

Tuesday, November 6, 2018

- **Warm-up**
 - What flavor is orange candy?
 - What flavor is red candy?
 - What flavor is blue candy?
- **Intro to our experiment**
- **Planning the experiment**
- **Conducting the experiment**

Content Objective: I will utilize the steps in an experiment correctly.

Social Objective: I will participate in our experiment through fulfilling the needed roles.

Language Objective: I will use the correct terms such as treatments, blinding and randomize in the class experiment.

The history – PepsiBlue



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Do teens have a preference for or dislike blue-colored soda?

- **Pepsi blue no longer exists – so what will we compare?**

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Our experiment

1. In taste test experiments like the one we are designing, it is usual to randomize the order in which the subjects taste the two drinks. That is, some subjects should taste the two drinks. A random mechanism should be used to determine the order for each subject. Why is it important to randomize the order?
2. What would be a good way to determine the order?

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Experiment Cont.

3. What are the two treatments for this experiment?
4. Why is it not possible in this experiment to “blind” the subjects with respect to which experimental group they are in?
5. How can we select the subjects for this experiment and how many will participate?
6. To what group, if any, will we be able to generalize the results of our experiment? Why?

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#8 Make a clear plan

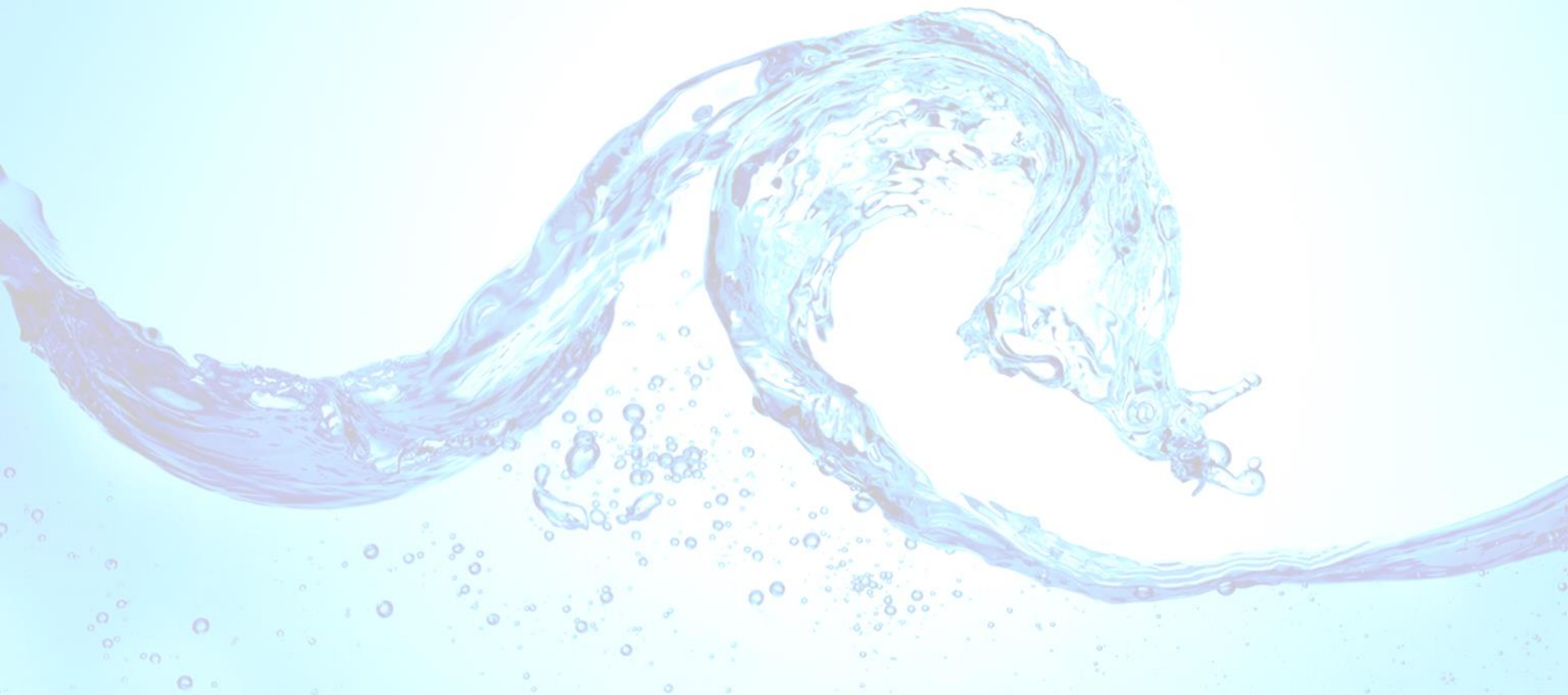
Write your design with enough detail that someone who has not been part of your design team could read the summary and be able to carry out the experiment as you intended. Make sure you address ethical issues of using human subjects.

