

Unit 3B Periodic Table Puzzle I

Name:

Date:

Fictitious symbols are used for the first 18 elements in the periodic table. Use the clues below to write the fictitious symbol in the appropriate spot on the periodic table provided. <u>HINT:</u> You do not have to complete each clue in order.

1							18
	2	13	14	15	16	17	

- <u>Clue 1:</u> <u>U</u> and <u>J</u> are alkali metals. <u>J</u> has more energy levels.
- Clue 2: T has 4 valence electrons on the 3rd energy level.
- <u>Clue 3: M</u> is a metal in period 3 with 2 valence electrons.
- Clue 4: X has one proton in its nucleus.
- Clue 5: Q has 2 energy levels, is a nonmetal, and is a solid at room temperature.
- Clue 6: L is a noble gas that doesn't have 8 valence electrons.
- Clue 7: Z and Y are members of the nitrogen family. Y is a gas at room temperature.
- <u>Clue 8:</u> <u>D</u> has an ending electron distribution of s^2p^5 . <u>R</u> has an ending electron distribution of s^2 .
- Clue 9: G has 6 valence electrons.
- Clue 10: V and W have full outer energy levels. V has 3 energy levels.
- Clue 11: A atoms have 3 valence electrons and E atoms have 6 valence electrons. Both are in the second period.
- Clue 12: K has one fewer total electrons than V.
- Clue 13: I has 3 valence electrons on the third energy level.