Grade 6 – Level 4

**TEACHERS:**  Ellen Costa  
John Correia

**Mr. Correia**  
Earth and Space Sciences, Environmental Science  
ZOOM

**Ms. Costa**  
Physical Science, Technology & Engineering  
GOOGLE CLASROOM

2020 Schedule  
Homeroom:  Mr. John Correia  Miss Ellen Costa

| Week  | 7/6  | Mr. Correia  
|       | 6/10 | Solar System  
|       |      | Big Bang Theory  
|       |      | Ms. Costa  
|       |      | Oil Spills  
|       |      | Oil Cleanup |
| Week 2 | 7/13,  
|        | 7/17 | Mr. Correia  
|       |      | Moon Phases  
|       |      | Ms. Costa  
|       |      | Water Filtration  
|       |      | Clean Water |
| Week 3 | 7/20  
|        | 7/24 | Mr. Correia  
|       |      | Environmental Police  
|       |      | Ms. Costa  
|       |      | Alternative Energy |
| Week 4 | 7/21  
|        | 7/31 | Ms. Costa  
|       |      | Oil Spills  
|       |      | Oil Cleanup  
|       |      | Mr. Correia  
|       |      | Environmental Police |
| Week 5 | 8/3   
|        | 8/7  | Ms. Costa  
|       |      | Water Filtration  
|       |      | Clean Water  
|       |      | Mr. Correia  
|       |      | Solar System  
|       |      | Big Bang Theory |
| Week 6 | 8/10  
|        | 8/14 | Ms. Costa  
|       |      | Alternative Energy  
|       |      | Mr. Correia  
|       |      | Moon Phases |
LESSON 1  Earth and Space Sciences

“The Formation of the Solar System”

Students will view a Power Point Presentation, which will promote interactive discussion of the Big Bang Theory. Additionally, students will view and discuss how the earth is part of a system referred to as a “Solar System” that includes a sun (sol), planets, and many moons.

Assignment 1: Create a sundial from a paper plate

Assignment 2: Design and create a “Solar System in a Cereal Box. Students will present their Solar System in a box and discuss its content and construction.

Challenge: How many words can a student make from the letters in – “Our Amazing Solar System?”

LESSON 2  Earth and Space Science

“Water Filtration and Clean Water”

Utilizing a power point presentation, students will view, explain, and discuss the phases of the moon. Interactive discussion will include how the moon affects planet, Earth, and human beings.

Assignment: Create a three-dimensional model to indicate the positioning of the sun, planet Earth, and the moon determines moon phases

LESSON 3  Environmental Science

“Massachusetts Boating Safety Rules”

The Massachusetts Environmental Police have been issuing Boating Licenses to Sea Lab students for over twenty years. Lt. John from the Massachusetts Environmental Police will be introducing, reviewing, and discussing Safe Boating rules with the Grade 6 – Level 4 Sea Lab students. This interactive experience is a precursor to the 52nd Part 2 Summer Session 2021. Students will participate with Lt. John in a mock boat inspection.

Materials Needed: 1 straw, 1 paper plate, crayons or markers, scissors, empty cereal box, white paper or construction paper, tape, ruler, cardboard cereal box or any box, desk lamp or flashlight, string or yarn, large paper clips, and a 3 inch Styrofoam or rubber ball
Ms. Ellen Costa

I will be creating two Google Classroom platforms, one per homeroom, to post all information, assignments, and host meetings.

**LESSON 1**  
**Physical Science**  
“Oil Spills and Oil Cleanup“

In our first virtual session, sixth grade students will “break the ice” and meet each other practicing engineering in its most simple form: cup stacking. After playing a quick memory game of cup stacking, students will be immersed in conversation about oil transportation, spills, and clean up strategies. Sixth graders will be exposed to a live simulation and given their first assignment which will challenge them to think about the containment of the non-renewable energy source of oil.

**LESSON 2**  
**Physical Science**  
“Water Filtration and Clean Water“

Students will return to their second virtual meet with the outcome of Assignment #1. We will discuss the strategies, successes, and failures of oil containment. This will open a door to the discussion of the need for clean water globally. Sixth grade students will watch as I create a water filter using natural resources. This discussion will introduce the importance of considering alternative energy sources like wind, water, and solar.

**LESSON 3**  
**Physical Science**  
“Alternative Energy”

For our final virtual lesson, students will demonstrate their hard work by showing and telling about the alternative energy source models. Students will walk away from this lesson with strategies for supporting their local environment. We will end the way we began with cup stacking and a preview of next summer’s curriculum.