Time Frame: 2 Weeks	Unit Title: Problem Solving	Course Name: Technology and Society

Stage 1 - Desired Results

Established Goals	Transfer	
NH CS Standards	*Students will be able to independently use their learning to…*	
AP - Algorithms & Programming	use a structured problem solving process to address problems and design solutions.	
1B-AP-08 - Compare and refine multiple algorithms for the same task and determine which is the most appropriate.	**Meaning**	
	UNDERSTANDINGS *Students will understand that….*	ESSENTIAL QUESTIONS *Students will keep considering*
	A model is a tool to help reach desired outcomes.	What strategies and processes can I use to become a more effective problem solver?
2-AP-13 Decompose problems and subproblems into parts to facilitate the design, implementation, and review of programs.	Following a problem solving model will aid in successful outcomes.	What is the problem solving process?
	Breaking a larger problem into parts will help make it easier to solve.	What actions can I take to solve problems?
Common Core State Standards for English Language Arts	Define, prepare, try, & reflect are key parts to the problem solving model.	How can I improve my ability to solve problems by analyzing the application of the problem solving process by others?
	Acquisition	
Speaking and Listening 6-12	*Students will know…*	*Students will be skilled at…*

1. Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively. **Next Generation Science Standards** HS-ETS1-2. Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering.	**Define** - How to thoroughly define a problem. **Prepare** - Steps to take to prepare a solution to the problem **Try** - Implementing a solution **Reflect** - How to reflect on the process and think about future applications	● Communicating and collaborating with classmates in order to solve a problem ● Iteratively improving a solution to a problem ● Identifying the four steps of the problem solving process ● Given a problem, identifying individual actions that would fall within each step of the problem solving process ● Identifying useful strategies within each step of the problem solving process

The UbD Template, Version 2.0 2011 by Grant Wiggins and Jay McTighe