

The UbD Template, Version 2.0

Time Frame: 2 Weeks	Unit Title: Problem Solving	Course Name: Computer Science Grade 7
Stage 1 - Desired Results		
<p>Established Goals</p> <p>Students will use a structured problem solving process to address problems and design solutions.</p> <p>NH CS Standards <i>AP - Algorithms & Programming</i></p> <ul style="list-style-type: none"> • 1B-AP-08 - Compare and refine multiple algorithms for the same task and determine which is the most appropriate. • 1B-AP-11 - Decompose (break down) problems into smaller, manageable subproblems to facilitate the program 	Transfer	
	<p><i>Students will be able to independently use their learning to...</i></p> <p>use the problem solving process to solve different types of problems.</p>	
	Meaning	
	<p>UNDERSTANDINGS <i>Students will understand that....</i></p> <ul style="list-style-type: none"> • Following a problem solving model will aid in successful outcomes. • A model is a tool to help reach desired outcomes. • Define, prepare, try, & reflect are key parts to the problem solving model. 	<p>ESSENTIAL QUESTIONS <i>Students will keep considering</i></p> <ul style="list-style-type: none"> • What strategies and processes can I use to become a more effective problem solver? • What is the problem solving process? • What actions can I take to solve problems?
	Acquisition	
	<p><i>Students will know...</i></p>	<p>Students will be skilled at...</p>

<p>development process.</p> <ul style="list-style-type: none"> • 1B-AP-16 - Take on varying roles, with teacher guidance, when collaborating with peers during the design, implementation and review stages of program development. 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Communicating and collaborating with classmates in order to solve a problem • Iteratively improving a solution to a problem • Identifying different strategies used to solve 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
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