

### **Study Questions on Henry More (Koyre 110-154)**

#### *Descartes & Henry More (Koyre 110-124)*

1. Why does More think Descartes' definition of matter (*i.e.*, extended substance) is too wide?
2. What does More suggest as an alternative definition of matter that allows it to be made distinct from "spirit"?
3. According to More, a vacuum, as the absence of matter, is possible. Is such an absence "absolute"? If not, then what "fills" a vacuum, if not matter?
4. What is More's criticism of Descartes' view that atoms do not exist?
5. Why does More argue, against Descartes, that the world is infinite?
6. What is the relation between God and the material world according to More? According to Descartes?

#### *More on God and Space, Spirit and Matter (Koyre 125-154)*

7. Does More think there could be space without matter? Does Descartes think this is possible?
8. According to More, what are some properties of spirit that make it distinct from body?
9. Why does Koyre think that More's concept of spirit wasn't all that outlandish in the context of the 17th century?
10. Why is gravity important to More?
11. What is space for More?
12. Why does More think Descartes' metaphysics excludes God from the world?
13. Why does More think Aristotle's finite cosmos is incompatible with God's omnipotence?
14. What are some properties of absolute space, according to More?

### **Study Questions on Newton: Ancient Wisdom (McGuire & Rattansi 100-143)**

1. What are the "classical" Scholia? What is their main claim?
2. What are the four principles underlying the views in the Principia that Newton claims the ancients had knowledge of?
3. Why do McGuire and Rattansi think the classical Scholia should not be interpreted as a "classical flourish to a scientific treatise", but rather must be taken as a serious endeavor by Newton to substantiate his views?
4. How does Newton conceive infinite space?
5. According to McGuire and Rattansi, did Newton completely separate his studies of natural philosophy from his religious and moral studies? How do they describe the framework within which Newton conducted these studies?
6. What is the central idea behind the various prisca traditions that thinkers such as Newton adopted?
7. Who was Moschus the Phoenician? What role does he play in the prisca tradition that attempted to legitimize the doctrine of atomism?
8. What is the main criticism that the Cambridge Platonists have of Descartes' philosophy?
9. What is the historical thesis that Henry More uses to explain the origins of Descartes' philosophy?
10. According to McGuire and Rattansi, what are some of the differences between Newton and the Cambridge Platonists?
11. Besides interpreting the texts of ancient natural philosophy, what other interpretive pursuits did Newton engage in?

### **Study Questions on Newton: New Synthesis (Cohen 148-184)**

1. What is Newton's First Law of Motion?
2. How does the 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? How does it explain the same fact for a train at rest?
3. What is Newton's Second Law of Motion? What is the constant of proportionality between impressed force and acceleration (change of motion)?
4. What is Newton's Law of Universal Gravitation?
5. In what sense is Newtonian gravity "universal"? What is the historical significance of this?
6. 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?