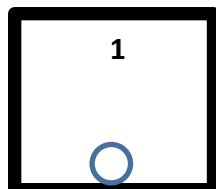


Part 1: ATOMIC RADIUS

Draw a circle to depict the size of an atom of each element using the measurements below.



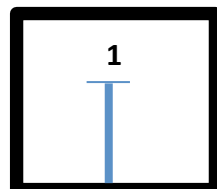
Example: H = .37cm

Scale: 1cm = 1/2 Å

		Atomic Radius
1	H	0.37
2	He	0.31
3	Li	1.52
4	Be	1.12
5	B	0.85
6	C	0.77
7	N	0.75
8	O	0.73
9	F	0.72
10	Ne	0.71
11	Na	1.86
12	Mg	1.60
13	Al	1.43
14	Si	1.18
15	P	1.10
16	S	1.03
17	Cl	1.00
18	Ar	0.98
19	K	2.27
20	Ca	1.97
<hr/>		
31	Ga	1.35
32	Ge	1.22
33	As	1.20
34	Se	1.19
35	Br	1.14
36	Kr	1.12

Part 2: IONIZATION ENERGY

Draw an "energy bar" to depict the energy needed to remove one electron.



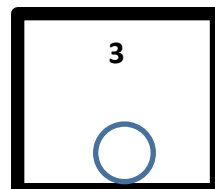
Example: H = 1.31 cm

Scale: 1cm=1kJ/mol

		Ionization Energy
1	H	1.31
2	He	2.40
3	Li	0.52
4	Be	0.90
5	B	0.80
6	C	1.09
7	N	1.40
8	O	1.31
9	F	1.68
10	Ne	2.08
11	Na	0.50
12	Mg	0.74
13	Al	0.59
14	Si	0.79
15	P	1.06
16	S	1.00
17	Cl	1.26
18	Ar	1.52
19	K	0.42
20	Ca	0.59
<hr/>		
31	Ga	0.58
32	Ge	0.78
33	As	1.01
34	Se	0.94
35	Br	1.14
36	Kr	1.35

Part 3: IONIC RADIUS

Draw a circle to depict the size of an ion of each element.



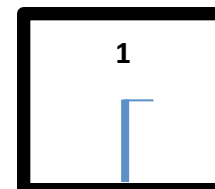
Example: Li = 0.76 cm

Scale: 1cm=1/2 Å

		Ionic Radius
1	H	-
2	He	-
3	Li	0.76
4	Be	0.31
5	B	0.20
6	C	-
7	N	1.46
8	O	1.40
9	F	1.33
10	Ne	-
11	Na	1.02
12	Mg	0.72
13	Al	0.54
14	Si	0.41
15	P	2.12
16	S	1.84
17	Cl	1.81
18	Ar	-
19	K	1.38
20	Ca	1.00
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31	Ga	0.62
32	Ge	0.53
33	As	2.22
34	Se	1.98
35	Br	1.95
36	Kr	-

Part 4: ELECTRO-NEGATIVITY

Draw a bar to depict the ability of an element's atoms to attract electrons in a chemical bond.



Example: H = 1.10 cm

Scale: 1cm = 1 Pauling

		Electro-negativity
1	H	2.1
2	He	-
3	Li	1.0
4	Be	1.5
5	B	2.0
6	C	2.5
7	N	3.0
8	O	3.5
9	F	4.0
10	Ne	-
11	Na	0.9
12	Mg	1.2
13	Al	1.5
14	Si	1.8
15	P	2.1
16	S	2.5
17	Cl	3.0
18	Ar	-
19	K	0.8
20	Ca	1.0
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31	Ga	1.6
32	Ge	1.8
33	As	2.0
34	Se	2.4
35	Br	2.8
36	Kr	-

