



CALIFORNIA SCIENCE & ENGINEERING FAIR 2019 PROJECT SUMMARY

Name(s) Marea Ito	Project Number J2013
Project Title Save the pHish	
<p style="text-align: center;">Abstract</p> <p>Objectives Approximately seventy percent of the world is covered with water and with our pollution crisis it is very important to help keep the water clean. Keeping our water safe is crucial for all living organisms. There are many harmful factors that affect the pH of a body of water. Harmful pH levels in water will not only harm fish, but also other living organisms. For my experiment, I tested the pH levels of different types of waters to determine which ones are the safest for several types of living organisms. The purpose of my experiment was to ensure that waters we encounter everyday are safe for all living organisms.</p> <p>Methods I gathered 10 different types of water to test the pH levels and I used a digital pH tester.</p> <p>Results My hypothesis was incorrect. My hypothesis stated if I test the pH levels of different types of water, then the Fiji bottled water will be the safest for living organisms. I discovered that the Arrowhead bottled water would be the safest with a pH level of 6.99. The Arrowhead water was the closest to 7 which is the most neutral pH level that all living organisms can live from.</p> <p>Conclusions I discovered that the Arrowhead bottled water would be the safest with a pH level of 6.99. The Arrowhead water was the closest to 7 which is the most neutral pH level that all living organisms can live from. The Fiji bottled water got the second closest to 7 with a pH level of 6.96. I thought the Fiji water was going to be the safest and most pure because when I researched the different types of water, the Fiji website was very fancy and had the most believable marketing! Fiji created a picture of their water coming from volcanic rock and purified clouds . I also discovered that the Brita water filter does change the pH level of the Hollister tap water slightly. Before filtering the Hollister tap water, it had a pH level of 7.69 and after filtering, it had a pH level of 7.44. Fortunately, the Brita filter did bring the pH level down to be closer to neutral so it made the water safer. All of the different types of water did stay in the range for all types of living organisms except the Aquafina bottled water. The Aquafina water had the lowest level with a 5.4 which means it is acidic. Having too much acidic water can be unhealthy for you because if you have too much acid in your body it could affect your kidneys and lungs which, in turn, could be life-threatening. In conclusion, running this experiment helped me to realize that our water is a precious resource that needs constant attention. It affects living organisms of all kinds and can really change the way we live.</p>	
Summary Statement Our water is a precious resource that needs constant attention, affects living organisms of all kinds, and can really change the way we live.	
Help Received I completed the project on my own.	