

Design Project Rubric

	4	3	2	1
Structure criteria	Meets all assignment criteria.	Missing an item from the criteria.	Missing two or three items from the criteria.	Missing four or more items from the criteria.
Blueprint	All straight lines are ruler-drawn and measurements are given. Design is properly labeled. Blueprint and model match.	All straight lines are ruler-drawn and measurements are given, but there are minor errors in the features compared to the actual model.	Most straight lines are ruler-drawn. Many errors in the features compared to the actual model.	Drawing does not resemble the actual model.
Scientific communication	Provides clear, effective explanation detailing how the task was carried out. All vocabulary was used correctly. Many connections were made to prior lessons and content to support communications.	Presented a clear explanation. Most vocabulary was used correctly. Some connections were made to prior lessons and content.	Incomplete explanation. Missing or misused vocabulary. Few if any connections made to prior lessons.	Explanation could not be understood or was incorrect. Vocabulary not used. No connections made to prior lessons and content.
Earthquake-resistant features	Incorporated seven or more earthquake-resistant features.	Incorporated five or six earthquake-resistant features.	Incorporated three or four earthquake-resistant features.	Incorporated two or less earthquake-resistant features.
Structural survival	Structure survived the simulated earthquake with no damage.	Structure survived the simulated earthquake with little damage.	Structure survived the simulated earthquake with major damage, such as a partial collapse.	Structure did not survive the simulated earthquake. There was a complete collapse of the structure.

Individual Report Rubric

	3	2	1	0
Design description	Description includes specific details about the design process to make the structure earthquake-resistant and includes support, bracing, and movement. All vocabulary is used correctly.	Description includes some details about the design process to make the structure earthquake-resistant and includes support, bracing, or movement. Most vocabulary is used correctly.	Description includes few details about the design process to make the structure earthquake-resistant. Little is mentioned about support, bracing, or movement. Vocabulary is missing or not used correctly.	Design description not provided.
Materials used for resistance	All materials are listed with an accurate explanation about why each item was selected. All vocabulary is used correctly.	All materials are listed, but some explanations and vocabulary are missing, incomplete, or incorrect.	Not all materials are listed. Most of the explanations and vocabulary are missing, incomplete, or incorrect.	No materials are listed. All explanations and vocabulary are missing.
Design decisions	All design decisions are explained correctly as they relate to earthquake resistance. All vocabulary is used correctly.	Most design decisions are explained correctly as they relate to earthquake resistance. Most vocabulary is used and used correctly.	Few design decisions are explained as they relate to earthquake resistance. Little vocabulary is used or used correctly.	Design decisions are not explained.

Design changes	Post-test design changes are listed and explained in detail. All vocabulary is used correctly.	Post-test design changes are listed. Rationale for changes is lacking in detail or incorrect. Vocabulary is missing or not used correctly.	Post-design changes are listed. Rationale for changes is lacking in detail and incorrect. Vocabulary is missing.	Post-design decisions are not listed or explained.
Proper writing conventions	All writing conventions and spelling are correct. The report is error-free.	There are a few conventions and spelling errors, but they do not interfere with correct content and readability.	There are some convention and spelling errors that interfere with correct content and readability.	There are many convention and spelling errors that make the report incomprehensible.