|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  | | --- | |  | |  | |  | |  | |  | |  | |  | |  | |  | | |  | | --- | | h | | **JouRnaL** | |  | | Mon, Apr 9) From my research I've learned that tooth enamel is 96% Hydroxyapatite. After a search on the Altavista website, I discovered a company in San Leandro called Berkeley Advanced Biomaterials who sells hydroxyapatite cubes, blocks, powder, etc for tooth and bone research. I emailed them asking for prices and further info about their products. | |  | | Tues, Apr 10) I received an email response from Lou Peng of Berkeley Advanced Biomaterials and the blocks will cost $35 each for 10 1cm cubes. This is obviously way too much for me to afford, though I probably could get by with just one or two. I'll also look into educational or student pricing.     I called Berkeley Advanced Biomaterials to inquire about ordering some Hydroxyapatite blocks and found some distressing news. They do have educational pricing (10% less) but the institution must buy it. Also, they have a minimum order of $300. Time to look for a new project. | |  | | Wed, Apr 11) Lou Peng, the sales rep for Berkeley Advanced Biomaterials called me back today and told me that they would be willing to donate 10 reject blocks to Amador's AP Biology program. Although these blocks would be rejects, they will send them to me for free. Remind me to send them a thank you letter discussing the project in greater detail. | |  | | Fri, Apr 13) The blocks came in the mail today. I as expecting a box with "biohazard" and all that, but they were in a plastic bag inside a regular envelope. One wonders why they would charge $9 to ship this stuff. But the blocks are obviously rejects, they are chipped, not all the same size. That doesn't really matter though. And they actually sent me 11 (I only asked for 10). | |  | | Sun, Apr 15) While on the phone with Berkeley Advanced Biomaterials, they warned me about implanting these block into humans (right...), and told me that they dissolve in substances with pH<5. I plan to use several acidic substances, so I'm going to test the extra block in soda, vinegar and orange juice. They turned out to be very difficult to cut, so I had to smash it with a hammer. The pieces are about 1cm in length and .5cm in width. I plan to inspect the pieces before and after they are in the substances. [View results here](http://docs.google.com/data.htm#pre).     Based on these initial results, I feel that I can safely use these blocks and these substances in my testing. | |  | | Mon, Apr 17) Beginning experiment as outlined in instructions. I am going to use Water (control), vinegar, Diet Coke, Dr Pepper, milk, coffee, tea and orange juice. [View results here](http://docs.google.com/data.htm#act). | |  | | Sun, Apr 22) Well, I'm going to measure and observe for a final time. It doesn't look like there was too much change, though through the week I've realized several key aspects of the experiment that should have been addressed. More about those in the [conclusions](http://docs.google.com/conc.htm). I'm not sure I think the project went pretty well, it was very lucky that Berkeley Advanced Biomaterials donated the blocks to me. | |  | | [**Top/\**](#30j0zll) | |