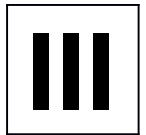


[Science] Chemistry O Level Exam Paper
Preliminary Examination Set [III]
Secondary Four Express & Five Normal



CANDIDATE NAME:

CLASS:

INDEX NUMBER:

Science(Chemistry)

5076/01

Paper 1 Multiple Choice

5078/01

2024

30 min

READ THESE INSTRUCTIONS FIRST

Write in soft pencil.

Do not use staples, paper clips, glue or correction fluid/tape.

Write your name, class and index number on the Answer Sheet in the spaces provided.

There are **forty** questions on this paper. Answer **all** questions. For each question, there are four possible answers **A, B, C** or **D**.

Choose the **one** you consider correct and record your choice in **soft pencil** on the separate Answer Sheet.

Read the instructions on the Answer Sheet very carefully.

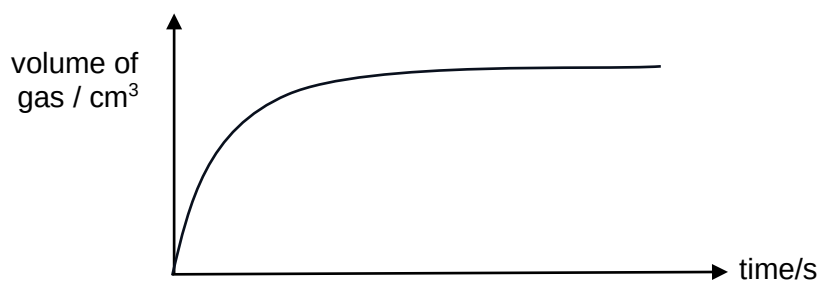
Each correct answer will score one mark. A mark will not be deducted for a wrong answer.

Any rough working should be done in this booklet.

The use of an approved scientific calculator is expected, where appropriate.

- 1 A 5 cm reactive metal ribbon was reacted with excess dilute nitric acid.

The graph shows the volume of gas evolved at 20 second intervals until the reaction had finished.



Which piece of apparatus should not be used for the experiment?

- A burette
 - B gas syringe
 - C ruler
 - D stopwatch
- 2 Aqueous ammonia was added into the following solutions.

ammonium chloride calcium chloride copper(II) chloride zinc chloride

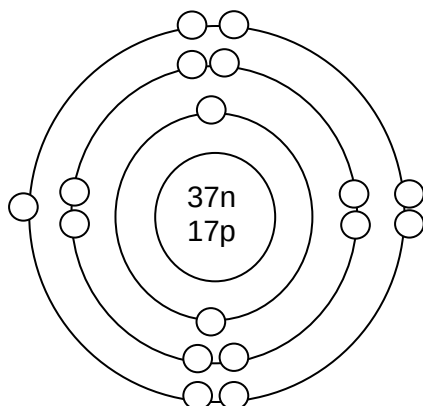
How many of the solutions would show an observation?

- A 1
- B 2
- C 3
- D 4

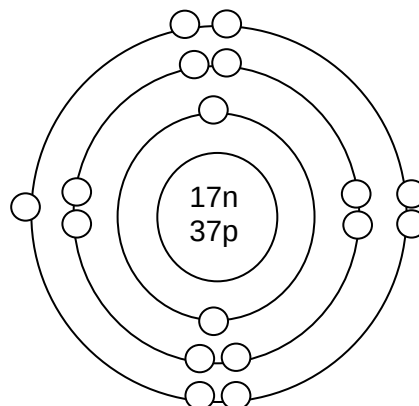
- 3 An atom of chlorine is represented by ${}^{37}_{17}\text{Cl}$.

Which option shows the structure of the atom?

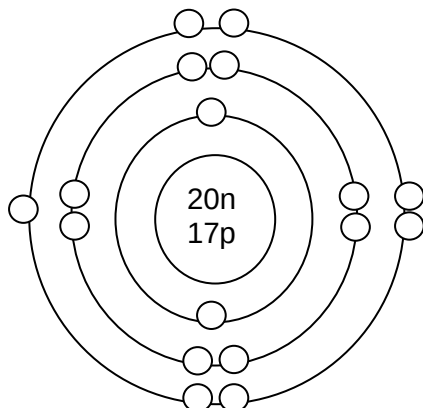
A



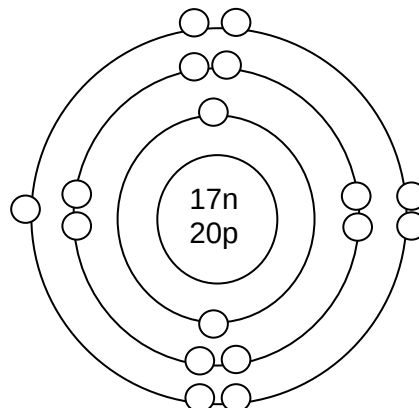
B



C



D



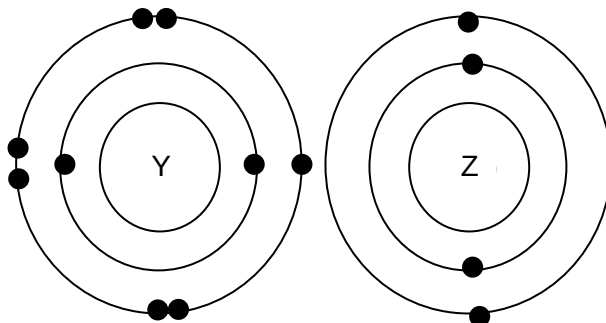
- 4 The particles in substance X are closely packed and vibrating about fixed positions.

