

Chemistry Revision

1.	Chlorine	Non-Metal	Cl	Negative, 1-
	Magnesium	metal	Mg	Positive, 2+
	Neon	noble gas	Ne	No charge.
	Oxygen	non-metal	O	Negative, 2-

2. **ELEMENT** - a substance made up of only one type of atom. Can be found on periodic table.

ION - atom or molecule that has lost or gained one or more valance electrons; has a net positive or net negative charge.

COMPOUND - substance made up of two or more elements that are chemically bonded.

PROTON - positive subatomic particle, found in nucleus

HALOGENS - very reactive ^(non-metals) elements, found in the 2nd last group of the periodic table; have 7 valance electrons in their outer shell (one 'gap'). React with metals to form salts.

ALKALI METALS - very reactive elements (metals) found in group I of periodic table; they have one 'spare' electron in their outer shell.

Reactants - the 'ingredients' of a chemical reaction; the things that react

ELECTRONS - negative subatomic particles that orbit the nucleus.

MOLECULE - Two or more atoms joined together by chemical bonds.

NOBLE GAS - non-metals in the last group of the periodic table; they have full outer shells, so they are stable and do not react.

PRODUCTS - the things that are made (produced) in a chemical reaction.

ATOM - fundamental particle of matter.

NEUTRON - neutral subatomic particle, found in the nucleus.

ATOMIC NUMBER - no. protons in the nucleus of the atoms of an element.

ATOMIC MASS - no. of protons + no. of neutrons.

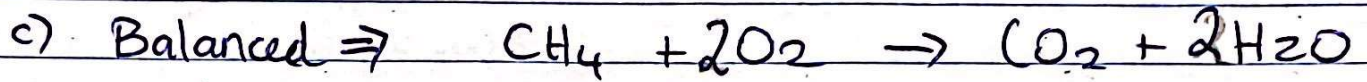
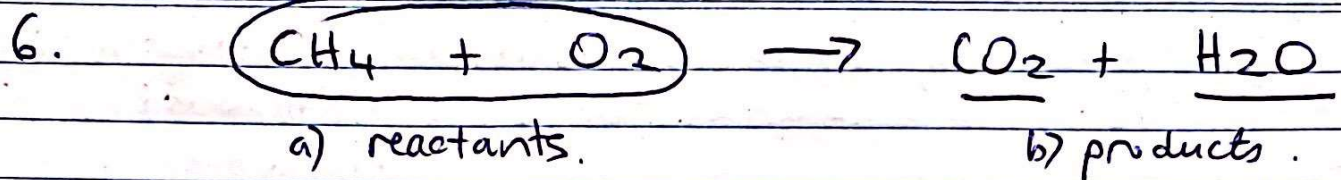
3. a) 24

b) 3

c) 12

4. 'Matter cannot be created or destroyed; the amount of matter cannot change.'

5. They only need to lose 1 electron to become stable; so they readily donate it (i.e. react).



7. • increase temperature $\rightarrow$ speeds up particle movement
+ increases energy
 $\therefore$ more + stronger collision

• increase surface area $\rightarrow$ allows particles to make more contact

• increase concentration $\rightarrow$ puts more particles
(+/- increase pressure) in the area
 $\therefore$ more frequent collision

• use a catalyst $\rightarrow$ to lower the activation energy of the reaction
 $\therefore$ less energy needed.

8. b $\rightarrow \text{NH}_3$

9. b $\rightarrow$ molecule

10. c $\rightarrow$ a compound

11. a $\rightarrow$ a positive ion.

12. c $\rightarrow 4$

13. - Synthesis (Combination)

- Decomposition

- Combustion

- Single displacement

- Double displacement

14. d.

15. a.

16. a.

17. c

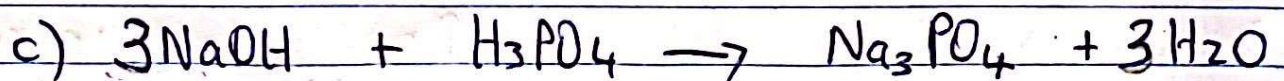
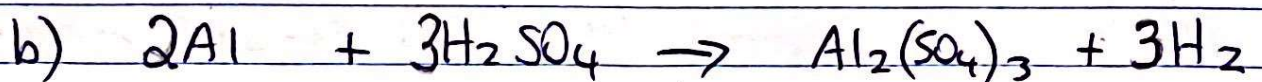
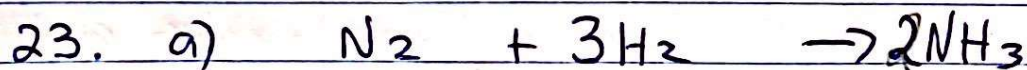
18. b.

19. c

20. d

21. a

22. a.



24.

Chlorine

Calcium

Neon

Group 7
Halogens

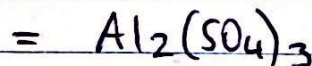
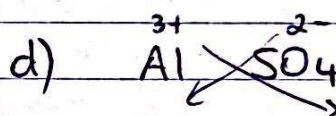
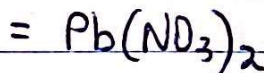
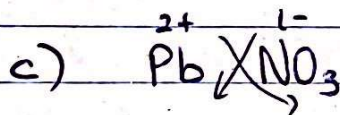
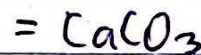
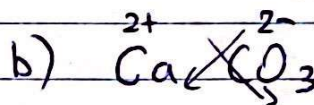
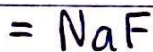
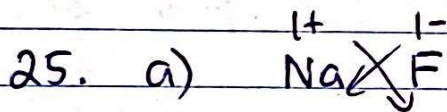
Group 2
Alkali Earth
metals

Group 8
Noble Gases

F, Br, I.

Be, Mg, Sr,
Ba, Ra.

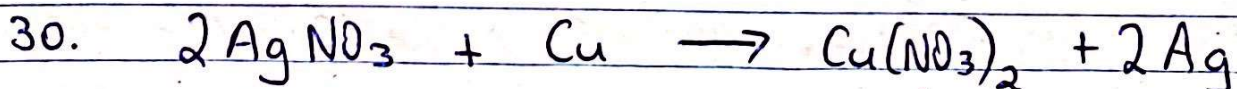
He, Ar, Kr,
Xe, Rn.



27. b.

28. b.

29. b.



31. a. temperature

b. time (to react)

c. concentration of chemicals, type of chemicals,
size of beaker, amount of chemicals

d. ↑ temp. causes ↑ in rate of reaction. (hot = fast)
(cold = slow)