# YOUNG EXPL@RERS

## FIREFLIES

When it comes to cool insects, it's hard to beat fireflies. Not only do they light up a dark summer night, but they also send secret messages, trick other fireflies, and can even be poisonous to some predators.

#### **SECRET CODES**

Have you ever flashed a flashlight at a friend to send a message? You were acting like a firefly. These beetles light up a chemical in their lower abdomen (the end part of their body) in a specific blinking pattern to "talk" with other fireflies.

They also blink to attract a mate. Here's how: The male flies around flashing a pattern. Down below on the ground, a female copies that pattern. The male sees his own pattern and flies straight to the female. If the two are the same species, they may mate. But sometimes the female attracts a male of a different species on purpose—to eat him!

#### DON'T EAT ME

Like monarch butterflies, most fireflies are toxic to insect-eating predators, who learn very quickly to avoid the blinking fireflies.

#### DANGER ZONE

Fireflies face other threats beyond being eaten. The use of lawn chemicals is very harmful, especially to just-hatched fireflies, which live in the soil. Too many nighttime lights may also make it hard for fireflies to pick out signals from other fireflies.





### OUTDOOR ACTIVITIES

#### LIGHTNING IN A BOTTLE

Grab a jar with no lid and head to a meadow with no lights just as the sun sets. When you see blinking, see if you can safely catch a firefly in your jar. Place your hand on top, get a good look, and then let it go!

#### **BE A FIREFLY**

Grab an even number of friends with flashlights and form two-person teams. Each team should come up with a blinking code. Head outside on a dark night (with an adult's permission, of course), spread out, and start flashing. See if each team member can find his or her "mate" by the signals.

> You may call me a lightning bug, but I am not a true bug. True bugs have sucking mouthparts but, like all beetles, my mouthparts crush or tear food instead.

