

WRITING A CONCLUSION

Science Fair

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CONCLUSION - HYPOTHESIS

- ◉ After you conduct your experiment and analyze your data you are ready to write your conclusion
 - Start by writing your hypothesis
 - Then tell your audience if you proved or disproved your hypothesis or if your experiment results were inconclusive

EXAMPLE

Hypothesis Statement

- ⦿ Orange Soda and Mentos will make a higher geyser than root beer and Mentos or Diet Coke and Mentos. My hypothesis was incorrect. The results of my experiment show that Diet Coke and Mentos made the highest geyser.

CONCLUSION - SUPPORT

- Support your hypothesis statement by writing about your data
 - Look back at your data
 - Think about how you analyzed your data
 - Write the details about the high data and the low data in order to support your hypothesis statement

EXAMPLE - SUPPORT

- Look back to your table for the details

	Height of	Geyser		
	Trial 1	Trial 2	Trial 3	Mean
Diet Coke	13 ft	14 ft	12 ft	13 ft
Orange	9 ft	11 ft	10 ft	10 ft
Root Beer	11 ft	12 ft	10 ft	11 ft

EXAMPLE - SUPPORT

Use your Data for Support

- The results of my experiment clearly show that Diet Coke produced the highest geyser. Diet Coke and Mentos made a geyser that was 14 feet high. The tallest geyser for the orange soda was only 11 feet. The tallest geyser for the root beer was 12 feet so it made a higher geyser than the orange soda, also.

EXAMPLE - SUPPORT

Use your Data for Support

- Orange soda produced the shortest geyser in my experiment. The highest geyser for orange soda went 11 feet up into the air. The shortest geyser for the Diet Coke was 12 feet, so even the shortest geyser for the Diet Coke went higher than the tallest geyser for the orange soda.

EXAMPLE - SUPPORT 5TH AND 6TH

Use your Data for Support

- Be sure to write about how the means for your manipulated variables compare
 - My data shows that Diet Coke produced a mean geyser height of 13 feet, while the mean height for orange soda was only 10 feet. This is a difference of 3 feet. Looking at the mean data, orange soda, had the shortest geyser overall, and Diet Coke had the highest geyser overall.

CONCLUSION

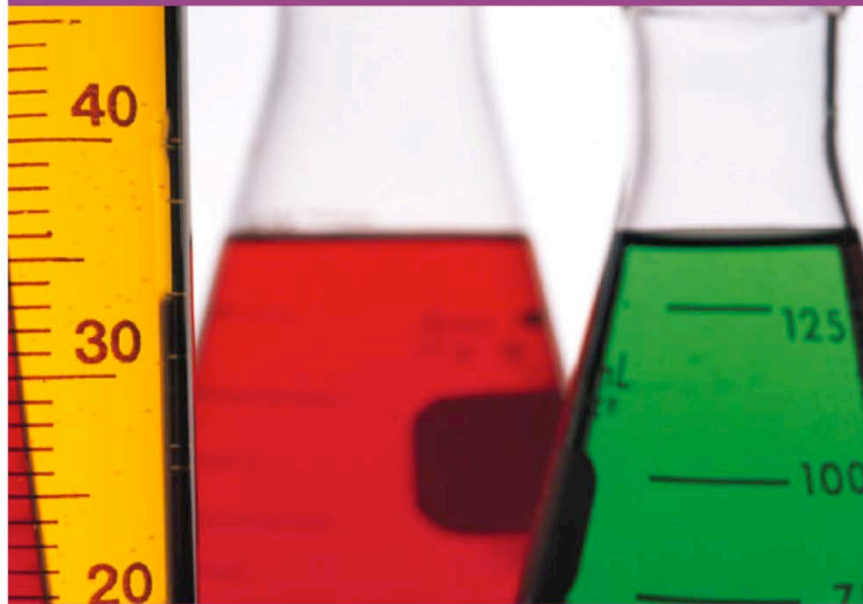
- Finish by writing about something you might want to try next time
- **Examples**
- Since my results showed that Diet Coke makes the highest geysers with Mentos, I would like to test other types of diet sodas to see how they compare with Diet Coke.
- Since my results showed that Diet Coke makes the highest geysers with Mentos, I would like to vary the number of Mentos I mix with the Diet Coke to see what happens to the height of the geyser.

CONCLUSION -INCONCLUSIVE RESULTS

- If your results were inconclusive write about something you might change in your experiment to help you get better results
 - Think of possible reasons why your experiment might not have turned out like you expected.
 - Use those reasons to change your experiment and make it better.

EXAMPLE - INCONCLUSIVE

- My results were inconclusive. Next time I will find a more accurate way to measure the height of the geyser. I will record the geysers on video tape so I can stop the action and get a more accurate measure of the height of the geyser.
- This conclusion shows that the person doing the experiment is a problem solver and willing to try again and get better results



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See you there!