Class:

I liked the change of pace brought about by doing motion experiments. I ended up doing experiments related to Galileo's inclined plane experiments. I used a stack of books to vary the height of the plane, and a piece of cardboard for the plane itself. I used three different types of balls- a marble, plastic ball, and a cue ball. Granted, the inclined plane I used was rather short, but it was very hard to distinguish any difference in times. The times were basically the same (I attribute differences to my own experimental inaccuracies) for the three balls at any given height, which is how its supposed to be. The times also decreased (kind of) when the height was increased, which is as Galileo found. It was hard for me in conducting my own experiments to be accurate and consistent. And I used my phone timer, which is much easier to use than the dripping water contraption Galileo had to use! I also really liked watching/helping Lea with her experiments. Some of her experiments with the different balls were surprising. And it was really fun trying to find different sizes of balls to recreate what was happening with that little white ball (sinking almost to the bottom and then floating). It was fun to just play with things and observing what happened.

In these experiments, I did however find it difficult to forget/not think about everything I have learned in my life about motion and just play and observe and try to figure out what was happening from those observations. I found myself playing and observing and trying to connect the dots of what I already knew to be true.

Reading:

I found two parts of the reading particularly interesting, the first being the passage about music and harmonics, and the second being the second conclusion. I particularly liked the section about music because it is something I have often played around with and experienced in my own life. I love that all of the different methods of creating tones (strings, pipes, etc) are all related, which to use now seems obvious and, in a way, simple, but to actually go and figure that out... Because really on the surface these things aren't at all alike.

I liked the second conclusion because it presented a different view of all these experiments. Because the author was right- in the beginning of this part he points out that the writings present Galileo's observations and discoveries as very straightforward, like he always had the right answer and came to the right conclusion right away. I feel as though most things we read about Galileo in school present it in that way. It seems as though he just always got it right, and, not to belittle his intelligence or work ethic in any way, it makes the whole thing kind of larger-than-life. I actually think it makes it more impressive if we look at the whole picture and realize he got it wrong a lot before he got it right. I think it brings it a little closer to home and allows us to realize we can discover things too. And although Galileo is still an outstanding and exceptional example, he is not so unlike us. In class awhile ago we were talking about the creation of knowledge and science and helping students realize that they, too, can create knowledge in the

world, and I think presenting Galileo's failures alongside his successes would be an interesting way to suggest that.

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