

## Student Lab Guide for Lesson #3

### Comparison of Emulsions

#### Materials

- 25 mL of several emulsion samples
- 100 mL beaker or similar container
- Hot plate or hot water bath
- Insulated gloves or tongs

**Make a Prediction** what will happen when the emulsion is heated:

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#### Conduct an Experiment

1. Obtain a beaker or a similar dish from your teacher.
2. Use a hot plate or a hot water bath to slowly heat your emulsion sample.
3. Make any observations.
4. Repeat with additional samples of different types of foundations.

#### Record your Observations

Emulsion Type	Amount of Time Heated	Observations

#### Analyze the Results

1. Did you observe what you predicted?

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2. If not, how did your observation differ from your predication?

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3. Do your observations leave you with any more questions? Do they enable you to make more predictions? If so, what are they?

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4. What other emulsions are there and would we see similar results with heating?

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### Conclusions

5. Based on your results, do you think that emulsions play an important role in commercial products? What do you think happens to the nanoparticles in the emulsions that contain them? Explain your answer. \_\_\_\_\_

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