Scope and Sequence :MAS

## Week 1: Earth Studies

Gravity
Oxygen Cycle
Nitrogen Cycle
Water Cycle
Soil studies: Weathering and Erosion
NASA Johnson Space Center Testing Facilities

5.12 (12) Science concepts. The student knows that the natural world includes earth materials and objects in the sky. The student is expected to:

(C) identify the physical characteristics of the Earth

(D) identify gravity as the force that keeps planets in orbit around the Sun

4.11(11) Science concepts. The student knows that the natural world includes earth materials and objects in the sky. The student is expected to:

(A) test properties of soils including texture, capacity to retain water, and ability to support life;

(C) identify the Sun as the major source of energy for the Earth and understand its role in the growth of plants, in the creation of winds, and in the water cycle. (

5.6 (A) identify events and describe changes that occur on a regular basis such as in daily, weekly, lunar, and seasonal cycles;
(B) identify the significance of the water, carbon, nitrogen cycles; oxygen cycle

Math
Measurment reading themeters from Data Harvesters
Social Studies
Geocaching GPS Longitude/Latitude
Lang. Arts
Novel studies
Writing Journal of an astronaut in space

Week 2: Moon Studies

Gravity
Oxygen Cycle
Nitrogen Cycle
Water Cycle
Soil Studies
DLN Moon Links/ Core resource s
Moon Rocks from NASA

5.12 (12) Science concepts. The student knows that the natural world includes earth materials and objects in the sky. The student is expected to:

(C) identify the physical characteristics of the moon

(D) identify gravity as the force that keeps the moon in orbit around the Earth.

4.11(11) Science concepts. The student knows that the natural world includes earth materials and objects in the sky. The student is expected to:

(A) test properties of soils including texture, capacity to retain water, and ability to support life;

(C) identify the Sun as the major source of energy for the Earth and understand its role in the growth of plants, in the creation of winds, and in the water cycle. (6) Science concepts. The student knows that some change occurs in cycles. The student is expected to:

5.6 (A) identify events and describe changes that occur on a regular basis such as in daily, weekly, lunar, and seasonal cycles;

(B) identify the significance of the water, carbon, and nitrogen cycles; and

Week 3: **Lunar Habitat** : Why the Moon?

Introduce Project: How do we sustain life on the moon….??? NASA Video and DLSN link Past, Present, and Future

Brainstorm: Problems that will occur according to the last two weeks knowledge obtained regarding the earth and the moon.

Groups: Plan and Implement a way to sustain human life on the moon?

1. Gravity Group
2. Oxygen Cycle Group
3. Nitrogen Cycle Group
4. Water Cycle
5. Soil Studies

Math Extensions
Scale models

Lang. Arts
Novel studies
Writing Journal of an astronaut in space