







Welcome to 8<sup>th</sup> grade science!

Welcome back from summer! I hope everyone accomplished something they wanted to do, relaxed, or otherwise enjoyed summer. As the school year begins I would like to share some information about 8<sup>th</sup> grade science.

This year we are excited to be in the second year of our science program. The curriculum, *Investigating and Questioning our World through Science and Technology (IQWST)* is being taught in all 4J middle schools. IQWST is a carefully sequenced, 12-unit middle school science curriculum. As designed, each academic year includes four units, one in each discipline: Chemistry, Earth Science, Life Science and Physics. IQWST's foundation is the latest research on how students learn and how they learn science in particular. It engages students in scientific practices as they experience, investigate, and explain phenomena while learning core ideas of science.

Rather than memorizing facts, students build understanding by connecting ideas across disciplines and across the middle grades. IQWST is based upon the development of student understanding through student-focused activities, reading and writing, and spirited claim, evidence and reasoning, discussions. IQWST encourages students to be willing to make mistakes and take risks.

The 8<sup>th</sup> grade year of IQWST consists of the following four units:

## **How Does Food Provide My Body with Energy?**

This unit is a cross-disciplinary approach to chemistry that targets ideas in the context of living systems. Students will investigate the molecular aspects of how food provides organisms with energy and building blocks and the chemical reactions and energy transformations that occur during photosynthesis and cellular respiration.

# **How Is the Earth Changing?**

This Earth Science unit focuses on plate tectonics and builds on key conceptual understandings including the conservation of matter, convection, and energy-transfer.

# Why Do Organisms Look the Way They Do?

This Life Science unit is organized around three topics: heredity, variation within and between species, and natural selection. These three topics focus on different levels of organization: the individual, species, and populations

#### **How Will It Move?**

A project-based physical science unit that embeds the study of forces and motion in students' real-world experiences. This unit will provide some background for the annual multi-district engineering and design solar car project.

## **EXPECTATIONS:**

#### Materials:

- Science section in your binder
- Pencil/pen, science notebook (provided by school), planner, extra notebook paper
- Charged iPad—we will be using iPads most days

## **During Class:**

- · Be in your seat at the bell
- Read agenda on board, record homework and begin work as directed
- Participate fully in all activities and complete class work

#### Homework

- Complete homework on time for full credit
- Be prepared to discuss or write about homework on the due date

Assessments (tests, quizzes, claim evidence reasoning, conclusions)

- Study notes and review sheets before tests and guizzes
- Come and get help before or after school as needed
- Retakes are sometimes available after further studying with a teacher

### Makeup

Missed labs and assessments need to be made up before or after school

### **GRADES:**

**YOU** earn your grade! You earn points for classwork, homework assignments, and assessments. I will update grades approximately every two weeks. Students should use StudentVue regularly to keep track of grades and work completion. Your grade will be determined by weighting:

Class work & homework = 50% Assessments/Tests/ Quizzes = 50%

Overall grades are based on the following percentages:

A = 90-100% B = 80-89% C = 70-79% D = 60 - 69% F = 0-59%

### STAYING IN TOUCH

Class information is available on the class web site, which is easily accessed through the "Teacher Websites" link at the Cal Young homepage <a href="http://schools.4j.lane.edu/calyoung/">http://schools.4j.lane.edu/calyoung/</a>. The most current information however, will always be in your student's agenda planner. I will also periodically send communication through ParentVue—please make sure that the office has your current e-mail address. Feel free to send a note, call, e-mail, or stop by if you have any questions. The best times to call are from 8:00-8:30 in the morning and from 3:30-4:00 in the afternoon.

Thanks for reading this letter and supporting your science student throughout the year!

Angie Ruzicka 8<sup>th</sup> Grade Science (541) 790-6452 ruzicka@4j.lane.edu

# Ms. Ruzicka's 8<sup>th</sup> Grade Science Class

Parent/Guardian Signature:

Please return this page as soon as possible or by Monday, September 18, 2017

To be filled out by the STUDENT: I have read through the Expectations and Website

information for Ms. Ruzicka's 8<sup>th</sup> grade science class and will keep the letter in the science section of my binder for future use. Student Name (please print) Student Signature To be filled out completely by a PARENT/GUARDIAN: 1. Please initial one of the following: My student and I have visited Ms. Ruzicka's website to see what information is available. We do not have internet access at home and were unable to visit Ms Ruzicka's website. 2. Please initial one of the following: I have email and receive school emails. I would prefer e-mail as a way of receiving information about this class. I would prefer a phone call or paper notification to receive information about this class. Preferred phone number: I have read through the attached letter with my student and have noted any questions or comments I have below. Parent/Guardian Name (please print)

Please use the bottom and/or back of this paper to list any information that would be helpful for me to know about you or your student. (interests, strengths, struggles, family situations etc.) You may also e-mail me comments for greater confidentiality. I look forward to hearing from you throughout the year.

Date