***GENERAL EDUCATION***

**ENGLISH**

**VOCABULARY WORDS**

ABASE- demoted

DESPOTIC- cruel

DEXTERITY- manual skill

FRIVOLOUS- worthless

VEXATIOUS- annoying

AMORPHOUS- shapeless

PENCHANT- fondness

TRANSMUTED- change

RANCOR- bitterness

MUNDANE- ordinary

PROFANITY- obscenity

APOCALYPTIC- prophetic

IMPERTINENT- irrelevant

VORACIOUS- very eager

CONFLAGRATION- large fire

APLOMB- composure/relax

QUEUE- line

EUPHORIA- state of well-being

EURIDITE- learned/smart

ACAPELLA- without accompaniment

**FRENCH**

SOIREE- evening party

CONNOISSEUR- expert in matter of taste

CHAUFFEUR- driver

MESDAMES- plural of madame

RENNAISANCE- rebirth

**LATIN**

CAVEAT EMPTOR- let the buyer beware

AD NAUSEAM- sickening

COUP DE GRACE- death blow

**IDIOMATIC EXPRESSIONS**

RED LETTER DAY- special day

AT SIXES AND SEVENS- states of confusion

GREEN THUMB- good at gardening

WHITE LIES- excusable

FIRST RATE- excellent

MAKING BOTH ENDS MEET- limited

MAN’S HUMANITY TO MAN- cruel behavior

FINGER IN THE PIE- take an active part in something

A SNOWBALL CHANCE IN HELL- no chance at all

THE FACE THAT LAUNCHED A THOUSAND OF SHIPS- Helen of troy

**LITERATURE**

CHRISTOPHER MARLOWE- Father of English Tragedy

WILLIAM SHAKESPEARE- Greatest English/Sonnet writer/Bard of Avon

GEOFFREY CHAUCER- Father of English Literature/Morning star of English Literature

EDGAR ALLAN POE- Father of Horror/Detective Stories

GUY DE MAUPASSANT- French short story

HOMER- mythical geographer

PSALMS OF KING DAVID- greatest lyric poem

RABINDARATH TAGORE- Indian lyric poem/1st awardee of Nobel Prize

KALIDASA- India’s Shakespeare Counterpart/Greatest Sanskrit

LITTLE WOMAN- Louisa Alcott

GETTYSBURG ADDRESS- Lincolm

DR. ZHIVAGO- Boris Paternak

SCARLET LETTER- Nathaniel Hawthorne

HARRY POTTER- J.K Rowling

PARADISE LOST- John Milton

THE LITTLE PRINCE- Antoine Exupery

ANNABEL LEE- Edgar Allan Poe

THE NECKLACE- Guy De Maupassant

PURGATORY- Dante Alighieri

MACBETH- ambition of power- Shakespeare

HAMLET- to be or not to be- Shakespeare

ROMEO & JULIET- love and war- Shakespeare

RUBAIYAT- Omar Khayyam

GITANJALI- Tagore

THE GREAT GATSBY- F.Scott Fitzgerald

MRS DALOWAY- Virginia Woolf

ULYSSES- James Joyce

THE PICTURE OF DORIAN GRAY- Oscar Wilde

HUCKLEBERRY FINN- Mark Twain

VANITY FAIR- William Makepeace Thackeray

GULLIVER’S TRAVEL- Jonathan Swift

ROBINSON CRUSOE- Daniel Defoe

DANIEL DERONDA- George Eliot

ALICE’S WONDERLAND- Lewis Carroll

MOBY-DICK- Herman Melville

JANE EYRE- Charlotte Bronte

PILGRIM’S PROGRESS- John Bunyan

THE ROAD NOT TAKEN- Robert Frost

ANNA KARENINA- Leo Tolstoy

SILAS MARNER- George Eliot

**FAMOUS WRITINGS**

Didactic- literary pieces with moral writings

Elizabethan- era of Shakespeare

Gilgamesh- first epic

Mahabharatta- longest epic of India

Nibelungenlied- medieval german epic

Patchatantra- collection of indian fables

**SYSTEM OF WRITINGS**

Cuneiform- Mesopotamia

Hieroglyphics- Egypt

Calligraphy- Chinese

Alphabet- Greek

Sanskrit- India

**PEN NAMES**

Mark Twain- Samuel Clemens

George Eliot- Mary Ann Evans

Roberth Galbraith- Joanne Rowling

**LET ANSWERS**

Cleanliness

Stephen’s writing

Stephen’s family boyhood

Extended Family- grandmother

Spouse- housewife

Manolo- stage fright

Hopeful

Mood- indecision

Isolation and loneliness

Destiny

**SOCIAL SCIENCE**

**PHILIPPINES**

7641- total islands

Philippines- only Christian nation

Pithecopaga Jefferyi- largest eagle

Mt. Apo- highest peak

Philippine Trench- deepest point

Rio Grande de Cagayan- longest river

San Juan- smallest city

Mindanao- land of province

Coron Palawan- best scuba diving site

Palawan- largest province

Batanes- smallest province

Cebu- oldest city

Quezon city- most populous city

Davao- largest City

Pagadian- Little Hongkong

Mindanao/Davao- durian originated

Diwata 1- 1st satellite

Aeta- indigenous people in tarlac, pampanga

Mt. Pinatubo- active stratovolcano in Zambales

Tarsier- smallest primate

**WORLD**

Asia- largest continent

China- largest country in Asia

Russia- largest country in the world

China- largest population

India- 2nd to the largest population

Hongkong- not ASEAN

Singapore- Financial Hub

Tokyo- largest city in the world

Shanghai, China- most populous city

Greenland- largest island in the world

Caspian Sea- largest lake

Mt. Everest- highest elevation on earth

Death Valleys- hottest place on earth

Mc Murdo Dry Valleys- driest place on earth

Africa- oldest continent

Hinduism- oldest religion in Asia

Dead Sea- lowest point in the world

Albatrosse- largest sea bird

Angkorwat- largest temple

Cheetah- fastest animal

Rafflesia- biggest flower

Bay of Bengal- largest bay

Indonesia- largest archipelago

**FORMER NAMES OF PRESENT DAY COUNTRY**

KAMPUCHEA – Cambodia

MESOPOTAMIA – Iraq

BURMA – Myanmar

PERSIA – Iran

CEYLON – Sri Lanka

SIAM – Thailand

FORMOSA - Taiwan

**SOCIAL STRUCTURE**

1. Maharlika – the ruling class

2. Timawa – free men

3. Aliping namamahay

4. Aliping sagigilid

**WAVE MIGRATION THEORY**

1. NEGRITOS – arrived through land bridges

2. INDONESIANS – arrived by boats

3. MALAYS – permanent settlers

**SPANISH OCCUPATION**

Chronicler- Antonio Pigafetta

Circumnavigate- Sebastian Elcano

Raja Sikatuna- blood compact with Legaspi

Raja Humabon- First baptism

Raja Lakandula- First to revolt

Raja Soliman- last Raja of Manila

**IMPORTANT TERMS**

Pueblo- bayan/town

Cabeceras- town center

Reduccion- paglipat/resettlement

Governador General- national

Goberbadorcillo- local

Sanctorum- tribute

Cedula Personal- tax

Polo y servicio- force labor

Falla- excemption fee

Frailocracia- abuse

Galleon Trade- source of income

Mexico- extended contact

Imam- religious leader

Umalohokan- announcer in barangay/town crier

Trial-Ordeal- justice system

**SPANISH GOVERNOR GENERAL**

Miguel Lopez De Legazpi- 1st Governor General

Diego De Los Rias- last Governor General

Jose Basco- Monopoly of Tobacco

Narciso Claveria- Spanish Surnames

Carlos Maria Dela Torre- best Governor General

Rafael De Izquierdo- Execution of Gomburza

**LA SOLARIDARIDAD PROPAGANDA**

Jaena- founder and creator (1st editor)

Del Pilar- 2nd editor

Ponce- managing editor

Triumvirate- Rizal, Jaena, Del Pilar

Rizal- dakilang manunulat

Jaena- dakilang orador

Del Pilar- dakilang political analyst

Andres Bonifacio- father of Philippine Revolution

Gregoria De Jesus- Lakambini

Emilio Jacinto- Utak ng Katipunan

Apolinario Mabini- Utak ng Rebolusyon

Dagohoy- longest revolt

Macario Sakay- President of Tagalog Republic

Pedro Pelaez- secular

Gregorio Aglipay- first bishop

Isabelo Delos Reyes- labor union

Union Cabrera Democratica- first labor union

Philippine Independent Church- only remnant

**AIMS OF PROPAGANDA**

-For Philippines to be a province of Spain

-Representation in the Philippines in the Cortes Generates, the Spanish parliament

-Secularization of the clergy

-Legalization of Spanish and Filipino equality

**AIMS OF KATIPUNAN**

-to win Philippine Independence by means of an armed conflict (or revolution)

-to establish a republic after Independence

-to develop a strong alliance with each and every Filipino

-to unite Filipinos into one solid nations

**PEN NAMES**

ANDRES BONIFACIO- May Pag-asa, Agapito, Bagumbayan

ANTONIO LUNA- Taga-ilog

EMILIO AGUINALDO- Magdalo

EMILIO JACINTO- Di Masilaw, Tingkian

GRACIANO LOPEZ JAENA- Diego Laura

JOSE MA. PANAGANIBAN- Jomapa

JOSE RIZAL- Dimas-alang, Laong Laan

JUAN LUNA- Buan

MARCELO DEL PILAR- Pudpoh, Plaridel, Dolores Manapat, Piping Dilat

MARIANO PONCE- Tikbalang, Naning (Satanas), Kalipulako

JOSE CORAZON DE JESUS- Huseng Batute

JOSE DELA CRUZ- Huseng Sisiw

VALERIANO PENA- Kintin Kulirat

JOSE VILLA- doveglion

**FILIPINO POETS**

BIENVENIDO SANTOS- American Culture Writings

DANIEL DEFOE- “Robinson Crusoen” (novel)

EDILBERTO TIEMPO- made “Cry Slaughter” that has been translated many times

ERNEST HEMINGWAY- Ring Lardner Jr.

JOSE GARCIA VILLA- “Comma Poet”, Dove G. Lion

MIGUEL DE CERVANTES/ESCALANDE- Masterpiece is “Don Quixote” that is most influential

NICK JOAQUIN- Quijano de Manila – Spanish Culture Writing

PAZ MARQUEZ BENITEZ- made “Dead Stars” that is the first modern English short story

**PHILIPPINE PRESIDENTS**

**(AgQueLa OsRoQui MagGarMaMar AquiRaEs ArAqui DU30BBm)**

**1. EMILIO NAGUINALDO (1898-1901)**

-First and youngest President

- 1st republic colonization of Spain

-led the declaration of Philippine Independence

-started the Malolos Republic

**2. MANUEL L. QUEZON (1935-1944)**

-Commonwealth

-National Language

**3. JOSE P. LAUREL (1943-1945)**

**-**President of the Japanese-sponsored republic

-Puppet Republic/Mickey Mouse Money

**4. SERGIO OSMENA (1944-1946)**

-First Visayan President (Cebu)

-First speaker of Philippine Assembly

-Served as President during the Liberation and began the reconstruction from the war

**5. MANUEL ROXAS (1946-1948)**

-President of third republic

-Second president from Visayas (Capiz)

-Continued the reconstruction of the Philippines with the passage of Bell-Trade Act (Parity Rights)

-Died of heart attack

**6. ELPIDIO QUIRINO (1948-1953)**

- First president from Ilocos

-Establishment of Central Bank of the Phil.

-Beset by corruption intrigues (golden orinola) and Huk rebellion

**7. RAMON MAGSAYSAY (1953-1957**

-Man and guy of the masses

-Opened Malcanang for the common people

-Founding of SEATO

-Died of a plane crash in Mt. Manunggal

**8. CARLOS P. GARCIA (1957-1961)**

-Third and last president from Visayas (Bohol)

-“Filipino First Policy”

**9. DIOSDADO MACAPAGAL (1961-1965)**

-Poor boy from Lubao

-Incorruptible

-Abolished Land Tenancy

-Changed Philippine Independence

-Certificate in Filipino

-MAPHILINDO

**10. FERDINAND MARCOS, SR. (1965-1969, 1969-1972, 1972-1986)**

-Longest reigning

-Large-scale graft and corruption

-Cronyism of relatives and allies

-Imprisonment, torture, and murder of activists and opposition personalities

-Clamped down on freedom of speech and of the press

**11. CORAZON COJUANGCO AQUINO (1986-1992)**

-First Woman President

-Restoration of democracy

-Drafting of the 1987 Constitution

-Most number of coup de etat

**12. FIDEL RAMOS (1992-1998)**

-Philippines 2000

-First Protestant President

-Introduction of the “Value Added Tax”

**13. JOSEPH ESTRADA (1998-2001)**

-Father of the masses

-Ran on the slogan “Erap para sa Mahirap”

-Ousted following EDSA People Power II in 2001 due to allegations of corruption

**14. GLORIA MACAPAGAL ARROYO (2001-2004, 2004-2010)**

-Second woman President

-“Strong Republic”

-RoRo highways (roll on-roll off)

-Holiday economics

-EVAT (12%)

-Started 4P’s

**15. BENIGNO “NOYNOY” AQUINO III (2010-2016)**

-ran on the slogan of “Kung walang corrupt, walang mahirap” and “Tuwid na Daan”

-RA 10533 K-12

-Reproductive Health Law

**16. RODRIGO ROA DUTERTE (2016-2022)**

-First President from Mindanao

-“Change is coming” and “Tapang at malasakit”

-War on Drugs

-TRAIN Law

-Build, Build, Build Infrastructure Program

-Ambisyon natin 2040

**17. FERDINAND MARCOS, JR. (2022)**

-Ran on a promise of strengthening unity among Filipinos

-Vowed to promote recovery from pandemic (Bangon bayan muli)

**POLITICAL SCIENCE CONCEPTS**

Civil Rights- enjoy life

Political Rights- participation in governance

Suffrage- right to vote

Franchised- given the right to vote

Disenfranchised- removal of the right to vote

Exiled- thrown to another city

Executed- sentence to death

Barangay- smallest political unit

Precinct- smallest electoral unit

Aquilino Pimentel- Father of local govt. code

Bicameralism- division of legislative

3years- maximum number of consecutive terms for house of rep.

