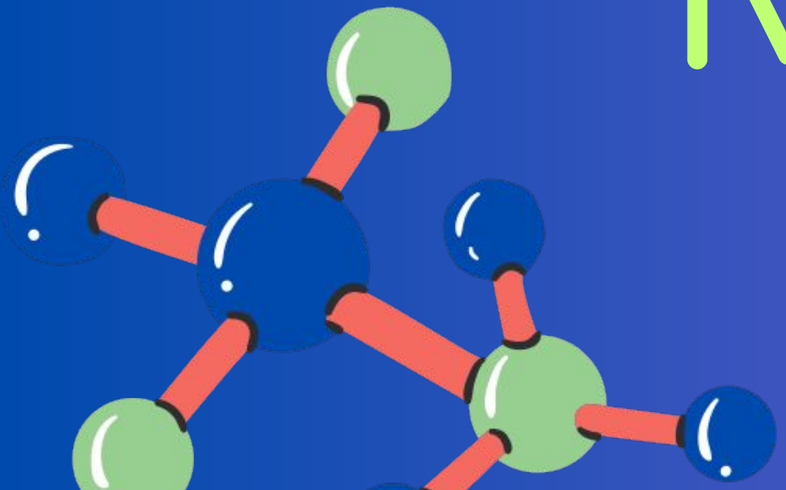
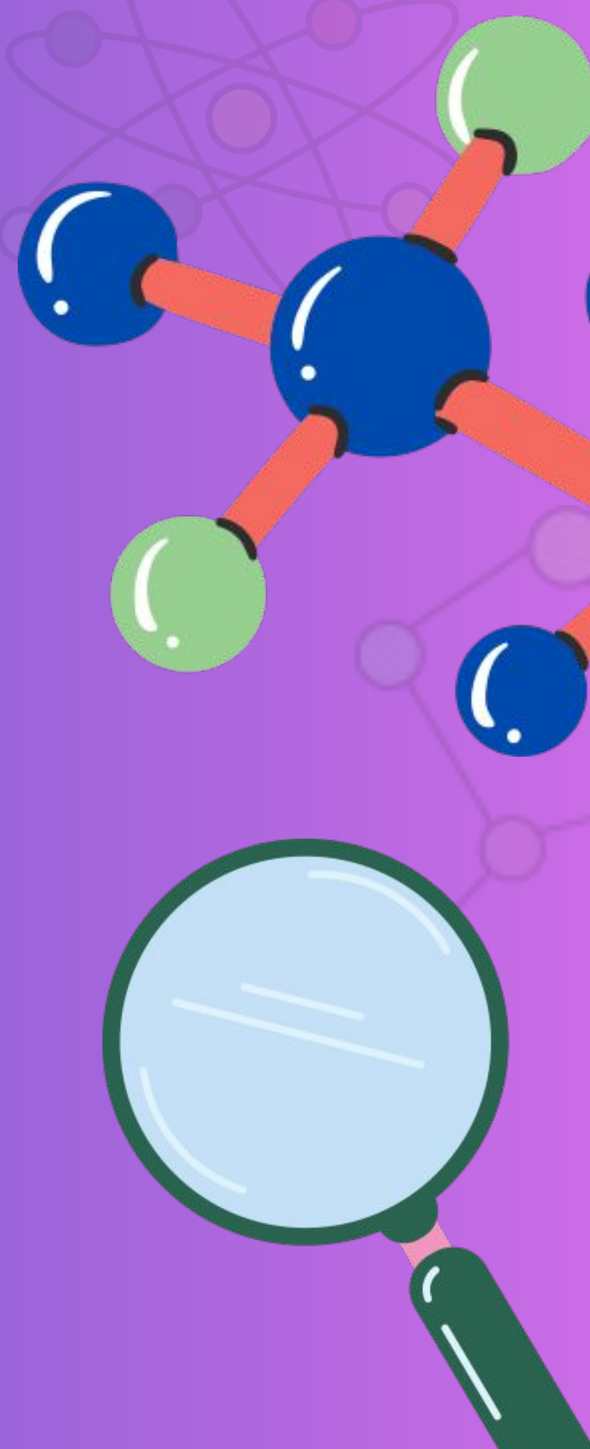
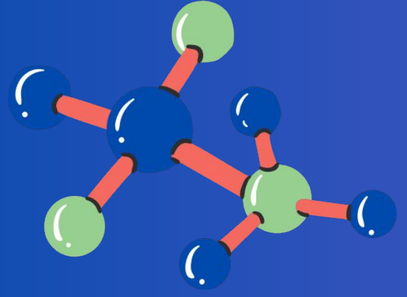
DISSOLVING MYSTERY



