Monsoon Science Acting Like A Scientist Report Card (9/19)

Let's look at the first month of school. By many measures, we are off to a great start!

Engineering Project:
The Single-Marble Dispenser, our first Engineering Project of the year (we have two per trimester), was a big success. More than 96% of Monsoons completed it on time. You can see (tiny) photos of these on my website homepage (www.stithsonianscience.com). Not only was the completion rate excellent, the variety of designs was amazing! I'm not sure I remember more creative work on this project! As you saw, no money ever needs to be spent on Engineering Projects. Why are these assigned? I think John Spencer, of the Creative Classroom, gives an excellent answer. See his video on the Student-Created Work page of my website next to the Single-Marble Dispenser video.

Introductory Unit:
Acting Like A Scientist is complete and we're moving on to ***Properties of Matter.*** I will provide families with a detailed report card at the end of each unit. ***Science is not included on the Monsoon progress reports and report cards.*** This class is totally standards-based, including its reporting. My report cards explain all assignments that appear in Aspen, and describe key ideas in the next unit.

Self Direction:
Most scores in Aspen at this point are in the ***SD***--Self Direction-category. Although non-academic, these skills are as important to students' future success as any academic goals. SD assignments are the only ones that cannot be redone, because we continuously practice these skills. Instead of dwelling on past assignments, students should focus on future ones, and on improving these skills. Here is an explanation of SD grades you will see in Aspen:

Survey: A simple survey was given the second week of school.

Water Bott: Students participated in an activity (water bottles) designed to promote teamwork and problem solving.

Wk 2, 3, 4 SD: These weekly scores describe how well students did their jobs in class (followed directions, handled equipment properly, brought materials to class, remained on task). There will be a SD Wk "X" score most weeks all year long.
Pend Soc: This score reflects whether or not students completed the Pendulums Socrative Assessment on time and if they signed in properly.

Science Process Skills:
In addition to the SD items, there are two academic scores--both in the Science Process Skills **(SPS)** category. The SPS category reflects students' abilities to ***do science.*** Skills include planning and carrying out **safe, fair** investigations, recognizing and controlling variables and controls, making plausible predictions, measuring accurately, recording information in data tables, analyzing data, writing and supporting conclusions, and graphing the results. [These, and all academic items, can be redone.] Here is an explanation of the two SPS-After grades you will see in Aspen:

Pend Graph: Each student graphed his or her group's data for how the pendulum length affected its frequency. Most students received guidance from me or an assistant. For this reason, they cannot score a "3". (3 shows understanding consistently and independently.) Students may complete a second graph independently if they wish to show 3 ability on graphing.

Pend Soc: Each student needs to complete the Pendulums Socrative Assessment. To access this students go to the Acting Like A Scientist page of my website and click on the button for the Socrative Assessment (after writing down the room code below the button!). As students answer each question they get immediate feedback about why the answer is the answer. Scoring: 9-10 = 3; 6-8 = 2; 0-5 = 1. Students may wait 24 hours and retake the quiz if not satisfied at first. Note: It is due on Friday, September 27, so scores will not appear in Aspen until after that date. There is technically no deadline on redoing Socratives.

Properties of Matter:

This is our next unit. Here are the specific goals of this unit:

- Students can explain that matter can change forms, but cannot be created

or destroyed (Law of Conservation of Matter).

- Students can ***provide evidence*** that gases are real even though they are usually not visible to human eyes.
- **Provide evidence** that invisible gases are made of tiny pieces (atoms and molecules) that, by themselves, are too small to be seen with the unaided eye.

For the next few weeks, students will carry out investigations aimed to provide evidence of these three goals. After each investigation, they will be interviewed by me or a student-assistant (7th or 8th grader). Midway through the unit each Monsoon will be interviewed on the first goal (Conservation of Matter). At the end of the unit, each student must ***produce evidence*** of the second and third goals. This product could take the form of Google Slides, a video, a labeled diagram, or a written narration. Work will mostly be completed ***in class.*** The product will be evaluated as a 1, 2 or 3 and each student will also be interviewed to make sure he or she truly understands what is shown in the product. (For a review of the meaning of 1, 2, and 3 please see the Standards-Based Grading section on page 2 of my Monsoon Science Class Overview on the Parent Info page of my website.)

Monsoon Science Parent & Student Night:
During Parents' Night I mentioned this. Last week I sent out an email blast to all parents. On Wednesday, October 9, I am hosting an evening for families to come in and get more information about Monsoon science. Many procedures were not in place as of the September Parents' Night. I also have not had the opportunity to explain ***why*** I am convinced standards-based assessing and reporting are better for students than traditional grading. Several of you signed up for this at Parents' Night, but did not respond to my email blast, giving me a head count for your family. This is important since I am setting up in the library. [6:30-7:30 LMS Library.] If you responded to the email, you are all set. If not and you plan to attend, please let me know by 10/02. Thank you.

Questions? Want to visit a class? Email me at dstith@londonderry.org