

What Do You Think Now?

At the beginning of this activity you were asked:

- What do you think will happen to a laser beam that is projected through samples of tap, distilled, and natural water? Explain.

You began this activity by making an observation of a laser beam being passed through each water sample. Explain your observations using terms you learned in this activity.

Chem Essential Questions

What does it mean?

Chemistry explains a macroscopic phenomenon (what you observe) with a description of what happens at the nanoscopic level (atoms and molecules) using symbolic structures as a way to communicate. Complete the chart below in your *Active Chemistry* log.

MACRO	NANO	SYMBOLIC
Describe the Tyndall Effect that is observed when laser light is projected through a natural water sample.	Sketch a diagram showing how a laser beam behaves when it strikes a colloidal particle.	What affect would a solution of sodium oxalate have on a filtration system that contained a mixture of alum and quicklime? Discuss this using the equation in the Chem Talk section.

How do you know?

Making specific reference to your data and using terms from the *Chem Talk* section, explain how you know the batch method was more effective than the flow method for water purification.

Why do you believe?

Why do you know that the batch method must be used in your water purification? Explain.

Why should you care?

What is the importance of the batch method for your *Chapter Challenge*?