

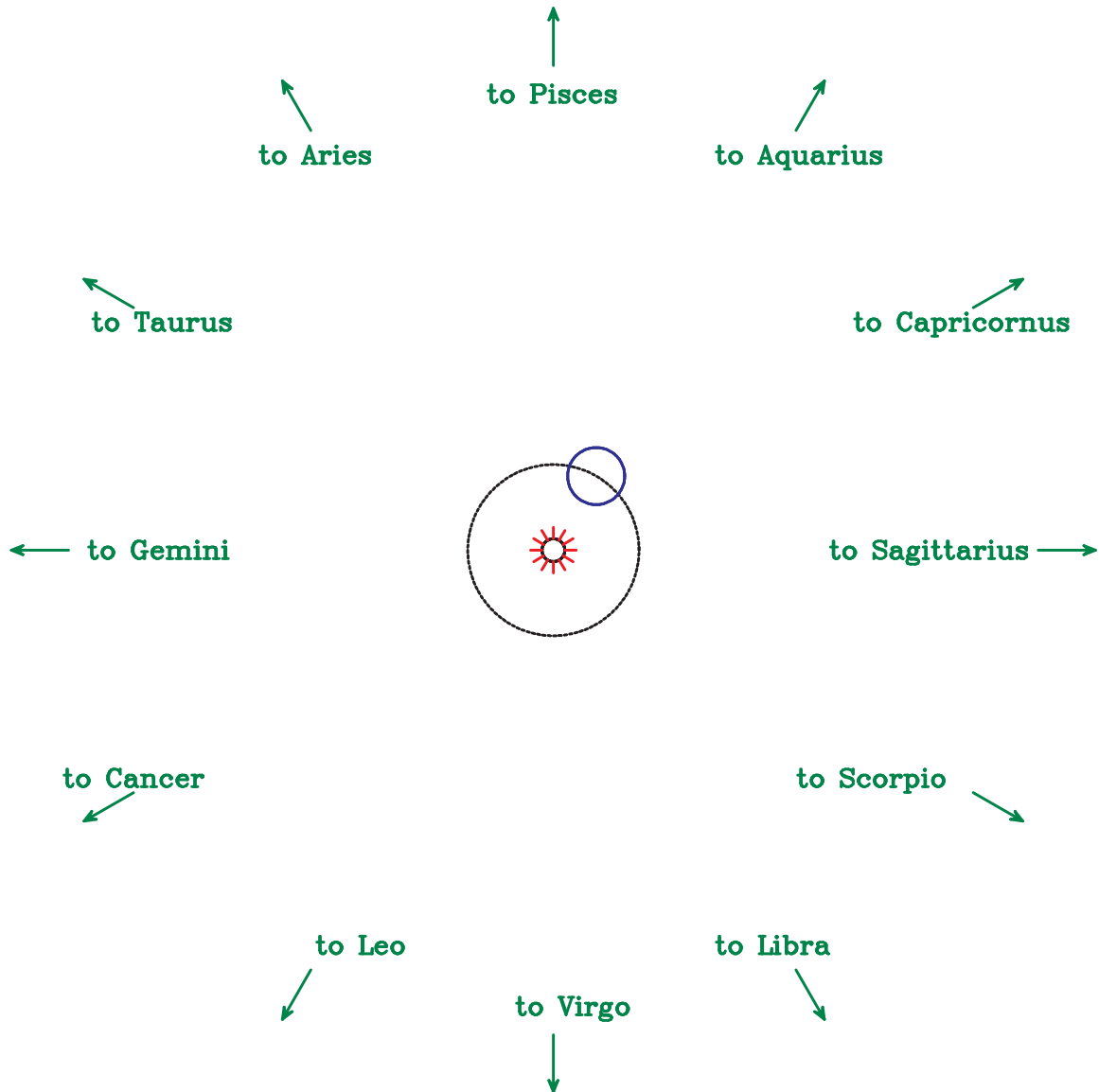
## QUIZ 2 – THE MOTION OF THE ZODIAC (RETAKE)

Name: \_\_\_\_\_

Lab Section: M0 \_\_\_\_\_  
(if you want your paper back)

For this quiz, you may use your Homework 2 or anything you yourself have handwritten, but may not consult with anyone else or use electronic devices.

Give your paper to Walter or put it in his mailbox in room 201 when you are done.



*This is a diagram of the Earth in September, seen from above the North Pole. From this perspective, the Earth rotates on its axis counterclockwise and orbits the Sun counterclockwise.*

*The questions are on the back page.*

1. Draw a stick figure in a location on the Earth (shown in the diagram) at midnight.
2. What constellation is just setting over the western horizon at this time?
3. How long would your observer need to wait to see the constellation Gemini? What would need to happen?
4. Draw Earth at its position in the orbit when Pisces is behind the Sun. Then answer the following:
  - (a) How many months after September would this be?
  - (b) What time of day would Sagittarius rise?
  - (c) What constellation would be highest in the sky when this happens?