ABSTRACT

We made observations on M&M's and then dissolved the candy coating in two different types of water: tap water & sugar water. We made the hypothesis that the coating would dissolve faster in tap water rather than in the sugar water. We performed the experiment by having two plates: one with tap water and the other with sugar water. We placed M&M's in the water at the same time and observed for two minutes. We wrote down our observations, & noticed that the coating on the M&M dissolved much faster in the tap water than the sugar water. With this, we came to the conclusion that this happened because the water molecules attracted the sugar & color molecules from the M&M. Therefore, our hypothesis was correct.



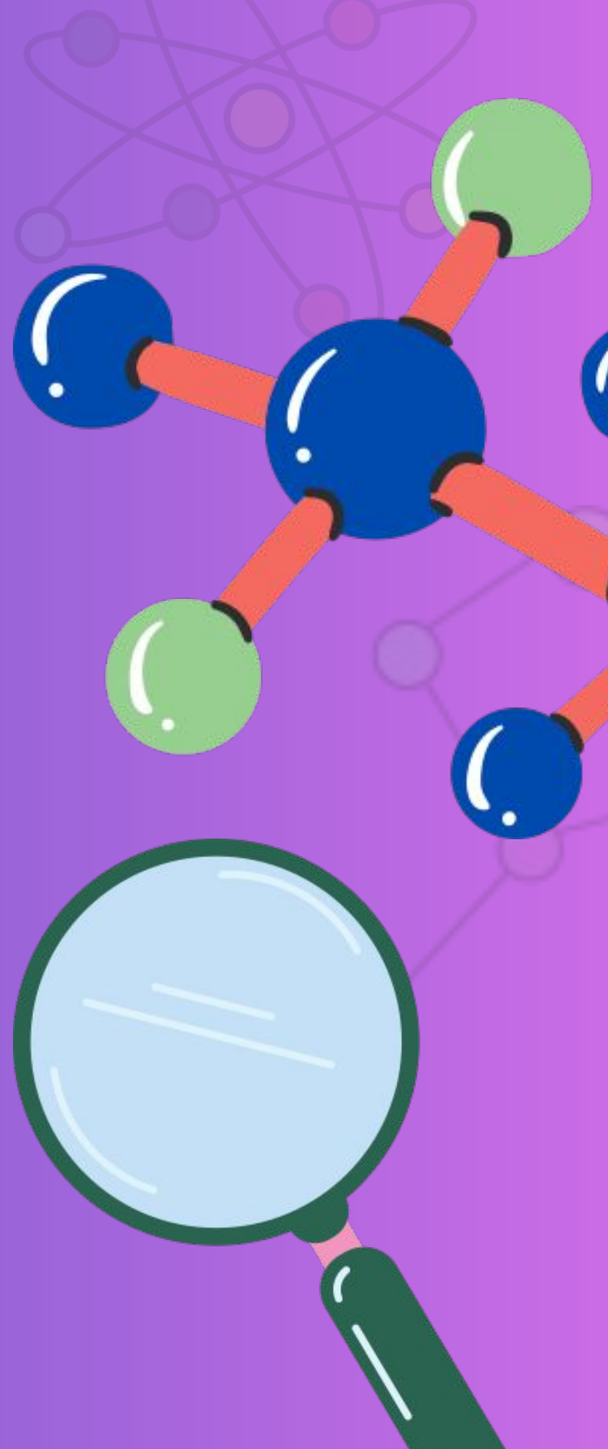


QUESTION

What happens to M&M colors in different waters?

HYPOTHESIS

We believe that the M&M coating will dissolve faster in tap water.

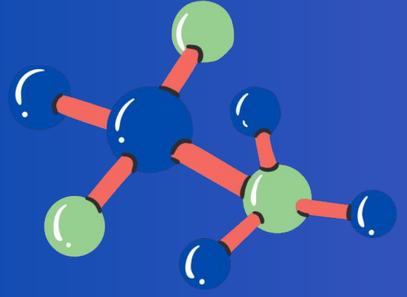


MATERIALS

- 2 small plastic plates
- 1 cup of tap water
- 1 cup of sugar water
- Same color M&Ms

