

Micelles to the Rescue: How Soap Transports Debris

Materials List

Day One – Soap Making Activity

- Crisco – 20 g
- NaOH (aq) – 6M, 10 mL
- Beaker – 100 mL
- Styrofoam cup
- Graduated cylinder – 25 mL
- Glass stirring rod
- Hot plate
- Two thermometers
- Universal pH indicator paper
- Dropper

Day Two – Hook Activity and Lesson

- Beaker – 2000 mL (8)
- Beaker – 100 mL (one per group)
- Calcium Chloride, CaCl₂, 100 grams
- Black Pepper, ground
- Generic dish soap
- Olive Oil mixed with a little dirt, 100 mL
- Disposable cooking pans (4)
- Tap water

Day Three – Experiment with Soap

- Olive Oil, 1 mL
- Distilled water, 100 mL
- Homemade soap
- Commercial soap
- Test tubes (7)
- Test tube stoppers (7)
- China Marker
- Test tube rack
- Hot plate
- Cold Bath
- Calcium Chloride, CaCl₂ 0.1 M, 10 mL
- Balance
- Forceps
- pH paper
- Pipet (2)
- Watch glass
- Cotton swab