

Quiz #11

VIDEO: Introduction to Quantum Mechanics (United Streaming)

Directions: Choose the letter of the BEST answer and mark it into your scantron sheet.

1. What is another name for *classical physics*?
 - A. Einsteinian
 - B. Heisenburg
 - C. Newtonian
 - D. Theoretical
 - E. Impossible
2. When we talk about our universe, we refer to it as being *dynamic* (opposite of static). What synonym might be used to substitute for *dynamic*?
 - A. Unchanging
 - B. Ever-changing
 - C. Reproducing
 - D. Multiplying
 - E. Dividing
3. What really enabled scientists to develop and understand our current model of the atom?
 - A. Biology
 - B. Music
 - C. Home economics
 - D. Technology
 - E. Chemistry
4. When an electron jumps up or falls down an energy level, it:
 - A. Absorbs or emits light
 - B. Implodes on itself
 - C. Speeds up and leaves the atom
 - D. Doesn't do anything
 - E. Gains mass
5. The *Uncertainty Principle* is attributed to which scientist?
 - A. Einstein
 - B. Rutherford
 - C. Dalton
 - D. Aristotle
 - E. Heisenburg
6. Protons, neutrons and electrons are made up of:
 - A. Quarks
 - B. Leptons
 - C. Bosons
 - D. All of the above
 - E. None of the above
7. Perhaps the most important physics theory of the twentieth century (1905) was described by:
 - A. Einstein
 - B. Rutherford
 - C. Dalton
 - D. Aristotle
 - E. Heisenburg

8. Einstein described the fourth dimension which is:
- A. Length
 - B. Area
 - C. Volume
 - D. Time
 - E. Density
9. As an object's speed approaches the speed of light, an object's mass _____ and time stops.
- A. Increases
 - B. Decreases
 - C. Stays the same
10. What is the name of the process where in the sun, matter is converted into energy?
- A. Explosion
 - B. Fission
 - C. Fusion
 - D. Fermentation
 - E. Fustification
11. Cosmology is the study of the:
- A. Atom
 - B. Electron
 - C. Universe
 - D. Earth
 - E. Sun
12. What scientist has a very famous telescope named after him and he disputed Einstein's theory of relativity?
- A. Thompson
 - B. Rutherford
 - C. Dalton
 - D. Hubble
 - E. Aristotle
13. After the "Big Bang," the universe immediately:
- A. Expanded and cooled
 - B. Imploded and heated up
 - C. Expanded and heated up
 - D. Imploded and cooled
14. The simplest atoms which were formed in the "Big Bang" were:
- A. Oxygen and helium
 - B. Hydrogen and helium
 - C. Nitrogen and hydrogen
 - D. Neon and helium
 - E. Radon and chlorine
15. Which of the following is used to describe an incredible amount of mass in the universe and from which no light can escape?
- A. Boson
 - B. Black hole
 - C. Cosmology
 - D. Cosmotology
 - E. Fission