



HUMANITIES AND THE SUNSHINE STATE

TEACHING FLORIDA'S CLIMATES
In partnership with the Florida Humanities Council

JUNE 15-29, 2018 UNIVERSITY OF FLORIDA

ACTION PLAN TEMPLATE

Teacher(s): Linda Buquet,

Grade(s): 4th grade

Subject(s): Writing/Reading/Math, Science gifted in collaboration with 7th grade AP science

Title of Lesson:

Green Dreamers Jr. Foresters Carbon Calculations

Learning Objectives:

Measuring Carbon in trees. Comparing a variety 2 or more trees based in different habitats (school yard to city park)

Standards Addressed (if applicable):

Elementary math: measuring inches, cm

Interdependences, researching in the sciences, life cycles

Community outreach; working in collaboration with AP 7/8th grade students as “global citizens for climate change awareness”

Lesson Outline:

1. Q and A with student what are tree and why are they here? Review life cycle of a tree and photosynthesis role. Discuss what students know about carbon.
2. Teach carbon cycle and create a chart showing a tree's role in the carbon cycle.
3. Teach how to measure a tree and estimate biomass
4. Students will choose a tree to measure each month during a 9 month period and disseminate/evaluate the data.
5. Students will research their tree and what role their tree plays in this environment, native or invasive?
6. Students will report back each month with data to compare the amount of biomass and carbon storage.
7. Write an expository piece on why do the trees look the way they do?

Learning Strategies:

Accessing prior knowledge, review life cycles and create carbon cycles with trees. Estimate tree and carbon capacity and trees.

Science Concept(s):

Interdependence and life cycles of plants/trees and carbon cycle

Humanities Concept(s):

Global citizenship in raising awareness of climate change

Technique(s)/Resource(s) Incorporated from Teaching Florida's Climates Workshop:

Measuring carbon in trees and effect from climate change

Student Assessment Strategies:

Chart depicting trees role in the carbon cycle

Research on native and invasive tree species

Data chart showing tree amount of biomass each month.

Benefit to my students:

Write an expository piece on Why do the trees look the way they do?

Students can explain and demonstrate what the carbon cycle is

Resources and Materials (supplies needed for activities):

Trees in school yard and city park

Measuring tape-sole feet

Clinometer

Computers internet

Books on climate change, periodicals, newspapers (2010 and later)

Paper, pencil, crayons, markers, chart paper



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“TAKING IT BACK TO THE CLASSROOM”

We know that it's not always possible to develop and implement a brand new lesson plan in a busy curriculum. How do you envision incorporating our experiences in your classroom teaching?

Idea 1

Learning Goals/Standards

Idea 2

Learning Goals/Standards

Idea 3

Learning Goals/Standards

Idea 4

Learning Goals/Standards

Idea 5

Learning Goals/Standards

Idea 6

Learning Goals/Standards

What additional resources do you need in order to act on these ideas?