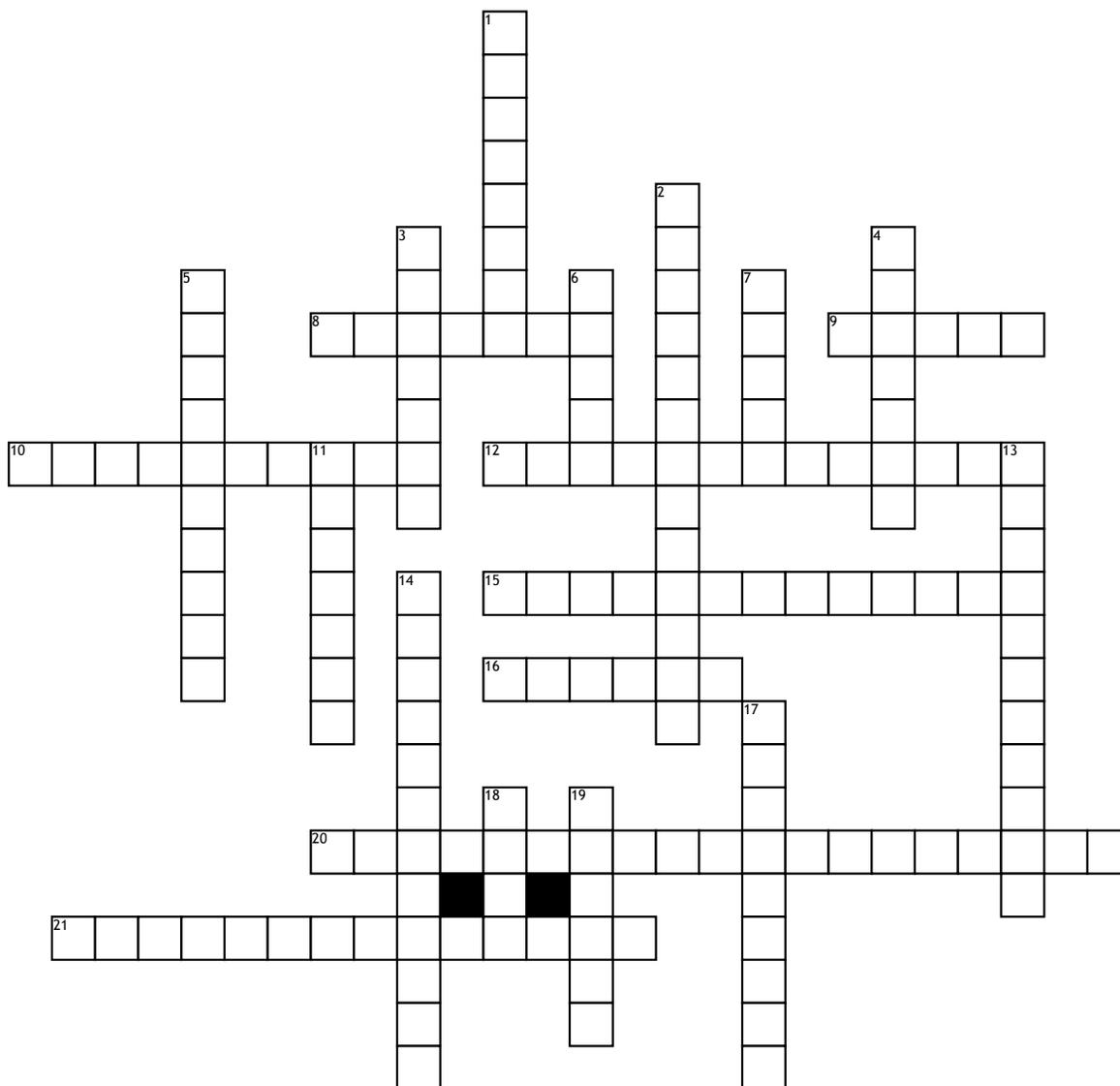


Name: _____

Date: _____

Chemistry Crossword



Across

8. covalent chemical bonds where two lobes of one atomic orbital overlap two lobes of other atomic orbital

9. chemical bond where a pair of electrons is unequally shared between two atoms

10. Known as the father of nuclear physics

12. First Canadian female nuclear physicist

15. Number that occurs in the theoretical expression for the value of some quantized property of subatomic particle, atom or molecule

16. Best known for proposing the modern atomic theory

20. emission of electrons or other free carriers when light is shone onto material

21. In metallic bonds the valence electrons from S and P orbitals delocalize.

Down

1. stable subatomic particle with a charge of negative electricity, found in all atoms

2. concept of mixing atomic orbitals into new hybrid orbitals

3. Covalent chemical bonds where two lobes of one atomic orbital overlap with two lobes of another atomic orbital

4. He contributed to the early spread of Dalton's atomic theory, invented of saccharometer

5. Key pioneer of quantum mechanics

6. model used in chemistry to predict the geometry of individual molecules

7. regular, repeating path than one object in space takes around another one

11. mathematical function that describes the wave-like behaviour of one electron or a pair in an atom

13. Formulated the wave equation

14. Branch of science concerned with the investigation and measurement of spectra produced when matter interacts with radiation

17. He postulated the wave nature of electrons and suggested that all matter has wave properties

18. Physicist who made foundational contributions to understanding atomic structure and quantum theory

19. His discovery of energy quanta won him Nobel prize in 1918