X changes to a state in which the particles are still in contact but able to move more freely.

What is this change called?

- A condensation
- B evaporation
- C freezing
- D melting

- 5 The electronic structures of two atoms Y and Z are shown.



Y and Z can combine together to form a compound.

Which row describe the bonding and formula of the compound?

	type of bonding	formula
A	covalent	YZ
B	ionic	ZY
C	covalent	Y_2Z_7
D	ionic	ZY_2

- 6 Which ions are present in solid calcium phosphate, $Ca_3(PO_4)_2$?
- A** Ca^{3+} and PO_4^{2-}
- B** Ca^{2+} and PO_4^{3-}
- C** Ca^{3-} and PO_4^{2+}
- D** Ca^{2-} and PO_4^{3+}

7 How many moles of ammonium chloride are there in 214 g of NH_4Cl ?
[Relative atomic masses: A_r : H, 1; N, 14; Cl, 35.5]

- A** 1 mol **B** 2 mol **C** 3 mol **D** 4 mol

8 Which statements about exothermic reactions are correct?

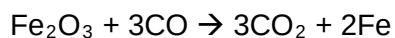
- 1 Energy is absorbed from the surroundings.
- 2 Energy is released to the surroundings.
- 3 The temperature of the reactants rises.
- 4 The temperature of the reactants falls.

- A** 1 and 3 **B** 1 and 4 **C** 2 and 3 **D** 2 and 4

9 Which statement about rate of reaction is correct?

- A** Decreasing the concentration of a reactant decreases the rate because the number of particles per unit volume is lesser.
- B** Increasing the particle size of a solid reactant increases the rate because there are more effective collisions.
- C** Decreasing the temperature decreases the rate because it decreases the number of particles per unit volume.
- D** Increasing the pressure decreases the rate because there are less collisions.

10 Which substance in the equation is reduced?



- A** Fe_2O_3
- B** CO
- C** CO_2
- D** Fe

- 11** A student tests three different solutions with red and blue litmus papers.

solution	P	Q	R
red litmus paper	remains red	turns blue	remains red
blue litmus paper	turns red	remains blue	remains blue

What could be the pH value of the three solutions?

	P	Q	R
A	7	3	9
B	9	7	3
C	3	9	7
D	2	9	10

- 12** Which of the following is a greenhouse gas?

- A** methane
- B** carbon monoxide
- C** nitrogen dioxide
- D** oxygen

- 13** Five elements have the following electronic configurations.

- O** 2
- P** 2 , 2
- Q** 2 , 4
- R** 2 , 8
- S** 2 , 8 , 2

Which statement is correct?

- A** O and P are shiny solids at room temperature.
- B** O, P and S are in the same group in the Periodic Table.
- C** P, Q and R are in the same period in the Periodic Table.
- D** Q and R are the only the non-metals among the five elements.

- 14 Group 2 elements have similar group trend as Group 1 elements.

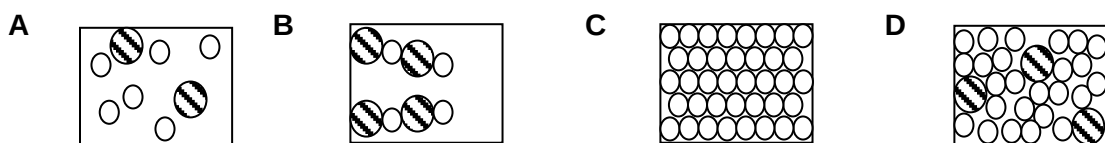
Some information about Group 2 elements is shown below.

element	atomic number	melting point °C	density g/cm ³
magnesium	12	650	1.737
calcium	20	842	1.526
strontium	38	777	2.582

Which statement about the trends shown by the elements in Group 2 of the Periodic Table is correct?

- A As the atomic number increases, the melting point decreases.
- B As the number of electron shells increases, it is easier to lose valence electrons.
- C As the atomic number increases, the density decreases.
- D As the number of electron shells increases, the elements become less reactive with non-metals.

- 15 Which diagram represents the arrangement of the atoms in brass?



- 16 The table below represents the reactions between metal copper, zinc and Q with solutions of the salts of the same metals.

metal	result of placing metal in solution of		
	salt of copper	salt of zinc	salt of Q
copper	no reaction	no reaction	no reaction
zinc	copper displaced	no reaction	no reaction
Q	copper displaced	zinc displaced	no reaction

What is the order of reactivity of the metals from the most reactive to least reactive?

- A Cu → Q → Zn
- B Q → Zn → Cu
- C Zn → Cu → Q
- D Q → Cu → Zn

17 Which statements about the pollutant, sulfur dioxide, are correct?

- 1 It is a colourless and odourless gas.
- 2 It is formed during volcanic eruptions.
- 3 It reacts with haemoglobin in the blood.
- 4 It causes acid rain formation.

A 1 and 3 **B** 1 and 4 **C** 2 and 3 **D** 2 and 4

18 Which statement about alkenes is incorrect?

- A** They are saturated hydrocarbons.
- B** They decolourise bromine water.
- C** Their viscosity increases as the relative molecular mass increases.
- D** They form carbon monoxide when burnt in a limited supply of oxygen.

