# 8<sup>th</sup> Grade Common Core Integrated Math/Physical Science Core Class Taught by Ms. Perry 2015-2016









# Attendance Policy:

Punctual attendance to class is a MUST.

Students must be lined up at my outside door by the beginning of the period bell, if not the student will be marked tardy.

If a student is absent, it is his/her responsibility to obtain notes and assignments from the "Missing Work" box. Any assignment that was assigned in the student's absence will be due on the day of the unit/chapter exam.

If your student is sick, please keep them at home until they are well enough to attend.

# Homework Policy:

Homework completion and return is MANDATORY for each student to be successful. Homework and classwork are ways for the students to practice what they have learned and show their mastery of skills.

There are 2 opportunities for students to turn in their homework.

The FIRST is two days after the work is assigned.

This allows students to attempt and finish the assignment while the lesson is still new and ask questions for clarification the day after it is assigned.

The SECOND is the day of the chapter test.

If a student fails to turn in homework by this day, the assignment earns a zero.

Every Friday, students will have a Math Homework Quiz on that week's homework assignments. The students will also be keeping all completed and graded homework for each Math chapter in a portfolio.

A TIME TRACKER is a useful tool in help students to be organized about their homework, classwork, and tests.

# Grading Scale:

A = 100% - 90%

B = 89% - 80%

C = 79% - 70%

D = 69% - 60%

F = 59% and below

# Extra Help:

Our Math adoption, CPM (College Preparatory Mathematics), has homework help available to students via their website. http://homework.cpm.org

If your student needs help with the assigned work, the after school help days will be listed on the board for that week. My email is vperry@busd.net.

#### PLAGIARISM and CHEATING:

The definition of plagiarism clearly states: to use the writing of someone else's as your own without giving credit to the original author. It is understood that students may collaborate on homework assignments, however each and every student must do their OWN WORK!

Cheating on quizzes, tests, and homework is ABSOLUTELY forbidden at Sierramont Middle School. For example, if a student fails to show their complete work, but has all the same answers, not necessarily correct, the student will be subject to questioning on the basis of cheating. Students who participate in this behavior will be given a zero and office referral!

## Rules:

The following is the classroom rules that I implement and enforce in my classroom. You should have already received a Rules Contract, signed it, and returned it to me.

- 1. Be quiet, focused and prepared during lecture or instructional time.
- 2. Come to class on time and prepared with your materials, so that you may participate fully in class.
- 3. There is ABSOLUTELY NO TALKING during quizzes and tests!
- 4. Only approved electronic devices are allowed during school hours. Ex. calculators

<sup>\*</sup>Individual Progress Reports are given two days before each test.

- 5. Homework must be turned in on the first due date (2 days after assigned) or the FINAL due date (the day of the test). If not, the assignment grade will be  $\emptyset$ , zero.
- 6. Teacher and students must be respectful in words, actions and body language of others and their materials in the class.
- 7. Raise your hand and wait to be called on if you have a question or comment.
- 8. Teacher and students will take responsibility for their actions.
- 9. Students MUST do their OWN work. Copying, cheating and plagiarism will NOT be accepted!
- 10. No eating, drinking or gum chewing in the classroom! Water is only allowed!

## Consequences:

\*Each violation will result in one of the following. Repeat violations will result more severe discipline.

- 1. Warning/Personal Conference
- 2. Call Home
- 3. Office referral
- 4. Detention
- 5. Removal from Class
- \*Cheating and/or plagiarism results in an automatic  $\emptyset$ , zero, and office referral for all parties involved.
- \*Non-approved electronic devices will be confiscated a 24-hour period and are to be picked up in the office.

## \*Electronic Devices\*

Sierramont School Policy states that electronic devices, such as ipods, ipads, iphones, smartphones, mp3 players, etc, are to be stowed in a student's backpack or not brought to school during school hours. As a Sierramont teacher, I respect this policy, however I use an abundance of technology in my classroom that students can access on these electronic devices. When instructed by me, students will be allowed to use these devices with instructional applications in my classroom. However at all other times, students are not allowed to have these devices out of their backpacks and/or in use.

# Grade 8 Common Core Integrated Math Standards

http://www.corestandards.org/Math/Content/8/introduction/

### The Number System

Know that there are numbers that are not rational, and approximate them by rational numbers.

## Expressions and Equations

- · Work with radicals and integer exponents.
- Understand the connections between proportional relationships, lines, and linear equations.
- · Analyze and solve linear equations and pairs of simultaneous linear equations.

#### **Functions**

- Define, evaluate, and compare functions.
- · Use functions to model relationships between quantities.

#### Geometry

- Understand congruence and similarity using physical models, transparencies, or geometry software.
- · Understand and apply the Pythagorean Theorem.
- Solve real-world and mathematical problems involving volume of cylinders, cones and spheres.

