



carl

Name _____

Date _____

ANSWERS

1. Fill in

particles	bohr drawing	Lewis Dot structure	octet rule satisfied?
13p 13e		$\cdot \text{Al} \cdot$	NO!
13p 10e		$\cdot \text{Al} \cdot$	yes 😊 (it has a full valence orbit)
17p 17e		$\cdot \text{Cl} \cdot$	no
17p 18e		$:\text{Cl}:$	yes

2. How many elements are there in Period 2?

8

3. Which element in Group 13 has the smallest radius?

"B"

4. Which element in Period 6 has the largest radius?

Cs

5. For the second element in Period 6,

a. Write its symbol **Ba**

b. How many electrons would it need to lose to make its electrons have a full outer orbit? **(two)**

c. If this neutral atom lost electrons it would become (**0** positive / negative).

d. Predict the charge of this element after it forms its ion **2+**

6. How many elements are there in Group 2? **6**

7. When neutral ${}^{80}_{37}\text{Rb}$ changes into Rb^+ ion, the numbers of some particle(s) change.

a. ${}^{80}_{37}\text{Rb}$ has 37 protons 37 electrons 43 neutrons

b. Rb^+ ion has 37 protons 36 electrons 43 neutrons

8. The number of neutrons in a neutral atom is always equal to its

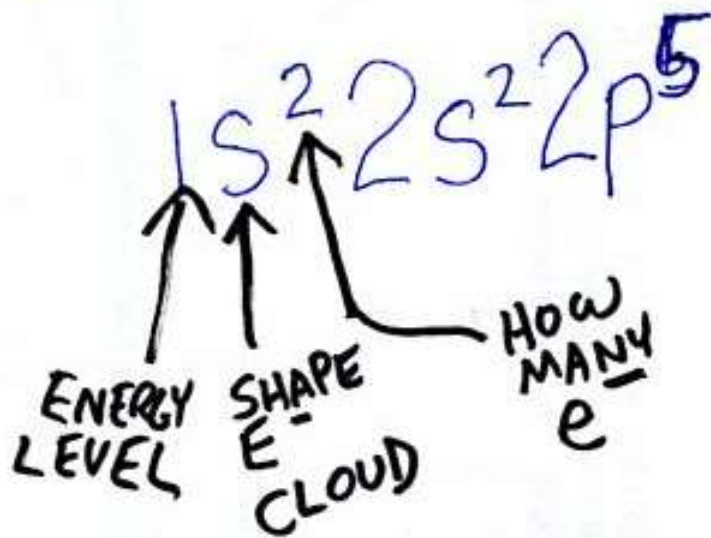
a. protons

b. neutrons **← ouch! BALK**

c. protons minus neutrons

d. mass minus protons

COLLEGE STYLE E⁻ CONFIGURATION



electrons move in four shapes usually

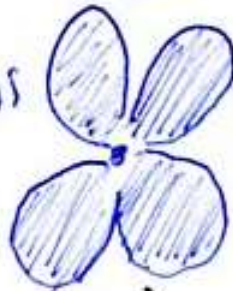


S shape



P shape

nucleus



d shape



f shape