**STATE**

Elements

1. People- inhabitants

2. Territory- fixed portion

3. Government- working agency

4. Sovereignty- freedom

**POWER**

Police- regulate laws

Eminent- just compensation

Taxation- charge of burden

**BRANCHES OF THE GOVERNMENT**

**LEGISLATIVE BRANCH**

-Bicameral Legislature

-House of Representatives

(Lower House) – led by Speaker

-Senate

(Upper House) – led by Senate President

-Has the following functions

1. Legislation/law making

2. Appointments confirmation

3. Budget/ “Power of the purse”

4. Oversight

-Qualifications are set in Article VI of the 1987 Constitution

**EXECUTIVE BRANCH**

-“Power of the sword”

-Implements the law

-Commander of Chief of Armed Forces

-Qualifications are set in Article VII of the 1987 Constitution

**LOCAL EXECUTIVE POSITIONS**

-Governor (for a province)

-Mayor (for a city or municipality)

-Barangay Chair

**JUDICIARY BRANCH**

-Interprets the laws as well as other government actions (executives orders, proclamations, etc)

-Qualifications are set in Article VIII of the 1987 Constitution

**PHILIPPINE COURT SYSTEM**

-Supreme Court (Highest Court/Court of Last Resort)

-Court of Appeals

-Regional Trial Court

-Municipal Trial Court

**JUSTICE SYSTEM**

**Royal Audencia -** acted as the Supreme Court

**Residencia** - investigation done to an outgoing official

**Visita** - unannounced investigations done anytime during an official’s tenure

**IMPEACHABLE PERSON (PVOCS)**

President, Vice President, Ombudsman, Commissioner, Supreme Court

**IMPEACHABLE OFFENSE (CBBGOT)**

Culpable violation

Bribery

Betrayal of public trust

Graft and corruption

Other high crimes

Treason

**TYPES OF GOVERNMENT**

Democracy

Republican

Monarchy- one man

Oligarchy- selected few

Aristocracy- elite of the society

Anarchy- no government at all

Communism- no private property

Meritocracy- talented/educated

Federalism- national/local

Parliamentary- executive and legislative

Presidential- executive

**AMERICAN REGIME**

Benevolent Assimilation Policy- intention to stay

Preamble of the Jones Law- stable government

Tydings Mc Duffie Law- ten-year transition

Treaty on General Relations- Independence of the Philippines

Bell Trade- trade between Philippines and USA

Payne-Aldrich Act- partial free trade

Underwood-Simmon Act- full free trade

**PROTECTED RIGHTS**

1. The right to life, liberty, and property

2. The right against unreasonable searches and seizures

3. Right to privacy of communication

4. Freedom of expression and assembly

5. The right to information on matters of public concern

6. Right to be presumed innocent until proven guilty

7. Liberty of abode

8. Right to remain silent, and right against self-incrimination

9. Right to have a legal counsel

10. Freedom of political thought

11. No person shall be imprisoned for debt

**CONTINENTS**

**ASIA**

-largest continent within its limits an area of 44,444,100 KM2

-most populous continent

-has the longest coastline of any continent

-Climate: Monsoon Asia, Dry Asia, Cold Asia

-Southwest Asia, South Asia, East Asia, Southeast Asia and Central/North Asia

**AFRICA**

-Second largest continent

-“Dark Continent”

-Most rural and least urbanized of the continents

-Climate is predominantly tropical

-Nile River – longest river

-54 countries

**NORTH AMERICA**

-Third in size

-Majority are Christian

-Caribbean islands maybe combined with Mexico and Central America – Middle America

-23 countries

**SOUTH AMERICA**

-Fourth largest continent

-Andes – longest mountain chain in the world

-Amazon Basin – world’s largest area of tropical rain forest

-Part of Latin America

-Spanish is the official language of the 9 countries

-12 countries

**ANTARTICA**

**-**Fifth largest and southernmost continent

-Position at the South Pole

-Birds of Antarctica: penguins, albatrosses and petrels

-Summer population – several thousand

-During winter – semitransparent bases

**OCEANIA**

-named used to refer to the widely scattered islands of the central and southern Pacific Ocean

-Melanesia – black islands

-Micronesia – little islands

-Polynesia – many islands

**EUROPE**

-Second to the smallest continent

-Dominant zone: Mediterranean, Continental and Maritime

-Vatican City – world’s smallest sovereign state

-European Union – an economic and political union of 27 countries member state

-51 countries

**AUSTRALLIA**

**-**world’s smallest continent

-world’s oldest land masses

-flattest continent

-Climate varies in latitude – northern part is tropical, southern part is more temperature climate

-largest producer of diamond

**TAGLINES OF THE PROVINCES/CITY**

BENGUET – Salad Bowl of the Philippines

BAGUIO CITY – Summer Capital of the Phil.

ILOCOS SUR – Heritage Village of the Phil.

ISABELA – Rice Granary of the North

PAMPANGA – Culinary Center of the Phil.

TARLAC – Melting Cup of Central Luzon

BULACAN – Land of Heroes

CAVITE – A Place with a Glorious Past

QUEZON – Land of Thousand Colors

RIZAL – Cradle of Philippine Art

PALAWAN – The Philippine’s Last Frontier

ROMBLON – Marble Country of the Phil.

ALBAY – Land of the World’s Most Perfect Cone

SORSOGON – Bicol’s Whale shark Paradise

AKLAN – Philippine’s Oldest Province

CAPIZ – Seafood Capital of the Phil.

NEGROS OCCIDENTAL – Sugar Bowl of the Phil.

LEYTE – Land of History

BUKIDNON – Pineapple Capital of the Phil.

DAGUPAN – Milkfish Capital of the Phil.

BACOLOD – City of Smile

ZAMBOANGA CITY – City of Flowers

GUIMARAS – Mango Capital of the Phil.

QUEZON CITY – The City of Stars

CAMIGUIN – Lanzones Capital of the Phil.

DIPOLOG CITY – Orchid City of the Phil.

MARINDUQUE – Heart of the Phil.

MAKATI – Manhattan of the Phil.

TAWI-TAWI – Venice of the South

DAVAO DEL NORTE – Durian and Banana Capital

SIQUIJOR – Island of Fire

CAGAYAN DE ORO – City of the Golden Friendship

**MAIN BRANCHES OF PHILOSOPHY**

**METAPHYSICS** – Fundamental questions of reality

**EPISTEMOLOGY** – concept of knowledge, how we learn and what we can know

**LOGIC** – rules of valid reasoning and argumentation

**ETHICS** – human values and how individuals should act

**AESTHETICS** - notion of beauty and the philosophy of art

**PRE-HISTORIC**

**PALEOLITHIC**

-Old Stone Age

-discovery of fire

-Hunting

**NEOLITHIC**

**-**New Stone Age

-Domesticating animals

**MESOPOTAMIA CIVILIZATION**

**SUMERIAN**

-Cuneiforms – writing system

-Clay Tablets

-Ziggurat

-Irrigations

-Wheel and Cart

**ALKADIAN EMPIRE**

-First empire

-Sargon I

-Semitic Language

-Abacus

**BABYLONIANS**

**-**Amorites

-Code of Hammurabi

-Column

-Hanging Garden

**ASSYRIANS**

-Ashurbanipal

-First Library

-Warrior Society

-Chariots

**HITTITES**

-First to use Iron

**PHOENICIANS**

-Phonetic Alphabets

**PERSIANS**

**-**Cyrus the Great

-Satraphy

**CHINA CIVILIZATIONS**

|  |  |
| --- | --- |
| **DYNASTY** | **CONTRIBUTIONS** |
| Shang | Oracle Bones |
| Zhou | Longest dynasty, Feudalism, Confucius was born |
| Chin (Qin) | Great Wall of China |
| Han | Civil Service started, Silk Road |
| Sui | Grand Canal |
| Tang | Buddhism Spreads, Golden Age of China |
| Sung | Magnetic Compass, Gun powder |
| Yuan | Unification of China |

**EGYPTIAN CIVILIZATION**

**OLD KINGDOM**

-First Pyramids

-Build Ships

**MIDDLE KINGDOM**

-Fortification

-Hyksos

**NEW KINGDOM**

-Prosperous time

-Hapshetsup

**EGYPTIAN CIVILIZATION**

-Lower and Upper Egypt (menes)

-divine kinship

-Hieroglyphics

-Papyrus

**INDUS CIVILIZATION**

**-**Harappan Civilization

-Harappan and Mojenjodaro

-Urban Planning

-Terra Cotta

**MAJOR EVENTS**

**WORLD WAR I**

**-**A number of alliance involving European powers

-Archduke Franz Ferdinand of Austria (Auto-Hungarian Empire)

-Serbia (Russia) Austria-Hungary (Germany)

-America enters World War I

-Germany, Austria-Hungary, Bulgaria and the Ottoman Empire (the Central Powers)

-Great Britain, France, Russia, Italy, Romania. Canada, Japan, and the US (the Allied Powers)

-Compensation by Germany for all damage done to the civilian population of the allies and their property by the Aggression of Germany by land and sea and from the air

**WORLD WAR II**

-Hitler’s invasion of Poland in September 1939 drove Great Britain and France to declare war on Germany, marking the beginning of WWII.

-Final Solution

-Superiority of the “pure” German race

-Lebensraum

-The axis powers (Germany, Italy, and Japan)

-Attack on Pearl Harbour

-D-Day – the allies began a massive invasion of Europe, landing 156,000 British, Canadian and American soldiers on the beaches of Normandy, France

-Victory in Europe (V-E Day)

-Hiroshima (August 06, little boy) and Nagasaki (August 09, fat man) bombing

-Victory over Japan (V-J Day)

**COLD WAR**

**-**the open yet restricted rivalry that developed after World War II between the US and Germany the Soviet Union and their respective allies.

**5 MAJOR RELIGIONS**

**HINDUISM**

-Brahma – creator of the universe

-Vishnu – preserves the universe

-Shiva – destroys the universe

-Karma

-Reincarnation

**BUDDHISM**

-Four Fold Truths

-Nirvana – total happiness

**JUDAISM**

-Abraham – father of Judaism

-Koshier – food that adhere to their dietary law

-Symbol – stars of david

**CHRISTIANITY**

-Christ means the “anointed one”

-Bible – holy book

Three main groups

1. Roman Catholicism – Pope

2. Protestantism – no recognize law

3. Eastern Orthodoxy – Patriarch

-Symbol – cross

**5 PILLARS OF ISLAM**

**-**Shahadah – Allah

-Salah – 5 times prayers

-Zakat – almsgiving

-Hajj – mecca

-Fasting – Ramadan

**JAPANESE CIVILIZATION**

Ainu- the first settlers of Japan

Nara- the first capital of Japan

Daimyo- military governors

Samurai- military officials to serve lords

Bushido- code of ethics by Samurais

**KOREAN CIVILIZATION**

Korea- “Hermit Kingdom”

Gojosen Kingdom- first kingdom

Goryeo Kingdom- the Golden Age of Korea

**ECONOMICS**

**PIONEERS IN ECONOMICS**

**JOHN STUART MILL –** supply and demand as relationship

**JEREMY BENTHAM** – Utilitarianism

**JEAN-BAPTISE SAY** – Treatise on Political Economy

**DAVID RICARDO** – Law of Comparative Advantage

**ADAM SMITH** – an inquiry into Nature and Causes of the Wealth of Nation

**THOMAS MALTHUS** – Theory of Population

**ALFRED MARSHALL** – Principle of Economics

**JOHN MAYNARD KEYNES** – The General Theory of Employment, Interest and Money

**TYPES OF ECONOMICS**

**-**Traditional Economics

-Command Economics System

-Market Economics System

-Mixed Economics System

**MARKET STRUCTURE**

**PERFECT COMPETITION**

**-**large number of sellers and buyers

-products are Homogenous

-All firms are price takers

**MONOPOLISTIC COMPETITION**

-large number of sellers

-similar but not identical

-little power for price

-heavy marketing

**MONOPOLY**

-only ONE seller

-price makers

**NON-PRICE DETERMINANT OF DEMAND**

-Income

-Taste

-Expectation of price/income

-Price of related good

-Population

**PRICE ELASTICITY OF DEMAND**

-responsive of quantity demanded for good to a change in price

**ELASTIC DEMANDS** – the good is non-essential

**INELASTIC DEMANDS** – the good is essential

**INCOME ELASTICITY OF DEMAND**

-responsiveness of quantity demanded for a good to a change in income

**INFERIOR GOODS** – budget meal

**NORMAL GOODS** – expensive

**NON-PRICE DETERMINANT OF SUPPLY**

-no. of sellers

-improved technology

-cost of production

**THE ECONOMIC RESOURCES (CELL)**

Capital

Entrepreneur

Labor

Land

**PRICE CEILING** – maximum

**PRICE MINIMUM** – minimum

**OTHER CONCEPTS**

**DEFLATION**

**-**general decline in prices; caused by reduction in supply of money

**DISINFLATION**

-a slowing of rate at which prices increase

**HYPER INFLATION**

**-**the extreme rapid inflation

**STAGFLATION**

-condition of slowly growing economic growth but fast growing prices

**GROSS NATIONAL PRODUCT (GNP)** – Gawa ng Pinoy

**GROSS DOMESTIC PRODUCT (GDP)** – Gawa Dito Pinas

**TAXATION**

**-**involuntary

-change in burden

**INCOME TAX** – individuals and business

**REALTY TAX** – propert

**CAPITAL GAINS TAX** – sellers of property

**COMMUNITY TAX** – residents of the community

**TARIFF** – imports from foreign country

**AD VALOREM TAX** – luxury imported goods

**SIN TAX** – imported alcoholic liquors and cigarette

**PERIOD IN ECONOMICS**

Stability

Boom

Recession

Depression

**GEMEINSCHAFT** – personal

**GESSELSCHAFT** - business

**MALTHUSIAN PRINCIPLE**

Capitalism- oppressive according to Karl Marx

Who are the oppressed? Working class

Do not allow capitalism- communism

**ARTS APPRECIATION AND HUMANITIES**

Carlos V. Francisco- visual arts

Lucio San Pedro- music

Lea Salongga- Filipino who gained international attention

Cecil Licad- renowned pianist

Liza Macuja- Prima ballerina

Napoleon Abueva- Father of modern sculpture

Eduardo Castillo- sculpture landmarks

Juan Luna- painter of spolarium

Fabian Dela Rosa- Amorsolo’s mentor

Gilopez Kabayao- classical violin to the masses

|  |  |
| --- | --- |
| THEATER | PROPONENT |
| Arena | Montano |
| Sala | Rogers |
| Experimental | Tinio |

