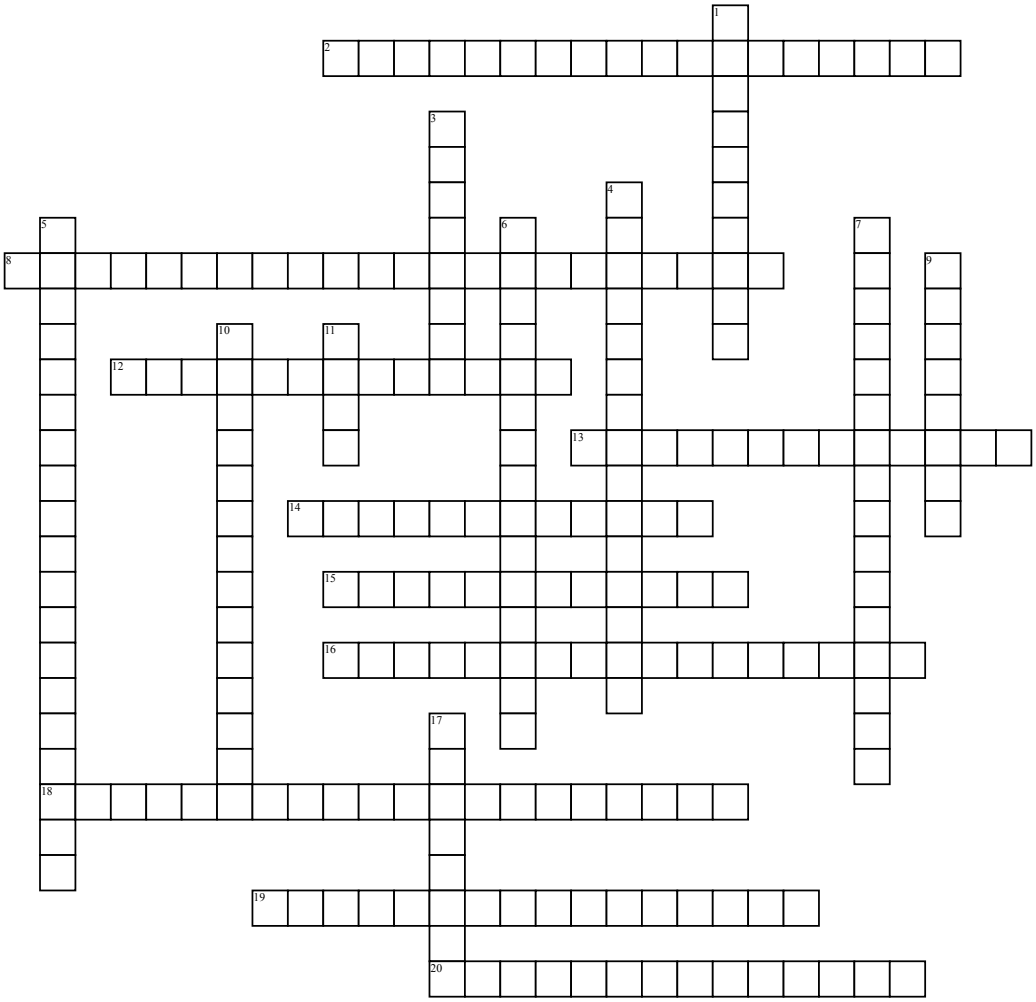
States Of Matter



Across

2. acts on subatomic particles that are extemely close together and overcomes the electrostatic repulsion among protons
8. a series of nuclear reactions that begins with an unstable nucleus and results in the formation of a stable nucleus
12. the combining of atomic nuclei
13. a reaction in which an atoms atomic number is altered
14. a sample that is massive enough to sustain a chain reaction
15. isotope of atoms with unstable nuclei
16. radiation energetic enough to ionize matter with which it collides
18. the process which involves striking nuclei with high velocity particles
19. radioactive decay proccess that involves the emission of a positron from a nucleus
20. the splitting of a nucleus into fragments

Down

1. the difference in mass between a nucleus and its component nucleons
3. protons and neutrons
4. reactors able to produce more fuel than they use
5. process of determining the age of an object by measuring the amount of a certain radioisotope remaining in that object
6. the area on the graph with in all stable nuclei
7. the ability of radiation to pass through matter
9. the time required for one half of a radioisotope to decay into its products
10. occurs when the nucleus of an atom draws in a surrounding electrons and combines with a proton to form a neutron
11. a form of high energy electromagnetic radiation
17. a particle with the same mass as an electron but positive charge

Word Bank

band of stability
critical mass
nucleons
nuclear fission
Radioisotope
mass defect
Positron emission
eletron capture
radioactive decay series
positron
nuclear fusion
breeder reactors
strong nuclear force
transmutation
radiochemical dating
half-life
x-ray
penetrating power
induced transmutation
ionizing radiation

Create your own puzzle at WordMint.com or print one of our 500,000+ pre-made word searches, crosswords, and more.