

Concentrated vs. Dilute

Purpose:

- Distinguish between a dilute and a concentrated solution.
- Use technology to graph data collected in an experiment.
- Make conclusions based on data collected in an experiment.

Method: Make three solutions of Kool-Aid with different concentrations. Compare the solutions to a value scale to rank the concentration of the Kool-Aid, and then taste them to decide which is the correct concentration.

Materials:

Kool-Aid Powder straw (to stir solutions)
Water Balance
Plastic cups

Procedure:

1. Measure out one spoonful of Kool-Aid and add to a full cup of water.
2. Use your straw to stir and mix the solution well.
3. Use the value scale provided to rank the concentration of the solution.
4. Use your straw to taste the Kool-Aid. Record your observations in the data table.
5. Repeat steps 1–4 until you have reached a concentration that tastes correct. Be sure to record your observations each time you add more Kool-aid



# of Teaspoons	Description of Taste	Value Scale rating

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Questions:

1. Which concentration that you tested was closest to the ideal concentration of Kool-Aid? What was wrong with each of the other solutions that you made?

2. How is taste related to concentration? Why are they related in this way?

Internet research.

3. How is molarity related to concentration?

4. Graph your results using your numbers program.