

Features	Description	Range	Comments for 2-3 primary features (by % weight)
Coverage of issues & information	<p>In making the case for funding the Manhattan Project, be sure to include the following technical content (not necessarily in this order):</p> <ul style="list-style-type: none"> • The definition of (a) a fissionable nuclide, (b) a fissile nuclide and (c) a fertile nuclide. In your explanation, list (d) an example of a fissile nuclide, (e) an example of a fissionable nuclide that is not fissile, and (f) an example of a fertile nuclide. • The definition of (a) a nuclear-explosive nuclide and (b) a nuclear-explosive material. Explain (c) whether or not all fissile nuclides are nuclear-explosive nuclides. Explain (d) why some nuclides that are not fissile are nevertheless nuclear-explosive. In your explanation, (e) list an example of an important nuclear-explosive nuclide that is not fissile. • Explain in one or two paragraphs the basic, general requirements for achieving a nuclear explosion using nuclear explosive material. n.b. Do not go into any of the details of particular weapon designs. • Explain in (a) one paragraph why the energy released in a nuclear explosion is much greater than the energy released in the explosion of a conventional bomb. In (b) a separate paragraph illustrate the magnitude of energy release of a nuclear explosion when deployed strategically. 	20% High Mid Low	
Accurate use of concepts	<p>Accurate, clear definitions of:</p> <ul style="list-style-type: none"> • Fissile, fissionable, and fertile • NEM, NEN <p>Accurate, clear explanations of:</p> <ul style="list-style-type: none"> • Nuclear explosion using NEM • Energy release greater than conventional bomb 	20% High Mid Low	
Explanation & argument	<ul style="list-style-type: none"> • Writer's approach is persuasive • Technical content is integrated into the persuasive case • Explanations use careful logic and evidence in reasoning about concepts and their applications 	10% High Mid Low	

Professional & adaptive style	<ul style="list-style-type: none"> ● Geared toward college-educated member of Congress ● Congruent with Congressional Research Service report style: text is clear, concise, organized; uses a tone appropriate to writing situation (CRS report) ● Comprehensive and thoughtful use of sources (need both “Physics and Technology of NEM” and course slides). <ul style="list-style-type: none"> ○ Source info cited according to assignment sheet ○ Most of report is in writer’s own words 	20% High Mid Low	
Conformity to conventions	<ul style="list-style-type: none"> ● 2 pages ● Title and section headings specified in prompt ● Header and date in correct format ● Page numbers ● 12-point Times New Roman font throughout, including page numbers (except if specified in prompt) ● 1.25" side margins and 1" top margins and .5" bottom margins ● Citation practices specified in prompt ● Key terms bolded in first use <p>(V = all correct, X = some mistakes [-10], XX = no conformity [-15])</p>	15% High Mid Low	<p align="center">**If you can't find the error, come to office hours. **</p>
Copy editing & use of standard language	Grammar and mechanics are edited for correctness and readability	5% High Mid Low	
Peer Review	2% for each writer's memo question answered and/or for each substantial comment	10%	
Overall Comments:			