MEOW= Mysticism Eastern

Optimism Western

**OTHER INFORMATIONS**

**AGUEDA KAHABAGAN**- Tagalog Joan of Arc

**TERESA MAGBANUA**- Visayan Joan of Arc

**JUANARIO GALOT**- Battle of Tirad Pass traitor

**TEODORO PATINO**- traitor of Katipunan

**DANIEL TIRONA**- provoke Bonifacio in Tejeros Convention

**DONYA PIA**- died because of difficulty of giving birth; mother of Maria Clara; her husband is Kapitan Tiago

**BERLIN**- lugar na pinagbentahan ng Noli Me Tangere

**LIWAYWAY**- first and longest running komiks in the Philippines

**MANILA BULLETIN**- oldest newspaper since 1990

**KALAYAAN**- Newspaper of the Katipunan

**DOCTRINA CHRISTIANA**- first book of the Philippines

**FRAY JUAN DE PLASENCIA**- author of Doctrina Christiana

**LIWAYWAY ARCEO**- “Tigang ang Uhaw na Lupa”

**TOMAS PINPIN**- First Filipino Publisher

**AMADO HERNANDEZ**- Labor Leader “Isang dipang langit” “Luha ng Buwaya”

**DEOGRACIAS ROSARIO**- “Aloha”, Ama ng Maikling Kwentong Tagalog

**JOSE MARIA PANGANIBAN**- Memoria Fotografica, Lupang Tinubuan

**INIGO ED REGALADO**- “Ang sampaguitang walang bango”

**ZOLIO GALANG**- A child of sorrow

**MODESTO DE CASTRO**- author of Urbana at Feliza, Father of Tagalog Classics

**GENOVEVA MATUTE**- Ang kwento ni Mabuti, first Palangka Award for Short Story

**DIONISIO SALAZAR**- first Palangka Award for Play

**WILLIAM SHAKESPEARE**- “Ang pag-ibig ay hindi pag-ibig kapag nagbabago kung nakakakita ng pagbabago”

**PANDAY PIRA**- a Muslim-Pampango blacksmith who is acknowledged as “The First Filipino Cannon-maker”

**JOSEFA ESCODA**- Girl scout of the Philippines

**DR. JOSE RIZAL**

-Sa Aking Mga Kabata (8 years old)

-22 languages

-A La Juventud Filipina (UST)

-Mi Ultimo Adios (last poem)

-Teodora Alonso (mother)

-Calamba, Laguna (birth place)

-June 19, 1861 (birthday)

-December 30, 1896 (died in Bagumbayan)

-firing squad (cause of death)

-Consummatum Est! (last word)

**FR. JOSE RODRIGUEZ**- the Spanish priest who denounced Dr. Rizal’s novels as enemies of the catholic religion

**DR. FERDINAND BLUEMENTRITT**- a supporter of Propaganda Movement and Rizal’s bestfriend

**LA INDOLENCIA DE LOS FILIPINOS**- the book written by Rizal in defense of alleged laziness of the Filipinos

**LAONG LAAN**- pen name used by Rizal in his writings in La Solidaridad

**GEN. CAMILIO G. DE POLAVIEJA**- Spanish Governor who signed the death sentence for Dr. Rizal

**PAHIMAKAS**- a translation of Rizal’s farewell poem written by Andres Bonifacio in tagalog

**FEB 15, 1889**- date of founding of the fortnightly newspaper “La Solidaridad”

**NOV 15, 1895**- date of last issue of La Solidaridad

**FRAY JOSE RODRIGUEZ**- the first Spanish friar to attack “Noli” and “Fili”

**HONGKONG**- place where Dr. Rizal conceived the idea of establishing La Liga Filipina, a civic association composed of Filipinos

**JOSE MARIA BASA**- helped Dr. Rizal in preparing the constitution of La Liga Filipina

**JULY 14, 1892**- date when Dr. Rizal exiled in Dapitan

**THE LIBERAL MINDED STUDENTS AT THE UST**- Dr. Rizal dedicated his famous poem “A La Juventud Filipina”

**LOPE K. SANTOS**- Ama ng Balarilang Filipino

**SEVERINO REYES**- Ama ng Sarswelang Tagalog “Lola Basyang”

**FELIPE AGONCILLO**- First Filipino Diplomat

**TEODORO AGONCILLO**- Ang madamdaming mananalaysay ni Napkil.

**FRANCISCO SOC RODRIGO**- Sa Pula, Sa Puti

**MANUEL BLANCO**- Flora de Filipinas

**YASUNARI KAWABATA**- a Japanese poet who won the Nobel Prize in 1968.

**MIDDLE AGES**- the era of knights, chivalry, and castles in English Literature

**KEMPETAI**- memories or brutality during Japanese regime

**JAPANESE ERA**- Gintong Panahon ng Panitikang Pilipinas

**LAKANDOLA**- chief of Tondo

**LEONOR RIVERA**- fiancé of Jose Rizal

**MARCELA AGONCILLO**- maker of the first-filipino flag

**DIEGO SILANG**- leader of the Ilocano Revolt

**LAPU LAPU**- first Filipino Hero

**EPIFANIO DELOS SANTOS**- the man of many talents

**FRANCISCO BALTAZAR**- prince of Tagalog poets

**TRINIDAD TECSON**- mother of Biak-na-Bato

**AGUEDA**- wife of Artemio Tecson

**GEN. FRANCISCO MAKABULOS**- leader of the Tarlac Revolt

**JULIAN FELIPE**- composer of the Philippine National Anthem

**INSULARES**- Spaniards born in the Philippines

**BALDOMERO AGUINALDO**- leader of Magdalo

**MARIANO ALVAREZ**- leader of Magdiwang

**PEDRO BUKANEG**- the father of Ilocano Literature

**JUAN CRISOSTOMO SOTO**- the father of Pampango Literature who wrote “There is no God”

**ALEJANDRO ABADILLA**- the father of modern Tagalog poetry

**BUKANEGAN**- Ilocano Balagtasan

**PANDEREGLA**- first Filipino bread

**GREGORIO DEL PILAR**- hero of the Tirad Pass Battle

**MELCHORA AQUINO**- Mother of Balintawak

**FERNANDO MA. GUERRERO**- greatest lyric poet of the Revolution

**PADRE PATERNO**- peace of the revolution

**HIGHWAY 54**- the old name of EDSA during World War II

**KUMINTANG**- Filipino would sing this song in preparation for war battle

**EN VENTRE SA MERE**- the right of the unborn child is the same as the right of individual

**SERGIO OSMENA**- the first appointed head of the Department of Education during commonwealth period

**PNU**- established by the Americans for aspiring educators in 1901

**ANIMAL CELLS**- do not produce cell walls

**BOUSTEROPHEDON**- ancient Greeks form of writing

**SARACENIC EDUCATION**- this education is training for scientific thinking

**SOCIAL JUSTICE**- very foundation of genuine peace and reconciliation

**NATIONAL TREASURY**- provides the fund to support the Air Quality Management in the Philippines

**PASCUAL POBLETE**- tinaguriang “Ama ng Pahayagang Tagalog”

**KINKEE**- the gas lamp used to lighten the streets in Intramuros way back in history

**MIRANDA RULE**- right of a person under arrest

**AGNOTICISM**- coined by Thomas Huxley which means “not knowledge but being able to know”

**METAPHYSICS**- it seeks to find out what is ultimately real

**HORTICULTURE**- the art of growing flowers, fruits and vegetables

**JUS SANGUINIS**- a child follows the nationality or citizenship of the parents regardless of the place of his birth

**1956**- Lupang Hinirang sung for the first time

**HENRY OTLEY BEYER**- proposed the idea that first Filipino came through waves of migration from south to north

**TRUMAN DOCTRINE**- was an American foreign policy created to counter soviet geopolitical expansion during the cold war

**MANILA**- was named “Distinguished and ever loyal city” by legaspi

**MARIANO TRIAS**- first vice president of the Republic of the Philippines

**PLEBISCITE**- the direct vote of all the members of an electorate on an important public questions such as change in the Constitutions

**MONOTHEIST RELIGION**- Christianity, Islam, Judaism

**FIRST SULTANATE**- sultanate of Sulu

**URAL MOUNTAIN**- separated Europe and Asia

**5 SHIPS OF MAGELLAN**- Trinidad, Conception, Victoria, San Antonio, Santiago

**MONGOLOIDS**- known as the yellow race

**MATHEMATICS**

**GEOMETRY IMPORTANT CONCEPTS**

Sphere- shape of the earth

Square- all sides are equal

Rectangle- opposite sides are equal

Parallelogram- opposite angles are equal

Icosagon- 20 sides

**LET ANSWERS**

9

24- cube

12- triangle

**BIOLOGICAL SCIENCES**

**CHEMISTRY IMPORTANT CONCEPTS**

Elements Ca and Te

Ionic- transfer of electrons

Covalent- sharing of electrons

Plasma- very hot gas of nuclei and electrons

Metalloids- properties of both metals and non-metals

Ambivalent- positive and negative

Esters- perfume

Bright green- borrow in a flame test

**EARTH SCIENCE IMPORTANT CONCEPTS**

Seasons- tilting of the earth on its axis

Mesosphere- meteors burn

Typhoon- storm in the pacific

Pacific ring of fire- volcanoes are active

**SCIENCE**

-systematic pursuit of knowledge

**SCIENTIFIC METHOD**

-Francis Bacon (modern)

-Galileo Galilei (classic)

**STEPS:**

1. Phenomena

2. Identify the problem

3. Formulating hypothesis

4. Conduct experimentation

5. Analyze the data

6. Generalization/Conclusion

7. Publish

**HYPOTHESIS**

1. Null

2. Alternative

**Philosophy**- mother of all sciences

Senses- empirical approach

Reliability- consistency

**BIOLOGY**

-branch of natural sciences

-study of life/living things

**Transcendence**- with God

**BRANCHES OF BIOLOGY**

**1. ANATOMY**

-internal structures of living things

**2. PHYSIOLOGY**

-functions of structures

**3. BOTANY**

-study of plants

**4. CYTOLOGY**

-study of cells

**5. ECOLOGY**

-relationship between living and non-living

**6. GENETICS**

-heredity

**7. PHYLOGENY**

-evolutionary history of organisms

**8. PATHOLOGY**

-diseases

**9. ENDOCRINOLOGY**

-hormones

**10. ZOOLOGY**

-study of animals

**206**- total bones

**629/600**- total muscles

**1. THALLES OF MILETUS**

-father of natural philosophy

**2. ARISTOTLE**

-father of biology

**3. CAROLUS LINNAEUS**

-Swedish botanist, zoologist, taxonomist, and physician.