19 Which of the following shows the effect of climate change correctly?

	climate change phenomenon	effect of climate change
A	ocean warming	coral reefs are bleached
B	desertification	high temperatures cause death of the elderly and frail
C	heat waves	sea levels increase
D	glacial retreat	food production decreases

20 Which organic compound will be oxidised by acidified potassium manganate(VII) solution to form a carboxylic acid?

- A** CH_2CH_2
- B** CH_3CH_3
- C** $\text{CH}_3\text{CH}_2\text{OH}$
- D** CH_3COOH

End of Paper

Data Sheet

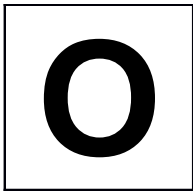
Colours of Some Common Metal Hydroxides

aluminium hydroxide	white
calcium hydroxide	white
copper (II) hydroxide	light blue
iron (II) hydroxide	green
iron (III) hydroxide	red-brown
zinc hydroxide	white

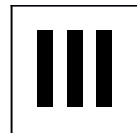
The Periodic Table of Elements

Group																									
1	2	1 Hhydrogen1												13	14	15	16	17	18						
Key		proton (atomic) number atomic symbol name relative atomic mass																							
3	4																	5	6	7	8	9	10	11	12
Li lithium 7	Be beryllium 9																	B boron 11	C carbon 12	N nitrogen 14	O oxygen 16	F fluorine 19	Ne neon 20		
11	12																	13	14	15	16	17	18		
Na sodium 23	Mg magnesium 24																	Al aluminium 27	Si silicon 28	P phosphorus 31	S sulfur 32	Cl chlorine 35.5	Ar argon 40		
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36								
K potassium 39	Ca calcium 40	Sc scandium 45	Ti titanium 48	V vanadium 51	Cr chromium 52	Mn manganese 55	Fe iron 56	Co cobalt 59	Ni nickel 59	Cu copper 64	Zn zinc 65	Ga gallium 70	Ge germanium 73	As arsenic 75	Se selenium 79	Br bromine 80	Kr krypton 84								
37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54								
Rb rubidium 85	Sr strontium 88	Y yttrium 89	Zr zirconium 91	Nb niobium 93	Mo molybdenum 96	Tc technetium —	Ru ruthenium 101	Rh rhodium 103	Pd palladium 106	Ag silver 108	Cd cadmium 112	In indium 115	Sn tin 119	Sb antimony 122	Te tellurium 128	I iodine 127	Xe xenon 131								
55	56	57–71 lanthanoids		72	73	74	75	76	77	78	79	80	81	82	83	84	85	86							
Cs caesium 133	Ba barium 137			Hf hafnium 178	Ta tantalum 181	W tungsten 184	Re rhenium 186	Os osmium 190	Ir iridium 192	Pt platinum 195	Au gold 197	Hg mercury 201	Tl thallium 204	Pb lead 207	Bi bismuth 209	Po polonium —	At astatine —	Rn radon —							
87	88	89–103 actinoids		104	105	106	107	108	109	110	111	112	113	114	115	116	117	118							
Fr francium	Ra radium —			Rf rutherfordium —	Db dubnium —	Sg seaborgium —	Bh bohrium —	Hs hassium —	Mt meitnerium —	Ds darmstadtium —	Rg roentgenium —	Cn copernicium —	Nh nihonium —	Fl flerovium —	Mc moscovium —	Lv livermorium —	Ts tennessine —	Og oganesson —							
lanthanoids		57 La lanthanum 139	58 Ce cerium 140	59 Pr praseodymium 141	60 Nd neodymium 144	61 Pm promethium —	62 Sm samarium 150	63 Eu europium 152	64 Gd gadolinium 157	65 Tb terbium 159	66 Dy dysprosium 163	67 Ho holmium 165	68 Er erbium 167	69 Tm thulium 169	70 Yb ytterbium 173	71 Lu lutetium 175									
actinoids		89 Ac actinium —	90 Th thorium 232	91 Pa protactinium 231	92 U uranium 238	93 Np neptunium —	94 Pu plutonium —	95 Am americium —	96 Cm curium —	97 Bk berkelium —	98 Cf californium —	99 Es einsteinium —	100 Fm fermium —	101 Md mendelevium —	102 No nobelium —	103 Lr lawrencium —									

The volume of one mole of any gas is 24 dm³ at room temperature and pressure (r.t.p.).
The Avogadro constant, $L = 6.02 \times 10^{23} \text{ mol}^{-1}$.



[Science] Chemistry O Level Exam
Paper Preliminary Examination Set [III]
Secondary Four Express & Five Normal



CANDIDATE NAME:

CLASS:

INDEX NUMBER:

Science(Chemistry)

Paper 2 Theory

5076/03

2024

5078/03

1 hour 15 minutes

READ THESE INSTRUCTIONS FIRST

Write your name, class and index number on all the work you hand in.
Write in dark blue or black pen on both sides of the paper.
You may use a HB pencil for any diagrams or graphs.
Do not use staples, paper clips, glue or correction fluid/tape.

Section A

Answer **all** questions.

Section B

Answer **all** questions. Question 11 has a choice of parts to answer.

