TEACHER:  CAROLE F. PRIOR
GRADE:        12th grade
SUBJECT:  ENGLISH LANGUAGE ARTS//SCIENCE

TITLE of LESSON:  MANGROVES ARE COMING...ARE COMING...ARE HERE!”

The LEARNING OBJECTIVES:

Students will BECOME AWARE of and ANALYZE specific applications (plant trees/negate plastics/share the knowledge) that work in order to help reduce global warming.

Students will be able to evaluate the effects that result in an upheaval in topography, geology and biology caused by climate change.

Students will be able to analyze both direct and indirect effects that enable the general population to become more engaged and responsible in daily living actions.

Students will SYNTHESIZE various factors necessary to DEVELOP/DESIGN and INCORPORATE possible SOLUTIONS while ADDRESSING various the various PROBLEMS via GROUP SOCRATIC SEMINARS.

STANDARDS ADDRESSED:  SC.912.N.1.6: DESCRIBE how scientific inferences are drawn from scientific observations and provide examples from the content being studied

LAFS: 1112. RST.3: Integration of knowledge and ideas (reading scientific articles)
LAFS: 1112. RST 4: Range of reading (science fiction to classical to scientific journals and the inter-relationship that exists)

SPECIFIC TERMINOLOGY:

<table>
<thead>
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<th>SCIENCE FICTION LITERATURE</th>
<th>CLIMATE</th>
<th>WEATHER</th>
<th>GREENHOUSE GASSES</th>
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<td>HUMANITIES</td>
<td>SALT MARSH</td>
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<td>RENEWABLE</td>
<td>NON RENEWABLE</td>
<td>CARBON FOOTPRINT</td>
<td>OXYGEN</td>
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GENERAL LESSON OUTLINE:  Students will read SPECIFIC HANDOUTS/VIEW SELECTED VIDEOS/WRITE JOURNAL REACTIONS TO OUR ENVIRONMENT.

STUDENTS will LISTEN to SELECTED SONGS that refer to NATURE:  RIVER of TIME/OLD MAN RIVER/SITTIN on the DOCK of the BAY/LAZY RIVER/MOTHER OCEAN/BLUE MOON/Stravinsky: The Rite of Spring: Symphony in Three Movements

STUDENTS will WRITE BRIEF PLAYLETS to be based upon pertinent FACTS/DATA

STUDENTS will FORM SOCRATIC TEAMS in which to ADDRESS major QUESTIONS

STUDENTS will DEVELOP a MARKETING PLAN which will involve TEAM PROJECTS.
Students will DESIGN LOGOS/ write POETRY/ DRAW or PAINT/Compose MUSIC or LYRICS etc. In order to CONVEY and SHARE VITAL FACTS and DATA regarding our FRAGILE WORLD from a HUMANISTIC HOLISTIC APPROACH.

These students all live along the ST. JOHNS RIVER, OCALA NATIONAL FOREST, SILVER GLEN SPRINGS or SALT SPRINGS area so this is a natural extension of BASIC SURVIVAL KNOWLEDGE they MUST UTILIZE for their future.

READING SELECTIONS include but are not limited to:
NOVELS:  ALAS, BABYLON, A LAND REMEMBERED, specific selections from the SCIENCE FICTION LITERATURE handout.

EXPLORE the SPRING/SUMMER 2017 issue published by RESEARCH at U. OF FLORIDA

To TRIGGER PERSONAL and IMMEDIATE REACTION to THE ROLE of TREES and OUR NATURAL ENVIRONMENT, we will REFLECT, PROJECT and REACT. Because we are ALL in this WORLD TOGETHER, We must UNDERSTAND and ANALYZE the GLOBAL IMPACT that our PERSONAL ACTIONS accrue. We are all sometimes THOUGHTLESS and MINDLESS about perhaps, WATER USAGE or PLASTIC THROW AWAYS, which have already ALTERED the PRESENT through reckless ACTIONS of PAST and PRESENT GENERATIONS.

MIND MAPPING  (STUDENT READ:  JOYCE KILBURN’S TREE POEM)  (TODAY’S MUSIC: (Meet me on the river of time)

Today we JOURNAL our THOUGHTS about TREES. The role they play in our current lives, our past lives, and the world. Write what you know about trees, your favorite trees, what a forest represents and what your back yard or favorite park looks like. This is a 10 minute MIND MAPPING JOURNAL.

Based on your own observations within your mind, we will walk outdoors WITH our journals and find ONE TREE in which to observe what you see and think about this tree.

MIND MOPPING: (mopping up all the components or wired jump up thoughts) WRITE or DRAW or DOODLE in your journal. You will have TEN MINUTES after finding your tree to jot down REACTIONS.

RETURN to the CLASSROOM: Upon returning to the classroom, we will DEFINE the GIVEN TERMS.

DAY TWO: OVERVIEW for STUDENTS: Our mission is TWOFOLD. (TODAY’S MUSIC:

FIRST we MUST BECOME the VOICE of the NEGLECTED PLANET by WRITING a BRIEF PLAYLET wherein each of the FOUR TEAMMATES assume the PERSONAE of the SPECIES: (Black Mangrove, Salt Marsh, Blue Crab, Carbon) Each voice must decry, excite, delight, yell, or otherwise, express their plight via dialogue among the others so in essence, each voice is explaining facts that reveal their own situation in relation to the ecosystem.

