



2nd QUARTER SYLLABUS

TITLE OF COURSE: 8th Grade Life Science	GRADE LEVEL/ DURATION OF COURSE: 8th Grade/ Full Year	TEACHER NAME & E-MAIL: Kristin Page-Botelho <u>kpage@asa.edu.py</u>	
STANDARDS:	ESSENTIAL QUESTIONS:	LEARNING OBJECTIVES:	
<p>Understand the structure of atoms and how this affects chemical reactivity.</p> <p>Understand that chemical reactions are processes in which atoms are rearranged into different combinations of molecules</p> <p>Understand that the organization of the periodic table is based on the properties of the elements and reflects the structure of atoms.</p>	<p>How do scientists organize our knowledge of the universe?</p> <p>How do scientists use evidence, models, and explanations to communicate about discoveries?</p> <p>How do scientists measure change?</p> <p>What forces cause change?</p> <p>What is the relationship between structure and function in objects, organisms, and systems?</p> <p>How do scientists explore, observe, ask questions, collect data, and find patterns?</p>	Vocabulary <ul style="list-style-type: none"> • Element • Metals • Nonmetal • Metalloids • Period • Group • Compound • Mixture • Solution • Solute • Solvent • Concentration • Solubility • Suspension • Colloid • Atomic mass unit • Isotopes • Periodic law 	<ul style="list-style-type: none"> • Alkali metals • Alkaline earth metals • Halogens • Noble gases • Transition metals • Chemical bonding • Molecule • Chemical reaction • Chemical formula • Chemical equation • Reactants • Products • Law of conservation of mass • Acid • Base • pH • Salt
		Skills <ul style="list-style-type: none"> • <i>Compare and contrast elements, compounds, and mixtures.</i> • <i>Recognize that combining two or more different elements forms compounds and that compounds have properties that are different from their constituent elements.</i> • <i>Describe process that will separate the components of physical mixtures.</i> • <i>Analyze a solution in terms of its solute, solvent, and concentration.</i> • <i>Explain how a colloid differs from a solution or a suspension.</i> • <i>Understand the basic structure of the periodic table and be able to use the table to identify elements in simple compounds.</i> • <i>Explain how ionic and covalent bonds form.</i> • <i>Identify chemical symbols, chemical formulas, and chemical equations.</i> • <i>Write and balance simple chemical equations.</i> • <i>Explain how a balanced equation shows the law of conservation of mass.</i> • <i>Describe properties of acids and bases.</i> • <i>Identify acids and bases by using the pH scale.</i> 	



ASSESSMENTS:

Student Grades will be determined by the following:

- 40% Tests/Quizzes
- 20% Labs/Hands-on Activities/Projects
- 20% Class work
- 10% Participation
- 10% Homework

Tests/Quizzes – Students can expect approximately 1 quiz every other week and a comprehensive test at the end of each chapter.

Labs/Hands-on Activities/Projects – Students can expect to participate in 1 hands-on activity or lab about every other week as well as several projects throughout the quarter. Students will be provided and instructed about grading rubrics for all projects prior to starting the project.

Class work – Students will complete daily warm-ups or science news responses, which will be collected weekly. Students will also complete a variety of in-class assignments on a regular basis.

Participation – Students can earn 2 participation points per day. If students are participating positively in class, contributing to class discussions, asking thoughtful questions about topics being taught, working cooperatively with classmates during labs and group-work, and not causing disruption to the learning environment they will earn their participation points.

Homework – Students will be given a variety of homework assignments throughout the quarter. It is expected that all assignments be completed individually. Instruction for all assignments has occurred before assignments are given and therefore assignments are a way of reinforcing concepts taught in class.

RESOURCES:

Science and Technology: Physical Science. Holt, Rinehart, and Winston, 2006.

<http://go.hrw.com>

www.mrspage.com

TEACHER AVAILABLITLY FOR EXTRA HELP AND MEETING WITH STUDENTS:

I will always be available **Mondays and Thursdays** from **3:30-4:15 p.m.** in room **H-11.**