Candidates are reminded that **all** quantitative answers should include appropriate units.
The use of an approved scientific calculator is expected, where appropriate.
Candidates are advised to show all their working in a clear and orderly manner, as more marks are awarded for sound use of Physics than for correct answers.

At the end of the examination, fasten all your work securely together.
The number of marks is given in brackets [] at the end of each question or part question.

Section A	
Section B	
Total	

Section A

Answer **all** questions in the spaces provided.

- 1** Choose from the following substances to answer the questions.

aqueous ammonia

bromine

carbon monoxide

potassium manganate(VII)

potassium iodide

sulfur trioxide

water

Each substance may be used once, more than once or not at all.

Identify a substance which:

- (a)** is a neutral oxide;

.....[1]

- (b)** is acidic;

.....[1]

- (c)** is alkaline;

.....[1]

- (d)** is a reducing agent;

.....[1]

- (e)** is used to test for the presence of sulfur dioxide gas;

.....[1]

- (f)** is formed from the incomplete combustion of fossil fuel.

.....[1]

2 Table 2.1 shows the names and nuclide notations of some isotopes.

Table 2.1

name	carbon-12	sodium-11	neon-20	carbon-14	magnesium-24
nuclide notation	$^{12}_6\text{C}$	$^{23}_{11}\text{Na}$	$^{20}_{10}\text{Ne}$	$^{14}_6\text{C}$	$^{24}_{12}\text{Mg}$

(a) Define *isotopes*.

.....
.....[1]

(b) Use the isotopes in Table 2.1 to answer the following questions.

(i) State the nuclide notation of an isotope that is an atom of an element in Group 14.

..... [1]

(ii) Name an isotope has more neutrons than protons.

..... [1]

(iii) Name an isotope that forms ions with a charge of +2.

..... [1]

(c) Draw the atomic structure of neon-20. Show all the subatomic particles in your diagram.

- 3 Table 3.1 shows the properties of Group 17 elements.

Table 3.1

Group 17 elements	melting point / °C	boiling point / °C	colour
chlorine	-101	-34	yellowish green
bromine	-7	59	reddish brown
iodine	114	184	shiny black
astatine			

- (a) State the name given to Group 17 elements in the Periodic Table.

..... [1]

- (b) Predict the colour and state of astatine at room temperature.

..... [1]

- (c) State a chemical property of Group 17 elements.

.....[1]

- (d) Table 3.2 shows the densities of chlorine and bromine at room temperature and pressure.

Table 3.2

element	density g/cm ³
chlorine	0.03
bromine	3.12

What is the main reason that the density of chlorine and bromine are so different at room temperature and pressure?

.....
.....[1]

- (e) All elements in Group 17 are diatomic.

- (i) Explain the meaning of the word *diatomic*.

.....
.....[1]

- (ii) Draw a 'dot-and-cross' diagram to show the bonding in a fluorine molecule.
Show the outer shell electrons only.

[2]

4 Fig. 4.1 describes some of the substances that result from the chemical reactions of solid **A**.

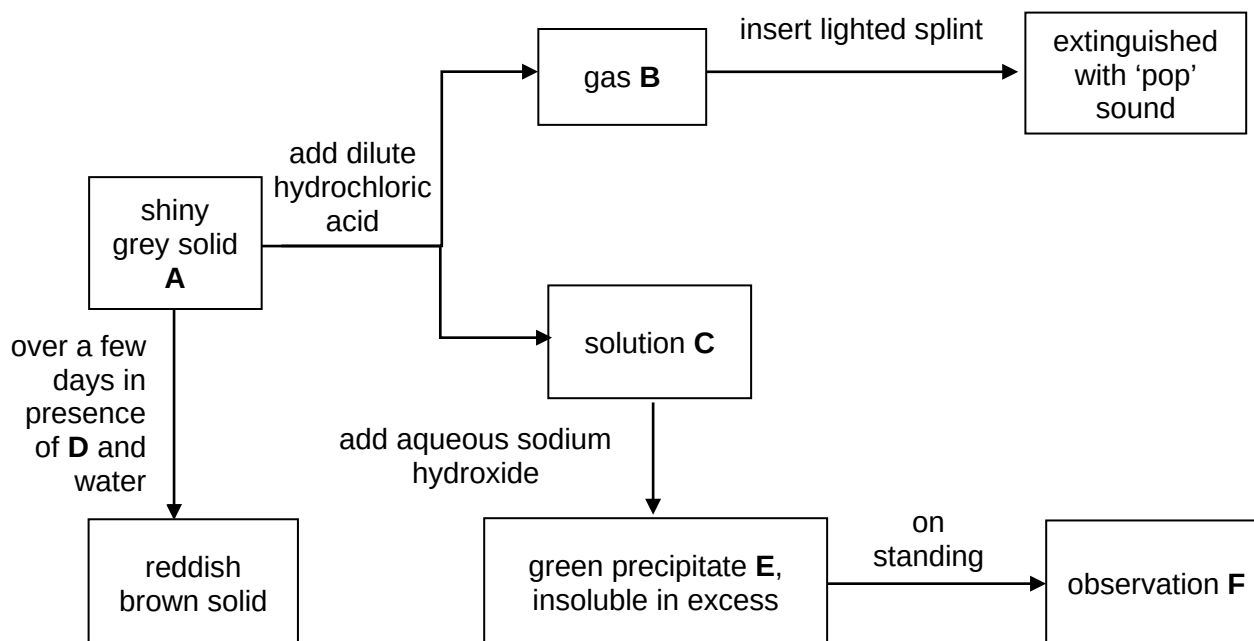


Fig. 4.1

(a) Identify **A**, **B**, **C**, **D** and **E**.