-binomial nomenclature

-father of modern taxonomy

-Aristotle (classical taxonomy)

**4. ANTON VAN LEEUWENHOEK**

-father of microbiology (study of microscope)

**5. GREGOR MENDEL**

-father of genetics (heredity, variations, genes, DNA)

**6. THEOPHRATUS**

-father of plant science (botany)

**7. CHARLES DARWIN**

-natural selection theory “on the origin”

**8. EDWARD JENNER**

-small pox vaccine

**9. ALEXANDER FLEMMING**

-discovered penicillin (penicillin notatum)

-father of antibiotics

**10. CLAUDE EPHRAIM ZOBELL**

-father of marine microbiology

**11. WILLIAM WHEWELL**

-coined the term “scientist”

**SERENDIPITY**

-accidental discovery

**CYTOLOGY**

-study of cells

1. All living organisms are composed of cells

2. Every organisms is made up of cells (cell is the basic unit of life)

3. All cells came from existing cell

**ROBERT HOOKE**

-father of cytology

-cork tree

-discovered cell

**MATTHIAS SCHLEIDEN** – botanist

**THEODORE SCHWAIN** – zoologist

**RUDOLF VIRCHOW** – pre-existing cell

**CHARACTERISTICS OF LIFE**

**HOMEOSTASIS**

-internal balance

-equilibrium

**ORGANIZATION**

-made up of one or more cells with complex structures and chemical processes

**LEVELS OF ORGANIZATION**

1. Atom- basic unit of matter

2. Compound or Molecules

3. Organelle/s or little organ

4. Cell

a. Prokaryotic- cells do not have nucleus, no membrane bound organelles

b. Eukaryotic- have nucleus and membrane bound organelles

5. Tissue- erythrocytes (red) leukocytes (white) thrombocytes (platelets) plasma (liquid)

6. Organ

7. Organ System

8. Organism- species

**METABOLISM**

-sum total of the chemical reactions in the body

-example; Anabolism (building up), Catabolism (breaking down)

**GROWTH AND DEVELOPMENT**

-increase in size and complexity respectively

Size- growth (quantitative)

Complexity- development (qualitative)

**ADAPTATION**

-fit and survive

-change

**REPRODUCTION**

**Sexual Reproduction**

-involve sex cells (fertilization)

-in human, fertilization occurs in the oviduct/fallopian tube

-gametes (sex cells)

**Asexual Reproduction**

1. Budding- outgrowth (hydra and yeast)

2. Binary Fission- split into two (bacteria)

3. Fragmentation- break parent cell into many parts (planaria)

4. Regeneration- capable of re-growing certain parts (lizard and starfish)

5. Parthenogenesis- bees

-haploid (male) diploid (female)

**RESPONSE TO STIMULUS “IRRITABILITY”**

-ability to response to stimulus

Stimulus- causes to react

Response- reaction

**Taxis**

-directional movement of animals as a response to a stimulus

-example; chemotaxis, phototaxis, geotaxis

**Tropism**

-directional response of plants toward (positive) or away (negative) from an environmental stimulus

-example; phototropism, thigmotropism, geotropism, hydrotropism, cryotropism

**PARTS OF A CELL**

Major Parts of Cell

1. Cell membrane

2. Cytoplasm

3. Nucleus

**CELL WALL**

Bacteria- peptidoglycan

Plants- cellulose, lignin

Fungi- chitin/crustaceans

Cytosol- gel like fluid

Vesicles- storage

Leucoplast- colorless, starch storage

**1. Glycolysis**

-cytoplasm

-2 ATP/glucose

**2. Kreb’s cycle/ citric acid cycle/ tricarboxylic acid**

-motochondria

-2 ATP

**3. Electron T.C**

-inside mitochondria

-34 ATP (eukaryotic)

-32 (prokaryotic)

Abiogenesis- spontaneous

Pathogen- germ/microbes

Robert Koch- Germ Theory of Disease

**Monosaccharaides**

1. Glucose

2. Fructose

3. Galactose

**Amino Acids**

-building blocks of protein

-20 total of amino acids (9 essentials, 11 non-essentials)

**Interphase**

-G1

-S (DNA Replication)

-G2

-mitosis

**Levels (PMAT)**

1. Prophase- big cell, visible chromosome

2. Metaphase- chromosomes are align

3. Anaphase- separation phase

4. Telophase- two cells

**Cytokinesis**- totally divide

**CELL MEMBRANE**

-selectively permeable

-phospholipid bilayer

**CYTOPLASM**

-all that is inside the cell, but outside nucleus

-two parts: cytosol and organelles

**Organelles**

-protein synthesis

**Lysosomes**

-suicide bag

-breaks down lipids, carbohydrates, proteins into simpler form to be used by the cell

**Endoplasmic Reticulum**

-internal transport system

-SER (lipid, cholesterol, sterod)

-RER (protein synthesis)

**Golgi Bodies**

-synthesizes, packages, and modifies chemical products of the cell

**Centrioles**

-spindle fibers (cell division)

**Plastids**

-found in most plants (chloroplast, chromoplast, leucoplast)

**Mitochondria**

-powerhouse of the cell

-cellular respiration

-glucose and oxygen

**NUCLEUS**

-control center of the cell

-present in eukaryotic cells

**KEY CONCEPTS TO REMEMBER**

**Microbiology**

-study of microorganisms

**Spontaneous Generation Theory**

-living organisms develop from nonliving

**Biogenesis**

-living from living

**Germ Theory of Disease**

-certain disease is caused by specific pathogen

**Bioremediation**

-using microorganisms like bacteria to consume and breakdown the pollutants in the environment

**SOME PATHOLOGY**

**Malaria**

-caused by plasmodium

**Dengue**

-aedes aegypti

**Amoebic Dysentery**

-bloody diarrhea: entamoeba histolytica

**Mad Cow Disease**

-caused by prion

**BIOCHEMISTRY**

**CARBOHYDRATES**

-provides immediate energy source for the body

-CHO

-monosaccharaides

**LIPIDS**

-stores energy

-fatty acids and glycerol

**PROTEINS**

-for building structures of the body

-for immunity

-for transport of substances

-amino acids

**NUCLEIC ACIDS**

-genetic make-up

-nucleotides

**Types:**

DNA- Deoxyribonucleic acid

RNA- Ribonucleic acid

**CHARGAFF’S RULE**

-equality in quantity between bases in DNA

**KEY CONCEPTS TO REMEMBER**

A is to T as C is to G

-adenine paired with thymine and cytosine paired with guanine

**COMPUNDS OF LIVING ORGANISM**

**INORGANIC COMPOUND**

-vitamins

-minerals

-water

-acid

-base

-gases

**VITAMINS**

1. Fat soluble

-ADEK

Vitamin A – Retinol (vision)

Vitamin D – Calciferal (calcium)

Vitamin E – Tocopherol (antioxidant)

Vitamin K – menadione (for blood clotting, anti-hemorrhagic activity)

Vitamin B1 – Thiamine (beriberi)

Vitamin B2 – Riboflavin

Vitamin B3 – Niacin (pellagra)

Vitamin B5 – pantothenic acid

Vitamin B6 – Pyridoxine

Vitamin B9 – folic acid

Vitamin B12 – Cobalamin (pernicious anemia)

Vitamin C – ascorbic acid (scurvy)

**MINERALS**

1. Iodine

2. Calcium

3. Potassium

4. Magnesium

5. Zinc

**WATER**

-universal solvent

-most abundant inorganic compound in cell’s protoplasm

**ACIDS**

-sour in taste

-hydrogen donor

-pH 0-6

**BASES**

-slippery and soapy

-hydrogen acceptor

-pH 8-14

**GASES**

-nitrogen 78%

-oxygen 21%

-CO2 and other gases 1%

**ORGANIC COMPOUND**

Carbohydrates

Proteins

Lipids

Nucleic Acids

**GENETICS**

**MENDELIAN LAWS OF GENETICS**

**1. Law of Segregation**

-poor of allele will separate resulting to only one present allele per gamete

**2. Law of Independent Assortment**

-separated alleles are independent of each other

**3. Law of Dominance**

-recessive alleles are always masked by dominant alleles

**NON-MENDELIAN LAWS OF GENETICS**

**1. Incomplete Dominance**

-carrying neither of their given traits

**2. Codominance**

-alleles are both expressed

**3. Multiple Alleles**

-gene is controlled by multiple alleles (ABO Bllod)

**WORDS TO REMEMBER**

**Gene**

-basic unit of inheritance, segment of DNA that codes for a specific protein

**Mutation**

-change in DNA sequence that lead to a change in the expression

**Variation**

-may be due to fertilization, meiosis, and mutation

**TAXONOMY**

1. Identification

2. Classification

3. Naming

Dream Domain

Ko Kingdom

Pumasa Phylum

Coz Class

Our Order

Family Family

Gets Genus

Sweldo Species

**DOMAINS**

1. Archaea

2. Bacteria

3. Eukarya

**KINGDOM**

1. Moneria- only prokaryotic kingdom

2. Protista- literally protest

3. Fungi- decay

4. Plantae

5. Animalia

**ANIMAL TAXONOMY**

**PHYLUM PORIFERA**

-most primitive invertebrates

-no organs and definite shape, sessile

-example; sponges

**PHYLUM CNIDARIA**

-with cnidoblast (stinging cells) which contains nematocyst (stinging organelle)

-polyp and medusa

-example; hydra, jellyfish

**PHYLUM PLATYHELMINTHES**

-flat worms

-flat body

-example; flukes, tapeworms

**PHYLUM NEMATODA**

-round worms

-unsegmented, smooth, and long

**PHYLUM ANNELIDA**

-segmented worms

-setae for movement

-example; earthworm, leeches

**PHYLUM ANTHROPODA**

-with head, thorax, and abdomen

-with jointed legs

-exoskeleton (chitin)

-example; insects, spiders, centipede

**PHYLUM MOLLUSCA**

-soft and unsegmented body

-with mantle glands

-example; chitons, bivalves

**PHYLUM ECHINODERMATA**

-with spiny outer covering

-radial symmetry

-lives on ocean floor

-example; starfish, sea urchins

**PHYLUM CHORDATA**

-a single dorsal nerve chord

-a dorsal rod of cartilage called a notochord

-pharyngeal (gills) slits

-a tail

-example; mammals, reptiles, amphibians, aves

**COMPONENTS OF ECOLOGY**

**BIOTIC FACTORS**

-living things

**ABIOTIC FACTORS**

-nonliving things

**LEVELS OF ECOLOGICAL ORGANIZATION**

**SPECIES (INDIVIDUAL)**

-organisms similar in characteristics, able to interbreed

**POPULATION**

-group of species living in the same area

-smallest biological unit that can evolve over time

**COMMUNITY**

-group of population living in the same area

**ECOSYSTEM**

-portion of biosphere where living things and non-living things interact

**WORLD BIOMES (TERRESTRIAL)**

**TUNDRA**

-permafrost, permanently frozen and treeless, coldest biome

**TAIGA**

-coniferous trees like pine fir, hemlock; cold biome

**TEMPERATE DECIDIUOUS FOREST**

-Four seasons

**TROPICAL RAINFOREST**

-located in the equator, most diverse terrestrial biome; dipterocarp

**SAVANNA**

-grassland with scattered trees

**DESERT**

-dry biome, low precipitation, organisms have specific adaptations to live

**ENERGY RELATIONSHIP**

**Producers (autotrophs)**

-use photosynthesis to produce food

-plants (rich in fibers) and algae

**Consumers (heterotrophs)**

-eat other organisms to obtain energy

-with sharp and tearing teeth

(Primary, Secondary, Tertiary, Quatenary)

**Decomposers (saprophytes)**

-break down dead matter into useful basic form of nutrients

a. Detritivore – feed on decaying matter

b. Scavenger – feed on dead animal/plant

**ECOLOGICAL RELATIONSHIP BETWEEN ORGANISMS**

**Competition**

-fight for limited resources

**Predation**

-predator eats prey

**Parasitism**

-One is harmed while other benefits

**Commensalism**

-One is benefited, other unaffected

**Mutualism**

-benefit from each other

**Ammensalism**

-one is harmed, other is unaffected

**EVIDENCES OF POPULATION**

1. Fossils

2. Organisms of new organisms

3. Mutation

4. Structural Development

5. Embryological Development

**VESTIGAL STRUCTURE**

1. Wisdom tooth

2. Appendix

3. Coccyx

4. Plica luminaries

5. Arector pili muscles

**EVOLUTION IMPORTANT CONCEPTS**

Lamarck- use and disuse

Spencer- survival of the fittest

Darwin- natural selection

Homologous organs- human arms, bat wings, seal flippers

**KEY TERMS TO REMEMBER**

Habitat – place where organisms live

Niche – function or role of an organism in its environment

Emigration – movement out of the area

Immigration – moving into the area

**BODY SYSTEMS**

**Epidermis**

-stratum corneum

-stratum lucidum

-stratum granulosum

-stratum spinosum

-stratum basale

**Cells present in Epidermis**

1. Keratinocytes

2. Melanocytes

3. Langerhans cells

4. Merkel cells

**Dermis**

-presence of blood, nerves, hair follicles, and glands

**Glands**

Sudoriferous gland (sweat gland)

-merocrine, eccrine, opocrine

Sebacious gland (oil gland)

-holocrine

**MUSCULAR SYSTEM**

-600 muscles

-myofilament (actin and myosin)

**Muscular Tissue**

1. Skeletal Muscle

2. Visceral/Smooth Muscle

3. Cardiac Muscle

**SKELETAL SYSTEM**

-206 bones

-axial (80), appendicular (126)

**Bone Cells**

-osteoblast (bone-forming)

-osteocyte (mature bone cell)

-osteoclast (bone-resorbing)

**Types of Skeletal System**

Endoskeleton

-internal

Exoskeleton

-external

**Types of Joints (bone to bone connection)**

Cartilaginous joints (slightly movable)

Fibrous joints (immovable)

Synovial joints (freely movable)

**Bone**

-living tissue which have their own blood vessels and are made of various cells, proteins, minerals and vitamins

**Cartilage**

-Is soft gel-like padding between bones that protects joints and facilitates movements.

**Tendon**

-is a band of tissue that connects muscle to bone

**Ligaments**

-is an elastic band of tissue that connects bone to bone and provides stability to the joint

**TERMS TO REMEMBER**

**Helicobacter pylori**

-causes ulcer

**Mastication**

-chewing

**Regurgitation**

-a mother bird partially digests the food and places on amount into the young’s beak

**BIOSTATISTICS**

-branch of applied statistics directed toward applications in the health sciences and biology

-provides some of the most fundamental tools and techniques of the scientific method

Descriptive

(Categorical) Variable

Nominal Variable

-(no order between variables)

Ordinal Variable

-(order among values)

Measurement Variable

Continuous

-height and weight

Discrete

-values are integers, example is the number of siblings, the number of times

**Types of Statistical Variable**

1. Nominal (eye color, gender, religion)

2. Ordinal (stage of diseases, level of pain)

3. Interval (no true zero, temperature)

4. Ratio (with true zero, length, weight)

**PHYSICAL SCIENCE**

**NATURE OF SCIENCE**

**Science**

-A systematic body of knowledge.

