

Lab report pg 17 to do question 3

PART A

Scale reading of Helium  
Scale reading of Hydrogen

PART B

You will see the flame of different metals  
& determine the unknown sample

PART A :

	blue violet ↓	dark aqua ↓	Yellow ↓	faint red ↓
Helium Spectrum :	1. 400.39	3. 400.81	5. 500.88	7. 100.02
1. 434 <sub>nm</sub> - Blue violet	2. 400.61	4. 400.91	6. 600.61	
2. 461 <sub>nm</sub> - Blue Green	Blue ↑ green	aqua	↑ red	
3. 485 <sub>nm</sub> - darker green				
4. 495 <sub>nm</sub> - light green				
5. 582 <sub>nm</sub> - Yellow				
6. 667 <sub>nm</sub> - Red				
7. 705 <sub>nm</sub> - faint pink				

Hydrogen Emission Lines

1. 659<sub>nm</sub> - red
2. 480<sub>nm</sub> - light blue
3. 428<sub>nm</sub> - violet
4. 410<sub>nm</sub> too weak to see

wavelength

Part B

Solution	color	Duration	
Barium (Ba)	Yellow	1.53	Weak
Copper chloride (Cu)	Green	2.96	Strong
Potassium chloride (K)	Pink/red	3.67	Weak
Lithium chloride (Li)	Pink	13.62	Strong
Sodium chloride (Na)	orange	51.09	Strong
Strontium chloride (Sr)	dark orange/red	13.87	Weak
Unknown 2	light pink	5.57	Weak

5.31