

## **GRASP and Design Checklist Planning**

Use the GRASP model to define the culminating STEM rich task

Goal and Driving Question	
Establish the goal, problem, challenge, or obstacle in the task	
Role	
Define the role of the students	
Audience	
Identify the target audience	
Situation Explain the situation, the background	
Product / Performance	
Clarify what the	
students will create and why	
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Standards	
What are the specific standards for success that must be met	





## Unpack the checklist of steps using the design thinking framework

Design Phase	Approx Time to Complete	Checklist Steps
Empathise Includes Research		1. 2. 3. 4.
Define Includes Mind- mapping		<ul><li>5.</li><li>6.</li><li>7.</li><li>8.</li></ul>
Ideate- Prototype-Test Iterative Improvement Cycle		9. 10. 11. 12. 13.
Communicating Preparing for and delivering presentation		14. 15. 16. 17.

Phase 1 Surface Acquire	Phase 2 Surface Acquire / Consolidate	Phase 3 Surface Consolidate / Deep Acquire	Phase 4 Deep Consolidate / Transfer
Laying the Foundation Part I Establishing routines, norms, rights and responsibilities Diagnostic assessment of knowledge, skill and thinking Building the base of knowledge and skill	Laying the Foundation Part II Building the base of knowledge and skill Using Bounded Problems to develop skill and capacity in applying the problem solving / design process	Using Bounded Problems to develop skill and capacity in applying the problem solving / design process	Application  Open ended problems where the students apply everything they have learnt to a task that has no one solution

Flow of STEAM learning and unit planning across the year

