Monsoon Science **End of *Acting Like A Scientist* Status Report** (9/18)

Our introductory unit, ***Acting Like A Scientist,*** has been completed and we're moving on to ***Properties of Matter.*** I plan to provide families with a status report at the end of each unit. This will serve to better explain the assignments that appear in Aspen, and to describe key ideas in the next unit.

Most everything in Aspen at this point is in the POP--Perseverance, Ownership, and Practice--category. Although non-academic, these skills are as important to students' future success as any academic goals. POP 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 some POP grades you will see in Aspen:

WBP, WBGW: The second week of school students participated in an activity (water bottles) designed to promote teamwork and problem solving. The first score reflects how well their plan worked, and the second how well their group worked together.

POP Wk 1, 2, 3: 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 POP Wk "X" score nearly every week all year long.

In addition to the POP items, there are two academic scores--both in the ***Science Process Skills--After*** category. The Process Skills categories reflect students' abilities to ***do*** science. The "after" part means after completing an investigation. Analyzing data, writing and supporting conclusions, and graphing are three such skills. [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.

P Quiz: Each student needed to complete the Pendulums Socrative Quiz. To access this students go to the Acting Like A Scientist page of my website and click on the button for the Socrative Quiz (**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.

Properties of Matter: This is our next unit. Here are the specific goals within this category:

- Students can define matter and identify its three common states.
- Students can explain that matter is made of tiny pieces (atoms and molecules.
- Students can also explain that matter can change forms, but cannot be created or destroyed (Law of Conservation of Matter).

For the next few weeks, students will carry out investigations aimed to provide evidence supporting these three statements. After each investigation, they will be interviewed by me or a student-assistant (7th or 8th grader). By the end of the unit, each student must produce evidence of the the second goal above. This product could take the form of Google Slides, a video, a labeled diagram, or a written narration. 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 5 of my Monsoon Science Class Overview on the Parent Info page of my website.)

Now, let's look at the first month of school. For many students, this first month is the most challenging of the year. This is not due to academic rigor so much as getting used to the middle school in general at the class format in particular.

The Think Tube, our first Engineering Project of the year (we have two per trimester), was a big success. 95% of Monsoons completed it. You can see (tiny) photos of these on the homepage of my website (www.stithsonianscience.com). Full credit (3) is given for all legitimate attempts that are brought to class on time. 2s represent late projects or ones that were clearly put together at the last minute (we had none of these). The only way to receive a 1 is to not attempt it. 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 Think Tube video.

Students were arranged in groups of my choosing for Acting Like A Scientist. They worked together within the group, but did not need to move at the same pace as other groups. Consequently, some groups completed more activities than others. When we reviewed the key activities, some groups had had first-hand experience with the activity; others had not.

Students may work alone or with partners of their choosing for most of the rest of the year. (Obviously, if partners are not focusing on their work, they are separated.)

We hope to see you at our **Second Monsoon Parent & Student Evening** (Thursday, October 11 at 6:30).

Sneak preview: Any Hot Wheels fans out there? I plan to host a Hot Wheels evening later in October or early November. Stay tuned!