

Blackline Master Quizzes for *Core Physics: Modern Physics*
Blackline Master 1A Quiz

Circle the correct answer. There may be more than one!

1. An electron has which charge?
 - a. Positive
 - b. High
 - c. Negative

2. Atoms have a positive mass at their center.
 - a. True
 - b. False

3. The atom looks like our solar system.
 - a. True
 - b. False

4. Classical physics is made up of
 - a. Fields
 - b. Objects
 - c. Chemicals

5. A field is potential.
 - a. True
 - b. False

6. Quanta are a kind of wave.
 - a. True
 - b. False

7. The three-body problem was about the difficulty of weighing three objects.
 - a. True
 - b. False

8. Precisely predicting the earth's weather is
 - a. Difficult
 - b. Easy
 - c. Impossible

9. The butterfly effect states that a flap of a butterfly's wing can change the weather.
 - a. True
 - b. False

10. Which are self similar?
- Clouds
 - Highways
 - Coastlines
 - Ecosystems
11. Which are true statements from special relativity?
- Space is a given
 - The faster you go the more you shrink
 - Time is relative
12. $E=MC^2$ is a formula from general relativity.
- True
 - False
13. The gravitational attraction between two bodies in space can be described as the curvature of space.
- True
 - False
14. Quantum mechanics was developed by many physicists.
- True
 - False
15. Electrons only show up when jumping from one orbit to another.
- True
 - False
16. Light is
- A wave
 - A particle
 - Electromagnetic radiation
17. Bubble chambers measure heat.
- True
 - False
18. Every tiny bit of matter contains a tiny bit of energy.
- True
 - False

19. Nuclear fission can produce
- Bombs
 - New particles
 - Heat
20. The first atomic bomb was dropped on Japan.
- True
 - False
21. Neutrons and protons are elemental.
- True
 - False
22. Quarks are negatively and positively charged in
- Halves
 - Thirds
 - Fourths
23. There are less than 10 subatomic particles.
- True
 - False