

Storytime Science Kit #2: Things that Glow

Let's discover things that glow! When you shine your UV (or black light) on certain things (like a message written with a highlighter), they light up. Other things keep glowing, even when the lights are turned off, like your glow-in-the-dark stars. The glow sticks light up because of special chemicals that mix inside. And, Mrs. Bailey is going to read you a book about animals who glow!

Here's the big words for the different types of glowing things in your kit:

- **Fluorescence:** ultraviolet (UV) light causes an object to glow (*your highlighter*).
- **Phosphorescence:** keeps glowing, even when light is turned off (*glow-in-the-dark stars*).
- **Chemiluminescence:** a chemical reaction creates a glow (*your glow stick*).
- **Bioluminescence:** the light inside a living creature (*the creatures in the "Glow" book*).

Listen to the read-aloud at www.evertreads.org/storytimescience

Go to the Storytime Science page and click on the link for Mrs. Bailey's read-aloud, *Glow: Animals with Their Own Nightlights*, by W.H. Beck.

Instructions for making a black light secret message (idea from Steve Spangler Science):



1. Using the highlighter, draw a design or write a message on the circle.
2. Decorate the outside of the cup with the glow-in-the-dark stars, or save to put on your bedroom ceiling (check with a parent first).
3. Using the labels as "tape", attach the paper circle onto the opening of the cup, with the design facing outward. Place the UV light into the hole that is punched on the end of the cup.
4. In a dark room, turn it on by pressing (and holding) the flashlight, or by moving the switch. Watch your message glow!
5. Light up your glow sticks by bending them (wait for direction from your teacher, as she may want you to do this later or at home).
Optional: put one stick in a cup of hot water, and one into a cup of cold water. How does water temperature affect the glow?
6. What happens if you shine your UV flashlight on your glow-in-the-dark stars?
7. For more information and activities, check out the links at the Storytime Science page: www.evertreads.org/storytimescience



Storytime Science Kits are sponsored by Cargill, and packaged by Evert Reads volunteers.