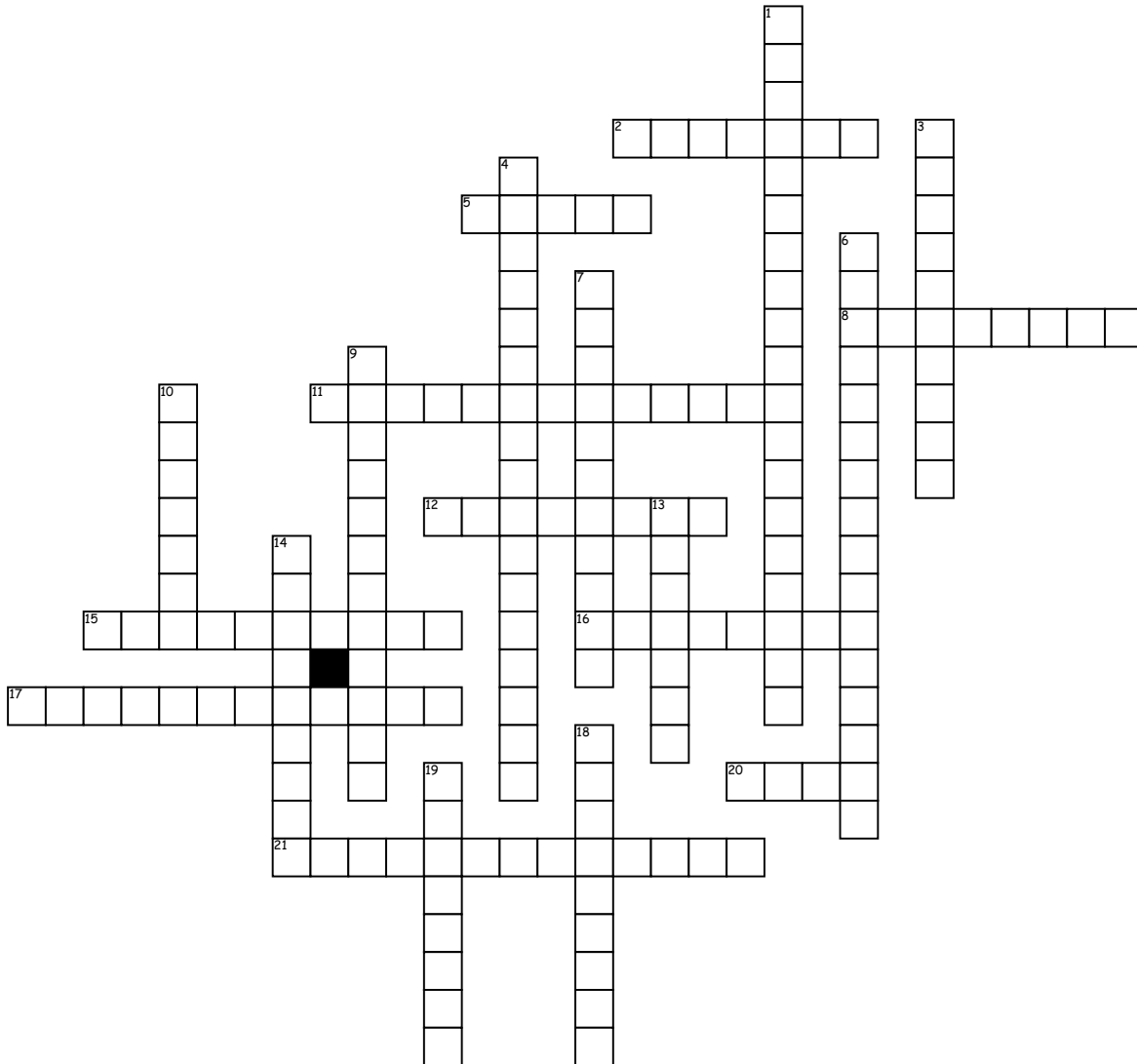


Name: _____

Date: _____

NUCLEAR PHYSICS



Across

2. The element formed when Uranium-235 undergo alpha decay
5. Type of radiation with highly penetrating power.
8. The original nucleus is called the parent nucleus and the formed nucleus is called the nucleus
11. A helium nucleus consisting of two protons and two neutrons.
12. are protons and neutrons.
15. Radiation that reaches the Earth from space.
16. The time taken for half of the radioactive nuclei to decay.
17. The number of protons in an atom.

20. particles are attracted towards a positively charged plate.

21. The process in which unstable nuclei disintegrate.

Down

1. occurs randomly over space and time.
3. Represented by the letter A.
4. include wearing radiation suits, reducing exposure time etc.
6. The release of radiation by unstable nuclei.
7. The radioactive atoms in a substance decay to become stable atoms. It was found that after 152 seconds, 46.875 atoms out of the 50 atoms have decayed. What is the half life of the substance?

9. Only Alpha particles can be detected by this equipment.

10. is located at the centre of an atom.

13. The majority of the mass of an atom is in its

14. Equipment to determine half-life that can be connected to a loudspeaker.

18. is used for cancer treatment in a process called radiotherapy

19. Atoms with the same proton number but different nucleon numbers.