



Dynamic Indicators of Basic Early Literacy Skills
8th Edition

Maze Benchmark

Grade 7

Student Materials

Name: _____

Date: _____

Practice Passage

Tom goes to a school far from his house. Every morning, he
takes a school _____ to go to school. In the _____, he also
takes a bus home.



Correct: _____

Incorrect: _____

Adjusted Score: _____

Fireflies

Do fireflies live near you? If so, you would see them twilight in the summer. Fireflies are type of winged beetle that lights like a small lamp. Their abdomens up to warn predators, attract prey, attract mates. There are around 2,000 of fireflies. However, fireflies all over world are endangered and their populations falling. It is now increasingly rare see them on summer nights.

Fireflies in temperate and tropical climates in , wooded areas. So you are more to see them if you live the countryside or in a wooded than in a city. They hibernate winter by burrowing underground or under bark of trees. In the spring, emerge and begin feeding. They like

Keep going 

live near streams or ponds where young will have lots of sources food.

Their diets are varied. Some eat slugs and snails while some on just plant nectar.

The ability light up is enabled by a process called bioluminescence. The enzyme luciferase on a compound called luciferin in presence of oxygen and other chemical . This is what produces light in firefly's abdomen. Fireflies flash these lights patterns to attract mates or prey.

some areas of the world, swarms fireflies have been observed to flash lights in unison. For example, the Thailand synchronizes itself perfectly to other fireflies that large groups of fireflies flash lights on and off at the

Keep going 

time. If you stand on a _____ in Southeast Asia at dusk, you _____ see these fireflies
light up an _____ mangrove forest by switching on their _____ at the same instant
then turning _____ off at the same instant. People _____ seen these fireflies say that
the _____ is beautiful and uncanny. Scientists are _____ unsure why they engage
in this _____. But they have figured out how _____ fireflies do it, if not why.

_____, the enzyme that is key to _____ firefly's light, has been
manufactured through _____ engineering in labs. This synthetic enzyme _____ then
be inserted into cells in _____ to observe cell processes like the _____ of tumors.
The cells will express _____ under certain conditions and scientists can _____ in
real-time how cells change and _____.

Keep going 

These processes might also have applications in the production of sustainable light sources. Synthetic material could be engineered to contain bioluminescent bacteria. Synthetic glowing trees might replace streetlamps on city streets!

Unfortunately, firefly populations seem to be dwindling across the globe. Since they require dark, wet, and wooded areas to reproduce and eat, deforestation in many areas is leading to their decline.

