

River Quest 2024 Essay Contest Winner

My Journey at Riverquest

Ordean East Middle School

Mr. Froeh's class

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On my journey at Riverquest, I learned many things at every station and every station was fun. I liked how the experiences were hands on and not just people explaining everything. Some of my favorite stations were cold hand luke, the disappearing beach and the observation station. This was a memorable field trip and it was a fun end of the year activity to do. The Vista Star was super fun and I would definitely do it again.

One of my stations was "What is the Es-chew-air-ee?" and I learned that an estuary is where two chemically different bodies of water meet and mix together. Some estuaries are big and some are small, some even have multiple rivers connecting to one estuary. I also learned that estuaries are a great place for small animals to live because they are protected from the wind and waves. Lake Superior National Estuarine Research Reserve came and talked to us and showed us some images of estuaries and we had to identify where the estuary was in the image. This station taught me how to observe an estuary and that we need to protect and preserve them.

Another one of my stations was the "Pollution and the River Watershed." I learned that we need to stop polluting because we can control pollution at our house. We control things like what you flush down the toilet, if you throw your trash away instead of throwing it in a lake or river, etc. I also learned some of the effects on nature and animals. Some aquatic creatures like fish are dying everyday because the water is dirty and they cant see to eat, they could also suffocate from a piece of trash and die. This station taught me to not pollute because there is always a better option than making a problem.

One of the other stations was the "Cold hand Luke" station. I learned that if you are unintentionally in Lake Superior then you should squeeze yourself into a ball to keep warm. If you are with other people in the lake then you should huddle around each other to share body heat. I also learned that you should wear a life jacket all the time because you will stay floating and not waste your energy trying to tread water. You should also try not to panic and stay relaxed because you will easily lose energy and heat. I also put my hand in 40 degree water for one minute and it was really hard and my hand was super cold after it. This station taught me to always wear a life jacket and how to maintain body heat in cold water.

Another one of the stations was the "It floats, you don't. Wear your lifejacket". I learned that objects that are buoyant or have many air pockets and float more than objects that are squished together. We did many experiments with various foods, toys and random household items. When we dropped the object in the bucket of water it either floated or did not and we had to guess if it was buoyant or not. One thing that surprised me was that an orange with the peel floats but an orange without the peel sinks because there is air trapped in between the peel and the orange. This station taught me to always wear my life jacket because no matter if you can swim or not, you always have to wear a life jacket.

The last station on the Vista was the "Observation Station". I saw some birds and some boats and some people. But what amazed me the most was that there were people on an island that we went by and they were feeding the seagulls on the island. The view from on the top of the boat was a super cool view and it was beautiful up there. The water looked like root beer with its brown color and the bubbles the boat was making. The observation station was my favorite because we used binoculars to look at boats, birds, people, ships carrying cargo and more!

At the DECC one of the stations was the "What is the Solution to Pollution?" station. I learned that pollution and contaminants are flushed into Lake Superior every day. We did a lab about what the researchers find in sand and how they clean it up. We used shovels, our hands and nets to clean up the sand. I also learned that the Minnesota Sea Grant Program works very hard to keep waters and beaches clean and trash free. This station taught me that people who litter on beaches/ in lakes might not be aware that others are working way too hard to clean up after someone else's mess.

Another one of the stations was the "Bacteria: The Real Workers at WLSSD" station. I learned that many people put plastic gloves, chip bags, gum, ect down the toilet instead of throwing it away. A lot of the water sent down the drain has baby wipes, vapes, toothbrushes, harsh chemicals, and more. I learned how they clean water and the Western Lake Superior Sanitary District is not the only ones that clean the water, once they are done cleaning it with chlorine and other chemicals they send it down to another place in Minnesota so they can deep clean the water. This station taught me that cleaning water is already a lot of work but with people sending garbage down the drain, it makes their job even harder.

One of the other stations was "The Disappearing Beach" station. I learned that beach grass is important to Minnesota beaches because they keep the water from coming on land and it is mother nature's water filter. We also learned that we should

stay on paths by lakes and not make new paths because the grass and weeds that are surrounding the path are protecting small animals and their homes. Another thing that we learned was that small fish are dying because the waves/erosion is bringing up the fish and leaving them on land to die. This station taught me to walk on paths and beach grass is important to lakes so it should be protected.

Another one of the stations was the "Great Lakes Cargo Capital" station. I learned that more than 80% of the world's goods get transported to factories by ships. I also learned that most things in your house are made out of iron ore that was made into steel. We did a lab experiment to try to balance a plastic boat with real iron ore pellets and see if we could balance it. I learned that cars, refrigerators, stoves, forks, spoons, knives, and more are all made out of iron ore. This station taught me that about 400,000 tons of iron ore can be on a ship and that is enough to produce three Golden Gate bridges!

The very last station was the "Stream Table" station. I learned about erosion and how it can carry small and very large things with it. I also learned how to safely cross a river with a model. I also learned that all rivers deposit somewhere but most rivers in Minneoota deposit in Lake Superior. We learned that the two safest and least damaging ways to cross a river were to build a bridge or find pipes to cross over. This station taught me that if you just cross the river then you could damage the flow of the river and might accidentally make a pond or a lake.

Overall I would do this trip again because it was fun and I had a good time. I loved the Vista ride and all the stations we went to, but most of all I liked hanging out with my friends and having a good time. My favorite part was the observation station because it was beautiful up there and I saw some pretty cool things. I learned so much more about water and how we need to keep it clean. This trip really enhanced my knowledge about water and Lake Superior and it was so much fun learning!