

Cool Light Worksheet

Discussion Questions

1. Describe what happened in this demonstration.
2. Oxidation is necessary for luminol to luminesce. The chemicals used in this experiment were 5% sodium hydroxide, 3% hydrogen peroxide, and potassium ferricyanide. Which of these do you think served as the oxidizing agent?
3. In chemiluminescence, a molecule in an “excited” state (i.e. electrons are at a high energy level) is produced. The electrons in the molecule then must return to their stable state (i.e. lower energy level). Explain how this is linked to the production of light.
4. Define chemiluminescence. Give an example of chemiluminescence found in nature.