

Ghost in the Water
The First League of Scientists Mystery

Ghost in the Water is a good blend of fiction and problem solving for your students. The mystery is engaging and will draw your students into the plot. While the investigations in the story can be hazardous and should not be tried there are many ways that investigations can give students insight into how the science in the story worked. The book also comes with a teacher's guide with cross-curricular activities and investigations, including the use of CER (Claim, Evidence, and Reasoning).

In the book, Fluorescein was used in the swimming pool along with dry ice to create the illusion of a green ghost. The League learned that fluorescein is a dye that glows under a black light or sunlight.

Try the inquiry starter on the back with your class to learn more about fluorescent materials. Students should record their observations and questions as they do the investigation. Additional investigations should be sparked by the student's questions.

Glowing Inquiry

Task Card

You will need:

- 2 glow sticks of the same color
- 1 8oz tall clear plastic cup of hot water (from tap)
- 1 8oz tall clear plastic cup of ice water (with salt added if possible)
- Stopwatch

1. Activate the glow sticks and observe their brightness.
2. At the same time, place one stick in the hot water and one stick in the cold water.
3. Check the sticks every 3 minutes for a total of 9 minutes.
4. Record any changes you notice in the brightness of the glow sticks.