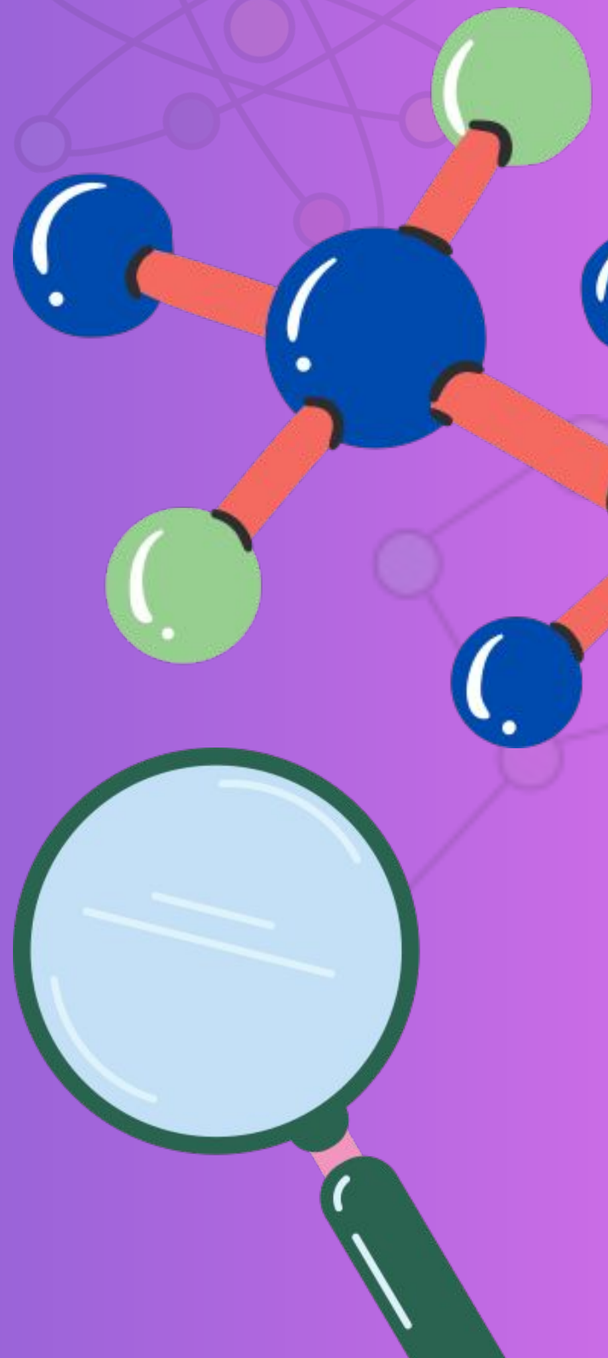
PROCEDURES

1. Place enough tap water in the first plastic plate.
2. Place enough sugar water in the second plastic plate.
3. At the same time, place one M&M in the center of each plate. Make sure they are the same color M&M's.
4. Observe for two minutes and record observations.



