

ACTIVITY 1

Atom of element	Symbol	Number of protons	Number of neutrons	Number of electrons	Number of parts in the nucleus	Overall charge (difference between number of protons and electrons)
Hydrogen		1	0	1		
Helium		2	2	2		
Lithium		3	4	3		
Beryllium		4	5	4		
Boron		5	6	5		
Carbon		6	6	6		
Nitrogen		7	7	7		
Oxygen		8	8	8		
Fluorine		9	10	9		
Neon		10	10	10		

ACTIVITY 2

Atom of element	Symbol	Atomic number	Atomic mass	Number of protons	Number of neutrons	Number of electrons
	Na					
	Mg					
	Al					
	Si					
	P					
	S					
	Cl					
	Ar					
	K					
	Ca					

Magnesium

Helium

Lithium

Hydrogen

Aluminium

Sulfur

Nitrogen

Oxygen

Beryllium

Fluorine

Neon

Sodium

Phosphorus

Silicon

Boron

Carbon

Potassium

Argon

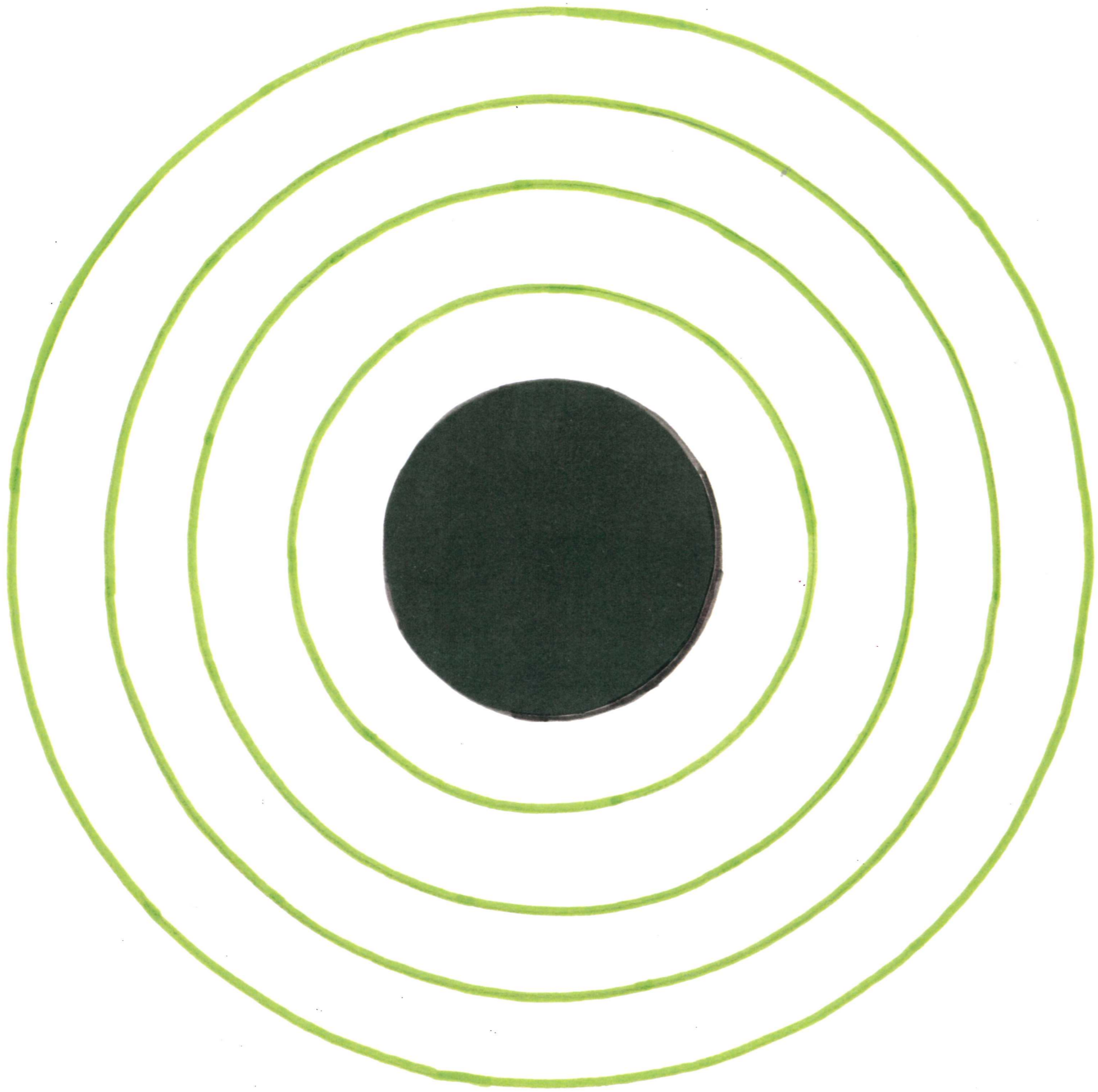
Chlorine

Calcium

A ✂

B

✂



D

✂ C

The Periodic Table of the Elements

Period	Groups																	
	I	II											III	IV	V	VI	VII	0
1																		4 He Helium 2
2	7 Li Lithium 3	9 Be Beryllium 4											11 B Boron 5	12 C Carbon 6	14 N Nitrogen 7	16 O Oxygen 8	19 F Fluorine 9	20 Ne Neon 10
3	23 Na Sodium 11	24 Mg Magnesium 12											27 Al Aluminium 13	28 Si Silicon 14	31 P Phosphorus 15	32 S Sulphur 16	35.5 Cl Chlorine 17	40 Ar Argon 18
4	39 K Potassium 19	40 Ca Calcium 20	45 Sc Scandium 21	48 Ti Titanium 22	51 V Vanadium 23	52 Cr Chromium 24	55 Mn Manganese 25	56 Fe Iron 26	59 Co Cobalt 27	59 Ni Nickel 28	64 Cu Copper 29	65 Zn Zinc 30	70 Ga Gallium 31	73 Ge Germanium 32	75 As Arsenic 33	79 Se Selenium 34	80 Br Bromine 35	84 Kr Krypton 36
