

## Quiz 2.2 – Electronic Structure

Name: \_\_\_\_\_

**Question 1**

List the four different types of electron subshells and roughly sketch what orbitals in the first three look like

**Question 2**

Tell how many electrons can be contained in each of the following:

- A  $d$  orbital
- A  $p$  subshell
- The 3rd shell

**Question 3**

List all subshells in order of increasing energy from  $1s$  to  $7p$

**Question 4**

Give the complete electronic configuration for the following:

- O
- Mg
- Ti
- B

**Question 5**

Give the electronic configuration using noble-gas notation for the following:

- Br
- Pt
- U
- Bi

## *Ozymandius*

By Percy Bysshe Shelley

I met a traveller from an antique land,  
Who said—"Two vast and trunkless legs of stone  
Stand in the desert. . . . Near them, on the sand,  
Half sunk a shattered visage lies, whose frown,  
And wrinkled lip, and sneer of cold command,  
Tell that its sculptor well those passions read  
Which yet survive, stamped on these lifeless things,  
The hand that mocked them, and the heart that fed;  
And on the pedestal, these words appear:  
My name is Ozymandias, King of Kings;  
Look on my Works, ye Mighty, and despair!  
Nothing beside remains. Round the decay  
Of that colossal Wreck, boundless and bare  
The lone and level sands stretch far away."