

TABLE 1

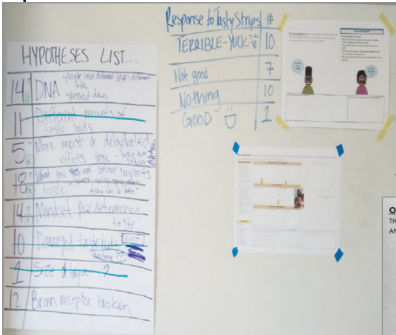
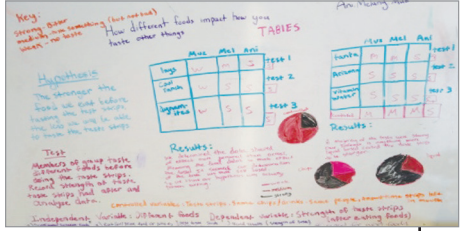
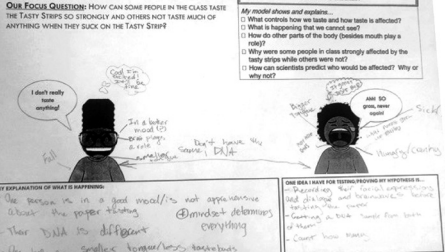
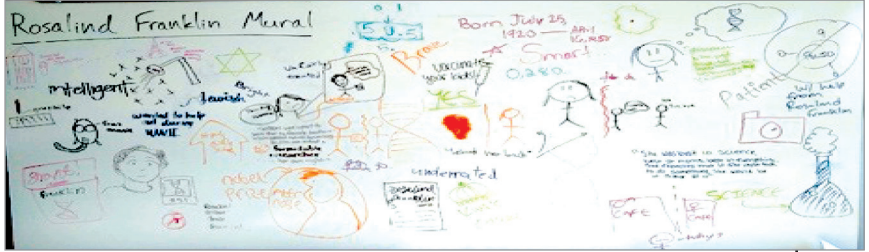
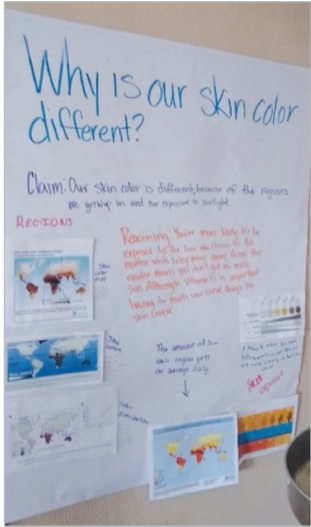
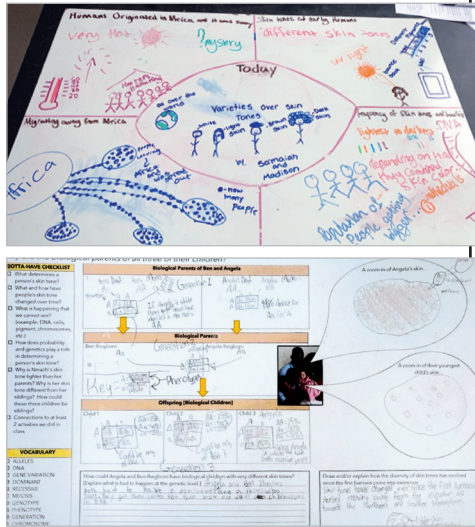
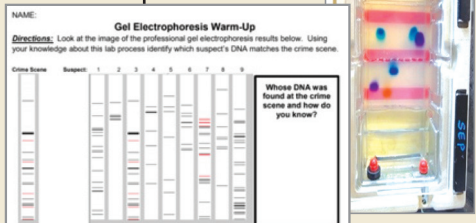
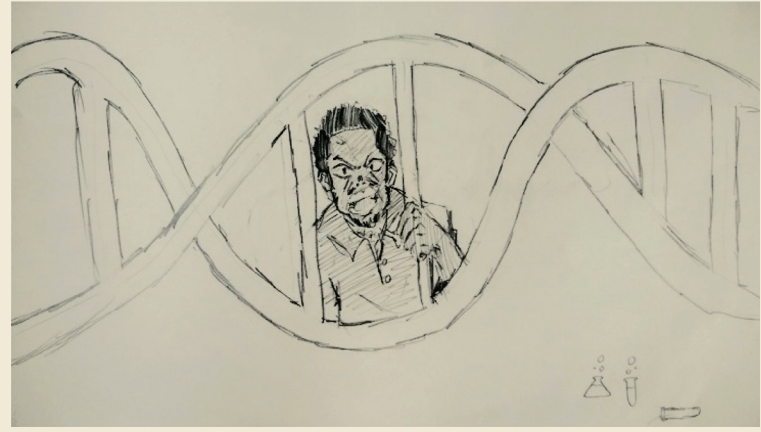
Big Ideas and Questions	Duration & Example Activities	Student Work
What is an example of a trait? How can we study traits? How do they impact our lives?	Lesson 1-3, 200 minutes - Introduce PTC ("Tasty Strips") phenomenon and elicit ideas about flavor differences - Students develop hypotheses about PTC strips and design experiments to test these - Students test hypotheses in groups and present findings to class - Students read article on genetics of taste and participate in debate line around genetics	  
What are examples of different traits? Are all traits inherited?	Lesson 4-5, 180 minutes - Students brainstorm and journal about different human traits - Students conduct a fingerprint lab and create graphs to create a class comparison of distribution of fingerprint types - Students watch fingerprint video and reading, then discuss distribution patterns of fingerprints - Human ratio activity and then body image small group discussion	
Where is DNA kept? What does DNA look like? How does DNA differ between species?	Lesson 7-9, 180 minutes - Students rotate through stations. In these stations they: (1) look at cheek and onion cells under microscopes and premade slides, (2) extract DNA from fruit and look at it, (3) read and discuss an article about Henrietta Lacks, (4) watch a video on DNA and take notes, and play a game to simulate thinking about probability - What % Irish is Ms. Fowler? What percent Malaysian is Ms. Noelle?	

TABLE 1 (CONT)

Big Ideas and Questions	Duration & Example Activities	Student Work
What about race? Why are there racial patterns among populations if it is a non-inheritable trait?	Lesson 10-12, 180 minutes - Students read graphs, maps, and tables of evidence to piece together the story of how different skin tones evolved. - Timeline and discussion of the impact of science on race - Group conversation about how race and other aspects of our identities are impacted by science. - Students read and debates on racial indicators on medical forms - Students model their ideas about the genetics of skin tone	 
How can scientists examine DNA? How can genetic forensics be used for justice?	Lesson 13-14, 200 minutes - Introduction to Gel Electrophoresis - Innocence Project 	
What have we learned about race and genetics? What parts of our identities are influenced by genetics? What do we want to say back to science and to society?	Lesson 15, 90 minutes - Students write raps, poems, songs, etc. to show what they have learned. - Optional (if extra time): students created artwork related to the unit and wrote up its meanings. 	 