A

B

C

D

E

[5]

(b) Describe the observation **F**.

.....

..... [1]

(c) Write a balanced chemical equation for any of the reactions shown in Fig. 4.1.

.....[2]

- 5 An experiment was carried out to measure the rate of reaction between excess powdered copper(II) carbonate and dilute acid.

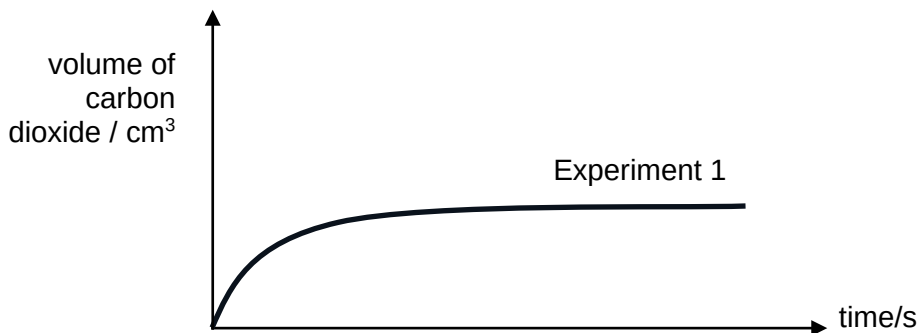


Fig. 5.1

- (a) In **Experiment 1**, 25 cm³ of 1.0 mol/dm³ of sulfuric acid was used.
- (i) Complete the equation for the reaction by filling in the missing state symbols.
- $$\text{H}_2\text{SO}_4 (\text{.....}) + \text{CuCO}_3 (\text{.....}) \rightarrow \text{CuSO}_4 (\text{.....}) + \text{H}_2\text{O} (\text{.....}) + \text{CO}_2 (\text{.....}) \quad [1]$$
- (ii) Calculate the volume of carbon dioxide produced in **Experiment 1** at room conditions.

volume of carbon dioxide = dm³ [2]

- (b) **Experiment 2** was carried out using the same reagents as Experiment 1 but at a higher temperature.

Sketch and label the graph obtained for **Experiment 2** in Fig. 5.1. [2]

- (c) **Experiment 3** was carried out by repeating Experiment 1 using the same volume of sulfuric acid.

The results are shown in the graph in Fig 5.2.

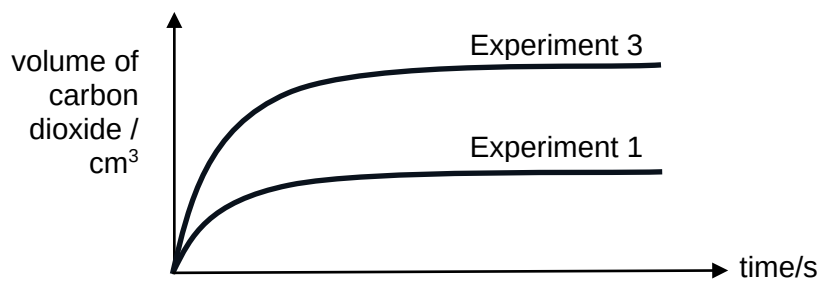


Fig. 5.2

Suggest the concentration of acid used in **Experiment 3**.

.....[1]

- 6 An oil refinery uses two different processes, **Process 1** and **Process 2**, to crack naphtha. Table 6.1 shows some information about the percentage of products from each process.

Table 6.1

product	percentage of product from Process 1 (%)	percentage of product from Process 2 (%)
hydrogen	1	1
methane	20	14
ethene	30	20
propene	14	14
C ₄ hydrocarbon	10	10
C ₅ to C ₈ hydrocarbon	25	40

- (a) The refinery sells ethene to make plastic and C₅ to C₈ hydrocarbons to add to petrol. Use the information from Table 6.1 to explain why the refinery must use both processes.

.....
[1]

- (b) During cracking, molecules of decane, C₁₀H₂₂, produce ethene, methane and product X.

- (i) Complete the equation to show the formula of product X.

decane → ethene + methane + product X



- (ii) Draw the full structural formula of ethene and methane in the boxes below.

ethene	methane
--------	---------

[2]

(c) Ethene can be further processed to obtain ethanol.

Name and describe an alternative way to obtain ethanol in the lab without using ethene.

.....

.....

..... [2]

7 Carbon monoxide detectors can be used in the home as shown in Fig. 7.1.

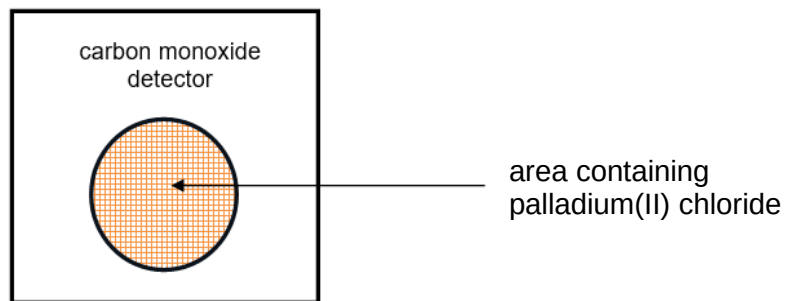


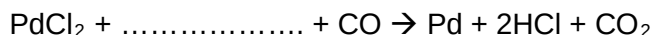
Fig. 7.1

The orange spot turns black if there is a high concentration of carbon monoxide in the air.

