

SECTION 7

CHEMISTRY

ÈKỌ ÈLÀ

INTRODUCTION / ÒRÒ ÀKÓSÒ

Chemistry is the science of matter, especially its properties, structure, composition, behavior, reactions, interactions and the changes it undergoes. Chemistry is sometimes called "the central science" because it connects physics with other natural sciences such as astronomy, geology and biology.	Èkọ Èlà jẹ èkọ ìmò-jinlẹ tí ẹdà, pápàá, tí یشهی***, ètò-inú, ohun-inú, یشهههه, àsẹ, ìbáraṣepọ àtí àwọn ìyípadà tó má nní. A máa npẹ èkọ-èlà ní ìmò-jinlẹ t'ààrín nítorí òun ló ẹ àsopọ àwọn èkọ-ẹdà pẹlú àwọn ìmò-jinlẹ míràn bí èkọ (nípa) iràwọ, èkọ یشهههه-aye, àtí èkọ ẹdà-oníyẹ.
Chemistry is the study of matter and energy and the interactions between them.	Èkọ èlà jẹ èkọ àwọn ẹdà, agbára àtí àwọn ìbáraṣepọ tó wà láàrín wọn
Chemical reaction is a process that leads to the transformation of one set of chemical substances to another.	Àsẹ èlà jẹ ìlànà bí àwọn ìjọ ẹdà kan ẹ nparadà sí àwọn ìjọ ẹdà miran. (àsẹ: reaction; èlà: chemicals)
Chemical equation is the symbolic representation of a chemical reaction where the reactant entities are given on the left hand side and the product entities on the right hand side	Òmì (equation) èlà jẹ àmì àpẹrẹ àsẹ èlà bí a tí nfi àwọn èsè-àsẹ (reactants) sí apá òsì tí a sì fi àwọn ẹsún-àsẹ (product of reaction) sí apá òtún.
Chemical composition: the arrangement, type and ratio of atoms in molecules of substances	Ètò Ohun-inú èlà: Ètò, oríṣi àtí ìbùpín (ratio) àwọn átòmù tó wà nínú mólékù àwọn ẹdà
Chemical synthesis is purposeful execution of chemical reactions to get a product, or several products	Ìṣẹdà èlà (Ìṣẹdà: bring to existence) jẹ ìlànà tí a mọ́mọ gbà ẹ àsẹ láti ní ẹsún tàbí àwọn ẹsún tí a nfẹ.

VOCABULARY / ÌTÚMỌ - ÒRÒ

English	Yoruba	English	Yoruba
Acids and Bases	Èkan at'ẹgbo	Gas volume	Àyẹ òyí
Air	Afẹ	Inorganic chemistry	Èkọ èlà-alálíedú
Alkali	Aṣoṣe	Laboratory	Ilé ìmò-jinlẹ
Alkali metals	Àlùrọ aṣoṣe	Liquid	Aṣàn
Alloy	Àyọpọ	Matter	Èdà
Amalgam	Àdálú	Metal	Àlùrọ
Analytical chemistry		Mixture	Àkópọ
Atom	Átòmù	Non-metal	Àdàrọ
Atomic energy	Agbára átòmù	Organic chemistry	Èkọ èlà-eléedú
Base	Ègbo	Physical chemistry	Èkọ-èlà t'یشهی-ẹdà
Biochemistry	Èkọ èlà-ìyẹ	Physical science	Èkọ ìmò-jinlẹ یشهی-ẹdà
Breeze	Afẹrẹ	Product of a reaction	Èsún-àsẹ

ÌWÉ-ÌLÉWỌ ÈKỌ ÌMỌ-JÌNLÈ ÀTÌ ÌMỌ-ÈRỌ

Changes in Nature	Àyípadà nnú àyànmọ	Reactants	Èsè-àsè
Chemical	ẹlà	Reaction	Àsè
Chemical composition	Ètò-inú ẹlà	Shape	Ìrísí
Chemical equation	Ọmì ẹlà	Soap Making	Qṣe ṣiṣẹ
Chemical process		Solid	Adì
Chemist	Akẹkọ ẹlà	Solute	Gbẹrẹfun; Àipò
Chemistry	Èkọ-ẹlà	Solution	Àpòpọ
Colour	Àwọ	Solvent	Epo
Compound	Àsẹpọ	States of matter	Ìrú-ipò àwọn ẹdá
Concentrate	Látí sọ dògidi	Substance	Ẹdá
Drug	Oògùn	Synthesis	Ìṣẹdá
Dye	Aró	Wind	Afẹfẹ
Element	Ìṣù-átòmù	Fire	Iná
Endothermic reaction	Àsè aloná	Gas	Òyì
Energy	Agbára	Gas equation	Ọmì òyì
Entropy	Ìdàrú	Gas Laws	Àwọn Ofi-òyì
Exothermic reaction	Àsè afaná		