-The system of acquiring knowledge through systematic experimentation and methodology.

-The search for truth and knowledge.

**DEFINING SCIENCE**

**Pure Science**

-research that adds to the body of scientific knowledge

-has no practical use

**Applied Science (Technology)**

-the practical application of scientific knowledge

**THREE MAIN BRANCHES OF SCIENCE**

**Life Science**

-the study of living organisms

Earth Science

-the study of Earth and space

**Physical Science**

-the study of matter and energy

-chemistry & physics

**LIFE SCIENCE AREAS OF STUDY**

**Biology**

-The study of life or living matter in all its forms

Anatomy

-The study of the structure of animals and plants

**Botany**

-The study of plants.

**Ecology**

-The study of relations and interactions between organisms and their environment.

**Zoology**

-The science that covers animals and animal life.

Physical Science Areas of Study

**Chemistry**

-The science that deals with the composition, properties, reactions, and the structure of matter.

**Physics**

-The study of matter and energy and the interactions between them.

Earth Science Areas of Study

**Geology**

-The study of the origin, history, and structure of the Earth, and the physical, chemical, and biological changes that it has experienced or is experiencing.

**Meteorology**

-The study of the atmosphere and its phenomena, such as weather and climate

**Paleontology**

-The study of the forms of life that existed in prehistoric or geologic periods.

**Astronomy**

-The study of the universe beyond the earth's atmosphere

**SCIENTIFIC METHOD**

-The Scientific Method involves a series of steps that are used to investigate a natural occurrence.

**Steps of the Scientific Method**

**1. Problem/Question**

-Develop a question or problem that can be solved through experimentation.

**2. Observation/Research**

-Make observations and research your topic of interest.

**3. Formulate a Hypothesis**

-Predict a possible answer to the problem or question.

**HYPOTHESIS**

-An educated guess about the relationship between the independent and dependent variables.

If IV then DV.

**Independent Variable**

-the factor that is intentionally manipulated or changed in an experiment.

-Valid experiments have only one independent variable.

**Dependent Variable**

-the factor that may change as a result of changes made in the independent variable.

-The dependent variable must be measurable.

**4. Experiment**

-Develop and follow a procedure.

-The outcomes must be measurable (quantifiable).

**5. Collect and Analyze Results**

-Modify the procedure if needed.

-Confirm the results by retesting.

-Include tables, graphs, and photographs.

**6. Conclusion**

-Include a statement that accepts or rejects the hypothesis.

-Make recommendations for further study and possible improvements to the procedure.

**7. Communicate the Results**

-Be prepared to present the project to an audience.

**MEASUREMENT**

-A scientific measurement requires:

(1) the definition of the physical quantity

(2) the units.

-The value of a physical quantity is actually the product of a number and a unit.

**PHYSICAL QUANTITIES**

-An attribute or property of a substance that can be expressed in a mathematical equation

-Is made up of a value and a unit.

-A unit of measurement refers to a particular physical quantity

**TYPES OF PHYSICAL QUANTITIES**

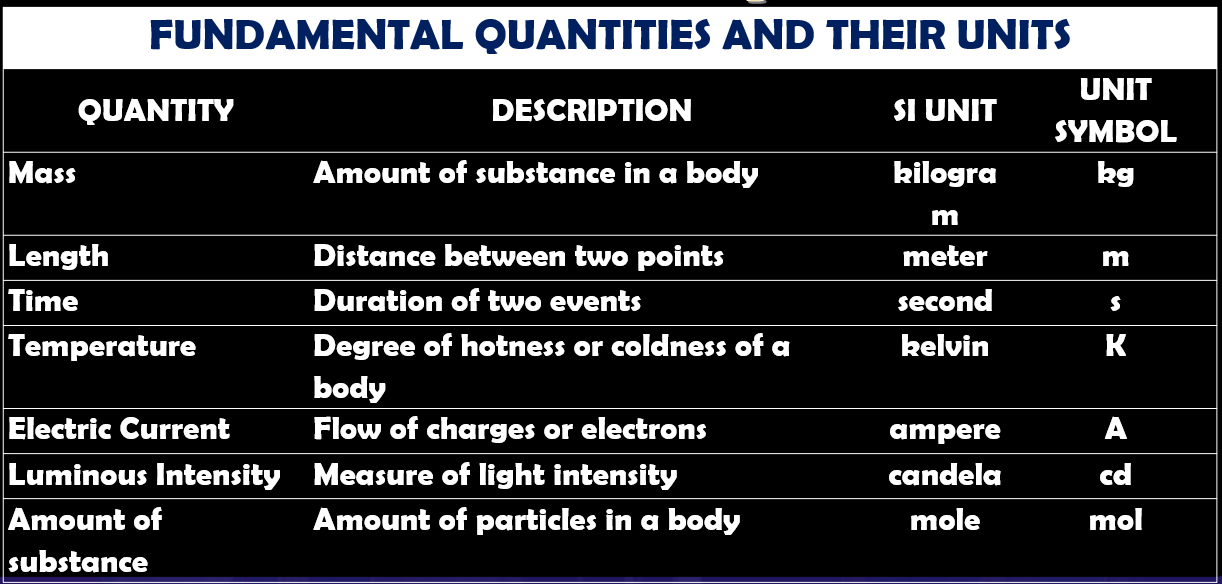
**1. Fundamental Quantities**

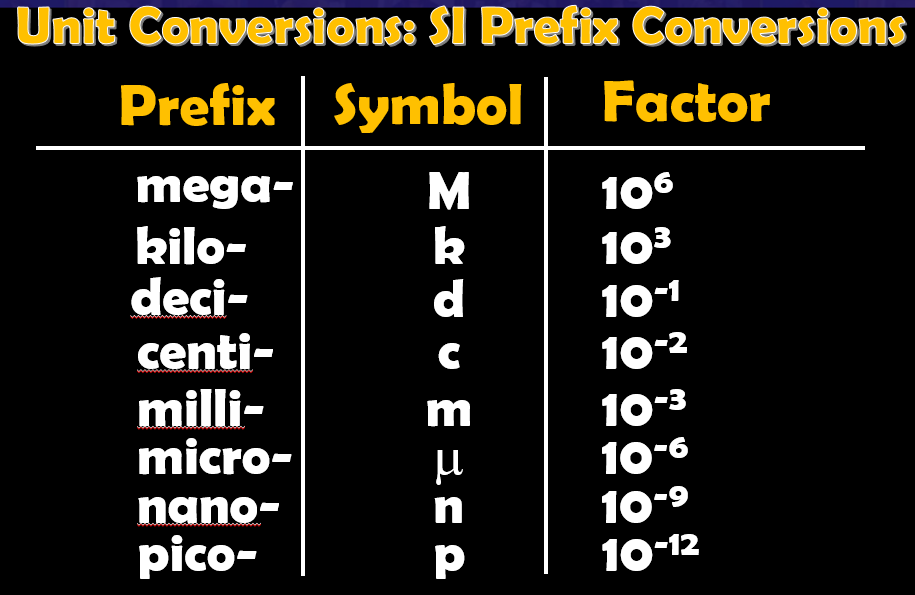
-quantities that do not depend on any other physical quantity for their measurement

**2. Derived Quantities**

-products and/or ratios of fundamental quantities

**FUNDAMENTAL QUANTITIES**





**SIGNIFICANT FIGURES**

-Scientist use significant figures to determine how precise a measurement is

-Significant digits in a measurement include all of the known digits plus one estimated digit

**Rules for Significant figures**

**Rule #1**

-All non-zero digits are ALWAYS significant

-How many significant digits are in the following numbers?

**Rule #2**

-All zeros between significant digits are ALWAYS significant

-How many significant digits are in the following numbers?

**Rule #3**

-All FINAL zeros to the right of the decimal ARE significant

-How many significant digits are in the following numbers?

**Rule #4**

-All zeros that act as place holders are NOT significant

-Another way to say this is: zeros are only significant if they are between significant digits OR are the very final thing at the end of a decimal

**SCIENTIFIC NOTATION**

-Scientific notation is used to express very large or very small numbers

-It consists of a number between 1 & 10 followed by x 10 to an exponent

-The exponent can be determined by the number of decimal places you have to move to get only 1 number in front of the decimal

**Large Numbers**

-If the number you start with is greater than 1, the exponent will be positive

**Small Numbers**

-If the number you start with is less than 1, the exponent will be negative

**SCIENTIFIC INSTRUMENTS**

**Ammeter**

-strength of an electric current

**Anemometer**

-measure the speed, direction and pressure of the wind

**Voltmeter**

-potential difference between two points

**Barometer**

-atmospheric pressure and conditions

**Callipers**

-diameters of wire, tube or rod

**Calorimeter**

-quantities of Heat

**Thermometer**

-temperature

**Hydrometer**

-relative density of liquids

**Hygrometer**

-moisture content or the humidity

**Microscope**

-magnified view of very small objects

**Clinometer**

-angles of slope, elevation, or depression of an object with respect to gravity's direction

**Rain Gauge**

-Rainfall

**Seismograph**

-intensity and origin of earthquakes shocks

**Sextant**

-angular distance between two objects

**Speedometer**

-speed of the vehicle

**Phonograph**

-used for reproducing sound

**Sphygmomanometer**

-Blood pressure

**Stethoscope**

-hearing and analyzing the sound of Heart

**CHEMISTRY**

**Matter – Vocabulary**

**Chemistry**

-Science that describes matter – its properties, the changes it undergoes, and the energy changes that accompany those processes

**Matter**

-Anything that has mass and occupies space.

**Fundamental Laws of Matter**

There are three fundamental laws of matter

-Law of conservation of mass

-Law of constant/definite composition

-Law of multiple proportions

**Anton Lavoisier**

**LAW OF CONSERVATION OF MASS**

-In a chemical reaction, matter is neither created nor destroyed, it is transformed into something else.

**Joseph Prousz**

**LAW OF DEFINITE COMPOSITION**

-A given compound always contains the same, fixed ratio of elements.

**LAW OF MULTIPLE PROPORTIONS**

-Elements can combine in different ratios to form different compounds

**Kinetic Molecular Theory**

-Tiny, constantly moving particles make up all matter.

-The kinetic energy (motion) of these particles increases as temperature increases.

**FOUR STATES OF MATTER**

**SOLIDS**

-Low KE - particles vibrate but can’t move around

-definite shape & volume

-Crystalline - repeating geometric pattern

-Amorphous - no pattern (e.g. glass, wax)

**LIQUIDS**

-Higher KE - particles can move around but are still close together

-Indefinite shape

-Definite volume

**GASES**

-High KE - particles can separate and move throughout container

-Indefinite shape & volume

**PLASMA**

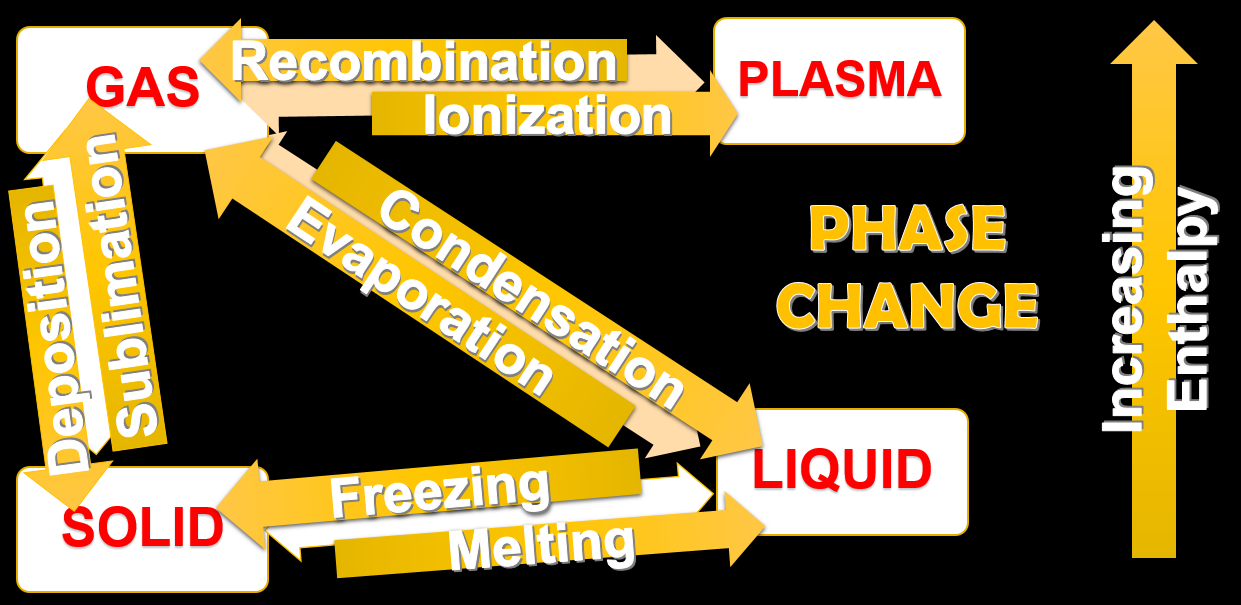
-Very high KE - particles collide with enough energy to break into charged particles (+/-)

-Gas-like, indefinite

-Shape & volume

-Stars, fluorescent

Light bulbs, TV tubes



**PROPERTIES OF MATTER**

**Physical Properties**

-properties that can be measured or observed without changing the chemical nature of the substance

-can be perceived by physical senses

**Intensive**

-It does not depend on the amount of the substance present.

-Ex. COLOR DENSITY B.P./M.P.

