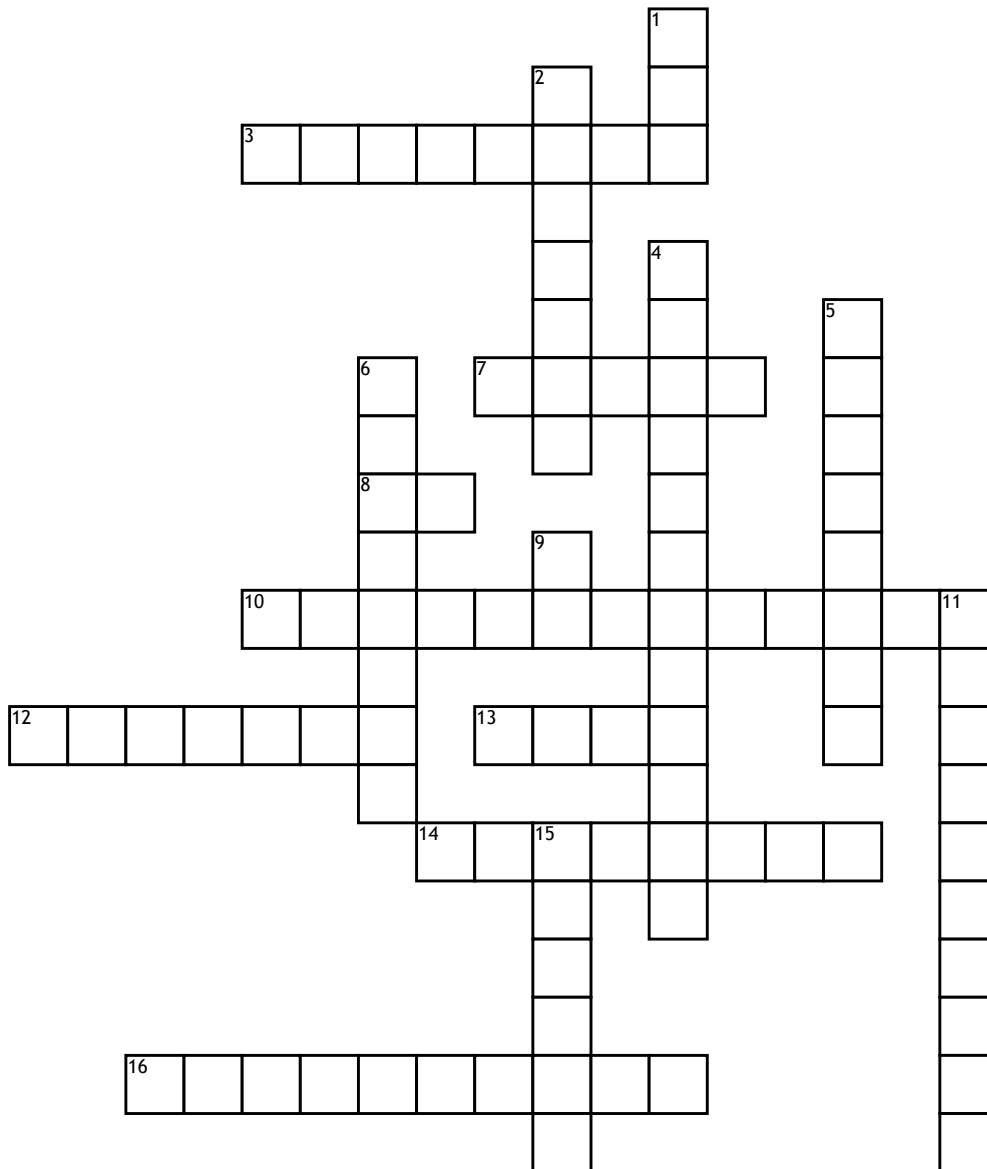


# Final Project: Atomic Structure



## Across

3. \_\_\_\_ have a negative charge  
 7. An \_\_\_\_ has an extra electron that creates a negative charge in an ion  
 8. What element has the atomic number of 17?  
 10. where electrons are found  
 12. Where protons and neutrons are found  
 13. An \_\_\_\_ is the smallest particle of an element that retains all of the chemical and physical properties of that element

14. What happens to the number of protons as you move left to right across a period?  
 16. Who completed the gold foil experiment

## Down

1. An \_\_\_\_ is an atom with a net electric charge due to the loss or gain of electrons  
 2. \_\_\_\_ have a positive charge  
 4. The number that represents the number of protons in an element (bottom left of box)

5. \_\_\_\_ have neither positive nor negative charges; think neutral  
 6. What happens to the number of electrons as you move down a group?  
 9. What is the element with an atomic number of 87 (symbol)?  
 11. Idea of the atom originated from him (think Greek)  
 15. A \_\_\_\_ anion has fewer electrons and creates a positive charge in an ion