Sacred Heart School
2010-2011

Class Subject: Grade 6 - Earth Science

Teacher Information: Amy Ward
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Course Description: In Earth Science, students will learn about Astronomy, Meteorology, Geology, and Oceanography. Using a child's curiosity, opportunities are created to investigate, hypothesize, test ideas, draw conclusions, and engage in hands on activities. Science develops skills in gathering, categorizing, quantifying, and interpreting data. Students will be able to make discoveries about themselves and their environment through science.

General Course Objectives:

Astronomy:

Students will:

- Identify and describe main characteristics of planets, moons, stars, comets, meteoroids, asteroids, etc
- Understand gravitational pull from the moon and the sun in relation to Earth
- Identify various theories about the origins of the universe

Meteorology:

Students will:

- Understand about air changes throughout the atmospheric layers and know about conditions in each layer
- Understand causes and characteristics of hurricanes, tornadoes, etc
- Identify characteristics of a cloud and understand how it is formed
- Define and understand the parts of the water cycle and why it is important for life on Earth

Geology:

Students will:

- Describe characteristics of Earth's layers
- Identify land and water formations and interpret the source information on maps
- Describe the relationships and characteristics of volcanoes, earthquakes, mountains
- Identify characteristics and the formation of igneous, sedimentary, and metamorphic rocks

Oceanography:

Students will:

- Explain how tides are created
- Describe coastal ocean environments such as estuaries, swamps, tide flats, etc
- Understand how oceans effect temperature and climate
- Identify how humans impact the oceans and ocean life through fishing, drilling, and pollution

Instructional Strategies: Include but are not limited to the following.

Lecture, Discussions/Questioning, Viewing/Listening/Answering, Problem Finding/Solving, Laboratory, Data Collection, Discovery, Collaborative Learning Groups, Independent Learning, Computer Applications, Videos

Assessments:

Class Discussions, Teacher Observation, Class Work, Homework, Tests/Quizzes, Projects/Oral Presentations, Journal Writing Assignments, Laboratory Performance, Laboratory Reports

Materials: Prentice Hall Science Explorer (five books):

<u>Inside Earth, Earth's Changing Surface, Earth's Waters, Weather and Climate, and Astronomy</u>

Laboratory activity materials, Supplemental Materials, Videos, Teacher Generated Materials, Interaction white board