

Emulsions to Keep Clean



Reflect on what you already know about cleaning products, read a popular science piece for more detail, and see how emulsion chemistry really is everywhere!

Review & Reflection

1. For each example below, what kinds of molecules are you trying to clean away?

a. Dishes

b. Hair

c. Hands

d. Clothes

2. Considering #1, why might you need separate dish soap, hand soap, laundry detergent and shampoo?

3. The verb to shampoo comes from Hindi *chāmpo* (चाँपो [tʃā:po:]), itself derived from the Sanskrit root *chapati* (चपति), which means to press, knead, soothe. How does this relate to the emulsion process? Could these early meanings apply to any of the cleaning categories or just to shampoo?

Learn More: Read at least one of the following

- Dish soap: <https://thewirecutter.com/reviews/best-dish-soap/#surfactants-and-a-potentially-hazardous-byproduct>
- Hair shampoo: <https://www.hoddereducation.co.uk/media/Documents/Magazines/Sample%20Articles/CR-V22.pdf>
- Hand soap: <https://labmuffin.com/make-your-own-soap-part-1-the-chemistry-behind-soap-making/>



There is also a video summarizing many of the main topics covered in this case study:

<https://science360.gov/obj/tkn-video/81074969-11e0-4a2e-b674-8fc8886fd9c3>

