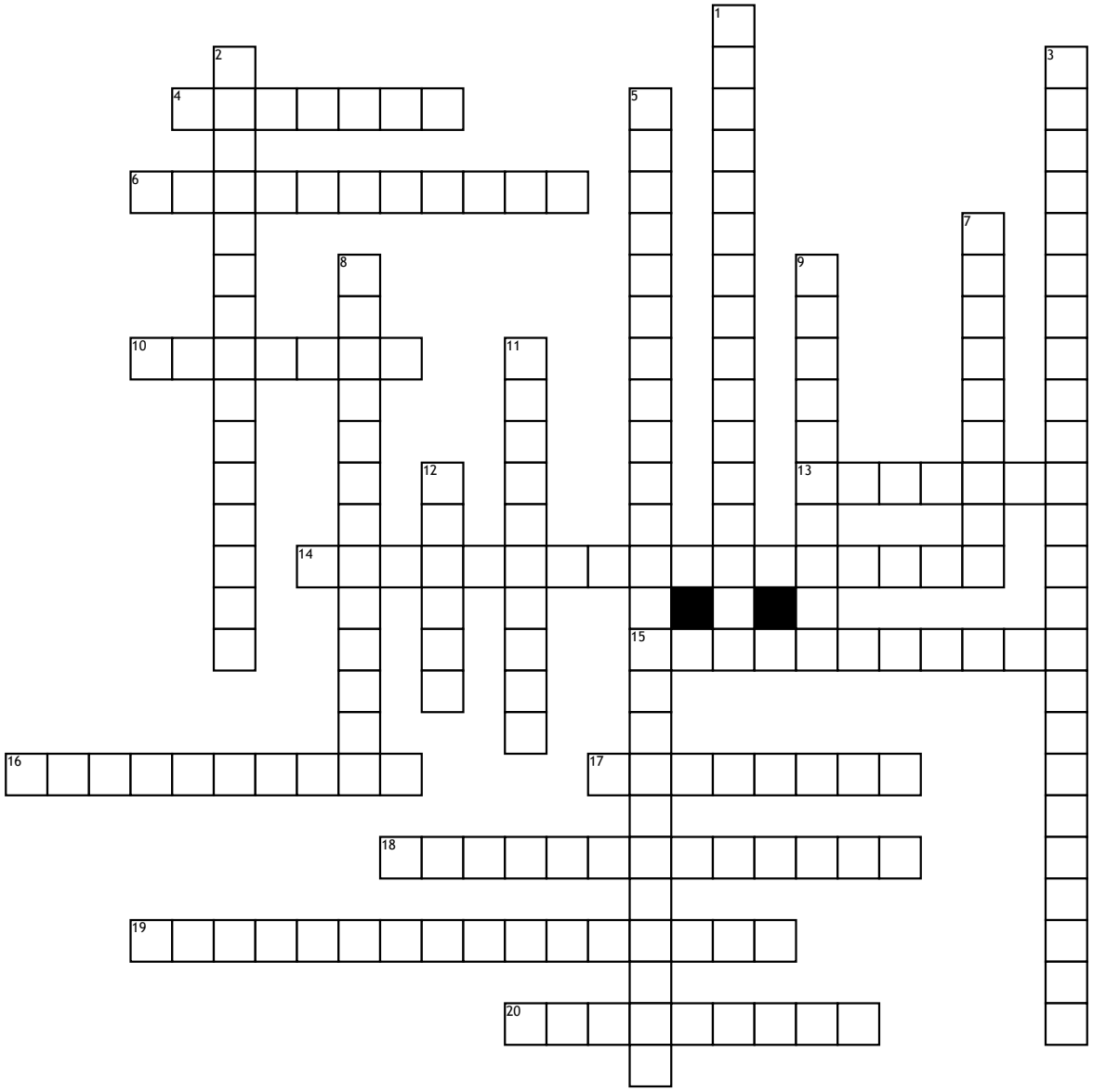
Name: _____ Date: _____

NMR Spectroscopy



Across

4. A organic compound which has one or more hydroxyl groups attached to a hydrocarbon chain

6. The angular movement of the nucleus

10. A signal on an NMR which is not split

13. This creates a bond from the overlap of p orbitals on adjacent atoms

14. The tendency measured by Pauling scale of an atom to attract the pair of electrons in a bond

15. Provides the relative number of hydrogens at each signal

16. The kind of light is dependent on wavelengths

17. A functional group where a carbon is double bonded to an oxygen

18. Area around an electric charge which causes magnetism forces

19. E = hv = (hc)/l

20. A way of describing the bonding within compounds

Down

1. This is a measure of interactions between a pair of protons

2. The probability measurement of an electron in an element of space

3. This a medical imaging technique normally used in the field of radiology to produce pictures of the anatomy as well as the physiological body processes

5. Light is an example of this form of energy

7. Measured in units of hertz (Hz) this is said to be the number of occurrence of a certain time period

8. Resonant frequency variation between the nucleus and magnetic field

9. Eliminates the splitting between the nuclei being analysed and the nuclei being irritated for NMR

11. Carbons which have no protons such as hydrogens attached to them and give weak signals

12. The central part of an atom where the protons and neutrons are located