

Virtual Firefly Lesson: Catching Fireflies

In this lesson, participants will learn how to catch fireflies and do no harm.

Maybe the only thing more magical than watching fireflies on a warm summer evening is catching some to observe up close. However, catching can be harmful to fireflies if you're not careful. There are safe ways to capture them without hurting them or getting in the way of their light-coded mating calls.

What you will need

- Fine mesh net for catching fireflies
- Bug cage with moist paper towel and some leaves or
- Clear glass jar with a moist towel and some leaves
- Piece of cloth and rubber band to cover jar



Catch Some Fireflies

Male and female fireflies communicate mating interest by flashing light patterns at one another. If you want to catch a firefly, you need to follow these careful steps. First, you need to go outside at dusk and wait for the males to lift off from the grass. Turn off your exterior house lights as these may confuse fireflies and make them less likely to respond to light signals from other fireflies. Don't use flashlights for the same reason.



Stay still and watch where the fireflies are flying. It is best to use a net when catching these beetles. Follow one and when you get close enough, use your net to catch it. Be careful to aim the net for careful capture and not for swatting the insect to the ground. It is often more effective to work in pairs when catching fireflies, with one person to hold the jar and another to use the net. Be sure to be gentle when catching them; fireflies are fragile. If you don't have a net, you can surround the flying firefly with two hands like a cage and catch it in between your hands. This must be done with great care to prevent squishing the firefly.

Gently transfer the insect to your jar or bug cage. Once you have a jar or critter keeper with some fireflies, observe them to your hearts content, but let them go the same night. Releasing at night is important because that's when they're most active and able to avoid predators. If you keep them for longer, the fireflies are likely to die.

In the olden days, children used to crush the beetles in their fingers to make them glow in the dark. While this seemed cool in days when fireflies were more plentiful, today's firefly populations are dwindling, so **each one should be cherished**. Catch fireflies gently, treat them with the awe they deserve, and release them back into the night again. Release them unharmed as soon as possible so they can continue to make their light magic for all of us.



Test your knowledge:

- Why do fireflies flash?
- What's the best method for catching fireflies?
- Why is it best to release the firefly the same night that you catch it?



Home Activities

- Get a magnifying glass and observe your captured fireflies up close before release. Draw the firefly in detail.
- Before catching, try to identify the beetle's flash pattern so you can identify the species. [Here is an article about flash patterns to identify fireflies.](#)
- Catch fireflies for several days in a row. Record the time and weather when you see the first firefly flash. Is there any difference in when they start flashing based on time or weather? Do they flash in the jar?
- Record your observations in a journal and repeat every summer for a lifetime of memories.

Answer Key to Test Your Knowledge

Test your knowledge:

- Why do fireflies flash?
To communicate with potential mates.
- What's the best method for catching fireflies?
Catch and release within a short amount of time, carefully using a large net, and gently handling.
- Why is it best to release the firefly the same night that you catch it?
They will die if you don't release them the same night, and it is important that we protect as many fireflies as we can so that they can safely reproduce and increase their population.

Additional Resources

- [Firefly Resources](#)
- [Catching Firefly Instructions](#)
- [Catching Fireflies Instructions](#)
- [Talk Like A Firefly; Science Friday](#)
- [Catching fireflies](#)
- [Science Friday video](#)

Photos courtesy of Google Images.