

FAQs

Question: Progress reports came out, but Science is not on there! How am I supposed to know how my child is doing?

Answer: At the conclusion of each unit, I send a detailed report card like this one. ***This*** is your child's report card for science. All report cards are posted on the ***Parent Info*** page of my website.

Question: Do you have to wait for me to email these reports each unit?

Answer: No! I use Aspen to record scores, just as all the other teachers. Having trouble finding the specific scores for science on Aspen? Ask your child to show you. It's crucial for them to be able to regularly check Aspen. Contact your child's homeroom teacher if they can't access Aspen.

We have completed both our introductory unit, ***Acting Like A Scientist***, and our first "regular" unit, ***Properties of Matter***. At this point, students should be feeling comfortable with the structure of science class. The good news is, as students grow more comfortable with the structure, they tend to do better.

Here is information to help you better understand all assignments listed in Aspen.

SD (Self Direction):

PM SD Week 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) during our Properties of Matter unit. These SD scores will be posted each week all year.

CB: We needed cereal box cardboard for Cardboard Ski Jumpers. A “3” means your child brought the front and back (only) in on time. A “2” means they did not do it completely or on time. A “1” means they did not bring it in at all.

CB Ski SD: In addition to bringing in cereal box cardboard on time, students had a checklist of behaviors they were to exhibit during the Ski Jumper activity. These included testing multiple designs during the class period, handing tools properly, focusing on their work, and reflecting on their results (by completing either a Success Reflection or an Error Analysis).

PM Socratic Assessment on time: Each unit the Socratic Assessment serves as one summative assessment for the unit. Assessments are activated near the end of the unit, and students have two weeks to answer the 10-questions. This SD score indicates whether your child completed it on time, and also if they signed in properly. **[I want the following format: Period Last Name First Initial. Mrs. McKeen would sign in as H McKeen D if she was in H period science.]**

SPS and Properties of Matter:

In addition to the **SD** items, there are scores in two academic standards--**Science Process Skills (SPS)**, and **Properties of Matter**. Science Process Skills reflect student ability to **do** science. There is just one **SPS** task this unit.

Cardboard Ski Jumpers: Students had to measure and cut out a piece of cereal box cardboard that fit into grooves on the “ski jump”. In order to succeed on this activity students needed to measure accurately, cut carefully, and analyze how their piece behaved. These are all **process skills**. As I explained in class, I realize students will not be performing this exact task at work. They will, however, be asked to look at problems, devise and test solutions, and think for themselves.

There are six **Properties of Matter** scores in Aspen:

Ice: On this assessment, students had to explain what should happen to the mass of a sealed bottle when ice inside it melts. If they internalized the Law of Conservation of Matter, they should have explained that mass would **not change** when the ice changed forms.

Properties of Matter Product and Interview:

Students had to create a product that addresses the following:

- 1. Provide evidence** that gases are real even though they are usually invisible to human eyes.
- 2. 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.

Most student products were either a written piece (with diagrams), or Google Slides. Two groups made their own videos. Students were expected to use activities from the unit as evidence.

The product was evaluated independently from the interview. **Most students were more proficient with the interview than the product.** This is not unusual. It is one thing to get all the ideas in your head; it is another to put these together in a clear and logical manner. We will keep working on this important skill. Students receive **specific feedback** for how to improve products.

All four Properties of Matter tasks can be redone if students are not satisfied with their current scores. Most days during Storm Time I have “Science Work”. Instead of listing something specific, like Graph Redos, students may work on whatever they need to. **[Note:** Students had time **in class** to redo these tasks, as well. Once we move on to a new unit, however, students must make use of Storm Time for this.]

Properties of Matter Socratic Assessment: [See Socratic Assessment info above under SD.] As students answer each question they get immediate feedback about **why** the answer is the answer. **Scoring:**

- 3: 9-10 correct
- 2: 6-8 correct
- 1: 0-5 correct

Students may wait 24 hours and retake the assessment if not satisfied at first.

More Questions

Question: How is my child doing in science overall?

Answer: At this time I need to give you **three** separate answers to that question. (How they are doing with Self Direction, with Science Process Skills, and with Properties of Matter.) These are very different standards, and should not be lumped together.

We are now on to **Cells & Genetics**. Here are the four product goals for this unit:

1. Name a specific **single-celled** organism and describe how they make more of themselves. [Include diagrams, and name the type of reproduction.]
2. Name a specific **multi-celled** organism and describe how they make more of themselves. [Name the type of reproduction.]
3. Draw or make a model of a cell. (Include: **nucleus, genes, chromosomes.**)
4. Explain the following:
 - a. Name the part of your cell that is basically your traits.
 - b. Explain where **your** traits came from.

Engineering Assignments and Family Science:

The **Pop Up Greeting** is the second Engineering Assignment of the trimester. Due Thursday, 10/31. You may see the video describing this on the Student-Created Work page of my website.

The **Diving Submarine** is the first Family Science project of the year. I offer one per trimester. Due Friday, 11/08. Family Science projects are **not required**, but if you watched students struggling on the Cardboard Ski Jumper you may see reason to encourage this type of problem solving in your child! You may see the explanation video on the Family Science page.

October Parent & Student Evening:

It was great to see such a large group of Monsoons and families in the library on 10/09. Based on positive feedback I received I will plan a Science Evening later this fall or winter. The purpose of that evening will be having fun, rather than informational. I will keep you posted!