

# Help! Simple Machines RAFT Project

**Directions:** Using what you have learned about simple machines and Newton's Laws come up with a method to help this cow off the fence:



**Role:** You are the engineer

**Audience:** (choose one)

- fellow scientists on a scientific website,
- farmers in the "Farmers Unite" Magazine

**Format:** (choose one or combo)

- blog,
- news article,
- step by step directions,
- narrative of events (non-fiction story format)

**Topic:** Use simple machines and your knowledge of Newton's laws, forces, and energy to devise a plan to get the cow off the fence. (Must use vocabulary terms and use them correctly) Be specific on your plan. You can't hurt the cow in anyway.

**Rubric:**

- See the side box → 20 points
- ADDITIONAL Expectations for "Topic" Grade:
  - o Simple machine(s) used and explained (6 points – no compound machines)
  - o Other physic unit terms used like Newton's law referenced and explained, energy, and force (meaning: 4 + vocab words used and explained) (4 points)
- Sketch of simple machine(s) in action – or being used to rescue the cow. (5 points)
- Creativity and overall direction following: 5 points

TOTAL: \_\_\_\_\_/40 points

Individual Rubric for RAFT Writing Assignment				
SCORE LEVELS				
	4	3	2	1
CATEGORY	Spelling and Grammar	There are no errors in spelling and/or grammar that diverts the reader's attention from the content.	There are 1-3 errors in spelling and/or grammar that diverts the reader's attention from the content.	There are 4-6 errors in spelling and/or grammar that diverts the reader's attention from the content.
	Assumed Role as Writer	The writer's assumed role is clear. The role fits within the context of the writing.	The writer's assumed role is clear. The context of the writing is not completely consistent with the writer's role.	The writer's assumed role is not clear. However, the context of the writing suggests ideas about what the writer's role is supposed to be.
	Recognition of Audience	The audience is appropriate based on the role of the writer and the writing relates to the target audience.	The audience is appropriate based on the role of the writer but the writing does not relate to the target audience.	The audience is not appropriate based on the role of the writer and the writing does not relate at all to the target audience.
	Format of the Writing	The format is appropriate based on the role of the writer and the target audience. The format is consistent throughout the writing.	The format is appropriate based on the role of the writer and the target audience. However, the format changes throughout the writing.	The format is not appropriate based on the role of the writer and the target audience. The format is not consistent throughout the writing.
	Defining the Topic	The topic is clear and well-focused. The topic completely fits the format of the writing.	The topic is clear and well-focused. However, the topic does not fit the format of the writing.	The topic is unclear and not at all focused. However, the topic does fit the format of the writing.