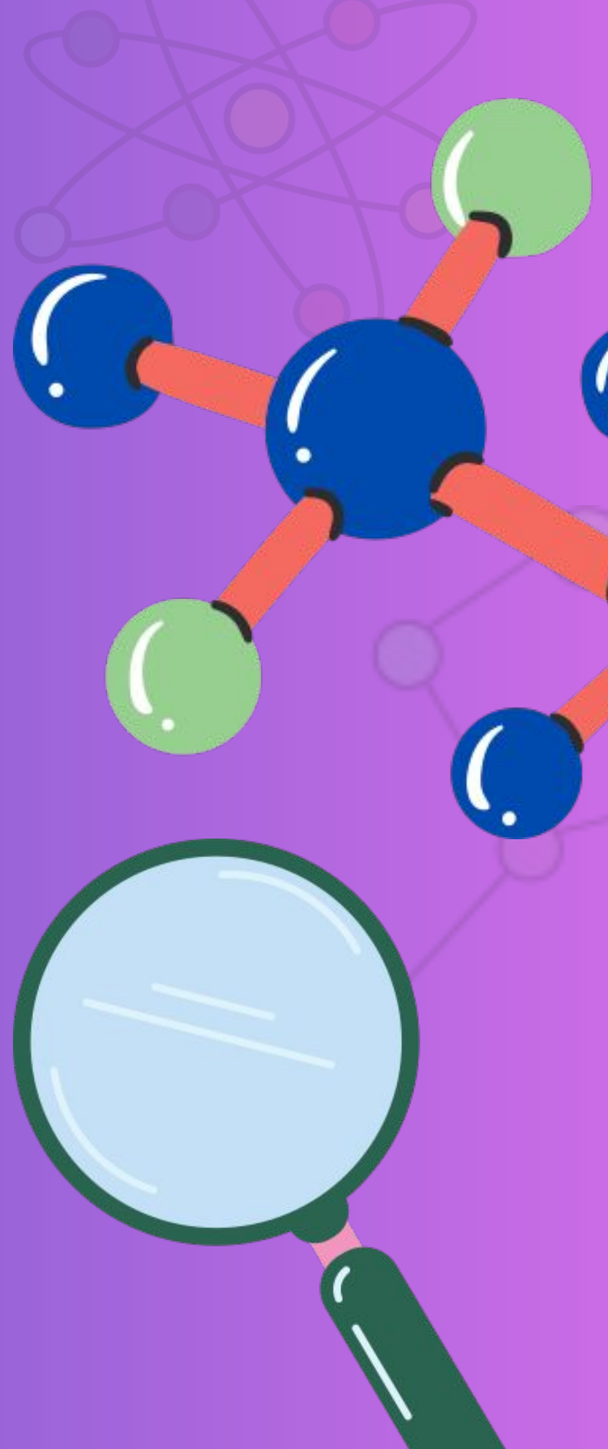
OBSERVATIONS: TAP WATER

- The M&M made the water turn into color.
- The color coating from the M&M came off almost instantly.
- It makes a colored circle around the M&M.
- Eventually, the M&M turned white and then that dissolved too, exposing the chocolate.

