



Louisiana High School GLEs addressed by STEM Field Trip

Science as Inquiry	
4. Conduct an investigation that includes multiple trials and record, organize, and display data appropriately (SI-H-A2)	Students will conduct an experiment that includes at least 6 trials while recording, organizing, and displaying data
5. Utilize mathematics, organizational tools, and graphing skills to solve problems (SI-H-A3)	Students use mathematics on six different stops in the Museum galleries to solve problems facing scientists in WWII
12. Cite evidence that scientific investigations are conducted for many different reasons (SI-H-B2)	Through ten stops in the exhibits and a design challenge, students will experience a variety of reasons for scientific investigation
Physical Science	
9. Compare nuclear fission to nuclear fusion (PS-H-B2)	Through investigating the atomic bomb, students will be able to compare nuclear fission to nuclear fusion
22. Identify evidence of chemical changes (PS-H-D1)	Through describing the process of turning waste fats into explosives, students will understand the chemical change during a detonation
Biology	
38. Discuss mechanisms of disease transmission and processes of infection (LS-H-G2) (LS-H-G4)	Students calculate the speed of infection of a battlefield wound and find out how penicillin works to stop the spread of infection
Chemistry	
8. Analyze the development of the modern atomic theory from a historical perspective (PS-H-B1)	Atomic theory explained in our exhibit on the Manhattan Project
31. Describe chemical changes and reactions using diagrams and descriptions of the reactants, products, and energy changes (PS-H-D1)	Students describe the chemical reaction brought on by impact on nitroglycerin.
Physics	
7. Relate gravitational force to mass and distance (PS-H-E1)	Students examine a WWII glider to determine how material choice helps overcome gravitational force to achieve optimal distance
Mathematics (Grade 10)	
12. Apply the Pythagorean theorem in both abstract and real-life settings (G-2-H)	Students use the Pythagoreans theorem to find the distance of an object at sea.
23. Draw and justify conclusions based on the use of logic (e.g., conditional statements, converse, inverse, contrapositive) (D-8-H) (G-6-H) (N-7-H)	To break a code, students will use conditional statements to substitute the correct letters for coded letters.

