

EiE: Designing Parachutes
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1-8

Lesson 1 Rubric

Student will be able to...	Novice 1	Apprentice 2	Proficient 3	Distinguished 4
explain how aerospace engineers design things that fly through air or space.	Student does not successfully explain what aerospace engineers do for their work.	Student explains one or more aspects of the work of aerospace engineers. Response is partially correct. Student may require significant support.	Student correctly explains at least two aspects of the work of aerospace engineers.	Student participates at proficient level and goes significantly beyond (e.g., by comparing the work of aerospace engineers and astronauts).
discuss atmospheres and drag (or air resistance) and how they relate.	Student does not show evidence of understanding the concepts of atmosphere and drag.	Student partially explains the concepts of atmosphere and drag and how they relate. Student may require significant support.	Student correctly explains the concepts of atmosphere and drag and how they relate.	Student participates at proficient level and goes significantly beyond (e.g., by discussing how different objects are affected by drag).
identify the basic parts of a parachute and explain how parachutes work.	Student does not successfully identify the parts of a parachute. Student does not show evidence of understanding how parachutes work.	Student is unable to fully identify the parts of a parachute and explain how it works. Or, student requires significant support.	Student correctly identifies the parts of a parachute and accurately explains how a parachute works.	Student participates at proficient level and goes significantly beyond (e.g., by comparing real-world examples of parachutes).
identify and explain the steps of the Engineering Design Process.	Student does not successfully identify or explain the steps of the Engineering Design Process.	Student incompletely identifies and explains the five steps of the Engineering Design Process. Student may require significant support.	Student correctly identifies and completely and accurately explains all five steps of the Engineering Design Process.	Student participates at proficient level and goes significantly beyond (e.g., by elaborating on what else Paulo and Lucas might have done to complete each step).