Teacher: CORE STEM 6	Year: 2017-18
Course: STEM	Month:

A Performance Task: Industrial Designer: Skateboard Park and Zoologist

u	Essential Questions	Content	Knowledge and Skills	Vocabulary	Assessments	Lessons	Resources	Standards
g	How are materials selected to be used	What makes a skate park?	Look at pictures of skate parks.				Internet	
	for a project?							
u	How do human wants and needs							
	influence engineering developments?							
s	How does geometric awareness							
	develop through visualization and							
	practice?							
t								
S								
e								Standards
р	How are materials selected to be used	Research types of		Flatbank, half			Word	
	for a project?	equipment.		pipe, quarter				
t		Research pros and cons of		pipe, rail, etc.			Excel	
ι	How do human wants and needs	skate parks.					LACEI	
	influence engineering developments?	skate parks.						
e	How does geometric awareness							
	develop through visualization and		What equipment is there and how large					
	practice?		do you think each piece is? What size					
			overall would you judge this area to be?					
			What could be added or taken away?					
			What are safety considerations? What					
			functionality is the whole skate board area?					
n			Research equipment cost and sizes					
			using an excel sheet.					
b								
e			Research the pros and cons (safety					
			concerns) using a table in a word					
			document.					
r								

Students write a letter explaining why they want to build a skate park and addressing the safety concerns. Students design a skate park sign with rules.

			rules.				
с	Essential Questions	Content	Knowledge and Skills	Vocabulary	Assessments Lesso	ons Resources	Standards
t	How are materials selected to be used	Learn Sketchup 8	Show how to design on Sketchup8,	push/pull tool,		Sketchup8	
	for a project? How does geometric		stressing that the whole park needs to	offset tool,			
	awareness develop through		be shown but only the skate park needs	lines, arcs, etc.			
	visualization and practice?		to be detailed equipment, benches,				
			railings and in scale.				
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b							
e							
r							
N							
	How do human wants and needs influence engineering developments?						
ο	initialitie engineering developments:						
-	How are materials selected to be used	Learn Power Point	Students put together a final	animation,		Power Point	
v	for a project? How does geometric		presentation of all their work into a	transition		r ower r onte	
	awareness develop through		Power Point. Students are to add				
	visualization and practice? How do		transitions and animations to their				
	human wants and needs infludence		Power Point.				
e	engineering developments?						
m							
b							
е							
r							
_							
D							
e	How is the survival of a species and the	Sat un reference cards for	Student choose endangered animal	endgangered,		Word	
C	ability to adapt affected by human and		from WWF.org ro research. Watch	zoologist		word	
	natural influences?	research	snips of endangered animals and why	200108131			
	natarar minucifices:		they are on the list. What are the				
			common themes?				
e	When investing different systems how		Set up research cards or sway to input			Sway	
	does a habitat meet the needs of a		their information. Use a citation for				
	species?		web sites for their bibliography cards.				

m Why are public policies and programs for resource use and management dependent on environmental and social pressures? Students use Gimp2 to cut out a pictures and paste it in word.

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b

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- n How is the survival of a species and the Design a Prezi ability to adapt affected by human and natural influences?
- u When investing different systems how does a habitat meet the needs of a species?

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 r Why are public policies and programs for resource use and management dependent on environmental and social pressures? Students are to design a prezi on their endangered animal.

Students design a poster of their animal using word by putting in graphics and wrapping pictures and texts.