Grade 8 ELL Science Syllabus

Mrs. Cherkaoui Atlantic Middle School 86 Hollis Avenue North Quincy, Massachusetts 02171

Textbook: "Gateway to Science", Thomson & Heinle, 2008

This course will utilize a complete science program developed specifically for the unique needs of English Language Learners. Each lesson will provide clear language objectives, along with the science content appropriate to the grade level and ability of students. Each lesson will incorporate academic vocabulary, word study, critical thinking and best practices based on the English Language Proficiency Standards.

<u>Course</u> <u>Content</u>:

The Scientific Method:

Review of and Practice in the application to various questions

Science Basics:

Thinking Like a Scientist, Science Tools and Metric Units of Measurement

Life Science:

The Cell, Single-Celled Organisms, Plants, Kinds of Plants, Photosynthesis, Animals, Invertebrates, Vertebrates, The Human Body, Asexual Reproduction, Sexual Reproduction, Genetics, Changes Over Time, Classification Systems, Biomes and Ecosystems, Energy Transfer in Living Things, Cycles in Nature, Responding to the Environment and Conservation

Earth Science:

Space, Stars, Our Solar System, Earth, the Moon and the Sun, Eclipses and Tides, Space Exploration, Minerals and Rocks, Earth's Structure, Earth's Surface, Earthquakes and Volcanos, Our Changing Earth, The Atmosphere, Weather and Climate, Extreme Weather, Natural Resources

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Physical Science:

Nature of Matter, Measuring Matter, Atoms and Molecules, Compounds and Mixtures, Chemical Reactions, Radiation and Radioactivity, Forces, Forces and Motion, Work, Power and Machines, Waves, Light, Forms of Energy, Energy Transformations, Energy and Life, Electricity and Magnetism

Assessment Tools:

Notebook checks, Objective Tests and Quizzes, Open-ended Questions/Critical Thinking Activities, Class Participation, Homework, Projects

Grading Policy:

Tests 20% Quizzes 20% Participation in Class 20%** Homework 20% Major Project/Science Fair Project 20%

Additional Important Information:

All students should obtain and use a 3-ring binder with a folder, pen and pencil for every class meeting. Students must cover the textbook and bring it to every class period. All work should be neat and legible in order to receive credit. Notice of 5 school days will be given for upcoming tests, and likewise 2 days notice for upcoming quizzes. A bilingual dictionary is a good tool to bring to class, but may not always be permitted during certain testing situations. Homework or assessments missed due to an excused absence must be made up within 2 days, but exceptions apply, depending on the length of the absence.

** All students must behave in a manner that creates an atmosphere of learning for the good of the entire class. This behavior will be reflected in the class participation portion of the term grade.