


Subject		Art Studio									
Grades		3D Print									
Key Learning:											
<p>In 3D Print students will learn to design using a CAD program. They will make both utilitarian and art objects. They will understand the math behind creating a form, using correct measurements and angles. Students will learn about overhangs and support structures and use both additive and subtractive modelling techniques in CAD.</p>				<p>Pinellas Preparatory Academy Curriculum Guide</p>							
Standard(s):				Standard(s):				Standard(s):			
VA.68.C.1.3, VA.68.C.2.3, VA.68.C.3.1, VA.68.S.1.4, VA.68.S.2.1, VA.68.S.2.3, VA.68.S.3.1, VA.68.S.3.3, VA.68.S.3.4				VA.68.O.1.2, VA.68.O.2.4, VA.68.O.3.1, VA.68.H.1.2, VA.68.H.2.3, VA.68.H.3.3				VA.68.F.1.1, VA.68.F.2.1, VA.68.F.3.4, VA.FS.68.WHST.2.4			
Unit Essential Question:				Unit Essential Question:				Unit Essential Question:			
How can CAD help artists express their ideas? How can we use design principles to organize ideas?				What kinds of things can 3D printing create? How can we use 3D printing to reflect culture and create art?				Do artists have a responsibility to their audiences? How does this art form make us think better? Can 3D printing help me understand other subjects?			
Vocabulary:				Vocabulary:				Vocabulary:			
Additive, subtractive, 3-dimensional, elements of art and principles of design				union, boolean union, slicing, duplicating, rotations on the X, Y, and				filaments, melting points, pla, abs, build plate, nozzle, heater and fan replacement			

