



**CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY**

Name(s) Christopher M. Hoage	Project Number S0507
Project Title "Ship"wrecked Science II: The Death of Heavy Metal	
Abstract Objectives/Goals The objective of my project was to determine what factors cause certain types of metal to decay faster than others. Methods/Materials I used 36 glass jars filled with sea water, river water and distilled water to test steel, steel with rivet, brass and iron. I took observations every night and took a chemical analysis at the end of the project. Results I found that a combination of things lead to the deterioration of the metal. The worst preserved sample was the sea water, steel with rivet, outside, because of galvanic corrosion. The best preserved sample was the sea water, brass. Conclusions/Discussion I found that if a metal is not near a metal of higher nobility, is in deep, cold water and dark, without organisms, it will be well preserved.	
Summary Statement My project was to investigate why shipwrecks deteriorate over time, what preserves them.	
Help Received Mother typing, father prep samples, and building board, Mr. Lea and Mr. Aleszka for information, Tim for cast iron pipe. Clive Cussler for inspiration.	