

Name: _____

Intro Astro Lab Prep Quiz: Lab 5: Planets

Instructions: There are 10 to 20 multiple-choice problems each worth 1 mark for a total of 10 to 20 marks altogether. Choose the **BEST** answer, completion, etc., and **DARKEN** fully the appropriate circle on the table provided below. Read all responses carefully. **NOTE** long detailed responses won't depend on hidden keywords: keywords in such responses are bold-faced capitalized.

This is a 10 minute quiz.

Answer Table for the Multiple-Choice Questions

	a	b	c	d	e		a	b	c	d	e
1.	O	O	O	O	O	11.	O	O	O	O	O
2.	O	O	O	O	O	12.	O	O	O	O	O
3.	O	O	O	O	O	13.	O	O	O	O	O
4.	O	O	O	O	O	14.	O	O	O	O	O
5.	O	O	O	O	O	15.	O	O	O	O	O
6.	O	O	O	O	O	16.	O	O	O	O	O
7.	O	O	O	O	O	17.	O	O	O	O	O
8.	O	O	O	O	O	18.	O	O	O	O	O
9.	O	O	O	O	O	19.	O	O	O	O	O
10.	O	O	O	O	O	20.	O	O	O	O	O

1. Before circa 1500, everyone in the context of ancient-Greek-derived astronomy (i.e., in European and the Mideastern astronomy) and perhaps nearly everywhere else believed that the Solar System was:

- a) heliocentric. b) Venusocentric. c) geocentric. d) Martiocentric. e) egocentric.

2. Ancient Greek mathematical astronomers used _____ models to obtain quantitatively accurate predictions of celestial events.

- a) flat Earth b) ethereal sphere c) epicycle d) epic e) pillar Earth

3. "Let's play *Jeopardy!* For \$100, the answer is: He created a complete epicycle model for the Solar System which continued to be used for astronomical prediction and was somewhat believed in for 13 centuries."

Who is _____, Alex?

- a) Aristotle (384–322 BCE) b) Berossos, priest of Bel Marduk (3rd century BCE)
 c) King Ptolemy I (c. 367–c. 283 BCE) d) Cleopatra (69–30 BCE)
 e) Ptolemy (circa 100–175 CE)

4. The epicycle theory has two major deficiencies. It is _____ and it gives _____ of the solar system.

- a) wrong; no uniquely good model b) right; a uniquely good model
 c) right; no uniquely good model d) wrong; a uniquely good model
 e) right; two uniquely good models

5. "Let's play *Jeopardy!* For \$100, the answer is: This astronomer introduced into the permanent historical record the heliocentric model of the solar system as a well-supported hypothesis, and therefore as one that could not be ignored."

Who is _____, Alex?

- a) Aristarchus of Samos (c. 310–c. 230 BCE) b) Nicolaus Copernicus (1473–1543)

- c) Galileo Galilei (1564–1642) d) Johannes Kepler (1571–1630)
 e) Isaac Newton (1642/3–1727)
6. The time interval from Ptolemy to Copernicus is about _____ years.
 a) negative 400 b) 250 c) 1200 d) 1400 e) 2000
7. The heliocentric theory allowed Copernicus to predict the locations of all the planets in units of the:
 a) meter. b) kilometer. c) astronomical unit. d) mile. e) light-year.
8. A _____ can be defined as an especially significant apparent position of a planet (i.e., its angular position position as see from Earth) relative to the Sun and the relationship of this apparent position to the 3-dimensional position of the planet in the solar system.
 a) planetary configuration b) galactic coordinate c) lunar mare d) planetary orbit
 e) magnitude
9. A/An _____ planet is one whose orbital radius is lesser/greater than the Earth's orbital radius.
 a) elongated/compactd b) bad/good c) raw/cooked d) hot/cold
 e) inferior/superior
10. An inferior/superior conjunction is when an inferior planet—a low, depraved planet—is in conjunction and is _____ the Sun.
 a) turned/rotated from b) on the far/near side of c) opposite/across from
 d) on the near/far side of e) colder/hotter than
11. A syzygy is:
 a) when black is white and white is black.
 b) an alignment of three astronomical bodies in a gravitationally-bound system.
 c) when a planet is in conjunction and opposition simultaneously.
 d) an alignment of three bodies that also forms a right angle.
 e) when a door is both open and closed.
12. Elongation is the angle between:
 a) a planet and a planet. b) a planet and the Sun. c) the Sun and the Sun.
 d) opposition and conjunction. e) conjunction and syzygy.
13. Greatest or maximum eastern/western elongation occurs when an inferior planet is _____ the Sun.
 a) as far west/east as it can be on a given orbit from b) as far east/west as it can be on a given orbit from
 c) at 90° east/west from d) at 90° west/east from e) in opposition to/conjunction with