Science Department
Multiple Choice Answer Sheet

Test Topic: 9Chem 2 **Name:** ANSWERS **Year:** __

Multiple Choice – 20 questions.

Circle your choice. If you change your mind, scrub your choice out and circle the one you want. If it is messy, clearly write your choice next to question.

1.	A	B	C	**D**	11.	A	B	**C**	D
2.	A	B	**C**	D	12.	**A**	B	C	D
3.	A	B	C	**D**	13.	A	**B**	C	D
4.	A	B	**C**	D	14.	A	B	C	**D**
5.	A	**B**	C	D	15.	**A**	B	C	D
6.	**A**	B	C	D	16.	A	B	C	**D**
7.	**A**	B	C	D	17.	A	B	C	**D**
8.	A	B	C	**D**	18.	A	B	**C**	D
9.	A	B	**C**	D	19.	A	B	C	**D**
10.	**A**	B	C	D	20.	**A**	B	C	D

Written Section:

Write your answers for the written section below. Ask your teacher if you need more paper.

SECTION 2: WRITTEN ANSWER (1 mark each)

Write your answer in the spaces provided on this sheet.

1. Match the chemical equation to the reaction type by writing the reaction type's number next to each equation. (5)

5	a)	$Ag^{+}_{(aq)} + Cl^{-}_{(aq)} \rightarrow AgCl_{(s)}$	1 Combination
2	b)	$CuCO_{3(s)} \rightarrow CuO_{(s)} + CO_{2(g)}$	2 Decomposition
4	c)	$2C_8H_{18(l)} + 25O_{2(g)} \rightarrow 16CO_{2(g)} + 18H_2O_{(g)}$	3 Displacement
1	d)	$Zn_{(s)} + I_{2(s)} \rightarrow ZnI_{2(s)}$	4 Combustion
3	e)	$Mg_{(s)} + 2HCl_{(aq)} \rightarrow MgCl_{2(aq)} + H_{2(g)}$	5 Precipitation

2. Write the formula of each of the following substances, then classify each of these as acid, base, salt, carbonate or gas (10)

	Formula	Classification
a) sodium hydroxide	NaOH	base
b) potassium chloride	KCl	salt
c) sulphuric acid	H_2SO_4	acid.
d) copper (II) carbonate	$CuCO_3$	carbonate
e) carbon dioxide	CO_2	gas.

3. Balance the following equations (2)

a) $N_2 + 3H_2 \rightarrow 2NH_3$

b) $Na_2CO_3 + 2HCl \rightarrow 2NaCl + H_2O + CO_2$

4. Write a balanced chemical equation from the following word equations (2)

a) sodium + water → sodium hydroxide + hydrogen

$2Na + 2H_2O \rightarrow 2NaOH + H_2$

b) calcium carbonate + hydrochloric acid → calcium chloride + carbon dioxide + water

$CaCO_3 + 2HCl \rightarrow CaCl_2 + CO_2 + H_2O$

5. Complete the word equation by predicting the products and then write a balanced chemical equation for the full reaction (4)

a) hydrochloric acid + zinc → zinc chloride + hydrogen

$2HCl + Zn \rightarrow ZnCl_2 + H_2$

b) sodium* charge for next year
calcium carbonate + sulphuric acid → calcium sulfate + carbondioxide + water.

$CaCO_3 + H_2SO_4 \rightarrow CaSO_4 + CO_2 + H_2O.$

6. Define nanochemicals and give one example of a current application. (2)

particles 1-100 nm ($\frac{1}{\text{billion}}$ to $\frac{100}{\text{billion}}$ m).

eg dirt proof clothing
sunscreen
medication that targets cells etc.
carbon capture filters

End of Test (Out of ~~40~~) 45