



## Lesson Logistics

### Swirly Whirly Milk

#### Learning Outcomes

<b>Grades 10-12</b>
From structures to properties

#### Class Organization

Separate the class into groups of four. Each group will perform the activity with their own materials.

#### Notes

Set up the materials necessary for each group. A flat and stable desk is necessary to avoid disruption of the *Swirly Whirly Milk* solution. Make sure the students know not to shake the desk.

Access to a sink is necessary for post-demonstration clean-up. If no sink is available, set up buckets around the classroom where the milk and food colouring can be deposited.

#### Further Exploration

Instead of using food colouring and milk, a similar activity can be done using a cardboard fish cut-out floating in water. When liquid dish soap is added to the water close to the fish's tail, the fish will appear to swim away.

Another experiment that demonstrates the same principles is the needle and soap experiment. Fill a petri dish with water and place a needle on top of the water. If done carefully, the needle should float. Then add a drop of soap to the water. The soap breaks up the surface tension of the water and the needle will sink.