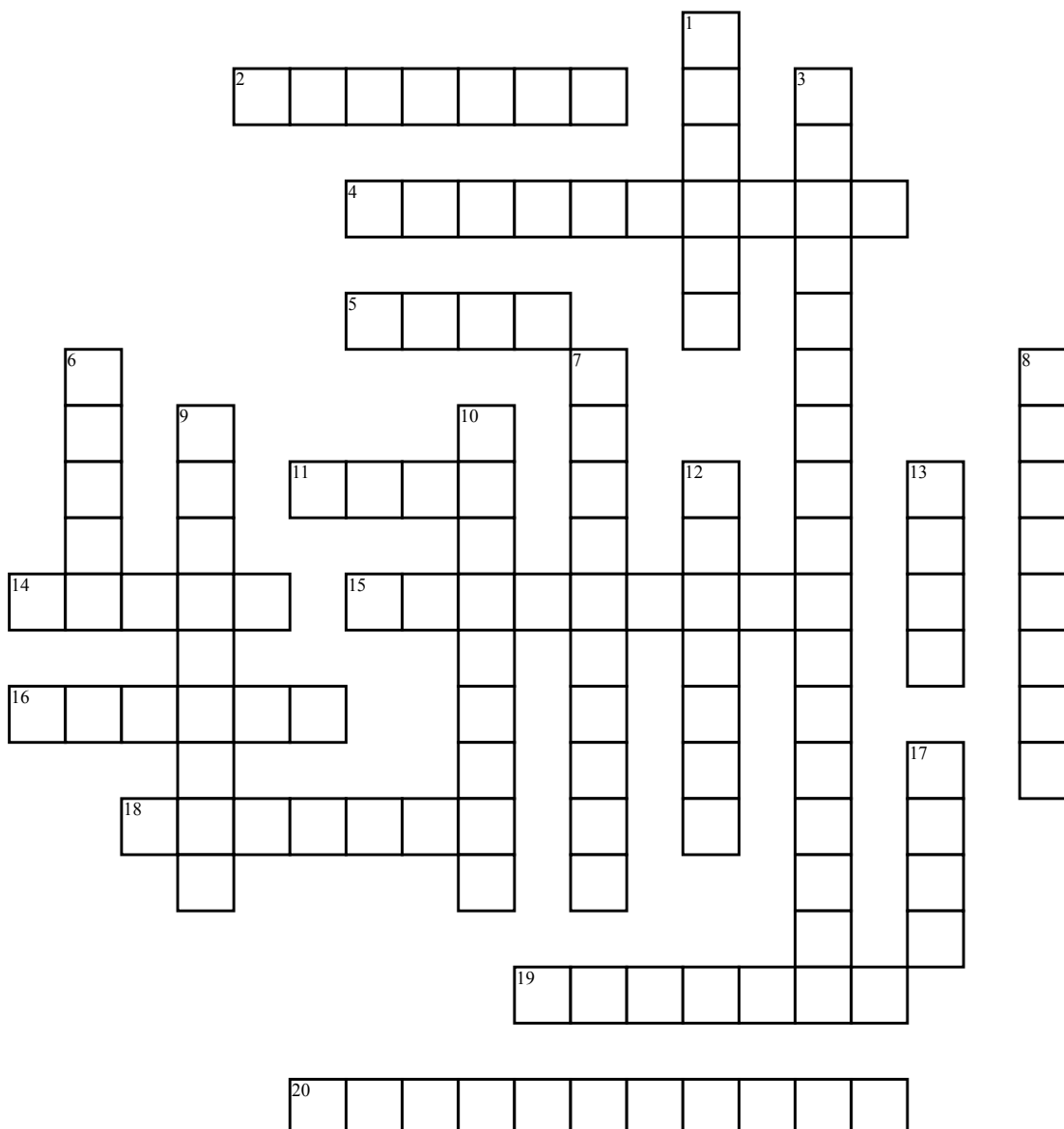


# NMR Crossword



## Across

2. Less hydrogen binding equals to \_\_\_\_\_ shift.
4. The kind of light is dependent on the...?
5. When was NMR first demonstrated?
11. Deshielded hydrogens are those that appear \_\_\_\_\_ field.
14. The type of electromagnetic wave that has the longest wavelength.
15. What can waves be discussed in terms of?
16. A particle of light is called a...?

18. When a spectra has a signal with two lines close together which can have equal or unequal height, this is called a...?
19. When a signal is made up of three lines we have a...?

20. The name given to the electron withdrawing effect when sp<sup>2</sup> carbons attract electrons due to a high s character.

## Down

1. Every atom, in a given molecule, that has a different environment, gives a different...?
3. What is the standard used against samples in NMR?
6. What's the electromagnetic wave with the shortest wavelength?

7. Very different spectra are observed with off resonance. This is...?

8. Name of the constant denoted by the letter J.

9. Light is a form of energy known as electromagnetic...?

10. Integration allows us to measure the relative \_\_\_\_\_ of the signals in the spectrum?

12. This type of spin value is required to be able to be used for NMR.

13. Another way of determining the number of hydrogens on a given carbon atom is...?

17. The nuclei of many atoms have a quantity described as a...?