TABLE OF ELEMENTS / ÌTÉ ÀWỌN ÌṢÙ-ÁTÒMÙ

ELEMENT	ÌṢÙ-ÁTÒMÙ	ELEMENT	ÌṢÙ-ÁTÒMÙ	ELEMENT	ÌṢÙ-ÁTÒMÙ
Actinium	Actinium	Germanium	Gemia	Scandium	Scandia
Aluminum	Alumo	Gold	goolu; Wura	Selenium	Selenia
Americium	Amerisia	Hafnium	Hafnia	Silicon	Silika
Antimony		Helium	Helia	Silver	Fadaka
Argon		Holmium	Holmia	Phosphorus	
Arsenic		Indium	India	Platinum	
Barium	Bárià	Iodine	Iodo	Plutonium	Plutonia
Berkelium	Bekelia	Iridium	Iridia	Polonium	Polonia
Beryllium	Berilia	Iron	Irin	Potassium	
Bismuth		Krypton		Praseodymium	Praseodimia
Boron		Lanthanum		Promethium	Prometia
Bromine		Lawrencium	Laurensia	Protactinium	Purotatinia
Cadmium	Kadmia	Lead	Ojé	Sodium	Soda
Calcium	Kalsia	Lithium	Lítia	Strontium	Strontia
Californium	Kalifonia	Lutetium	Lutetia	Sulfur	Imi-ọjọ, Sulfuri
Carbon	Eedu	Magnesium	Magnesia	Tantalum	
Cerium	Ceria	Manganese		Technetium	Teknetia
Cesium	Cesia	Mendelevium	Mendelefia	Tellurium	Teluria
Chlorine	Òyì-iyò (Oyivò)	Mercury		Terbium	Tebia
Chromium	Cromia	Molybdenum		Thallium	Talia
Cobalt		Neodymium	Neodimia	Thorium	Toria
Copper	Kopa, Kobo	Nickel	Nikeeli	Thulium	Tulia
Curium	Curia	Niobium	Niobia	Tin	Stania
Dysprosium	Disprosia	Nitrogen	Òyì-ilẹ, Oyile	Titanium	Titania
Einsteinium	Ainstenia	Nobelium	Nobelia	Tungsten	
Element 104	Ìṣù-átòmù 104	Osmium	Osmia	Uranium	Urania
Element 105	Ìṣù 105	Oxygen	Òyì-iná	Vanadium	Fanadia

SCIENCE AND TECHNOLOGY HANDBOOK

Element 106	Ìṣù 106	Palladium	Paladia	Xenon	Senia
Erbium	Ebia	Radium	Radia	Ytterbium	Yitabia
Europium	Europia	Radon	Redonu	Yttrium	Yitiria
Fermium	Femia	Rhenium	Renia	Zinc	
Fluorine		Rhodium	Rodia	Zirconium	Saconia
Francium	Fransia	Rubidium	Rubidia		
Gadolinium	Gadolinia	Ruthenium	Rutenia		
Gallium	Galia	Samarium	Samaria		

CHEMISTRY TERMS / ÀWỌN ÈNỌ ÈKỌ-ÈLÀ

English	Yoruba	Use	Ìlò
Reaction	Àsẹ̀	The reaction of A with B produces D	Àsẹ̀ A pẹ̀lú B sun D
React	Látí se (àwọ̀n èsẹ̀)	React A with B	Se A pẹ̀lú B
Product	Èsún	The product of the reaction of A with (and) B are D and F	Èsún àsẹ̀ A pẹ̀lú (or àti) B ni D àti F
Product of a reaction	Èsún àsẹ̀	What are the products of the reaction of A and B	Kini àwọ̀n èsún àsẹ̀ A àti (or pẹ̀lú) B
Reactant	Èsẹ̀, Èsẹ̀-àsẹ̀	What are the reactants that produced D	Àwọ̀n èsẹ̀-àsẹ̀ wo ló sun D or Kini àwọ̀n èsẹ̀-àsẹ̀ tó sun D
Complete reaction	Àsẹ̀-isẹ̀parí		
Incomplete reaction	Àsẹ̀-àisẹ̀parí		
Reactor	Abọ̀-àsẹ̀		
Equilibrium	Agbede		
Equilibrium Point	Ibi agbede		
Equilibrium reaction	Àsẹ̀ adúrólagbede		
Equilibrium constant	Òòkà-àiyẹ̀ ibi-agbede		
Equilibrium Point	Ibi agbede		
Endothermic Reaction	Àsẹ̀ aloná		
Exothermic reaction	Àsẹ̀ afaná		
Energy	Agbára		
Heat energy	Agbára Okun-iná	Heat = Okun-iná	
Hotness	Ìgbóná		
Free energy	Agbára wíwúlò		
Gibb's free energy	Agbára wíwúlò tí Gíbíṣì		
Helmholtz free energy	Agbára wíwúlò tí Hẹ́lmhóòsì		
Temperature	Ìgbóná		
Temperature scale	Ìdíwọ̀n igbóná		
Entropy	Ìdàrú		
Enthalpy	Agbára ***		
Enthalpy of a reaction			