SECOND: We must become personally aware of MARKETING the PLIGHT to OTHER FELLOW TRAVELERS on this earth who walk among us, our friends, neighbors, classmates, parents, citizens by increasing our knowledge. How do we do this? We will INCREASE our READING to INCLUDE SCIENCE FICTION LITERATURE/READ SCIENTIFIC JOURNALS/INVOLVED and PARTICIPATE in a SOCRATIC TEAM/CREATE A MARKETING PLAN/PLANT A TREE.

DAY TWO ACTIVITY: COMPUTER GOOGLE CHROME LAP TOPS: OPEN GOOGLE DOCS to NEW GOOGLE DOCS (TO TAKE NOTES for FACTUAL DATA needed for FUTURE SKIT WRITING)

VIEW and TAKE NOTES after viewing: Climate change is causing trees in the eastern US to move north, west
https://www.usatoday.com/story/tech/sciencefair/2017/05/18/trees-moving-west-and-north/101836832/May 18, 2017 ...
The shift — the result of warmer temperatures and changing rainfall patterns — could even lead to the extinction of certain trees in select forests...
DAY THREE; (TODAY'S MUSIC: STUDENTS will listen to: ‘OLD MAN RIVER’) BREAKOUT GROUPS: DISCUSS and TAKE NOTES: EACH TEAM MEMBER write out TWO QUESTIONS based upon the TEXT after VIEWING:

ESSENTIAL QUESTIONS TO CONSIDER: WHY are the MANGROVES moving NORTH? HOW FAR NORTH can they be found? WHAT is the DISRUPTION in the ECOSYSTEM? WHAT will be a MAJOR PROBLEM? WHAT will be POSITIVE? Can the POSITIVES and the NEGATIVES be OFFSET? HOW can HUMANS HELP?

North Florida Mangroves Could Pose Threat To Coastal ... - WFSU
http://www.globalforestwatch.org/map
www.syngenta.com/GoodGrowthPlan

DAYS FOUR to TWENTY Students RESEARCH/read/digest/formulate QUESTIONS, DISCOVER PROBLEMS/ARRIVE at SIMPLE SOLUTIONS/ CREATE A DEVELOPED MARETIING PLAN/WRITE/DEVELOP/REHEARSE their PLAYLET based on their own PERSONALLY COLLECTED DATA /PERFORM their VOICE for OTHER STUDENTS

TECHNOLOGY: CHROME BOOKS/ PRESENTATION SLIDESHOW/INTERNET CONNECTION/INTERACTIVE GOOGLE CLASSROOM/

BACKGROUND SUPPORT SOUND: Student selected songs about nature

PRIOR KNOWLEDGE: Students should have basic knowledge of our current environmental issues and the polarizing political influence that interferes with genuine progress. Students should have some understanding of the impact that each CARBON FOOTPRINT has had on their PERSONAL SPACE.

LEARNING STRATEGIES: By incorporating their personal involvement and thoughts via MIND MAPPING/THOUGHT JOURNALS/REACTIONS to various stimuli via viewing a wide variety of complex issues, the students will continue to align themselves on the KNOWLEDGE LINE of THINKING (I will have the students DRAW a GIGANTIC TREE with BRANCHES going in all directions on LARGE SHEET PAPER, each student is a ‘branch’ on which they will add their thoughts or reactions on a weekly basis regarding KNOWLEDGE of SPECIFIC DATA) Observing NATURE/TREES on the GROUNDS of our SCHOOL CAMPUS will raise STUDENT’S AWARENESS of NATURE’S GIFTS (The OXYGEN we breathe, the WATER GIVING PRINCIPLES inherent )

SCIENCE CONCEPTS: DESCRIBE how scientific inferences are drawn from scientific observations and provide examples from the content being studied.

HUMANITIES/ENGLISH CONCEPTS: TOTAL immersion within the ARTISTIC/MUSICAL/RIGHT BRAINED DEVELOPMENT of ASSOCIATING the RELATIONSHIPS or SYSTEMS within the ARTISTIC-LITERATURE world wherein NATURE’S PREDICAMENT is WRITTEN, DRAWN, PAINTED, COMMUNICATED and CONVEYED in a MARKETING VENUE which COMBINES ALL AREAS. Students will increase their ABILITY to ENHANCE READING and ANALYSIS skills by SYNTHESIZING SCIENTIFIC MATERIAL and DIGESTING SOPHISTICATED INFORMATION. Integration of knowledge and ideas (reading scientific articles) Range of reading (science fiction to classical to scientific journals and the inter-relationship that exists)
STUDENT OUTCOME: Students should understand the high impact that coal generated power has produced deleterious effects on our atmosphere which has helped create GREENHOUSE GASSES. Students will have developed a MARKETING PLAN with which to SHARE their KNOWLEDGE. Students will demonstrate their understanding of the specific terminology necessary to convey informative facts and data for their specific environmental arena. Students will improve their ability to analyze fact vs fiction. Students will form opinions based upon factual information. Students will discern essential ideas that are relevant to the material as read/deciphered/utilized. Students will be able to draw information upon which to synthesize facts in which to base a deeply valued basis for answering essential questions.