(a) Why is carbon monoxide hazardous?

.....
[1]

(b) The spot turns black when palladium(II) chloride reacts with carbon monoxide to form black palladium metal.



(i) Complete the equation by writing the formula of the missing reactant above. [1]

(ii) Complete Table 7.1 to show the oxidation states of palladium and carbon after the reaction takes place.

Table 7.1

element	oxidation state before reaction	oxidation state after the reaction
palladium	+2	
carbon	+2	

[2]

(iii) Use the information from Table 7.1 to state and explain if palladium(II) chloride is oxidised, reduced or neither oxidised nor reduced.

.....
[2]

8 Lithium is stored under oil because it can rapidly react with oxygen in air to form lithium oxide, Li_2O .

(a) The relative atomic mass of lithium is 7.

Define *relative atomic mass*.

.....
.....[1]

(b) Write the electronic configuration of lithium atom and oxygen atom.

lithium atom: [1]

oxygen atom:[1]

(c) Draw a 'dot-and-cross' diagram to show the arrangement of all the electrons of lithium oxide, Li_2O .

[2]

(d) State the type of oxide that lithium oxide forms.

..... [1]

(e) Molten lithium oxide conducts electricity, but solid lithium oxide does not.

Explain this difference in electrical conductivity.

.....
.....
.....[2]

(f) Using bonding and structure, explain why oxygen is a gas at room condition.

.....
.....[2]

Section B

Answer any **one** question in this section in the spaces provided.

9 Fig. 9.1 show the processes in the carbon cycle.

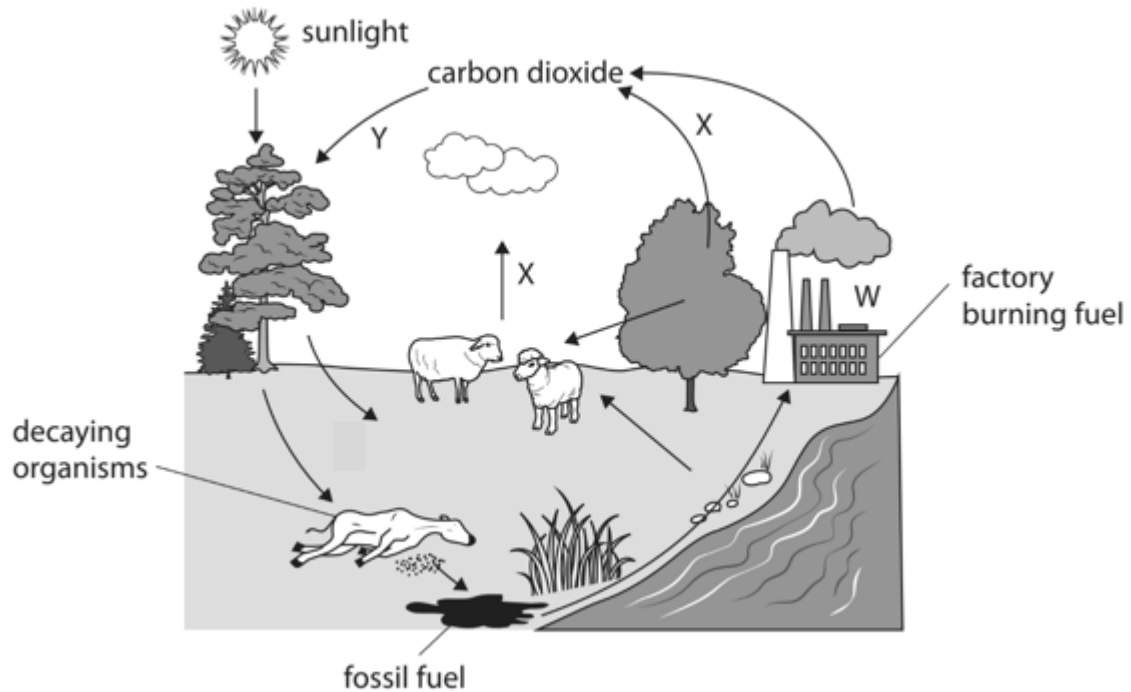


Fig. 9.1

(a) Identify the following processes:

W:

X:

Y:

- (b) Plastic can be made from fossil fuel. Fraction like naphtha undergo chemical reaction to form unsaturated monomers. The monomer then undergoes addition reaction to form polymer.

Fig. 9.2 shows part of the structure of poly(propene).

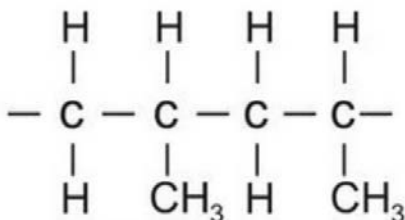


Fig. 9.2

- (i) Define *polymer*.

.....
..... [1]

- (ii) Draw the full structural formula of the monomer that is used to make poly(propene).

[1]

- (iii) State one problem caused by disposal of non-biodegradable poly(propene).

.....
..... [1]

- (c) We can recycle common plastic like poly(propene) using mechanical and chemical methods as illustrated in Fig. 9.3.

