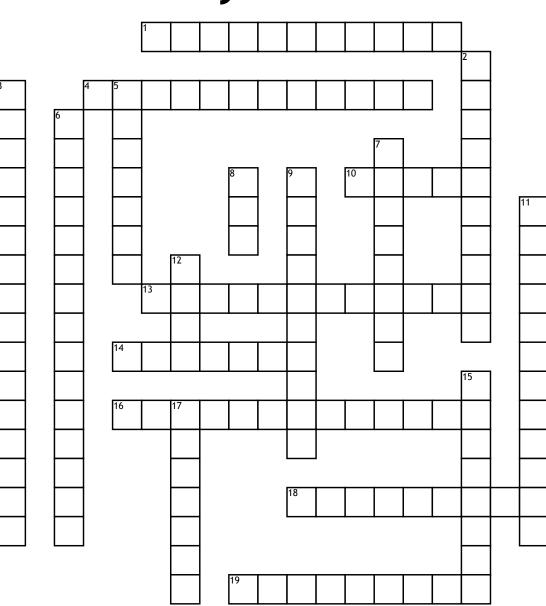
## Physical Sc



## <u>Across</u>

 Keeps the charged particles together in the nucleus
 What are the different orbits of the electrons that represent the different energy levels the electrons have?
 What language do some of the elements on the periodic chart originate from?
 an electron that an unstable nucleus threw away
 What do you get when you change the number of neutrons? **16.** Is made up of 2 protons and 2 neutrons

18. What force governs radioactivity?19. Protons and ? have the same charge

## <u>Down</u>

2. The sum of the numbers of neutrons and protons in the nucleus

**3.** An atom with a nucleus that is not stable

5. The center of an atom

6. The product of beta decay

7. The time it takes for half of the original sample of a radioactive isotope to decay
8. What do you get when you change the number of electrons?
9. What kind of decay does an element go through where it stays the same element?
11. The number of protons in

an atom

**12.** What is the overall charge of an atom?

- **15.** has no charge
- 17. has a positive charge