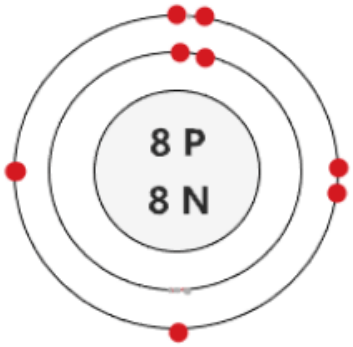
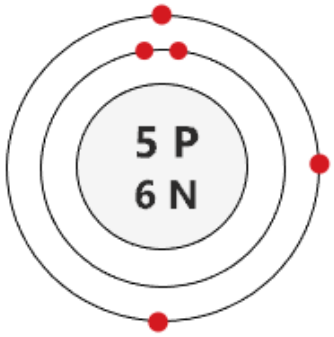
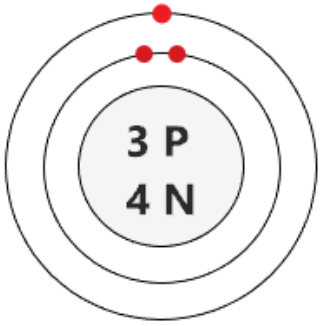
HOT	
MEDIUM	
MILD	

1. Determine the atom that is shown in each Bohr Rutherford Diagram.

2. How can you determine the atomic mass of an atom by looking at a Bohr Rutherford diagram?

3. How do you know how many electrons to draw **in total** in a Bohr Rutherford diagram?

4. How many electrons go in the first electron shell? How many electrons go in the 2nd and 3rd electron shells?

5. Lithium is the first element that requires a 2nd electron shell. What is the first element that uses a 3rd electron shell?

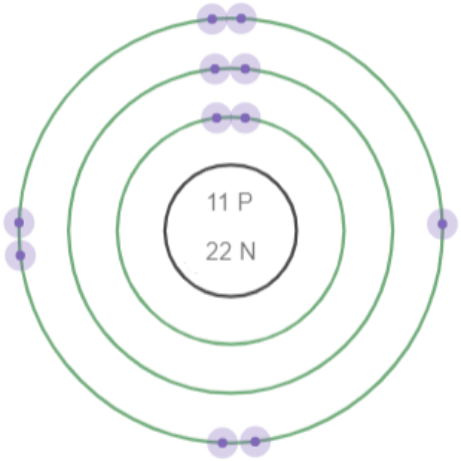
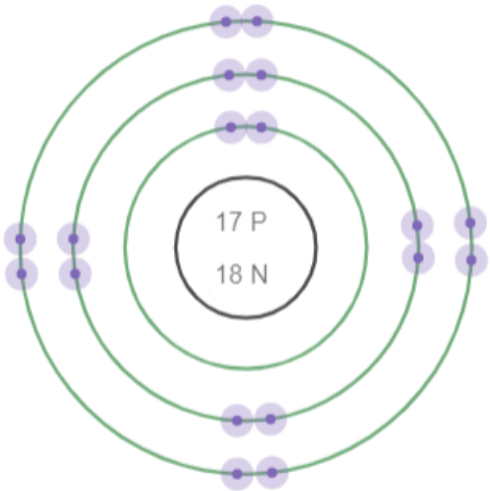
1. Add the electrons to the Bohr Rutherford Diagrams and determine the atom it represents.

MEDIUM

2. What are the similarities and differences between the Bohr Rutherford Diagram of a Lithium atom and a Sodium atom?

3. The following two Bohr Rutherford Diagrams have been drawn incorrectly. What mistakes were made?

Diagram	What was the mistake?
	
	

1. Draw a Bohr Rutherford diagram for each atom.

Nitrogen	Magnesium	Silicon

2. What is the same for every Bohr Rutherford Diagram for the Noble Gases?

3. How many electron shells would a Calcium atom have? How many electrons would be in it's outermost shell?

4. Based on their Bohr Rutherford Diagrams, pick 2 of the following 3 atoms that you think are the most similar. Explain your thinking.

Fluorine, Sodium, Chlorine

5. If you only knew the number of neutrons in an atom, would that always give you enough information to draw a Bohr Rutherford Diagram for that atom? Explain your answer.