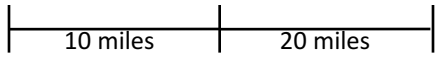
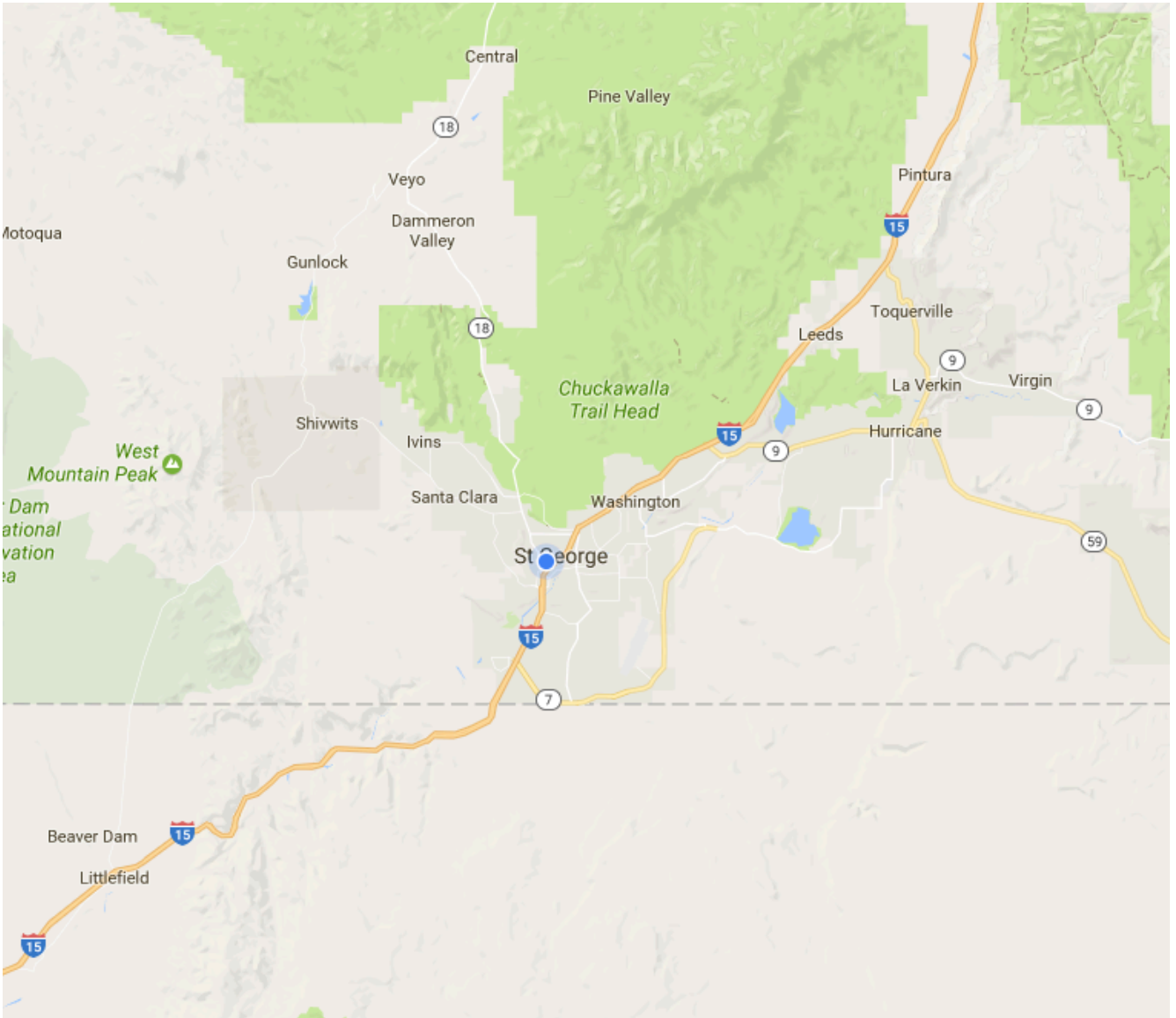


# Scale Model of an Atom

In the classroom, we have a model of the NUCLEUS of the atom Neon (Ne). If the nucleus of our atom is in our classroom, where would the first two electrons be? Where would the next 8 electrons be? Use the map below to draw a scale model of the atom. Using the element Neon (Ne) label the location of the nucleus, the two electrons in the first shell, and the eight electrons in the second shell. When drawing the nucleus include the correct number of protons and neutrons. Use different colors to represent the different parts of an atom (protons, neutrons and electrons.)



## Questions:

1. What model of the atom is being represented in this assignment?
2. How would this model be different if it were JJ Thomson's plum pudding model?
3. How would this model be different if it were the modern electron cloud model?
4. The protons and neutrons in our classroom are 6 cm in diameter. A proton is 1835 times larger than an electron. How large is the electron in this model?
5. How far away from Dixie Middle School is the first electron shell?
6. How far away from Dixie Middle School is the 2<sup>nd</sup> electron shell?