

Name _____ Per _____

PBS NOVA: "Creatures of Light"

1. What is bioluminescence?
2. What percentage of organisms in the deep ocean are bioluminescent?
3. What did Edie use the big screen on her submersible for?
4. Describe how each of the following organisms uses its bioluminescence:
 - dinoflagellates-
 - shrimp-
 - squids/sharks-
 - ostracods-
 - glow worms-
 - millipedes-
 - fireflies-
5. How many different "firefly" species are there?

6. How does bioluminescence in fireflies (and other organisms) happen?
7. What does biofluorescence mean?
8. What color of light triggers the fluorescence?
9. What was the first fluorescent fish discovered?
10. How has GFP (green fluorescent protein) been used to help medical science?
11. What color of fluorescent protein is needed for seeing nerve cells in the brain?
12. How many different species have scientists discovered fluorescence in?
13. How many neurons in the human brain?