Syllabus 8th Grade Science

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Welcome to another school year! It is my hope that you, as a student, will be given many opportunities to observe and investigate. You will need to keep an open mind, ask a lot of questions and enjoy learning about the scientific world around us.

A. Course Outline:

We are currently moving forward with full integration of the Next Generation Science Standards (NGSS) and will be taking the CAASP Science test in the spring.

8th Grade focuses:

1st Trimester Physical Science: Scientific method with an overview of the equipment we will be using over the course of the year, and incorporating an Engineering/Design standard with the Egg Drop lab. Astronomy will also be covered, with a focus on Earth-Sun-Moon cyclical patterns, gravity, seasons, and the scale of the solar system.

2nd **Trimester Earth Science:** The geological time scale of Earth, population and consumption of Earth's natural resources, and genetics

3rd **Trimester Physical Science:** A study of Physics with an emphasis on Newton's 3 Laws of Motion, energy of motion and gravity, waves, electromagnetic forces and gravitational interactions. Design projects will include an amplification device, bottle rockets and roller coasters.

STEAM units: Science, Technology, Engineering, Art, and Math

- Amplification Device, Balloon Car, Roller Coasters, Bottle Rockets
- : In all STEAM activities, students must develop ideas to create a solution, test the solution, and then evaluate the success of their results and possibly how the solution could be improved.
- •All STEAM units are integrated as IB Design Units

B. Required Materials:

The teacher will give no loaners. It is the student's responsibility to come prepared to class.

- •Spiral or Composition Notebook-We will keep science notes, and a process journal for our IB Design units.
- •Pencils only will be used for daily work. There will be instances that pens will be used, and these must be black or blue only.
- Highlighters
- •Glue Sticks

C. Grading Policy / Standards Based Report Cards

Students will be assessed on each standard using a grading system based on academic achievement in relation to the NGSS standards using an IB rubric. Each standard will be specifically broken down and your student will receive an achievement score based on his/her

level of proficiency in each content area. Your child's achievement in each standard will be based on multiple assessments in each area such as written work, oral feedback or performance-based labs. Grades will reflect summative knowledge in these standards. These "Academic Content" assessments will make up 100% of their grade. These grades will be assessed using an 8-point IB rubric scale for Science and Design and/or a percentage scale. Homework, class participation and concept building skills are essential to help your student reach his or her academic goals. These "Academic Behavior" skills will not be counted in their grade but will be entered in the gradebook to show completion. Grades will constantly be posted in the classroom by student ID numbers and will also be posted online. Grades will also indicate if work has not been turned in. I will not be calling home in regards to missing assignments. It is important to look online to keep track of your student's scores. Science retakes will be at the discretion of the teacher and will be offered only once. A redo-ticket/assignment will be required in order to participate in the retake, as well as completion of homework for that unit. One-time retakes will occur in a timely fashion after the initial assessment at the arranged opportunity by the teacher. A retake can not exceed a "6" on the rubric.

D. Absences:

Students who are absent are responsible for all missing class work including labs. It is the student's responsibility to find out what work was missed by checking with classmates, the assignment board, or my website. I will also have work posted on my website. If a student is absent for a test, it is their responsibility to make arrangements to make-up the test. Keep all course work from this class. Proof of assignment and test grades will help if ever a discrepancy of grade occurs.

E. Behavior: Be Safe, Be Respectful, Be Responsible

Students are expected to follow all school rules (see the parent-student handbook). This includes coming to class on time, being in your seat and being fully prepared. In addition, students are expected to:

- 1. Show respect to myself and other students, which includes listening quietly while other are speaking.
- 2. Use appropriate language.
- 3. Be prepared for learning (having their supplies ready).
- 4. Respect other people's property.
- 5. No gum, food or drinks. Only water is allowed.
- 6. No put-downs! Words such as "stupid, sucks, and dumb" are not allowed toward other students and certainly not my labs. It makes for a positive learning environment for everyone.

Failure to follow the above behavior expectations will result in the following consequences:

1. Warning 2. Parent contact 3. Office referral (DP) Rewards can be earned for good behavior, consistent homework turned in, 100% on quizzes or tests, or answering the question of the day.

Thank you for your support to make this a successful and positive year at Eich.