5	85 Rb Rubidium 37	88 Sr Strontium 38	89 Y Yttrium 39	91 Zr Zirconium 40	93 Nb Niobium 41	96 Mo Molybdenum 42	96 Tc Technetium 43	101 Ru Ruthenium 44	103 Rh Rhodium 45	106 Pd Palladium 46	108 Ag Silver 47	112 Cd Cadmium 48	115 In Indium 49	119 Sn Tin 50	122 Sb Antimony 51	128 Te Tellurium 52	127 I Iodine 53	131 Xe Xenon 54
6	133 Cs Caesium 55	137 Ba Barium 56	139 La Lanthanum 57	178 Hf Hafnium 72	181 Ta Tantalum 73	184 W Tungsten 74	186 Re Rhenium 75	190 Os Osmium 76	192 Ir Iridium 77	195 Pt Platinum 78	197 Au Gold 79	201 Hg Mercury 80	204 Tl Thallium 81	207 Pb Lead 82	209 Bi Bismuth 83	210 Po Polonium 84	210 At Astatine 85	210 Rn Radon 86
7	223 Fr Francium 87	226 Ra Radium 88	227 Ac Actinium 89															

140 Ce Cerium 58	141 Pr Praseodymium 59	144 Nd Neodymium 60	147 Pm Promethium 61	150 Sm Samarium 62	152 Eu Europium 63	157 Gd Gadolinium 64	159 Tb Terbium 65	162 Dy Dysprosium 66	165 Ho Holmium 67	167 Er Erbium 68	169 Tm Thulium 69	173 Yb Ytterbium 70	175 Lu Lutetium 71
232 Th Thorium 90	231 Pa Protactinium 91	238 U Uranium 92	237 Np Neptunium 93	244 Pu Plutonium 94	247 Am Americium 95	251 Cm Curium 96	254 Bk Berkelium 97	259 Cf Californium 98	261 Es Einsteinium 99	267 Fm Fermium 100	268 Md Mendelevium 101	269 No Nobelium 102	277 Lr Lawrencium 103

$\begin{matrix} a \\ \mathbf{X} \\ b \end{matrix}$	a = relative atomic mass \mathbf{X} = atomic symbol b = proton (atomic) number
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The volume of one mole of any gas is 24 dm³ at room temperature and pressure (r.t.p.)