

SUBJECT: Technology Education		GRADE: 7	
Unit Title: Architectural Drawing and Design		Time Frame: 21 Days	
UNIT OVERVIEW			
Within this unit students will learn about the design process, within certain constraints. By the end of this unit, students will have completed assignments involving the designing of a house, using the Home By Me Software.			
LRG SKILLS AND DISPOSITIONS		PA STANDARDS	
Creativity & Innovation: Design a Two Story House. (S3A) Critical Thinking & Problem Solving: Design a Two Story House. (S4B)		3.5.6-8.G 3.5.6-8.Q 3.5.6-8.T 3.5.6-8.V 3.5.6-8.X 3.5.6-8.CC	
COMPETENCIES		LEARNING TARGETS	
Nature and Characteristics of Technology and Engineering		- I can develop innovative products and systems that solve problems and extend capabilities based on individual or collective needs and wants. (K1TEB1I1) - I can apply creative problem-solving strategies to the improvement of existing devices or processes or the development of new approaches. (K1TEB1I4)	
Design in Technology and Engineering Education.		- I can assess design quality based upon established principles and elements of design. (K1TEB7H5) - I can refine design solutions to address criteria and constraints. (K1TEB7H3) - I can improve essential skills necessary to successfully design. (K1TEB7H7)	

SUBJECT: Technology Education		GRADE: 7	
Unit Title: Graphic Design		Time Frame: 12 Days	
UNIT OVERVIEW			
Within this unit students will learn the basics of using Microsoft Word, Publisher and PowerPoint to create personalized graphic designs for communication purposes.			
LRG SKILLS AND DISPOSITIONS		PA STANDARDS	
Digital Literacy & Technological Proficiency: Create a Calendar. (K4DLT1B1) Critical Thinking & Problem Solving: Design a Business Card.		3.5.6-8.P 3.5.6-8.Q 3.5.6-8.T 3.5.6-8.V 3.5.6-8.X	
COMPETENCIES		LEARNING TARGETS	
Design in Technology and Engineering Education		- I can illustrate the benefits and opportunities associated with different approaches to design. (K1TEB7H1) - I can apply the technology and engineering design process. (K1TEB7H2) - I can refine design solutions to address criteria and constraints. (K1TEB7H3)	
Integration of Knowledge, Technologies, and Practices		- I can explain how knowledge gained from other content areas affects the development of technological products and systems. (K1TEB3H3) - I can assess design quality based upon established principles and elements of design. (K1TEB7H3)	

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Unit Title: 3D Modeling	Time Frame: 12 Days
UNIT OVERVIEW	
Within this unit students will build on past coursework in Technology education, to use what they have learned about drawing in 3D using SketchUp, VCarve and Autodesk 123D, then milling and or printing their personalized creation.	
LRG SKILLS AND DISPOSITIONS	PA STANDARDS
Adaptability & Flexibility: Learn new software. (D1B) Digital Literacy & Technological Proficiency: Use 3D Software. (K4DLT1B1) Continual Learning & Growth Mindset. Create a 3D Model. (D2B)	3.5.6-8.J 3.5.6-8.L 3.5.6-8.Q 3.5.6-8.V 3.5.6-8.X 3.5.6-8.LL
COMPETENCIES	LEARNING TARGETS
Design in Technology and Engineering Education	I can refine design solutions to address criteria and constraints. (K1TEB7H3)
Core Concepts of Technology and Engineering	I can compare how different technologies involve different sets of processes. K1TEB2H6
Nature and Characteristics of Technology and Engineering	I can apply creative problem-solving strategies to the improvement of existing devices or processes or the development of new approaches. (K1TEB1H4)