

Definition of Planet Quiz

DON'T OPEN UNTIL I
TELL YOU TO!!!

1. What does the Greek word planetes mean?

- A. wanderer
- B. large mass
- C. orbit
- D. sphere

2. The ancient greek definition of a planet given by the ancient greeks and romans was:

- A. An object that appears in a different points in the celestial sphere
- B. A large spherical mass orbiting the sun
- C. A large spherical mass moving in an ellipse around the earth
- D. Any large mass in space.

3. Retrograde Motion refers to what phenomenon:

- A. A planet slows down, stops, and reverses direction
- B. The earth slows down, stops, and reverses direction
- C. A planet moving across the sky appears turn backwards
- D. A planet begins slowing down

4. The explanation for retrograde motion in the Ptolomeic universe was:

- A. Planets are moving in a small circles within a larger circle.
- B. The planet slowed down, stopped, and reversed direction due to the force of gravity.
- C. The earth changed direction while orbiting.
- D. The sun changed the direction it is spinning.

5. The explanation for retrograde motion in the Copernican universe is:

- A. The sun changed the direction it is spinning.
- B. The planet slowed down, stopped, and reversed direction due to the force of gravity.
- C. Planets are moving in small circles within a larger circle.
- D. The earth changed direction while orbiting.

6. For most of history, people believed the planets must move in circles. Kepler discovered that:

- A. They move in a square, not a circle
- B. They move in ellipses, not circles, and the ellipses are highly eccentric (non-circular).
- C. They move in ellipses, not circles, but the ellipses are nearly circular.
- D. They did indeed move in circles

7. From the Renaissance to the 2006 IAU meeting, the term "planet" had a very unclear definition.

The closest thing to a definition was:

- A. A large spherical mass orbiting the earth
- B. A large spherical mass orbiting the sun
- C. An object that appears in different points in the celestial sphere
- D. Any large mass in space.

8. Galileo discovered four new spheres (called moons) orbiting:

- A. Jupiter
- B. Venus
- C. Mercury
- D. Earth

9. One significance of the discovery of the four Galilean moons of _____ was that:

- A. They showed an object could orbit a body other than earth.
- B. They showed that everything in space orbits the sun.
- C. They showed that our moon orbits the earth.
- D. They showed everything in space is a sphere.

10. Pluto was a suspicious inclusion on the list of planets because (check ALL that apply)

- A. it's mass is much lower than other planets
- B. it is much farther away from the sun than other planets
- C. the eccentricity of its orbit is much greater than other planets
- D. it has no moons

11. The impetus for writing a new definition of a planet was:

- A. Ceres had been discovered recently and needed to be classified.
- B. Many many objects that could be potentially classified as planets had been discovered in a very short time
- C. Astronomers needed to decide if comets were planets.
- D. Pluto was the head of the IAU's least favorite Disney character.

12. Ceres is an object that was briefly considered a planet when it was first discovered in the 19th century.

It no longer fits the definition of a planet. Ceres is:

- A. A large spherical object in the asteroid belt
- B. A large spherical object in the Kuiper belt.
- C. A large non-spherical object in the asteroid belt.
- D. An object that is outside the solar system

13. Why did people initially classify Ceres as a planet?

- A. It is near other planets.
- B. It has several moons
- C. It is large, spherical, and orbits the sun
- D. It is made of rock

14. How many planets did the ancient Greeks have, (including things today not considered planets?)

- A. 5
- B. 6
- C. 7
- D. 8

E. 9

15. Which of the following is NOT a planet in the ancient Greek definition (assume the Greeks had been able to discover everything on the list)?

- A. Pluto
- B. Neptune
- C. Earth
- D. Jupiter
- E. Mars

16. Pluto was eventually reclassified as a "dwarf planet" because:

- A. It is in the Kuiper Belt
- B. It is too far away from the sun
- C. It is too small
- D. It has no moons

Questions 17 - 24 are with 0.5 point each and all draw from the same list of options
For each of the following astronomers, determine their contribution [.5 points each]

17. Ptolomey	A. Discovered Pluto
18. Nicolaus Copernicus	B. Created a map of the universe in which all objects move around the earth
19. Galileo Galilee	C. Mathematically analyzed the records of planets to determine three laws of planetary motion.
20. Tycho Brae	D. Discovered four moons of __[omitted]__ and effectively argued for a heliocentric universe
21. Johannes Kepler	E. Created a theory that objects move in circles around the sun, rather than the earth
22. Isaac Newton	F. Created a long record of locations of stars and planets that was the best available in the 17th century
24. Clyde Turnbough	G. Discovered Eris and several similar Pluto-like objects (now called Kuiper Belt objects)
24. Mike Brown	FH Developed a theory of gravity and laws of motion which could then prove the laws of planetary motion developed by his predecessor.

25. Let

$$A = \{x | x \in \mathbb{N} \wedge x^2 \leq 7\}$$

Then supremum of A
is

A. 7

B. 3

C. does not exist

D. 0

26. A sequence $\{(-1)^n\}$ is

A. convergent.

B. unbounded.

C. divergent.

D. bounded.

27. Port Moresby is the capital of

A. Papua New Guinea

B. Micronesia

C. New Zealand

D. Togo

28. The third largest island of Indonesia is

A. Kalimantan

B. Sulawesi

C. Sumatra

D. Java

29. Martin van Beuren's native language was

A. Dutch

B. English

C. German

D. Danish

30. National Waffle Iron Day is

A. June 29

B. July 8

C. August 12

D. September 19

31. Does _____ know you raid his wardrobe?

- A. Tony Bennet
- B. Frank Sinatra
- C. Barry Manilow
- D. David Bowie

32. Ποια είναι η πρωτεύουσα της Ελλάδας;

- A. Θήβα
- B. Αθήνα
- C. Σπάρτη
- D. Δήλος

33. For what dates was Otto II the Holy Roman Emperor?

- A. 834 - 854
- B. 892 - 904
- C. 945 - 965
- D. 973 - 983

34. The half-life of Plutonium-238 is approximately:

- A. 88 years
- B. 32 months
- C. 87 hours
- D. 99 years