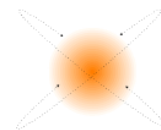


Name: _____ Date: _____
Chemistry

Worksheet



The Quantum Mechanics

DIRECTIONS: Write the best answer for each of the following on the blank provided.

- _____ 1. the probabilities of an electron's position
- _____ 2. momentum and position of electrons cannot be know simultaneously
- _____ 3. the waves from particles
- _____ 4. the electron arrangement in the atom
- _____ 5. a 3-D wave-form with an integral number of wavelengths
- _____ 6. the solutions to the Schrödinger equation

DIRECTIONS: Write the name of the person who best fits each statement below.

- _____ 7. applied de Broglie's hypothesis to the Bohr model
- _____ 8. he determined the first three quantum numbers
- _____ 9. he proposed that particles have wave properties
- _____ 10. he proposed the uncertainty principle
- _____ 11. refused to accept the uncertainty principle

SOLVE the following and show your work.

- _____ 12. Calculate the velocity of a proton with a wavelength of 105 pm.
(proton = 1.67×10^{-27} kg)

**"The way to get good ideas is to get lots of ideas, and throw
the bad ones away." - Dr. Linus Pauling**