FLINN SCIENTIFIC

Name_____

# Fountain of Light Worksheet

## Discussion Questions

1. Describe what happened in this demonstration.

2. Oxidation is necessary for luminol and pyragallol, ingredients in the Fountain of Light solution, to luminesce. Both chemicals were oxidized by the same agent. The other chemicals used in this experiment were 37% formaldehyde, 30% hydrogen peroxide, and potassium carbonate. Which of these do you think served as the oxidizing agent?

3. What caused the frothing in the beaker after the hydrogen peroxide was added?

4. 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.