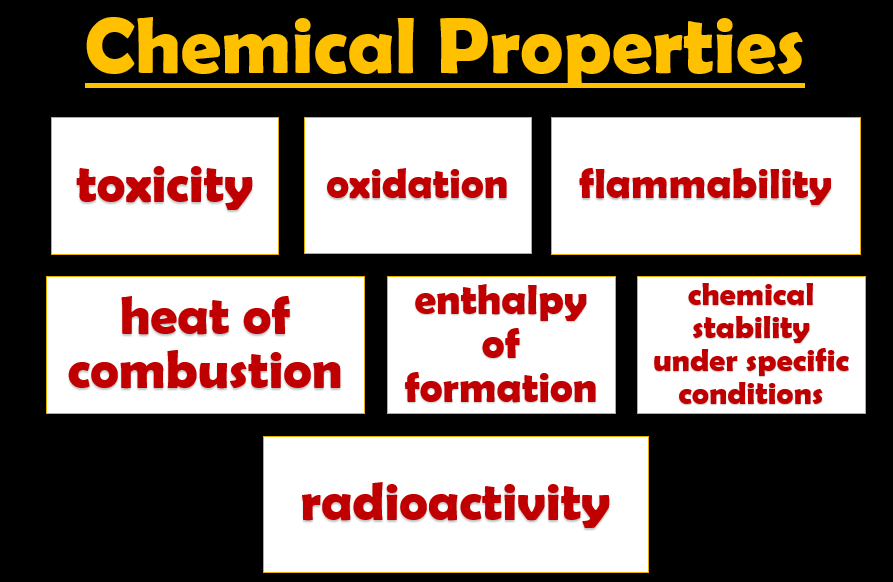
**Extensive**

-It depends on the amount of matter being measured.

-Ex. Volume Mass

**Chemical Properties**

-Properties that is only observable when the substance reacts with another substance thereby causing a change in the chemical composition of the substance.



**CHANGES OF MATTER**

**1. Physical**

-Changes in the physical properties of matter and takes place without changing the chemical composition

**2. Chemical**

-Changes in the chemical properties of matter

-Chemical composition is altered producing a new substance

Ex. Iron Rusting, Wood Burning, Banana Rotting

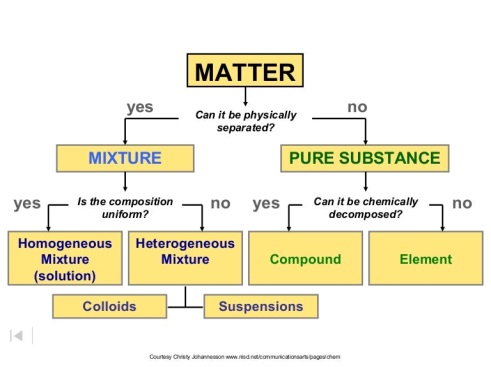
**3. Nuclear**

-Changes in the nuclear properties of matter

-Changes in the atomic properties of an element

-Ex. Fusion (combine) and Fission (divide)

**CLASSIFYING MATTER**



PURE SUBSTANCE

-Pure type matter which cannot be separated physically

-homogenous

**Elements**

-matter composed of identical atoms

-EX: copper

**METALS**

-Metals are lustrous (shiny), malleable, ductile, and are good conductors of heat and electricity

-They are mostly solids at room temperature.

**NON-METALS**

-They are dull, brittle, nonconductors (insulators).

-Some are solid, but many are gases

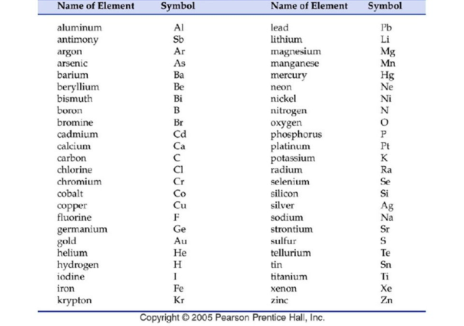
-Bromine is a liquid

**METALLOIDS**

-Semimetals: They have characteristics of both metals and nonmetals

-They are shiny but brittle

-they are semiconductors



**COMPOUND**

-matter composed of 2 or more elements in a fixed ratio

-properties differ from those of individual elements

-EX: salt (NaCl)

**Acids**

-Ionize to form hydronium ions (H3O+) in water

HCl, H2SO4, H3PO4, HF

**Bases**

-Dissociate or ionize to form hydroxide ions (OH-) in water

-NaOH, KOH

**Indicator**

-substance that changes color in an acid or base

-Examples:

-litmus - red/blue

-phenolphthalein – colorless/pink

**Mixtures**

-Variable combination of 2 or more pure substances.

**Homogeneous**

-Uniform and the different components of the mixture cannot be seen

-Exhibits one phase

-Particles never settle

-Solutions

**Heterogeneous**

-Heterogeneous Mixture

-uneven distribution of components

-Colloids and suspensions

-EX: granite

**Colloid**

-medium-sized particles

-particles never settle

-Tyndall effect - particles scatter light (looks cloudy)

EX: milk

**Suspension**

-large particles

-particles will settle (needs to be shaken)

-particles scatter light or can be opaque

-Ex: antibiotics

**HISTORY OF ATOM**

**Democritus (400 B.C.)**

-Proposed that matter was composed of tiny indivisible particles

-Not based on experimental data

-Greek: atomos

**John Dalton (1807)**

British School teacher

-based his theory on others’ experimental data

Billiard Ball Model

-atom is a uniform, solid sphere

**Henri Becquerel (1896)**

Discovered radioactivity

-spontaneous emission of radiation from the nucleus

Three types:

-Alpha - positive

-Beta - negative

-Gamma – neutral

**J. J. Thomson (1903)**

**Cathode Ray Tube Experiments**

-beam of negative particles

**Discovered Electrons**

-negative particles within the atom

**Plum-pudding Model**

-positive sphere (pudding) with

Negative electrons (plums) dispersed throughout

**Ernest Rutherford (1911)**

**Gold Foil Experiment**

Discovered the nucleus

-dense, positive charge in the center of the atom

Nuclear Model

**Niels Bohr (1913)**

Bright-Line Spectrum

-tried to explain presence of specific colors in hydrogen’s spectrum

Energy Levels

-electrons can only exist in specific energy states

Planetary Model

**Erwin Schrödinger (1926)**

Quantum mechanics

-electrons can only exist in specified energy states

Electron cloud model

-Orbital: region around the nucleus where e-

are likely to be found

**James Chadwick (1932)**

Discovered neutrons

-neutral particles in the nucleus of an atom

Joliot-Curie Experiments

-based his theory on their experimental evidence

**Element Nomenclature**

Atomic number = #p+

Mass number = #p+ + #n0

Charge = #p+ - #e-

Neutral atom: #p+ = #e-

**The Periodic Table**

**Dmitri Mendeleev (1869, Russian)**

-Organized elements by increasing atomic mass.

-Predicted the existence of undiscovered elements.

**Henry Mosely (1913, British)**

-Organized elements by increasing atomic number.

-Fixed problems in Mendeleev’s arrangement.

**Chemical Bond**

-Strong attractive force between atoms or ions in a molecule or compound.

Formed by:

-transferring e- (losing or gaining)

-sharing e-

**Octet Rule**

-most atoms form bonds in order to have 8 valence e-

-full outer energy level

-like the Noble Gases!

**Chemical Reactions**

-Represented by chemical equations:

-Reactants → Products

4Fe + 3O2 → 2Fe2O3

-Reactants: starting materials

-Products: new compounds formed

**Balancing Chemical Reactions**

**Law of Conservation of Mass**

-The law of conservation of mass states that no atoms can be created or destroyed in a chemical reaction,

-So the number of atoms that are present in the reactants has to balance the number of atoms that are present in the products.

**Traditional method:**

1. Write down your given equation

2. Write down the number of atoms per element

3. Save hydrogen and oxygen for last, as they are often on both sides.

4. Start with single elements.

5. Use a coefficient to balance the single atoms.

6. Balance the hydrogen atoms next.

7. Balance the oxygen atoms.

**PHYSICS**

-is the study of the interaction of matter and energy

**Aristotle (Greek 4th Century BC)**

-Logic

-Studied motion

-Natural and violent motion

-4 elements: earth, water, air, fire

**Galileo Galilei (1564 AD)**

-Father of the scientific method (along with the Englishman Francis Bacon 1500’s).

-Studied motion.

-Agreed with the Greek Aristarchos and Polish Copernicus (1473-1543) on heliocentric view point. This lead to his house arrest.

**Isaac Newton**

-English (1642-1727)

-related force and motion and studied light.

-The BIG Guy

**Albert Einstein (1879-1955)**

-Relativity: there is no absolute frame of reference that is at rest.

-Photoelectric effect (Light is quantized) (Nobel Prize)

-Related mass and energy (E = mc2)

**SCALAR AND VECTOR QUANTITIES**

**Scalar Quantities**

-Quantities signifying magnitude only

-Examples: Mass, charge, length, temperature, speed

**Vector Quantities**

-signifying magnitude and direction

-Examples: Weight, displacement, Velocity, Acceleration, Momentum

**DISTANCE VS. DISPLACEMENT**

**Distance**

-Distance (d) – how far an object travels.

-Does not depend on direction.

**Displacement**

-difference between an object’s final position and its starting position.

-Does depend on direction.

-Displacement = final position – initial position

-In order to define displacement, we need direction.

**Motion**

-Change in position in relation to a reference point.

**Reference Point**

-Nonmoving point from which motion is measured

**SPEED AND VELOCITY**

**Speed**

-rate of motion

-distance traveled per unit time

Instantaneous Speed - speed at a given instant

**Velocity**

-speed in a given direction

-can change even when the speed is constant

**Acceleration**

-the rate of change of velocity

-change in speed or direction

Positive acceleration

-“speeding up”

Negative acceleration

-“slowing down

**THREE LAWS OF MOTION**

**Newton’s First Law**

-An object at rest will remain at rest and an object in motion will continue moving at a constant velocity unless acted upon by a net force.

- “Law of Inertia”

**Inertia**

-tendency of an object to resist any change in its motion

-Increases as mass increases

**Newton’s Second Law**

-The acceleration of an object is directly proportional to the net force acting on it and inversely proportional to its mass.

-F = ma

**Newton’s Third Law**

-For every action there is an equal and opposite reaction

“Law of Interaction”

-Tells that forces come in pairs: action force and reaction force

-Action and reaction force are equal in magnitude, are directed in opposite directions and are acting on different bodies

-Explains what happens when we walk, how rockets, airplanes and the like are propelled, and a lot more

**Force**

-a push or pull that one body exerts on another

**The 4 Fundamental Forces**

-Gravitational (attractive force between masses)

-Electromagnetic (caused by to electric and magnetic fields)

-Strong Nuclear Force (holds nuclear particles together)

-Weak Nuclear Force (involved in radioactive decay of nuclei)

**Normal Force**

-a force acting perpendicular to the interface of contact between two objects.

**Balanced Forces**

-forces acting on an object that are opposite in direction and equal in size

-no change in velocity

**Net Force**

-unbalanced forces that are not opposite and equal

-velocity changes (object accelerates)

**Friction**

-force that opposes motion between 2 surfaces

-depends on the:

1. Types of surfaces

2. Force between the surfaces

**Gravity**

-force of attraction between any two objects in the universe

-increases as:

1. Mass increases

2. Distance decreases

**Weight**

-the force of gravity on an object

**Projectile Motion**

**Projectile**

-any object thrown in the air

-acted upon only by gravity

**Free-Fall**

-when an object is influenced only by the force of gravity

**Weightlessness**

-sensation produced when an object and its surroundings are in free-fall

-surroundings are falling at the same rate so they don’t exert a force on the object

-object is not weightless

**Circular Motion**

**Centripetal Acceleration**

-acceleration toward the center of a circular path

-caused by centripetal force

**Forces in Fluids**

**Fluid**

-matter that flows

-liquids and gases

**Buoyancy**

-the ability of a fluid to exert an upward force on an object immersed in it

Archimedes’ Principle

-the buoyant force on an object in a fluid is equal to the weight of fluid displaced by the object

**Bouyant Force**

-upward force exerted

-by a fluid on an immersed object

-bouyant force > weight

-bouyant force < weight

-bouyant force = weight

**Work**

-transfer of energy through motion

-force exerted through a distance

**Machine**

-device that makes work easier

-changes the size and/or direction of the exerted force

**The Simple Machines**

**Lever**

-a bar that is free to pivot about a fixed point, or fulcrum

**Pulley**

-grooved wheel with a rope or chain

running along the groove

-a “flexible first-class lever”

**Wheel and Axle**

-two wheels of different sizes that rotate together

-a pair of “rotating levers”

**Inclined Plane**

-sloping surface used to raise objects

**Screw**

-inclined plane wrapped in a spiral around a cylinder

**Wedge**

-a moving inclined plane with 1 or 2 sloping sides

-used to push two objects apart

**Compound Machines**

-combination of 2 or more simple machines

**Energy**

-generally defined as the capacity of an object to do work

-Measured in Joules (J)

**Kinetic Energy**

-Thermal energy – movement of molecules

-Electrical energy – movement of charges

-Mechanical energy – movement of systems of objects

-Radiant energy – accelerated charged particles producing electromagnetic waves.

-All objects at any temperature emit radiant energy.

**Potential Energy**

-Gravitational potential energy is the energy stored in an object as the result of its vertical position or height.

-Elastic potential energy is the energy stored in elastic materials as the result of their stretching or compressing.

-Chemical Energy is the energy from the formation or breaking of bonds

-Nuclear Energy is the energy in the nucleus of an atom.

**Law of Conservation of Energy**

-Energy may change forms, but it cannot be created or destroyed under ordinary conditions.

