

NEXT GENERATION SCIENCE STANDARDS



SciGirls Get Tech
Activity Guide



	Grades 3-5			Grade 5	Grades 6-8					
	Engineering Design			Physical Science	Physical Science		Engineering Design			
	Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on material, time, or cost.	Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.	Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.	Make observations and measurements to identify materials based on their properties.	Ask questions about data to determine the factor that affect the strength of electrical and magnetic forces.	Conduct an investigation and evaluate the experimental design to provide evidence that fields exist between object exerting forces on each other even though the objects are not in contact.	Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and natural environment that may limit possible solutions.	Evaluate competing design solutions using a systematic process to determine how well they meet the criteria and constraints of the problem.	Analyze data from tests to determine similarities and difference among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.	Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved.
Robot Body Language	x	x	x						x	
Passion for Pixels	x	x	x						x	
Dough Creatures	x	x	x	x	x	x	x	x	x	
High Tech Fashion	x	x	x	x	x	x	x	x	x	x
Keep Out!	x	x	x	x	x	x	x	x	x	x

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Grades 3-5																						
The Nature of Technology									Design						Abilities for a Technological World					The Designed World		
1C	1E	2G	2H	2I	2J	2K	2L	3C	8C	8D	9C	9D	10C	10E	11E	11F	11G	12D	12G	17E	17F	17G
Robot Body Language	X	X					X	X						X					X			
Passion for Pixels							X						X						X	X	X	X
Dough Creatures			X	X		X	X		X	X	X	X	X	X	X	X	X	X	X			
High Tech Fashion			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Keep Out!			X	X		X	X		X	X	X	X	X	X	X	X	X	X	X			



STANDARDS FOR TECHNOLOGICAL LITERACY 3rd Edition

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Grades 6-8																						
The Nature of Technology										Design							Abilities for a Technological World			The Designed World		
1F	1G	1H	2M	2N	2Q	2R	2S	3F	8E	8F	8G	9F	9G	9H	10F	10H	11J	11K	11L	17H	17I	17K
Robot Body Language	x	x	x				x	x								x				x		
Passion for Pixels	x	x					x								x					x	x	x
Dough Creatures			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			
High Tech Fashion			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			
Keep Out!	x	x		x	x	x	x		x	x	x	x	x	x	x	x		x	x			

