# Earth Science

# SYLLABUS Young Middle School August 6, 2012- May 22, 2013



# **Course Summary**

Investigations on the nature of science and how scientific knowledge is achieved are essential components of **sixth grade** earth science and necessary to achieve scientific literacy. The middle school earth science course is designed to enable students to look at the Earth as a set of closely coupled systems. This will be achieved by providing students with an overview of common strands in earth science including Geology (40%) Hydrology & Meteorology (40%) and Astronomy (20%).

Earth Science is taught in 9 units that are aligned with the district's scope and sequence. However, the length of a unit may be adjusted based upon the needs of the class. The estimated length of each unit and the content in unit is as follows:

| UNIT  | LENGTH  | STANDARD   | FOCUS  |
|---|---------|--|--|
| I Earth's Materials (Rocks & Minerals)            | 2 Weeks | S6E5 b, c & d Students will investigate the scientific view of how the earth's surface is formed.          | In this unit students investigate the 3 types of rocks found in the rock cycle and compare and contrast their origins and processes of formation.  |
| II Earth's  Materials  (Earth's  History/Fossils) | 2 Weeks | S6E5 g Students will investigate the scientific view of how the earth's surface is formed.                 | In this unit students will study how fossils provide evidence of constant environmental change.  |
| III Weathering<br>& Erosion                       | 4 Weeks | S6E5 d & h Students will investigate the scientific view of how the earth's surface is formed.             | In In this unit students will investigate processes of weathering and erosion in the formation of earth's structures.  |
| IV Geology: Inside the Earth                      | 3 Weeks | S6E5 a, e & f Students will investigate the scientific view of how the earth's surface is formed.          | In this unit students will examine surface and subsurface processes that are involved in the formation and destruction of earth materials.   |
| V Hydrology & Oceanography                        | 4 Weeks | S6E6 a, b, c, & d Students will recognize the significant role of water in earth's processes.              | In this unit students will study the movement of water through the crust, ocean and atmosphere.  |
| VI<br>Meteorology<br>(Climate &<br>Weather)       | 2 Weeks | Students will understand how the distribution of land and oceans affects climate & weather.                | In this unit students will investigate the interaction of atmospheric conditions and the effects of these on weather and climate.  |
| VII<br>Astronomy<br>(Earth, Moon &<br>Sun)        | 4 Weeks | S6E2 a, b & c Students will understand the effects of the relative positions of the Earth, Moon & Sun      | In this unit students will explore how objects in the solar system are in regular predictable motion.  Those motions explain such Phenomena as the day, the year, phase of the moon, and eclipses. |
| VIII Astronomy (Universe & Solar System)          | 3 Weeks | S6E1 a, b, c, d, e & f Students will investigate the scientific view of how the earth's surface is formed. | In this unit students will examine how scientific theories of the solar system and the universe have changed and how gravity shapes & drives the universe.   |

| Human Impact  4 Weeks  S6E5 a, b, Students will invest the scientific view of the earth's surface formed.  S6E6 a& b Students will descrivations sources of energy and with the uses and conservations. | of how nonrenewable resources and ways to conserve natural resources.  ribe f neir |
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#### **Text Book**

The Prentice Hall Science Explorer Earth Science Text Book is the official text book for this course. Students will have access to the **printed textbook in class**. They can also access the textbook online at http://www.pearsonsuccessnet.com when they are at home.

# **Supplies**

Each student must have a three ring binder with dividers. They must also have black ink pens, pencils, metric ruler, notebook paper and color pencils. Students should also purchase their supplies for projects assigned during the year.

Students will have access to most of the necessary supplies in the classroom. If students are negligent (did not follow procedures) or intentionally destroys classroom property, they must replace it or pay for its replacement.

# **Grading Policy**

The grading system for this course is aligned with the district grading policy. The grading scale for Atlanta Public Schools is as follows:

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|--|--------------------------|--|--|--|
| RANGE  | LETTER GRADE             |  |  |  |
| 100 - 90   | A= Excellent Achievement |  |  |  |
| 89 - 80  | B = Above Average        |  |  |  |
| 79 - 70 C = Average Achievement  |                          |  |  |  |
| 69-0   | F = Failure to Achieve   |  |  |  |
| NE   | No Evaluation            |  |  |  |

Student grades will be comprised of the following categories:

Classwork & Participation (25%), Homework (10%), Quizzes (20%), Labs & Special Projects (25%) including a Science Fair Project, and Tests (20%). The grade will also be comprised of Mid-term exams and Final exams. Students will also be required to maintain a science notebook that will be checked regularly and incorporated into their classwork grade. Each category counts heavily toward the final grade, therefore, it is strongly suggested that students make every effort to come to class prepared to learn and participate in everything the class has to offer. Lack of preparation compromises student's participation grades. Students must also attend class regularly as attendance is essential to successful completion of the course.

In addition to successful completion of courses <u>ALL STUDENTS MUST PASS the Georgia</u> Criterion Referenced Competency Test (GCRCT).

#### REMEMBER

Tutorial will be held on Wednesdays after school to help ensure that students master all concepts.

- Scientists must be able to read and follow directions. Failure to follow directions on test, assignments and class work results in a reduction in grades. All assignments must have the appropriate heading.
- Scientists always record their discoveries and write their reports in black ink. Therefore, you are expected to type your major assignments or write them in black ink.
- Always make an effort not excuses.
- ❖ Science is based upon exploration. Class participation is NECESSARY!

# **Deficiency Notices**

The minimum passing numerical score for all courses is a 70%. Students who are not making satisfactory progress toward meeting the minimum standards will receive a deficiency notice four times during the year to advise them of their questionable status. Deficiencies will be issued early enough to provide students with enough time to improve their unsatisfactory performance. Deficiencies will be issued by **September 5**, **2012**, **November 9**, **2012**, **February 6**, **2013** and **April 17**, **2013**.

# **Report Card Schedule**

October 17, 2012 January 11, 2013 March 20, 2013 June 3, 2013

# **Academic Honesty**

Atlanta Public Schools and Young Middle School demand academic honesty and integrity. Students' work should be their own. Cheating of any kind is prohibited and will result in disciplinary actions as well as a zero on the assignment. *Talking and any other type of communication during a test of any kind is considered cheating.* 

It is imperative that students turn in assignments by the pre-established deadline. If students encounter challenges, they should be proactive and ask for assistance prior to due dates.

### **Behavior Expectations**

The expectations for this class are outlined in the attached constitutions which will be posted in the class at all times to remind students of what is expected of them and what they can expect of me. ALL STUDENTS MUST ADHERE TO THE BIG 4 AT ALL TIMES!

# **Contact Information**

Parents please feel free to visit and participate in the class. I encourage and appreciate parental communication and involvement. You are a vital part of your child's continued success. Dr. S. Mitchell's number is (404) 729-9660 and e-mail address is <a href="mailto:smitchell@atlanta.k12.ga.us">smitchell@atlanta.k12.ga.us</a>. Mr. Chisolm's number is (404)585-1681 and his email address is chadchisolm@gmail.com or chisolmc@atlanta.k12.ga.us.

Please return to acknowledge that you read and understand the policies and procedures for Earth Science.

| Student's Name:         |              |  |  |  |  |  |
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| Parent Signature:       | <b>Date:</b> |  |  |  |  |  |