

## STANDLEY MIDDLE SCHOOL SYLLABUS AND COURSE REQUIREMENTS 8<sup>th</sup> GRADE SCIENCE 2021-2022



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Welcome to 8<sup>th</sup> grade Science!! This will be a new and exciting year! In this class, you will have the opportunity to learn about the world around you and about yourself. This syllabus contains the VITAL information you need for a successful year in science. Please read this paper carefully and keep it with your science notebook.

**COURSE DESCRIPTION:** Students in 8<sup>th</sup> grade are enrolled in a year long integrated science course in which they explore and use cognitive processing skills to discover science concepts. Students will develop and apply their inquiry and questioning abilities by performing a variety of investigations. Academic rigor will be emphasized in all aspects of the curriculum. We will primarily be using the Amplify Curriculum along with a variety of other resources.

In this course, students will study: (1) Physical sciences (2) Earth Sciences and (3) Life Sciences

CALIFORNIA STATE STANDARDS: During the course of the year, students will be engaged in units of study that will encompass, but not be limited to, the following Next Generation State Standards (for more information visit NGSS at http://www.cde.ca.gov/pd/ca/sc/ngssstandards.asp):

As we begin to implement the NGSS, students will use the eight practices of science and engineering to engage in scientific investigations (National Research Council/NRC Framework or go to <a href="http://www.nextgenscience.org/">http://www.nextgenscience.org/</a>). We will continue to integrate the Common Core State Standards (CCSS) this year (for more information visit <a href="http://www.corestandards.org/">http://www.corestandards.org/</a>)

| Grade  | Cross Cutting<br>Concepts        | Life                              | Earth   | Physical                                   | Human<br>Impact | Engineering |
|--------|----------------------------------|-----------------------------------|---------|--|-----------------|-------------|
| Eighth | change; scale,<br>proportion and | Natural<br>Selection<br>Evolution | Earth É | Waves and<br>Electro-magnetic<br>radiation | Human<br>Impact | ETS         |
|        | Matter & Energy                  |                                   |         | Energy Forces and Interactions             |                 |             |

## 2021-2022 Science Curriculum

The Amplify Science Grade 8 Integrated Science Course includes units that support students in meeting the Next Generation Science Standards (NGSS). Amplify Science is a revolutionary K-8 curriculum that empowers students to make the leap from "learning about" to "figuring out" the natural and designed worlds. As students apply scientific practices to solve real-world problems, they learn to think, read, write and argue like actual scientists. In each unit, students conduct investigations, create and critique models, and gather evidence to support claims. They accomplish this by analyzing complex, scientific texts, and using digital tools to simulate and model scientific phenomena and test engineering solutions.

## **Units of Study May Include:**

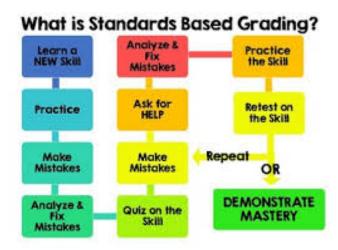
- Harnessing Human Energy
- Force and Motion
- Natural Selection
- Evolutionary History

Lessons are directly accessed and completed in the Amplify application located in Clever under Instant Login Applications (District)

## **GRADING POLICY:**

This year your student will participate in standards based learning. The Next Generation Science Standards (NGSS) will be the focus of curriculum, instruction, assessment, and feedback. Standards based grading is a system of assessing and reporting that describes student progress in relation to standards.

In a standards-based classroom, students make gains in knowledge and skills across large units of instruction is designed to start where the students' knowledge and abilities are on the standard and end with proficiency on the standard.



## Overview of Standards Based Grading and how it is measured:

Standards Based Grading (SBG) keeps track of students' progress and achievements while focusing on helping them learn and reach their highest potential. SBG measures the mastery of the learning objectives, or how well students understand the content in class. Priority Standards specify what all students should know and be able to do by the end of the school year rather than a one and done approach as in the previous traditional grading system. Instead of the all-or-nothing, percentages-and-letter-grades system, standards-based approaches consider evidence of learning and the data it produces in different ways.

For example, a student might struggle in the beginning of a grading period with new content but may demonstrate proficiency by the end of the grading period. In traditional grading, the student's performance for the whole grading period would be averaged, and early assessment scores that were low would be averaged together with proficient assessment scores. The result of the scores averaged would be a lower grade. When a percentage system is applied, it can be misleading. In SBG, a student who reaches proficiency would be reported proficient, and the grade would reflect current performance level.

The big switch with standards-based grading is work is evaluated by levels of proficiency, not percentages. It's more useful to know that your child has met a priority standard or level of proficiency than that they have a B with 84 percent. Each grade on the report card represents a skill or mastery of a priority standard your child has had the opportunity to learn, so it's a meaningful snapshot of academic achievement.

#### GRADING POLICY CONTINUED:

The students can be identified at any time in terms of their proficiency level on a given standard at a level 4, 3, 2, or 1, through assignments that are appropriate for that level. Students at level 1 receive practice and activities to help them reach a level 2, and so on. We tie learning materials—assignments, projects, assessments, etc.—to the standards, learning objectives, or learning targets we want to measure. This type of differentiated learning makes lessons more relevant for students, leading to positive learning experiences and a personal investment in the learning process.