Check against the four principles of experimental design.

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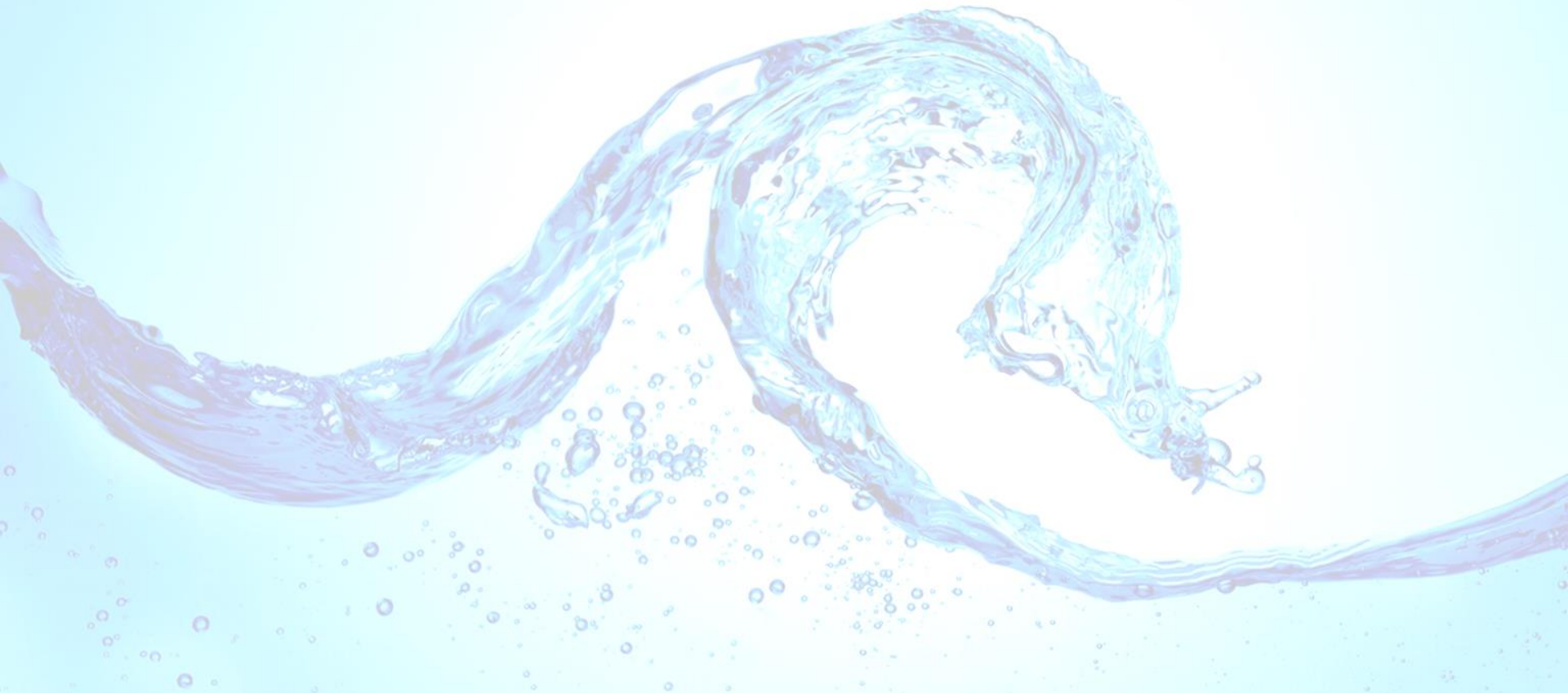


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Gather Data



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Make Conclusions

9. Create a graphical display that allows us to compare the preferences for the two experimental groups.
10. Based on your display, do you think there is a difference in preference for the two groups? Do you think the order made a difference in preference?
11. Based on the data, do you think there is a preference for one of the two drinks over the other?

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Final Product

- **Write a report that makes recommendations to a soft drink company that is considering introducing a blue soft drink that will be marketed to teens. Include appropriate data and graphs to support your recommendations.**

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