

Extra Credit #2 (Optional: 10pts total)

1. Besides interpreting the texts of ancient natural philosophy, what other interpretive pursuits did Newton engage in?
2. How does Newton's First Law explain the fact that a ball thrown upward from a uniformly moving train will fall back to the spot from which it was thrown?
3. In what sense is Newtonian gravity “universal”? What is the historical significance of this?
4. How does the combination of the 2nd Law of Motion and the Law of Universal Gravitation explain the fact that all objects have the same acceleration when they fall freely at any given spot on the Earth, regardless of their mass or weight?