EX:

-PE - KE

-mechanical thermal

-chemical thermal

**Thermal Energy**

**Temperature**

-measure of the average KE of the particles in a sample of matter

**Heat Transfer**

**Heat**

-thermal energy that flows from a warmer material to a cooler material

Like work, heat is...

-measured in joules (J)

-a transfer of energy

**Specific Heat (Cp)**

-amount of energy required to raise the temp. of 1 kg of material by 1 degree Kelvin

-units: J/(kg•K) or J/(kg•°C)

**Light and Matter**

**Opaque**

-absorbs or reflects all light

**Transparent**

-allows light to pass through completely

**Translucent**

-allows some light to pass through

**White light**

-contains all visible colors - ROY G. BIV

In white light, an object…

-reflects the color you see

-absorbs all other colors

**Conductor**

-material that allows electrons to move through it easily

-e- are loosely held

-ex: metals like copper and silver

**Insulators**

-material that doesn’t allow electrons to move through it easily

-e- are tightly held

-Ex: plastic, wood, rubber, glass

**Circuit**

-closed path through which electrons can flow

**Potential Difference**

**Voltage**

-difference in electrical potential between two places

-large separation of charge creates high voltage

-the “push” that causes e- to move from - to +

-measured in volts (V)

**Current**

-flow of electrons through a conductor

-Depends on # of e- passing a point in a given time

-measured in amperes (A)

**Resistance**

-opposition the flow of electrons

-electrical energy is converted to thermal energy & light

-measured in ohms

**Series Circuits**

-current travels in a single path

-One break stops the flow of current

-current is the same throughout circuit

-lights are equal brightness

**Parallel Circuits**

-current travels in multiple paths

-One break doesn’t stop flow

-current varies in different branches

**EARTH SCIENCE**

-study of the physical structure of the earth and its atmosphere including the universe

**The Universe**

-Also called as cosmos

-The sum total of all matter and energy that is everything within and between all galaxies

**Basic Astronomical Objects**

-Star(s)

-Planets

-Satellites

-Asteroids

-Dwarf Planets

-Comets

-Meteor / Meteoroid / Meteorite

**Star**

-Large, glowing balls of gas that generate heat and light through nuclear fusion in their cores.

**Planet**

-A moderately large object that orbits a star

-Planets may be rocky, icy or gaseous in composition

-They shine primarily by reflecting light from their star.

**Criteria for being a planet**

-Is in orbit around the Sun.

-Has sufficient mass for it self-gravity to overcome rigid body forces so that it assumes a hydrostatic equilibrium (nearly round shape).

-Has cleared neighborhood around its orbit.

**Moon or Satellite**

-An object that orbits a planet.

**Asteroid**

-A relatively small and rocky object that orbits a star.

-Located in the asteroid belt – between Mars and Jupiter’s orbit.

**Ceres**

-Largest Known Asteroid

-By far, the largest and most massive body in the asteroid belt.

**Dwarf Planets**

A celestial body that:

-Is in orbit around the Sun

-Has sufficient mass for its self-gravity to overcome rigid body forces so that it assumes a hydrostatic equilibrium (nearly round) shape.

-the neighborhood around its orbit is not cleared

-is not a satellite

Located at:

Kuiper Belt

-begins near the orbit of Neptune and continues beyond Pluto. This is also a region where most comets are found.

**Comets**

-Comets are cosmic snowballs of frozen gases, rock and dust roughly the size of a small town.

**Meteors**

-Small objects falling into the Earth's atmosphere from space.

**The Solar System**

**SCIENTISTS**

**1. PTOLEMY** (Earth Centered Model - geocentric)

**2. GALILEO** (Telescope)

**3. COPERNICUS** (Sun Centered Model – heliocentric)

**4. JOHANNES KEPLER** (Laws of Planetary Motion)

**5. TYCHO BRAHE** (Detailed observation of heavenly bodies without aid of telescope)

**Mercury -** The Fastest Revolving Planet

**Venus** - The Hottest Planet

**Mars** - The Angry Red Planet

**Jupiter -** The Largest Planet

**Saturn** - Rings of Beauty

**Uranus -** The Sidewise Planet

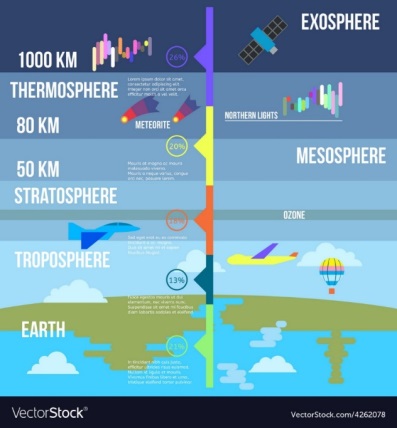
**Neptune -** The Farthest Planet

**Earth -** Our Mother Planet

**Eclipses**

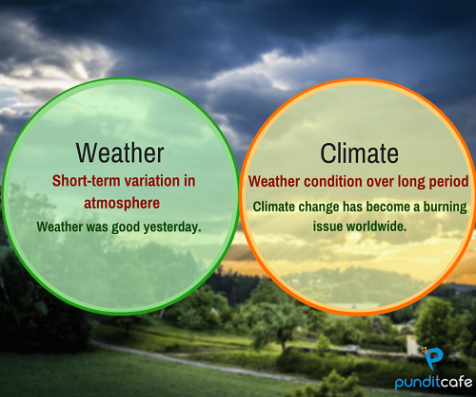
-When the Sun’s light falls on the Earth and the Moon, their shadows are formed and they cause eclipses.

**Layers of the Atmosphere**



**The Greenhouse Effect**

**Weather and Climate**



**Weather and Climate**

**Weather**

-refers to the state of the atmosphere at any given time and place.

-Elements of weather include temperature, pressure, humidity, velocity and direction of wind, cloudiness and precipitation.

**Climate**

-is the average condition of the atmosphere based on weather observations over a long period of time.

**Factors that affect climate**

**Latitude**

-As latitude increases, the intensity of solar energy decreases. Temperature decreases as latitude increase

**Elevation or Altitude**

-the higher the elevation is, the colder the climate

**Topography**

-topographic features such as mountains and valleys play an important role in the amount of precipitation that falls in an area

**Bodies of water**

-large bodies of water affect the temperature of an area. The temperature of water affects the temperature of the air above it.

**Atmospheric Circulation**

-global wind patterns influences climate since they distribute heat and moisture around the Earth.

**Monsoons**

**Sea Breeze**

-Air over land is warmer than over the sea

Occurs during the day

**Land Breeze**

-Air over the sea is warmer than on land

Occurs during the night

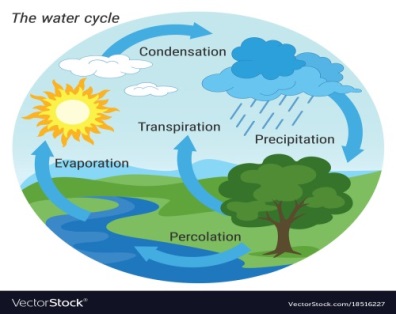
**Northeast Monsoon (Amihan)**

-November – April

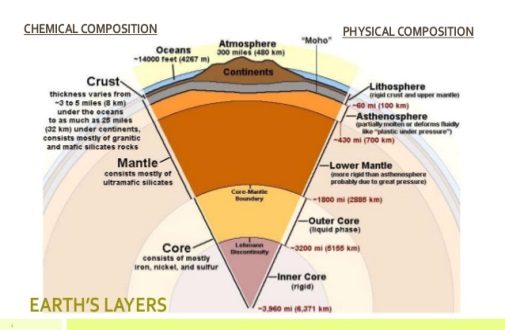
**Southwest Monsoon (Habagat)**

-May – October

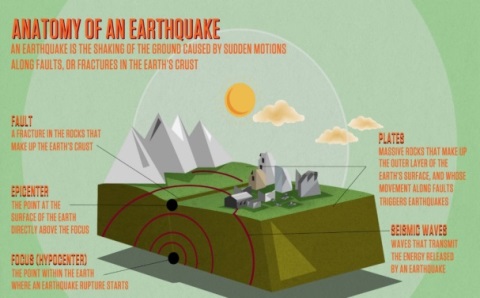
**Water Cycle**



**Layers of the Earth**



**Earthquakes and Movement of Plates**



**SCIENTISTS: THEIR WORK AND DISCOVERIES**

**PIERRE AND MARIE CURIE**- discovered radium and polonium

**MARIE CURIE**- 1st woman to win 2 Nobel prizes

**ANTOINE BECQUEREL**- discovered radioactivity

**WILLIAM ROENTGEN**- X-rays

**JOHN DALTON**- Atomic Theory

**ALBRECHT VAN HALLER**- father of experimental physiology

**JOSEPH JOHN THOMSON**- discovered electrons

**ALBERT EINSTEIN**- Theory of Relativity

**ISAAC NEWTON**- Law of Gravitation / Laws of Motion

**ARISTOTLE**- Father of Biology

**GREGOR MENDEL**- Father of Genetics

**PTOLEMY**- Geocentric Model

**COPERNICUS**- Heliocentric Model

**ROBERT HOOKE**- Father of Cytology

**HIPPOCRATES**- Father of Medicine

**AMADEO AVOGADRO**- Mole, amount of particles of matter

**ANTON LAVOISIER-** Law of Conservation of Mass

**JAMES CHADWICK**- Discovered the Neutron

**CHARLES**- evolution

**MICHAEL FARADAY**- Electromagnetic induction

**ALEXANDER FLEMMING-** Penicillin

**ERNEST RUTHERFORD-** Discovered nucleus

**FILIPINO**

**KAHULUGAN NG WIKA**

**HENRY GLEASON**

-Ang wika ay masistemang balangkas na sinasalitang tunog na pinili at isinaayos sa paraang arbitraryo.

**EDWARD SAPIR**

-likas at makataong pamamaraan

**CAROLL**

-sistema ng mga sagisag

**TODD**

-ginagamit sa komunikasyon

**ARCHIBALD A HILL**

-pangunahin at pinakaelaboreyt

**KATANGIAN NG WIKA**

**1. MASISTEMANG BALANGKAS**

-may organisasyon/pagkasunod sunod

**2. SINASALITANG TUNOG**

-nagdadala ng mga kahulugan

**3. PINILI AT ISINAAYOS**

-pinagkakaunawaan at pagkakaintindihan

**4. ARBITRARYO**

-napagkakasunduan

**5. MAGAMIT**

-ang wika ay dapat magamit ng tao upang hindi mamatay

**6. KULTURA**

-magkabuhol

**7. TAO**

-gumagamit ng wika

**8. DAYNAMIKO**

-ang wika ay nagbabago

**9. LIKAS**

-kusang natututunan

**TEORYA NG PINAGMULAN NG WIKA**

**TORE NI BABEL**- bibliya

**BOW WOW**- tunog ng kalikasan

**DING DONG**- bagay na walang buhay

**YOHEHO**- pwersang pisikal

**POOH POOH**- masidhing damdamin

**YUM YUM**- dila, tunog ng tiyan

**TATA**- kumpas ng kamay

**TARARA BOOM DE AY**- sayaw at ritwal

**COO COO**- sanggol

**MAMA**- bulalas ng sanggol

**TUNGKULIN NG WIKA**

**INTERAKSYUNAL**

-pagpapanatili ng ugnayan at relasyong sosyal

-pagbati

**INSTRUMENTAL**

-tumutugon sa pangangailangan

**REGULATORI**

-kumukontrol o gumagabay sa kilos ng tao

**PERSONAL**

-pagpapahayag ng sariling damdamin o opinion

**IMAJINATIV**

-malikhaing pagpapahayag ng saloobin

**HEURISTIKO**

-paghahanap ng impormasyon

**INFORMATIV**

-nagbibigay ng impormasyon

GAMIT NG WIKA

EMOTIVE

-damdamin/nararamdaman

CONATIVE

-panghihimok/nanghihikayat

PHATIC

-nagsisimula ng ugnayan

REFERENTIAL

-paggamit bilang sanggunian

METALINGGUAL

-pagpapahayag ng kuro-kuro

POETIC

-patalinhagang pagpapahayag

**ANTAS NG WIKA**

**PORMAL**

**1. PAMPANITIKAN/ PANSEMANTIKA/ PANGRETORIKA**

-pormal at matalinghaga

**2. PANTEKNIKAL**

-agham at matematika

**3. PAMBANSA**

-hindi matalinghaga

-ginagamit sa diksyunaryo

**DI-PORMAL**

**1. LALAWIGANIN**

-rehiyonal

-halimbawa ay kapampangan

**2. KOLOKYAL**

-pang araw-araw

-pinaiksi

-ginagamit sa mga text messages

**3. BALBAL**

-salitang pang kalye

-pagpapahaba at pagpapaiksi

**BARAYTI NG WIKA**

**DAYALEK**

-batay sa lugar o lalawigan

-heograpiko

**IDYOLEK**

-personal o natatanging paraan ng paggamit ng wika na nagsisilbing pagkakakilanlan ng isang tao