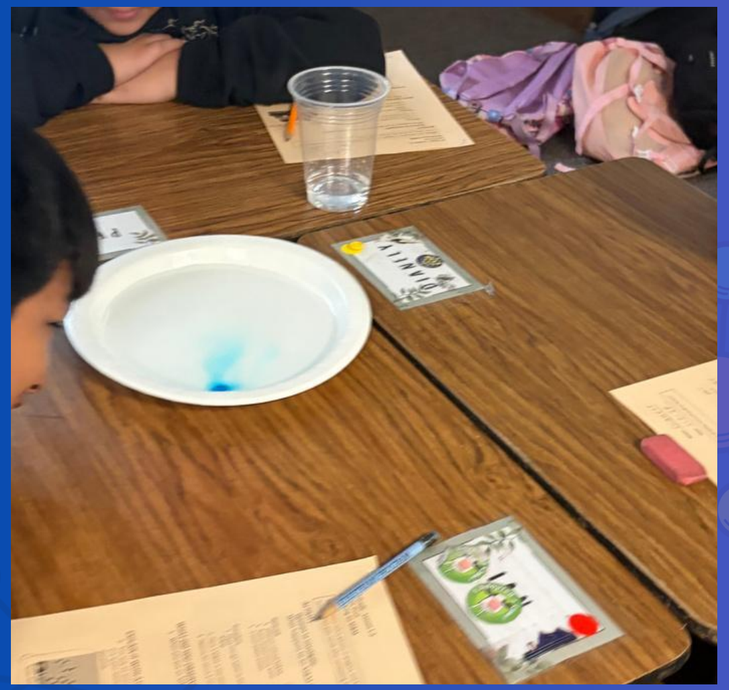


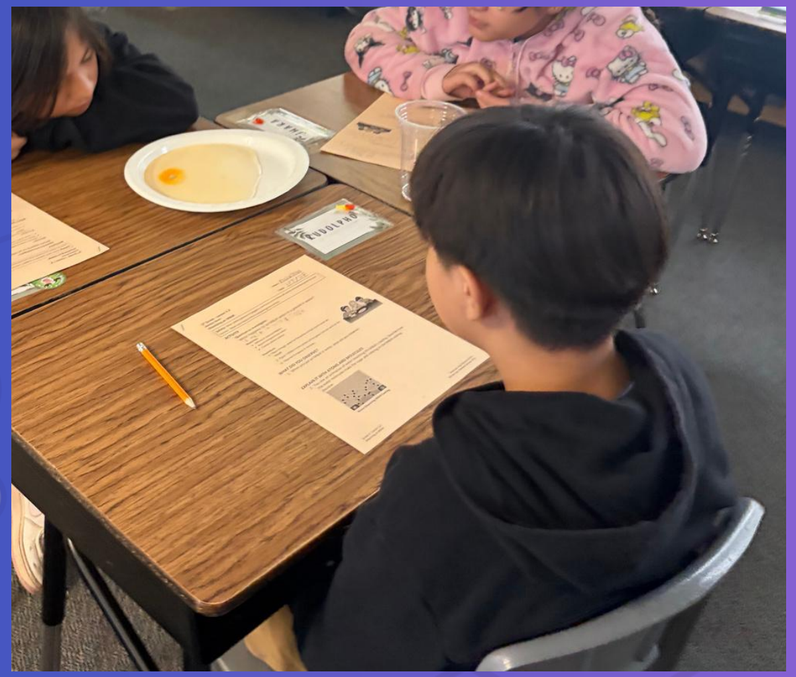
OBSERVATIONS: SUGAR WATER

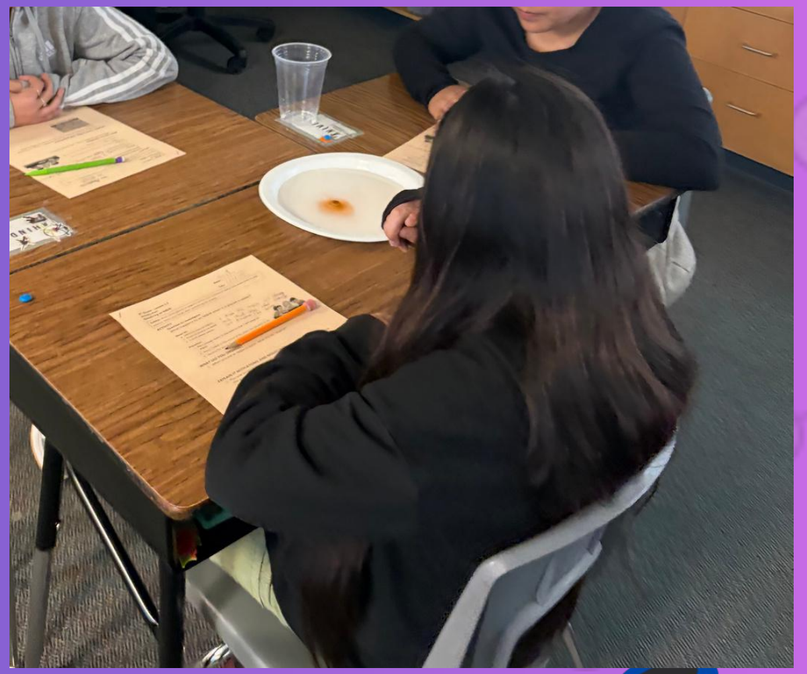
- The M&M stayed the same for almost a minute.
- The color coating from the M&M did not come off right away.
- When the color coating eventually came off, the color seemed lighter than in the tap water plate.
- The sugar water took longer to pull the color coating from the M&M



