



16. Soap Production

OPPOSITION

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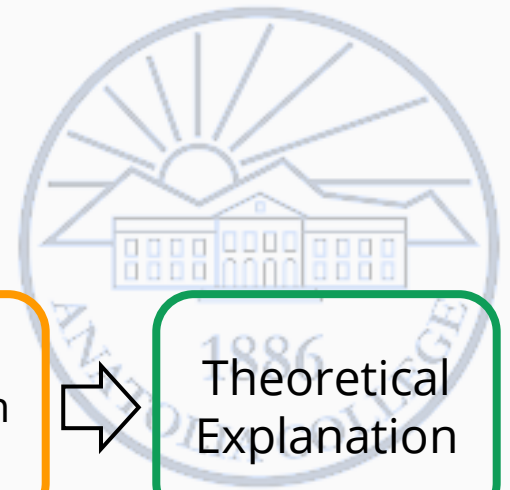


Problem to be investigated

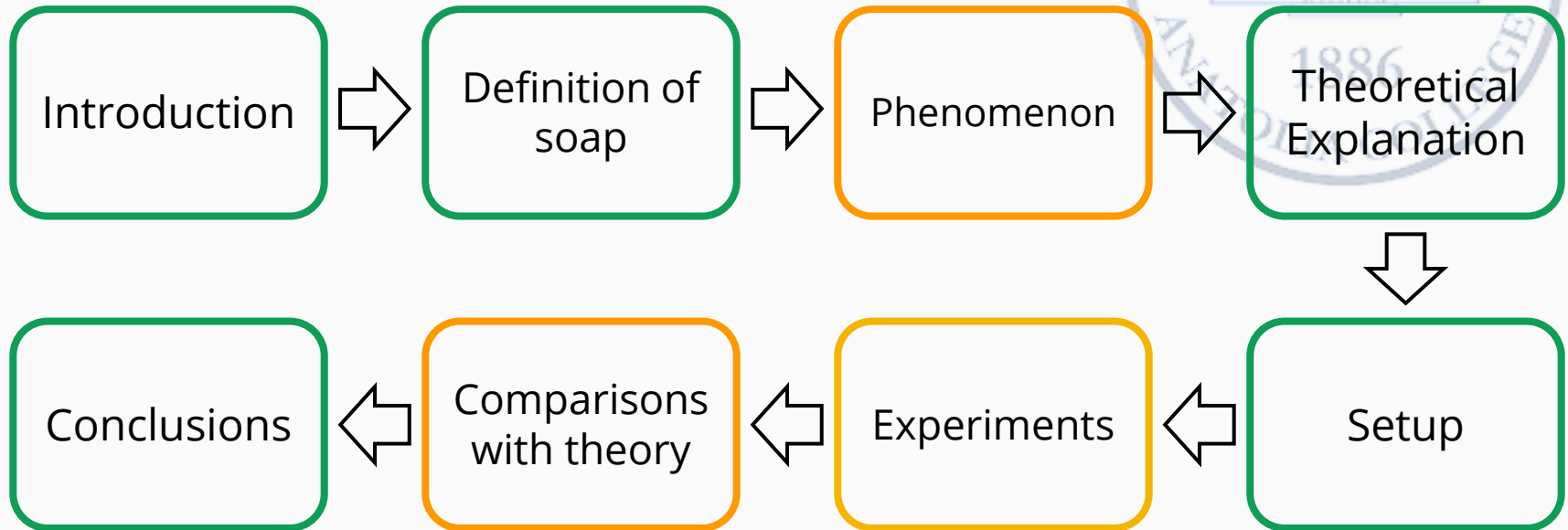
Problem Statement : Vegetable and animal oils and fats are historically used to make soap. Investigate how physical and chemical properties of such soap depend on ingredients and recipes, and propose an interesting problem concerning soap-making from easily accessible ingredients.

Reporter's Statement : Produce soap with natural ingredients by using different vegetable and animal oils and fats that can be found in most private households. Then compare the differences in physical and chemical properties of the produced soaps.





Outline



Well Done



Good



Work on



Theory

- Didn't explain chemical properties
- Didn't explain how soaps work
- + Had the definition of the soap
- + Explained formulas





Experiment



- + Clearly stated hypotheses
- + Had error bars
- + Had photos and graphs
- Didn't explain error bars
- Shaked with hand the solutions (It affects the experimental results)
- Transferred in different pots (may have lose solution)
- Did not examine soap's pH (important parameter)
- Did not have any other additives
- Did not know which method he used



Discussion