Earth Science Grade 8 Syllabus 2015

This class introduces the student to the planet Earth, its characteristics and properties. Topics such as weather and climate, Earth’s history and geology and geography, which affect the surface of the Earth, are studied. Also, the exploration continues into space with the study of our solar system.

**GRADES**

For grading purposes, all graded assignments will have a point value. The student will receive a certain percentage of the point value. Their class grade will be based on the average of all of the work they have turned in.

**School Grading Scale:**

93-100 A 90-92 A-

88-89 B+ 83-87 B 80-82 B-

78-79 C+ 73-77 C 70-72 C-

68-69 D+ 63-67 D 60-62 D-

0-59 F

Class grades will consist of (1) daily work which can include readings, questions, worksheets, lab activities, and projects, (2) chapter/unit tests and quizzes. Lab activities, projects and tests have higher point values than other work. Therefore the grades from these will impact the overall average more.

The Semester Grade will be based on the following formula:

1st quarter grade 50%

2nd quarter grade 50%

**Quarter 1----Topic : Weather and Climate**

Weather instruments and weather forecasting

Properties of air

Seasons and the relationship of the Earth and Sun

Heat transfer through the solar system

**At the end of the quarter, the student will know:**

1. **Tools used to develop a weather forecast**
2. **Various methods of heat transfer and how that affects weather**

**Quarter 2----Topic: Weather and Climate continued**

Water in the air-clouds, humidity, etc.

Water on the surface and below ground

Air Pressure and Wind

The relationship between weather and climate

 **Topic: Earth History**

Observations-facts versus inferences

**At the end of the quarter, the student will know:**

1. **How moisture and heat determine weather**
2. **what facts and inferences are and how they are used in science**

**Quarter 3----Topic: Earth History continued**

Introduction to the Grand Canyon

Rocks of the Grand Canyon

Erosion and weathering in the Grand Canyon and locally

Formation of Limestone

Timeline of Earth’s history

**At the end of the quarter, the student will know:**

1. **how weathering and erosion change Earth’s surface**
2. **how various types of rocks are formed**
3. **Earth’s geological history**

**Quarter 4----Topic: Earth History continued**

Fossils and time

Types of rock and the rock cycle

**Quarter 4----Topic: Planetary Science**

Maps and images of various scales

Round/flat earth evidence

Day and night, seasons

Moon observations

Craters on the moon

Mapping the moon

History of moon exploration

Phases of the moon

**At the end of the quarter, the student will know:**

1. **How fossils correlate to various times periods**
2. **Rotation and revolution of the Earth-relationship to day length and seasons**
3. **How meteoroids have impacted and shaped the moon and Earth**

**Expectations for Classroom Behavior**

There are 2 basic guiding principles for what I expect in the classroom. They are: respect and responsibility. Respect refers to how students treat all of the people in the classroom, other students as well as the teacher or other adults. Responsibility refers to doing the "right" thing. Such things as getting assignments done on time, working with other students to complete a project or cleaning up after an experiment are a few examples of responsibility.

All classroom rules are based on these two principles.

1. **Respec**t-during discussions, listen quietly to others' ideas or explanations before speaking.

2. **Responsibility**-getting work completed on time and turned in, working with other students with a positive attitude, being in the room by the time the bell is done ringing, following safety rules during laboratory activities, etc.