

Monsoon Science Mid 1st Trimester Status Report (10/17)

Monsoon Parent and Student evening:

What a great turnout at our Monsoon Parent and Student evening last week! Thanks for making the effort to attend. I supplied handouts (Successful Science Strategies and Monsoon Science Class Overview), but I also had them at the September Parent Night. If you were unable to attend either event, you may access these documents by going to the Parent Info page of my website—www.stithsonianscience.com There you will find buttons for PDFs of these and other materials.

One parent raised a good question regarding the Parent and Student Evening: Was it necessary for students to attend? I would argue that it was not **necessary**. On the other hand, I think for many families, it is useful for parents and students to hear the same message at the same time. Nothing we said **should** have been news to students, but perhaps students didn't understand the **reasons** for our procedures. I appreciate this constructive criticism. ☺

Learner-Paced Science Class:

We began the school year (Acting Like A Scientist) with a group-paced science class. This means groups worked as one, but could move faster or slower than other groups in the class according to their needs. For most students, groups moved at a reasonable pace for their own needs. In others, groups worked too slow or too fast.

I shudder to think how, for nearly thirty years, I expected **all** my students to move at **one** pace! The good news is that will never happen again.

We are nearly at the end of our second unit, Properties of Matter. Students move at their own pace. Some learners work in pairs or trios (groups of four tend to be too big). Others elect to work alone. In any case, learners complete activities at their own pace. My assistants and I then interview each student on each activity. We assign each learner a 1, 2, or 3. 1's show no understanding of material. 2's show understanding inconsistently or only with guidance, and 3's show understanding independently and consistently. During the interview we guide each learner to understand the concepts related to the activity as thoroughly as possible.

As I write, most students have completed all required activities for Properties of Matter. Instead of a paper-and-pencil test, students must now create a product that shows they understand the key concepts of the unit. Since this is their first experience creating such a product from scratch, this will likely be the most

difficult one of the year. Future products should prove easier as they grow more experienced. (More complete details of this entire process can be found on pages 1-2 on the Monsoon Science Class Overview.) I am pleased with how smoothly the learner-paced science class is going this early in the year. It's very different from their experiences in earlier grades, but Mrs. Domitrz and Mr. Phillips are implementing this method as well. This has likely helped students take better charge of their learning.

Redos:

The obvious purpose of sixth grade science is for learners to master science content and skills as well as possible. For this reason, ***all academic work can be redone*** to show deeper understanding. There is no deadline to redo work. In most cases, an interview will be required. As of 1st trimester progress reports, too many students failed to redo poor line graphs from our introductory unit (completed a month ago!) At this time, the only grade in the PSP-3 Category—Process Skills ***After*** an activity—is the graph. This means it has a huge impact on overall grades. Speaking of grades...

Non-Graded Science Class:

I discussed the many problems I see with the use of grades to report student learning. Some things to consider:

- How does one accurately assign a % to complex work such as a writing piece? Is a 78% paper clearly different from an 81% paper?
- I interview a student on her Properties of Matter poster. She demonstrates her understanding of the three common states of matter, but I must guide her as she attempts to demonstrate how mass doesn't change when matter changes state. This means she currently is a "2". What % should I assign her? Is there clear difference between a 73%, a 75%, and a 77%?
- Suppose we cover three units in a trimester. A learner understands one thoroughly, a second average, and the third not at all. She receives a "C" for the trimester. A second child demonstrates average understanding for all three units. He, too, receives a "C"! How meaningful do you believe these grades are?
- A student successfully memorizes information for a unit test and receives an "A". She promptly forgets most of this information.

It is for these types of reasons I offer a non-graded science alternative. These students and parents will receive an email from me at the end of each unit. In the email I will describe the level of understanding I see from the student on the key ideas of the unit (in terms of 1, 2, and 3). No grades will be entered in Aspen. This reporting takes me a great deal of time, so I must limit the number of non-graded students each year. Currently I have 5. I can take only a few more. Please let me know if you are interested ASAP.

Family Science and Bonus Assignments:

Makin' A Splash (first Family Science project of year) is due on 11/03. Students receive no extrinsic credit for these optional projects. They do, however, get what they truly need—practice *doing* science and engineering.

The Pop-Up Greeting was the first Bonus Assignment of the year. Although fewer than half the Monsoons attempted this, the learners who did showed amazing diversity of designs. The final Bonus Assignment for the trimester will be presented in a couple weeks.

I'm glad to hear many parents and students are finding my website useful (www.stithsonianscience.com). The site contains many resources to help students regardless of their level. Should you have any questions, or would like to observe a class, please contact me at dstith@londonderry.org