A proficiency scale defines a learning progression or set of learning goals for a specific topic, relative to a given standard. The scale demonstrates what proficiency looks like, what knowledge and skills students need to achieve proficiency, and how students might go beyond proficiency.

## **Proficiency Scale\*\***:

| Score                   | Progression of Learning  |  |  |  |
|-------------------------|--|--|--|--|
| 4.0 (Beyond)            | Student demonstrates the performance expectation in a novel context (novel evidence, location/phenomenon), going beyond grade level.                               |  |  |  |
| 3.0 (At Grade<br>Level) | Student performs the performance expectation in 3 Dimensions.*   |  |  |  |
| 2.0 (Approaching)       | Student is approaching grade level in one or more dimensions, but not yet in all three or provides insufficient detail or connection between the three dimensions. |  |  |  |
| 1.0                     | Insufficient evidence to determine level   |  |  |  |

<sup>\*</sup>Next Generation Science Standards are 3 Dimensional Standards that include: 1) Disciplinary Core Ideas, 2) Crosscutting Concepts, and 3) Science and Engineering Practices.

# **ACADEMIC GRADES**

|            | **Proficiency Scale |    |           |    |           |    |               |  |  |  |  |
|------------|---------------------|----|-----------|----|-----------|----|---------------|--|--|--|--|
| <b>A</b> + | 3.75-4.00           | B+ | 2.84-2.99 | C+ | 2.34-2.49 | D+ | 1.76-1.99     |  |  |  |  |
| A          | 3.26-3.74           | В  | 2.76-2.83 | C  | 2.17-2.33 | D  | 1.26-1.75     |  |  |  |  |
| <b>A</b> - | 3.00-3.25           | B- | 2.50-2.66 | C- | 2.00-2.16 | D- | 1.00-1.25     |  |  |  |  |
|            |                     |    |           |    |           | F  | Below<br>1.00 |  |  |  |  |

## What are the benefits of Standards-Based Grading?

#### • For Students:

- o Learning targets are clearly defined and aligned to the Priority Standards (Critical Concepts)
- o Students are offered multiple opportunities and ways through which to demonstrate proficiency
- o Students monitor their own progress toward the achievement of specified targets
- o Specific feedback on progress helps build self-esteem, pride and motivation for students

## • For Parents:

- o Grades have more meaning
- o Parents are aware of what their child knows and is able to do
- o Parents see the learning progression
- o Parents know in what areas their child needs more support
- o Parents are empowered to increase their child's confidence and to actively participate in their child's learning goal.

## • For Teachers:

- o Teachers know exactly where students are in the learning continuum
- o Each grade assignment has the same aligned standards and expectations
- o Assessment results help teachers determine when students need more support and when they need challenging work

After meeting retake requirements, students can redo assignments, take part in quiz retakes and turn in late homework, which can feel strange to students and parents, but the goal is for students to master the priority standards. Students can focus on mastery and understanding in a standards-based classroom without constantly worrying about getting the most points.

Keep in mind that a 3 or "proficient" isn't the same as a letter grade. It means your child has met district priority standards, and that's the goal. Also, even top students can earn a 2 or "approaching proficiency" grade, which can be a shock for some families. But it's more important to know if your child is struggling with a concept than to see a slew of top grades because of stellar work habits rather than conceptual mastery.

### **Class Information**

## Learning Management System (LMS): Canvas

Students will be able to access course information and curriculum supports and resources through the district supported LMS- Canvas. Students will use their district username and password to sign-in to Canvas.

<u>Inbox</u>: The Inbox is the preferred messaging tool used to communicate with Ms. Frank and other students in the 8th grade science Canvas course. The Inbox link is located in the Global Navigation found in the far left side menu. Please use the Inbox for questions or concerns about 8th grade science.

**Announcements**: Check announcements daily. Students that are absent should check the Announcements and Amplify for the work they've missed and are responsible for completing.

<u>Modules</u>: Your teacher will create and post resources for various supplemental resources and assessments. Students can also access the Clever app to login to Amplify.

\*\*ATTENDANCE, ABSENCES AND LATE ASSIGNMENTS: If your student is absent, they need to go to Canvas and Amplify to get the class information and homework assignments for the day/days they miss. Students are also encouraged to have a study buddy from their class. Students who miss a class period miss valuable information and in person experiences with peers.

In addition, daily attendance will be taken in PowerSchool for all classes. Students will be marked present for attending.

• When students are absent for whatever reason, parents need to contact the office to excuse the absence.

CITIZENSHIP: See SOAR rubric in planner-

MATERIALS/SUPPLIES: All students need to bring their charged chromebook and charger to class everyday.

**DISCIPLINE**: The school wide discipline plan in the student planner is to be followed in class. Students will be held accountable to the expectations of a Standley Student.

To avoid disruptions we will use a warning system and parental notification via School Messenger (phone contacts). This procedure will continue each day with a verbal warning and a SchoolMessenger contact. After this point, if the disruptive behavior continues, the parent will be notified and the student will receive a referral and a parent conference will be requested.

**Contacting:** Please feel free to contact me via email (<u>srannikko@sandi.net</u>)with any questions or concerns. I will get back to you as efficiently as possible