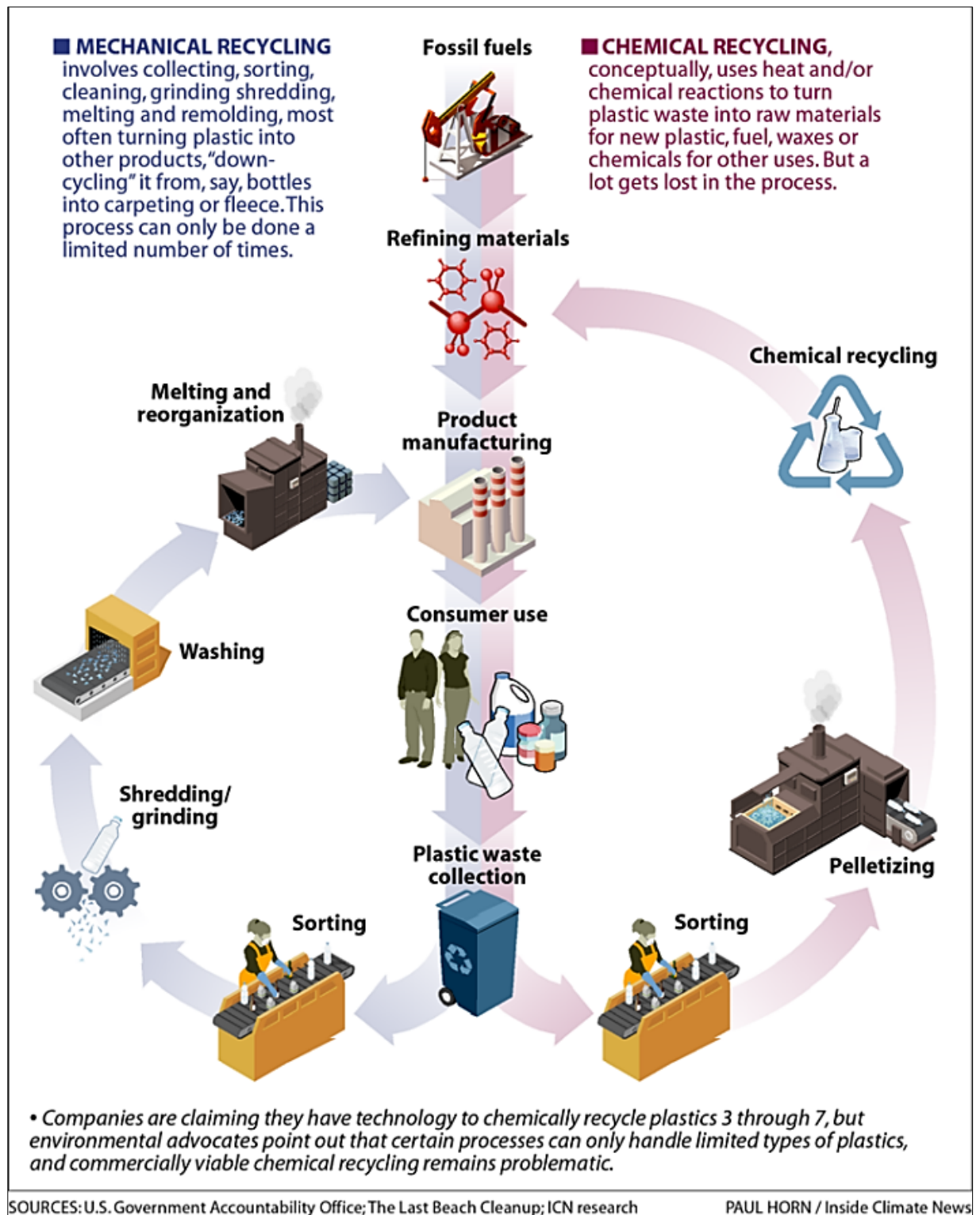


Fig 9.3

- (i)** Comment on one possible impact mechanical recycling of poly(propene) has on the carbon cycle.

.....

..... [1]

- (ii)** Describe how poly(propene) can be recycled using chemical method.

.....

..... [1]

- (iii)** Describe two economic issues of recycling poly(propene).

.....

..... [2]

- 10** 2 g of magnesium oxide is added to excess warm 1.5 mol/dm^3 of ethanoic acid (vinegar) to form magnesium ethanoate salt and water, as shown in Fig. 10.1.

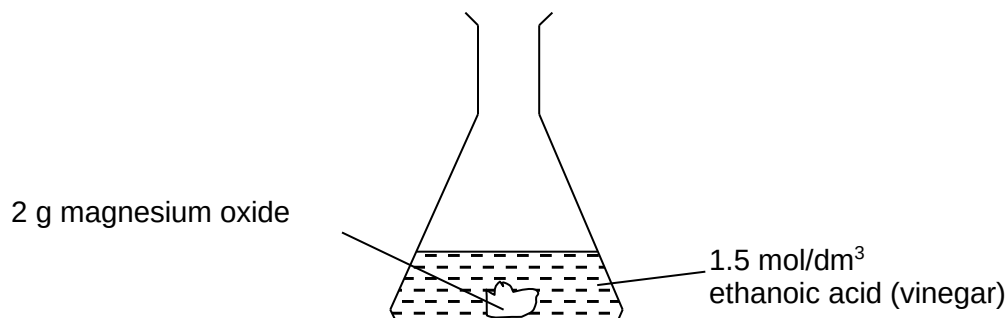


Fig. 10.1

- (a)** Complete the word equation for the reaction.

magnesium oxide + ethanoic acid $\rightarrow$ + [1]

- (b) (i)** How do we know the reaction has been completed?

