

Name(s): Richardson, McConaughy & Mattern

Course: Chemistry

Unit: Immigration

Period/Time: Periods 9/10 and 11

Unit Topic: Immigration

Dates: April 6 & 7, 2009

Department: Science

Grade Level: 11th

Essential Question: How has immigration influenced our knowledge and understanding of science, technology, and artesian crafts in the United States and how will it affect our future?

	4/6/2009-4/7/2009	4/8/09
Objectives	Students will be able to create a map of cocoa producing countries, listing regional characteristics of cocoa. They will also be able to predict flavor qualities of regional cocoa based on the chemistry of flavors.	Students will be able to test hypotheses from day 1. Also, students will be able to create a stoichiometric recipe utilizing the flavors predicted and determined.
Activities/ Procedures	Students will review reference materials provided in groups. Each group will evaluate a different aspect of the map. When brought together, the map will be created; students will use this information to predict regional cocoa tastes.	Students will create tasting mats, and explore the flavors of single origin cocoa products. Students will then use more common cocoa products to produce a stoichiometric recipe utilizing their experimentally gathered data.
Instructional Strategy	Group research and collaboration.	Student experimentation, group collaboration
Technology	Computers, Google Earth, and Internet.	Computers, Google Earth, and Internet.
Materials	Handouts, computers, and internet resources.	Cocoa samples, Handouts, computers, and internet resources.
Homework	Complete in-class assignment.	Evaluate hypothesis, recipes, and write up conclusions.
Assessment	Assessment based on student demonstration of completed work.	Assessment based on student demonstration of completed work.
NJCCS or Curriculum Standards	5.1., 5.2.A.1, 5.2.B.3, 5.4, 5.6, 5.8, 5.10	5.1., 5.2.A.1, 5.2.B.3, 5.4, 5.6, 5.8, 5.10