## SAMPLE FINAL EXAM QUESTIONS Physics 2021

1. Who studied the gaps in the Asteroid Belt? \_\_\_\_\_\_.

2. How many moons does Pluto have? \_\_\_\_\_

3. A "shooting" or "falling" star is what?

4. Which asteroid was discovered first?

5. A small piece of rock orbiting the Sun would be called

- a. a meteoroid
- b. a meteor
- c. a meteorite
- d. an asteroid
- e. a comet
- 6. The particular feature of a comet that always points away from the Sun is
  - a. the coma
  - b. the ion tail
  - c. the dust tail
  - d. the hydrogen envelope
  - e. the nucleus

- 7. The aphelia of comet orbits
  - a. are all closer to the Sun than the orbit of Pluto
  - b. are all located far beyond the orbit of Pluto
  - c. are mostly confined to the region between Mars and Jupiter
  - d. are non-existent because the orbits are hyperbolic
  - e. can be located anywhere from inside the orbit of Pluto to as far as 50,000 AU
- 8. Compared to Jovian planets, terrestrial planets have a
  - a. More rocky composition
  - b. Lower density
  - c. More rapid rotation
  - d. Larger size
  - e. More than one of the above
- 9. The combined matter in the Asteroid Belt would produce an object of what approximate size?
  - a. Much larger than the size of the Earth
  - b. About the size of the Earth
  - c. About the size of Mars
  - d. About the size of the Moon
  - e. Much smaller than the Moon
- 10. How are comets and asteroids different?

Answers:

- 1. Kirkwood
- 2. 5
- 3. Meteor
- 4. Ceres
- 5. a
- 6. b
- 7. e
- 8. a
- 9. e.
- 10. Comets: very eccentric orbits; all directions, dirty snowballs, small size Asteroids: slightly eccentric orbits; in ecliptic plane, rocky, relatively larger