DATA & RESULTS







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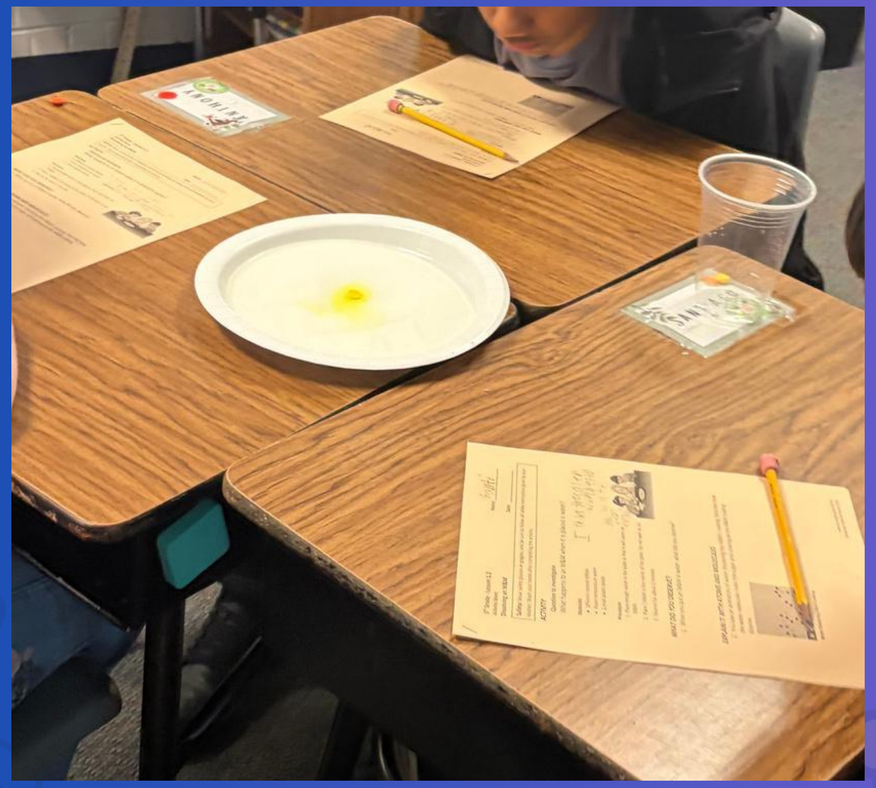
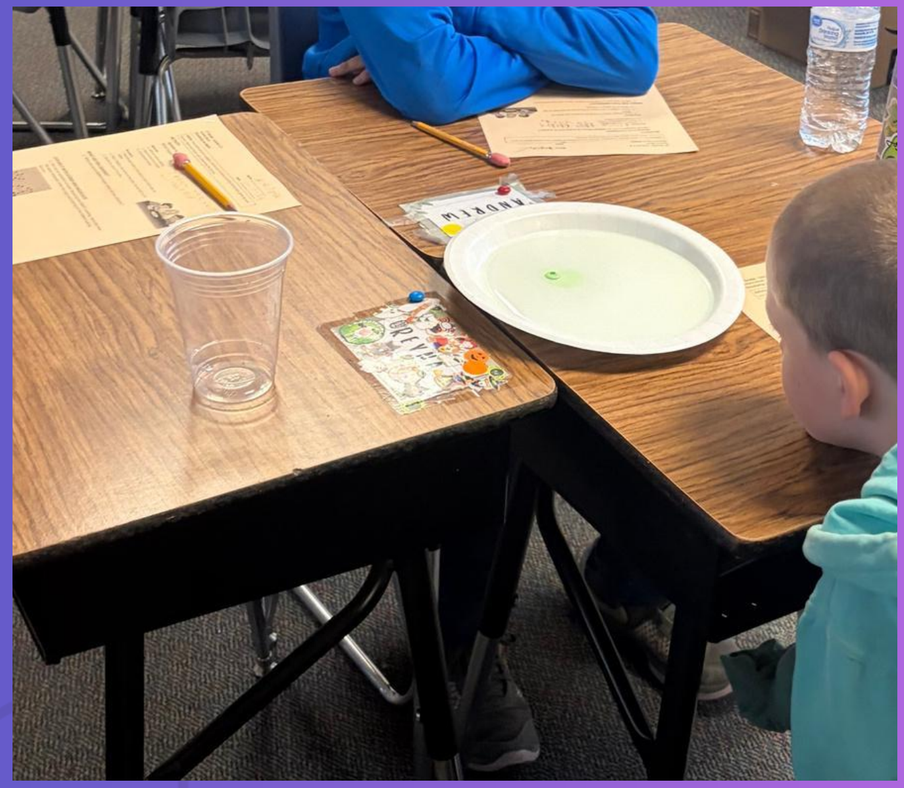


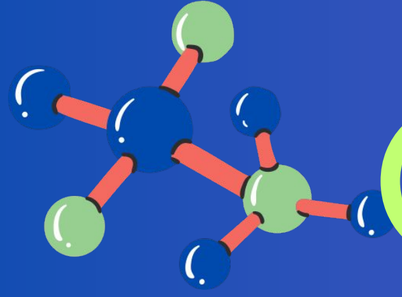
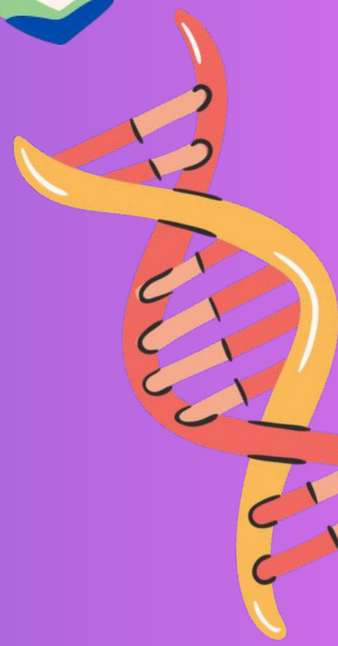


CONCLUSION

- We came to the conclusion that the M&M coating dissolved much faster in tap water than in sugar water. Therefore, our hypothesis was correct.

- This happened because the water molecules in the tap water attracted and pulled the sugar molecules and the color molecules from the M&M.

- Because the sugar water also has sugar molecules, we learned this is why it took longer to pull and attract the color molecules from the M&M.



THANK YOU!