.....
.....[1]

- (ii)** After the reaction is complete, the solution is tested with Universal indicator.
State the observation when a few drops of Universal indicator are added to the set-up.

.....[1]

(c) Another experiment is set up to add an **exact** volume of warm 1.5 mol/dm^3 ethanoic acid to react completely with an unknown mass of magnesium oxide.

(i) Describe how an exact volume of ethanoic acid can be added to react completely with unknown mass of magnesium oxide. State the apparatus needed.

(You may draw the set-up in the space provided.)

.....
.....
.....
..... [2]

(ii) After an exact volume of ethanoic acid is added to react completely with unknown mass of magnesium oxide, the solution is also tested with Universal indicator.

State and explain the observation when a few drops of Universal indicator are added to the set-up.

Colour of Universal indicator: [1]

Explanation:
..... [1]

(d) Ethanoic acid belongs to the carboxylic acid homologous series.

(i) Draw the full structural formula of ethanoic acid.

(ii) Name and state the chemical formula of the next successive member of ethanoic acid. [1]

name: [1]

chemical formula: [1]

End of Paper 3

Data Sheet

Colours of Some Common Metal Hydroxides

aluminium hydroxide	white
calcium hydroxide	white
copper(II) hydroxide	light blue
iron(II) hydroxide	green
iron(III) hydroxide	red-brown
zinc hydroxide	white

The Periodic Table of Elements

Group																		
1	2											13	14	15	16	17	18	
							1 H hydrogen 1											2 He helium 4
3 Li lithium 7	4 Be beryllium 9	Key proton (atomic) number atomic symbol name relative atomic mass										5 B boron 11	6 C carbon 12	7 N nitrogen 14	8 O oxygen 16	9 F fluorine 19	10 Ne neon 20	
11 Na sodium 23	12 Mg magnesium 24	3	4	5	6	7	8	9	10	11	12	13 Al aluminium 27	14 Si silicon 28	15 P phosphorus 31	16 S sulfur 32	17 Cl chlorine 35.5	18 Ar argon 40	
19 K potassium 39	20 Ca calcium 40	21 Sc scandium 45	22 Ti titanium 48	23 V vanadium 51	24 Cr chromium 52	25 Mn manganese 55	26 Fe iron 56	27 Co cobalt 59	28 Ni nickel 59	29 Cu copper 64	30 Zn zinc 65	31 Ga gallium 70	32 Ge germanium 73	33 As arsenic 75	34 Se selenium 79	35 Br bromine 80	36 Kr krypton 84	
37 Rb rubidium 85	38 Sr strontium 88	39 Y yttrium 89	40 Zr zirconium 91	41 Nb niobium 93	42 Mo molybdenum 96	43 Tc technetium —	44 Ru ruthenium 101	45 Rh rhodium 103	46 Pd palladium 106	47 Ag silver 108	48 Cd cadmium 112	49 In indium 115	50 Sn tin 119	51 Sb antimony 122	52 Te tellurium 128	53 I iodine 127	54 Xe xenon 131	
55 Cs caesium 133	56 Ba barium 137	57–71 lanthanoids	72 Hf hafnium 178	73 Ta tantalum 181	74 W tungsten 184	75 Re rhenium 186	76 Os osmium 190	77 Ir iridium 192	78 Pt platinum 195	79 Au gold 197	80 Hg mercury 201	81 Tl thallium 204	82 Pb lead 207	83 Bi bismuth 209	84 Po polonium —	85 At astatine —	86 Rn radon —	
87 Fr francium —	88 Ra radium —	89–103 actinoids	104 Rf rutherfordium —	105 Db dubnium —	106 Sg seaborgium —	107 Bh bohrium —	108 Hs hassium —	109 Mt meitnerium —	110 Ds darmstadtium —	111 Rg roentgenium —	112 Cn copernicium —	113 Nh nihonium —	114 Fl flerovium —	115 Mc moscovium —	116 Lv livermorium —	117 Ts tennessine —	118 Og oganeson —	

lanthanoids	57 La lanthanum 139	58 Ce cerium 140	59 Pr praseodymium 141	60 Nd neodymium 144	61 Pm promethium —	62 Sm samarium 150	63 Eu europium 152	64 Gd gadolinium 157	65 Tb terbium 159	66 Dy dysprosium 163	67 Ho holmium 165	68 Er erbium 167	69 Tm thulium 169	70 Yb ytterbium 173	71 Lu lutetium 175
	89 Ac actinium —	90 Th thorium 232	91 Pa protactinium 231	92 U uranium 238	93 Np neptunium —	94 Pu plutonium —	95 Am americium —	96 Cm curium —	97 Bk berkelium —	98 Cf californium —	99 Es einsteinium —	100 Fm fermium —	101 Md mendelevium —	102 No nobelium —	103 Lr lawrencium —

The volume of one mole of any gas is 24 dm³ at room temperature and pressure (r.t.p.).

The Avogadro constant, $L = 6.02 \times 10^{23} \text{ mol}^{-1}$.

