both. Some fly south and remain active through the winter. Red bats have been seen traveling in migratory waves along with small birds.

Bats are one of the few species that are “true hibernators.” Once they conk out for the winter, they rouse themselves only occasionally to “answer calls of nature” (potty time!), to get a drink of water, and to snack lightly if they can find insects nearby. Some red bats, even in relatively cold climates, stay put. They wrap up in their furry tails and hibernate under leaf piles, fallen logs, or in hollow trees.

Bat Life Cycle Sequencing Activity

Put the red bat life-cycle events in order to spell the scrambled word.

A

Pups learn to fly when they are only three or four weeks old.

B

Pups cling to their mothers. When the mother leaves to hunt at night, she may carry a pup or it may hang from a small tree branch while she is gone.

D

Most bat pups are born naked or with minor peach fuzz.

E

Most bats give birth to only one pup per year, but red bats can have as many as four.

R

Female red bats become pregnant in the spring. The mother bat is pregnant for approximately three months.

T

Pups are weaned when they are five or six weeks old at which point they leave their mother.