**Atoms: Electronic Configuration (BEG): Quiz 3a**

Please show work where necessary!

/5

*In the space below, write the expanded electron configurations of the following elements:*

1. Sodium: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Chlorine: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. 1s22s22p63s23p4 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. 1s22s22p63s23p64s23d104p65s1 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. 1s22s22p63s23p64s23d104p65s24d105p66s24f145d5

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Answers:

1. sodium **1s22s22p63s1**
2. chlorine **1s22s22p63s23p5**
3. 1s22s22p63s23p4 **sulfur**
4. 1s22s22p63s23p64s23d104p65s1 **rubidium**
5. 1s22s22p63s23p64s23d104p65s24d105p66s24f145d5 **rhenium**