

## Make Bioluminescent Water



With items you have at home, make your own bioluminescent water.

Bioluminescence is light created by a chemical reaction inside the body of a living organism. Many ocean animals, including comb jellies & sea slugs, have this ability. For more information about these amazing animals, scan the QR code to watch our BIMS Bites Kids “Bioluminescence” episode on Youtube.



### Materials

- Water
- 1 non-toxic yellow highlighter
- Glass jar or other clear container
- Flashlight
- Tongs

*Optional: Pliers*

### Directions

- 1.Fill your container up with water.
- 2.With adult supervision, remove the end cap of the highlighter and pull out the ink soaked felt that is inside. The end cap may be screwed on tight, so use pliers if necessary.
- 3.Using tongs, put the highlighter felt in the container and squeeze it until the water is stained with the highlighter ink. If you don't use tongs, you might have highlighter ink all over your fingers.
- 4.Remove the highlighter felt from the container.
- 5.Turn off the lights.
- 6.Place a flashlight under the jar and watch the water glow! Try this activity with other highlighter colors!

### Discussion Questions

- Name an animal who has the bioluminescent ability.
- Name an animal that uses bioluminescence.
- Why would an animal living in the water need to glow?
- Would this be helpful to those animals living near sunlight at the top of the water or those deep in the depths of the ocean? Why?
- Can you think of any bioluminescent animals that do not live in water? Give an example.
  - One bioluminescent animal that does not live in the water is a firefly. How do fireflies use their bioluminescence?