



Activity 4: Milk Rainbow

What effect does soap have on the surface tension of milk?

Resources

- whole milk
- cotton swabs
- a flat, waterproof plate (a glass pie plate works very well)
- four food colourings
- liquid dishwashing soap
- **Milk Rainbow - Cool Science**

https://www.youtube.com/watch?v=Bq1_fVcji4g&feature=youtu.be

Procedure

1. Pour whole milk into the plate to a depth of about half a centimetre, and let the milk settle for a minute.
2. Add three or four drops of one food colouring in the centre of the plate. Add three to four drops of each of the second, third, and then fourth colour close together, but separate, in the centre of the plate of milk.
3. Dip a cotton swab (Q-Tip) in the dish soap. Place the dipped cotton swab in the milk but in the middle of the four food colours.
4. Observe the movement of the colours. Move the swab to various areas of the plate to begin more reactions.