# Statistics and Probability

Investigate patterns of association in bivariate data.

#### Mathematical Practices

- 1. Make sense of problems and persevere in solving them.
- 2. Reason abstractly and quantitatively.
- 3. Construct viable arguments and critique the reasoning of others.
- 4. Model with mathematics.
- 5. Use appropriate tools strategically.
- 6. Attend to precision.
- 7. Look for and make use of structure.
- 8. Look for and express regularity in repeated reasoning.

# California State Standards - 8<sup>th</sup> Grade Science

http://www.cde.ca.gov/be/st/ss/documents/sciencestnd.pdf

# Investigation and Experimentation

- Conduct scientific investigations to test a hypothesis
- Evaluate the accuracy of data
- · Identify controlled, independent, and dependent variables in an experiment
- Construct linear graphs from data and determine the slope
- Use scientific formulas to find missing variables and calculate quantities

# Earth in the Solar System (Astronomy)

- · Know the composition and types of galaxies
- Know that the composition of the Milky Way galaxy, including our solar system, stars, planets, asteroids, comets, and other astronomical objects
- Know that stars differ in size, temperature, and color
- Know how to use astronomical units and light years to measure between planets, stars, and galaxies
- Know that stars provide light for the moon and planets, and that the moon and planets do
  not produce their own light, but reflect light from a star

## Motion and Forces

- Know the terms position and distance as it relates to reference directions and the length between two points
- · Know how to solve for speed based on values of distance and time
- Be able to determine the differences between speed and velocity
- · Be able to create and interpret graphs for: position vs. time and speed vs. time
- Know vectors, such as force and velocity
- Be able to identify the forces imposed on an object and calculate its net force
- Be able to draw a force diagram, find unbalanced forces, and determine direction
- Know that balanced forces means the motion of the object stays the same
- Know the relationship between force, mass and acceleration
- Be able to calculate gravitational force of an object on Earth

# Density and Buoyancy

- · Know the formula for density and the relationship between density, mass and volume
- Calculate density of substances with measurements of mass and volume(regular and irregular)
- Know the definition of buoyant force

· Be able to predict whether an object will sink or float in a particular liquid

## Matter, the Periodic Table, and chemical reactions

- Know the structure of an atom
- Know the different phases of matter and their movement
- Know how to use the Periodic Table to identify elements
- Be able to indentify types of elements on the Periodic Table and their locations
- Know how to find the sub-atomic parts of an element based on its atomic number and mass
- Know that elements are classified by their properties and what those properties are:
   conductivity, melting point, boiling point, and density
- Know that compounds are formed by combining two or more elements and that compounds have different properties than the elements that are combined
- Know that solid compounds have repeating patterns or long chains when they form
- Know that a chemical equations shows the reactants on the left and products on the right
- Know that mass is conserved within a chemical reaction, equal number of atoms are in the reactants and products
- Know definitions of and equations that show exothermic and endothermic reactions
- Know the differences between chemical and physical reactions
- Be able to determine the acidic nature, basic nature, and pH of a solution

# Chemistry of Living Things

- Know that carbon has a central role in all living things
- · Know the chemical composition of DNA and other biological molecules
- Know that living things exist due to many different types of molecules, small and large

# 8th CC Math/Science 8 Supply List

The following are suggested items that each student should have to complete assignments, labs, projects and study guides. They are highly recommended as aids to help students be successful.

- 1. A Cloth bound College Ruled Composition Notebook (For Science) \*Must be 100 sheets
  - \$.50 donation if from Ms. Perry
- 2. A Cloth bound Quad(Graph Paper) Composition Notebook (For Math)
  - \$1.00 donation if from Ms. Perry
- 3. A Bi-pocket folder for Science assignments
- 4. Two 1.5-inch 3-ring binder, one for Science and one for Math
- 5. Binder Paper and Graph Paper for homework assignments
- 6. #2 Pencils
- 7. Blue/Black pens (no other colors are allowed)
- 8. 2 Highlighters
- 9. scientific calculator-Texas Instruments 30XIIS is preferred
- IO. TIME TRACKER!!!! (very important)

\_\_\_\_\_

# Classroom Supply Donations:

- Kleenex
- Binder Paper or Graph Paper
- · White Copy Paper

<b>{</b>
----------

Due to budget constraints, we are requesting parents to support us in any possible way you can. Your voluntary donations are highly appreciated. If you are willing to donate, please initial next to YES and write the amount. Also, please put cash or check (written to Sierramont Middle School, cc: Ms. Perry) in an envelope, and seal it. Please have the student return this paper along with the envelope. Thank you for your support.

Yes:	Amount: