

CfE Science

Periodic Table

Homework Booklet

Name:- _____

Class:- _____

Teacher:- _____

Exercise 1 - / 10

Exercise 2 - / 10

Homework Exercise 1

1. Answer parts a) and b) using the box below;

mercury, water, iron, helium, oxygen, carbon dioxide, carbon, bromine

- (a) List all of the substances above that contain only one type of atom.

_____ (1)

- (b) Complete the following table using all of the chemicals from the box

Elements			Compounds
Solid	Liquid	Gas	

(4)

- 2.

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

Complete the following sentences about the periodic table:

All the elements to the left of the zig-zag line are _____. There are over ____ of these elements. The remaining elements to the right of the zig-zag line are _____ and there are about ____ of these elements.

(2)

3. Circle the correct word(s) to complete the following sentences.

(a) Metals are (shiny / dull) when polished and are (conductors / insulators) of heat and electricity.

(b) All metals are (solid / liquid / gas) at room temperature except mercury which is a (solid / liquid / gas).

(c) Non-metals can exist as (solid / liquid / or gas) at room temperature.

(d) Non-metals have (high / low) melting points and boiling points.

(e) Non-metals are (good / poor) conductors of heat and electricity.

(3)

Total (10)

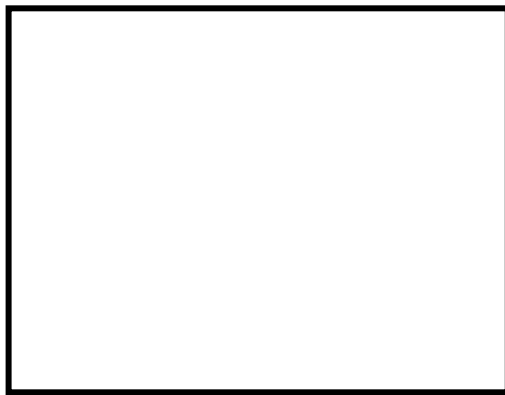
Homework Exercise 2

1. Iron is a solid element made up of atoms.

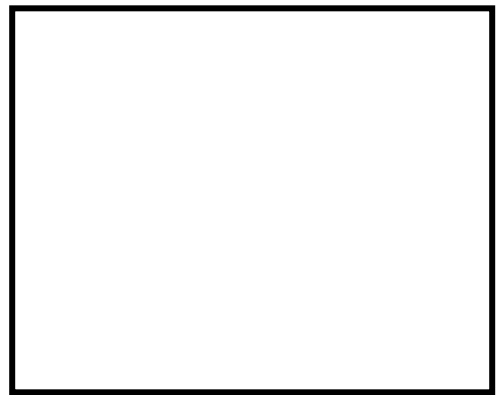
Nitrogen is a gas made up of molecules containing two identical atoms joined together.

Molecules of bromine are similar to nitrogen but the atoms are larger and bromine is a liquid.

Draw diagrams of iron, nitrogen and bromine showing their particles.



Iron



Nitrogen



Bromine

(3)

2.

1 H																	2 He
3 Li	4 Be											5 B	6 C	7 N	8 O	9 F	10 Ne
11 Na	12 Mg											13 Al	14 Si	15 P	16 S	17 Cl	18 Ar
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
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
55 Cs	56 Ba	57-71 see below	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
87 Fr	88 Ra	89-103 see below	104 Rf	105 Ha	106 Sg												
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			
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 Lw			

Answer the following questions about the periodic table in sentences:

(a) What are the vertical columns in the table called?

(b) What are the horizontal rows in the table called?

(c) What special name is given to the elements in the left hand column?

(d) What do you call the block of elements between groups two and three?

(e) What special name is given to the elements in the right hand column?

(f) What do all the group 8 elements have in common?

(g) What do all the group 1 elements have in common?

(7)

Total (10)