Guide Questions for Commentariolus

- 1. Why does Copernicus propose a new model of the solar system? What does he dislike about the Ptolemeic system? (This is hard, but it is on the first page.)
- 2. What were the 7 postulates that Copernicus is assuming for his proposed model? (Try and put these in words that mean something to you.)

- 3. How far away is the sun from the center of the earth's orbit?
- 4. How much larger is the sphere of the "fixed and immovable" stars than the "Grand Orb", the sphere that contains the earth? Why is it important that Copernicus say this?
- 5. Fill in the chart of the solar system as proposed by Copernicus:

Sphere (closest to farthest)	"radius of sphere"	period of revolution
Mercury		
Venus		
Earth		
Mars		
Jupiter		
Saturn		
Stars		

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6. The ancient Greeks built their geo-centric model on the assumption that motions in the heavens had to be circular and constant speed. What does Copernicus believe about the motions of the planets?

7. What does Copernicus propose as the cause of retrograde motion? How does his model differ between the two inner planets and the three outer planets?

8. Does the sun play any role in the mechanics of Copernicus' solar system?

9. Why does Copernicus still resort to epicycles in his model of the solar system? (This isn't really in the reading – make a guess, and we will go over it.)