

STEM School Chattanooga 11th Grade PBL Unit Plan Template

Unit Quarter: <u>3rd</u>



Title: <u>East Lake Park Outdoor Classroom and</u> <u>Middle School Student Design Mentoring</u>

Learning Target Topics

Collaboration: Working with other people on a project or problem to achieve a shared goal.

Creative Thinking: Accessing, using, and applying information and knowledge.

Innovation: Using creative thinking to construct something new and valuable.

Grade Level	11 th Grade	Unit Length	9 Weeks
Industry	Jenny Whitener, Bridge Innovate		
Partner	Michael Walton, Green Spaces		
Unit	STEM teams will develop design solutions for an outdoor classroom to impact sustainability (social,		
Overview	environmental, and economic) as well as energy conservation for East Lake Park. Teams will apply design		
	thinking methods for inspiration, to empathize with stakeholders, and to generate, develop, and prototype		
	ideas. Teams will work with a middle school partner to mentor students to design an outdoor classroom as		
	part of a first-ever design competition. For the school partner, the focus is on developing a creative outdoor		
	teams		
Unit			
Essential	• Project . Design and prototype a concept for an outdoor classroom for East Lake Park		
Issue			
Kick Off	Kick Off: January 13th		
Event	Jenny Whitner will explain the principles of design thinking. Michael Walton will discuss the East Lake		
	outdoor classroom project and the goals for sustainability and energy conservation.		
Culminating	Presentation Day: TBD (March 14th-18th)		
Events	The student teams will present their design concepts and prototype to the project sponsors. The project		
	sponsors will evaluate the designs and provide constructive feedback to the teams.		
Common	Students will be scored using the Association of American Colleges and Universities rubric for Creative		
Assessment	Ininking Skills. All 4 s will equate to Advanced, scores of 3 and 4 will equate to Proficient, and any scores		
	below a 5 will equate to below basic.		
	Items that will be used to score student work: • Assignments (Plans, Weekly Prototype Reports, Design Process Work Products, etc.)		
	• Presentation		
	• Functioning Prototype		