

**Viewing Kinetics with Glowsticks**

**Chemicals available:**

Glow sticks

**Materials for demonstration provided in kit:**

Four beakers

Two bottles for water carrying

**Materials used for multiple demos to add in**:

use dewar for liquid N2 if desired,

hot plate for water if desired.

**Materials you must grab immediately before:**

Hot water,

ice/cold water,

if desired liquid nitrogen (isn’t required but students LOVE liquid nitrogen).

**Procedure for in class demo**:

***Notes:*** Light sticks need to acclimate to water for about 2-3 minutes before cracking them to see the difference. Be sure to either set up ahead of time, or discuss the experiment in between initial set up and experiment. If you are going to do this in the middle of the class you’ll likely want to keep the water heated on a hot plate unless you have a thermos.

***Notes on topics***: Though this is a kinetics demonstration, it’s a good chance to review atomic spectroscopy too. Slides for both are included in the powerpoint document.

Set up 3-4 beakers of different temperature water or liquid N2.

Allow glow stick to equilibrate in each temperature beaker.

**Waste:**

Find a fun and educational way to dispose of liquid N2 in front of the class. Making clouds, letting the vapor fall down stairs. Ect…..

Dump water down the drain.

Trash glow sticks.