Atomic Structure and Periodic Table

Complete the table to show the difference between metals and non-metals

Property	Metals	Non Metals
Conduction of Heat/Electricity		
Ability to bend (Malleable or not)		
Appearance		
Sound when hit		
Density		
Magnetism		

In the space below draw an atom and label it with the keywords

Why are Group 0 atoms unreactive?

……
……
……

Complete the table to show the properties of the Halogens (Group 7)

	Fluorine	Chlorine	Bromine	Iodine
Electron Structure				
State at room temperature				
Key information about the halogens				
Reactivity				
Products when reacted with metals				

Complete the table to show the properties of the Alkali Metals (Group 1)

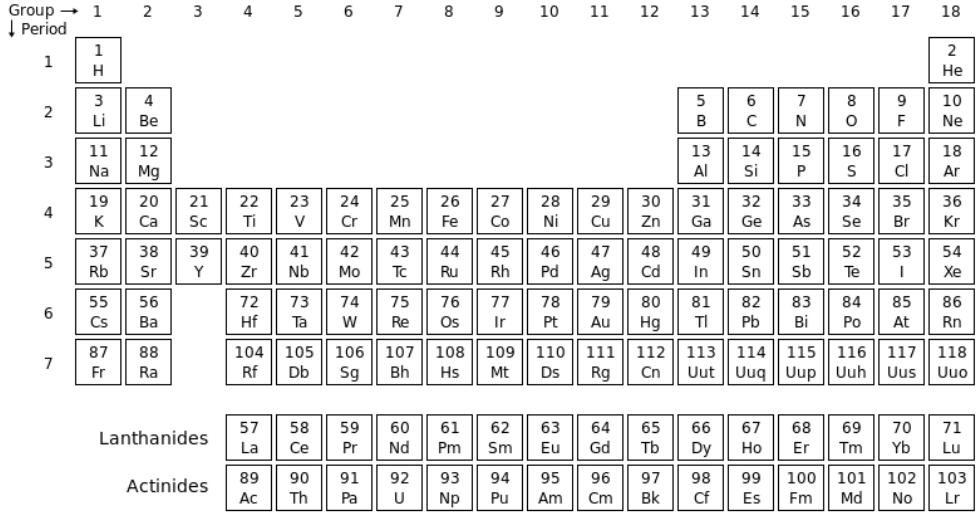
	Lithium	Sodium	Potassium
Electronic Structure			
Melting point/ °C			
Flame Test Colour			
Reaction with water			
Products of reaction with water			

Draw a timeline to describe how the periodic table was developed through time. Include the scientists and their theories.

Atomic Structure and Periodic Table

List 4 properties of transition metals

Shade the periodic table below to show where the transition metals are found



Group → / ↓ Period	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	1 H																	2 He
2	3 Li	4 Be											5 B	6 C	7 N	8 O	9 F	10 Ne
3	11 Na	12 Mg											13 Al	14 Si	15 P	16 S	17 Cl	18 Ar
4	19 K	20 Ca	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni	29 Cu	30 Zn	31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr
5	37 Rb	38 Sr	39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru	45 Rh	46 Pd	47 Ag	48 Cd	49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe
6	55 Cs	56 Ba		72 Hf	73 Ta	74 W	75 Re	76 Os	77 Ir	78 Pt	79 Au	80 Hg	81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn
7	87 Fr	88 Ra		104 Rf	105 Db	106 Sg	107 Bh	108 Hs	109 Mt	110 Ds	111 Rg	112 Cn	113 Uut	114 Uuq	115 Uup	116 Uuh	117 Uus	118 Uuo
Lanthanides				57 La	58 Ce	59 Pr	60 Nd	61 Pm	62 Sm	63 Eu	64 Gd	65 Tb	66 Dy	67 Ho	68 Er	69 Tm	70 Yb	71 Lu
Actinides				89 Ac	90 Th	91 Pa	92 U	93 Np	94 Pu	95 Am	96 Cm	97 Bk	98 Cf	99 Es	100 Fm	101 Md	102 No	103 Lr

Compare the properties of transition metals with those of Group 1 metals