**SOSYOLEK**

-nabubuo sa dimensyong sosyal

-bayan o lungsod

**ETNOLEK**

-etnolinggwistikong grupo

**PIDGIN**

-wikang putol-putol na walang istruktura

**CREOLE**

-wikang nadevelop mula sa pidgin

**REGISTER**

-tiyak na konteksto

**JARGON**

-natatanging larangan

-propesyonal

**MAHAHALAGANG TAON**

**1935**- hakbang pa lamang ang lahat

**1936**- SWP o Surian ng Wikang Pambansa

**1937**- ibinase sa Tagalog

**1940**

-nabuo ang aklat

-Abakadang Tagalog

-itinuro ang Tagalog sa mga paaralan

**1959**- Pilipino

**1967**

-Marcos regime

-gusali at mga tanggapan

**1971**

-Official gazette

-English and Filipino

-Linggo ng Wika

**1972**- Saligang Batas isinalin

**1974**

-KP 125 English-Filipino

-Bilingual Education

**1978**

-Seminars

-Filipino Curriculum

**1987**

-Aquino

-Linangan ng mga Wika sa Pilipinas

**1989**

-KT 335 DECS gamitin ang Filipino

**1990**- KP 21 Panunumpa

**1991**

-Komisyon sa Wikang Filipino KWF

-Arthur Cassanova

**1996**

-CHED memorandum 59

-mandatory 6 units in college

**1997**

-Ramos

-Buwan ng Wika

**2001**

-mas mahabang rebisyon

-28 letters alphabet

**2009**- gabay sa organisasyon

**KASAYSAYAN NG WIKANG PAMBANSA**

**BAYBAYIN**

-17 titik (3 patinig, 14 katinig)

**ABECEDARIO**

-kastila

-30 letters (5 patinig, 25 katinig)

**ABAKADA**

-Amerikano

-2o letters (5 patinig, 15 katinig)

**BAGONG ALPABETO**

-Filipino (1976)

-31 letters

**ALPABETONG FILIPINO**

-1987

-28 letters (5 patinig, 23 katinig)

**DOCTRINA CHRISTIANA** – 1st book

**NUESTRA SENYORA DEL ROSARIO** – 2nd book

**VOCABOLARIA DELA LENGUA TAGALA** – unang librong pangwika

**ALIBATA**

-17 letters (14 katinig, 3 patinig)

**KONSEPTONG PANGWIKA**

**MONOLINGGWAL** – isang wika

**BILINGGWAL** – dalawang wika

**MULTILINGGWAL** – ibat ibang wika

**MTB** – unang wikang ginamit

**PURISMO** – iniiwasan ang panghihiram ng salitang banyaga

**PAMBANSANG WIKA** – wikang ginagamit ng lahat ng mamamayan sa isang bansa

**WIKANG PANTURO** – midyum o daluyan sa pagtuturo

**AUXULLIARY LANGUAGES** – wikang pantulong

**ISTRUKTURA NG WIKANG FILIPINO**

**PONOLOHIYA o Palatunugan**

-pag aaral ng mga tubnog

**PONEMA**

-pinakamaliit na yunit ng tunog

-21 tunog (20 segmental, 1 glottal)

**1. SEGMENTAL**

-tunog na may katumbas na titik

**2. SUPRASEGMENTAL**

-tunog na walang katumbas

**TONO** – taas at pagbaba

**DIIN** – lakas at hina

**HABA** – iksi o haba

**ANTALA** – saglit na paghinto

**KLASTER**

-kambal katinig

-pluma, dyaryo, tsuper

**DIPTONGGO**

-bahay, baboy, ikaw

**MORPOLOHIYA o Palabuuan**

-pagbuo ng mga salita

**MORPEMA**

-pinakamaliit nay unit ng salita

**PANGNILALAMAN**

**1. PANGNGALAN (NOUN)**

-tumutukoy sa ngalan ng tao, bagay, hayop

**Pantangi** – particular at tiyak

**Pambalana** – pangkalahatan

**Tahas/Concrete** – nahahawakan

**Basal/Abstract** – isip

**Payak** – binubuo ng salitang ugat

**Maylapi** – pangalan na binubuo ng salitang ugat

**2. PANGHALIP (PRONOUN**)

**Panao** – tao

**Pamatnig** – nagtutukoy/nagtuturo

**Panaklaw** - +man

**Pananong** – nagtatanong

**3. PANDIWA (VERB)**

-nagpapakita ng kilos at gawa

**Pokus** – paksa (subject)

**Kaganapan** – panaguri (predicate)

**Tagaganap** – sino? Kumikilos sa pandiwa

Layon – ano? Binibigyang diin ang pandiwa

**Tagatanggap** – para kanino?

**Kagamitan** – sa pamamagitan ng ano? Gamit ang ano?

**BOKABULARYO**

**BUWAYA SA KATIHAN**- traydor

**INALAT**- minalas

**BAHAG ANG BUNTOT**- duwag

**LINANGAN**- unibersidad

**AMOY LUPA**- matanda

**A STITCH IN TIME SAVES NINE**- maagap

**A STORM IN A TEA CUP**- balewala

**YOU CAN COUNT ON ME**- maaasahan mo ako

**WASTE NOT, WANT NOT**- magtipid

**MAKING BOTH ENDS MEET**- di mapagkasya

**BANK ACCOUNT IS IN THE RED**- malapit ng maubos

**CREATING A MOUNTAIN OUT OF A MOLE**- eksaherada

**YOU ARE THE APPLE OF MY EYE**- ikaw ay mahalaga sakin

**SALAWIKAIN**

-explicitly

-malalim

**KASABIHAN**

-may particular na taong nagsabi nito

-literal

**SAWIKAIN**

-idiomatic expressions

**KAWIKAAN**

-bible verse

**MGA URI NG TAYUTAY**

1. PAGTUTULAD (SIMILE)

2. PAGWAWANGIS (METAPHOR)

3. PAGBIBIGAY KATAUHAN (PERSONIFICATION)

4. PAGMAMALABIS (HYPERBOLE)

5. PAGPAPALIT TAWAG (METONYMY)

6. PAGPAPALIT SAKLAW (SYNECDOCHE)

7. PAGTAWAG (APOSTROPHE)

8. OKSIMORON

9. PARALELISMO

**LITERAL**

-payak na pagsasalin ng bawat salita

**ADAPTASYON**

-hiram na salita ay pinapanatili ang baybay

**IDYOMATIKO**

-ginagamitan ng tayutay

**MALAYA**

-walang control, maaaring magdagdag at magbawas ng salita

**ELEMENTO NG TULA**

**1. SUKAT** – bilang

**2. TUGMA** – pagkakahawig

**3. KARIKTAN** – malikhaing pagpili ng salita

**4. INDAYOG** – pagiging madulas ng bigkas

**5. TALINGHAGA** – lalim

**6. LARAWANG DIWA** – imagery

**TULANG PASALAYSAY**

-may kwento at plot

**1. EPIKO**

-kwentong kabayanihan

-Maharlikang bida

-Di kapani-paniwala

-pagkahaba haba

**2. BALADA**

-karaniwan/ordinary

-real life

-maiksi

**TULANG LIRIKO**

**1. AWIT** – 12, Florante at Laura

**2. KORIDO** – 8, Ibong Adarna

**3. SONETO** – 14 lines

**4. ELEHIYA** – pagluluksa

**5. ODA** – paghanga

**6. KUNDIMAN** – panligaw

**7. OYAYI/HELE** – pagpapatulog sa bata

**8. DALIT O IMNO** – papuri sa diyos

**9. TALINDAW** – pamamangka

**10. KUMINTANG** – pakikidigma

**11. DIONA** – kasal sa bisaya

**12. SOLIRANIN** – pangingisda

**13. SAMBOTAN** – pagtatagumpay

**14. BALITAAN** – awit ng pag ibig (bisaya)

**15. DUNG-AW** – awit sa patay (ilokano)

**16. KUTANG KUTANG** – awit sa lansangan

**17. MALUWAY** – awit sa sama samang gawa

**18. TIGPASIN** – awit sa paggaod (to move on)

**MAIKLING KWENTO**

**1. KWENTO NG KATAUHAN**

-main character

**2. KWENTO NG MADULANG PANGYAYARI**

-life changing

**3. KWENTO NG KATUTUBONG KULAY**

-culture

**4. KWENTO NG KABABALAGHAN**

-horror

**DULA**

**1. KOMEDYA** – happy ending

**2. TRAHEDYA** – mabigat, death of characters

**3. MELODRAMA** – mabigat, happy ending

**4. TRAGIKOMEDYA** – pagkapuksa sa dulo

**5. PARSA** – exaggeration

**6. SAYNETE** – situation

**DULANG PANRELIHIYON**

**1. PANUNULUYAN** – Joseph & Mary

**2. FLORES DE MAYO** – pag aalay ng bulaklak

**3. SENAKULO** – pagpapasakit kay Kristo

**4. SALUBONG** – muling pagkabuhay

**5. TIBAG** – paghahanap ni Maria

**6. MORO MORO** – labang ng Christiano at Muslim

**7. SARSWELA** – musical

**NOBELA**

-may kabanata/chapters

-tagni tagning pangyayari

**1. NOLI ME TANGERE** – 63 chapters

**2. EL FILIBUSTERISMO** – 39 chapters

**SANAYSAY**

**1. PORMAL O MAANYO**

-very strict

-akademikong sulatin

**2. DI PORMAL O DI MAANYO**

-mailkhain

-personal/opinions

**TALUMPATI**

1. mangatwiran

2. manghikayat

3. magbigay-kaalaman

**PABULA**

-hayop ang mga tauhan

-nagbibigay ng aral

-pambata

**PARABULA**

-mula sa bibliya

-butil ng karunungan

**ALAMAT**

-pinagmulan ng mga bagay-bagay

**MITO**

-kwento ng mga kababalaghan tungkol sa Diyos at Diyosa

**ANEKDOTA**

-kakaiba at katatwang pangyayari ng isang kilalang tao

**PANITIKAN**

**PRE-KOLONYAL**

-kwentong bitbit (salin dila)

-bulong

-bugtong

-karagatan

-duplo (lamay)

**KASTILA**

-Balagtasan

-Bulaklak ng lahing kalinis linisan (unang balagtasan)

-Batutian – tagalog

-Bukanegan – ilokano

-Crisotan – kapampangan

**MGA PANITIKANG PANGKAASALAN**

-pasyon

-Doctrina Christiana

-Urbana at Feliza

**MGA PANITIKANG REBOLUSYONARYO**

-Andres Bonifacio – Ama ng Lupang Tinubuan

-Emilio Jacinto – Kartilya

-Apolinario Mabini

-Padre Pedro Pelaez – Ninay

**AMERIKANO**

-Dulang Sedisyoso

-Bodabil – American counterpart of sarswela

-Atang Delarama – Reyna ng Bodabil

-Kahapon, Ngayon at Bukas – Aurello Tolentino

**HAPON**

-Ginintuang Panahon

-Tanaga 7777=28 syllables

-Haiku 575=17 syllables

**PANAHONG KONTEMPORARYO**

-romansa

-kalagayang panlipunan

**GENOVEVA EDROZA MATUTE** – hall of famer, 1957 1st prize

**ROGELIO SIKAT** – Impeng Negro

**ROGELIO MANGAHAS** – Duguang Plakard 1974

**EFREN ABUEG** – Mabangis na Lungsod

**LIWAYWAYARCEO** – Titser

**LAZARO FRANCISCO** – Maganda pa ang daigdig

**NARCISO G. REYES** – Lupang Tinubuan

**EDGARDO M. REYES** – Sa kuko ng Liwanag

**RUTH ELYNIA S. MABANGLO** – Unang Ulan

**NILO PAR PAMONAG** – Miliminas taong 0069

**PAUL DUMOL** – Ang paglilitis kay Mang Serapio

**FANNY GARCIA** – Isang Daang Damit

**PEDAGOHIYA**

|  |  |
| --- | --- |
| RECEPTIVE | PRODUCTIVE |
| Pakikinig | Pagsasalita |
| Pagbasa | Pagsulat |
| Panonood | Pagtatanghal |

**PAKIKINIG**

**URI NG TAGAPAKINIG**

**1. EAGER BEAVER** – ngiti ng ngiti

**2. TIGER** – hinintay na magkamali

**3. SLEEPER** – tahimik sa sulok

**4. BEWILDERED** – kumukunot ang noo walang maintindihan

**5. FROWNER** – naghihintay ng oportunidad na magtanong

**6. RELAXED** – walang interes

**7. BUSY BEE** – abala sa ibang bagay

**8. TWO-EARED LISTENER** – ginagamit ang tainga at utak

**URI NG PAKIKINIG**

**1. PASIBO** – may ibang ginagawa habang nakikinig

**2. AKTIBO** – nagpapahiwatig ng malamang pakikinig

**3. ATENTIBO** – handa sa maaaring maging tanong

**4. MAPANURI** – sinisiyasat ang bawat salita

**5. ANALITIKAL** – maaaring maunawa ang pinakikinggan

**6. KRITIKAL** – nagbibigay ng pagpapasaya sa napakinggan

**7. APRESYATIV** – naiuugnay ang napakinggan sa sarili

**8. KOMPATIB** – nakikipagtalo sa pinakikinggan

**MGA HADLANG SA EPEKTIBONG PAKIKINIG**

1. Pisikal na dahilan

2. Pagkiling sa sariling opinion

3. Maling pagpapakahulugan

4. Magkakaiba ng kultura

5. Ingay

**KASANGKAPAN SA PAGSASALITA**

1. Tinig o Boses

2. Bigkas at Artikulasyon

3. Tindig

4. Kumpas

**MGA SALIK SA PGASASALITA**

1. Paksa

2. Okasyon

3. Tagapakinig

**MGA URI NG TINIG**

1. NASAL – ilong

2. HUSKY – basag

3. SHRILL – high pitch

4. PLEASANT – maganda

**PANONOOD**

1. Linggwistiko

2. Sosyolinggwistiko

3. Pragmatik o Strategic

4. Diskorsal

**MGA URI NG PANONOOD**

**1. Diskriminatibo**

-paggamit ng opinion o prejudice

**2. Kaswal o Panlibang**

-panlibangan lamang

**3. Komprehensibo**

-nakatuon sa mensahe

**4. Kritikal**

-bumubuo ng sariling kahulugan

**PAGBASA**

**TEORYA**

-Ibaba Pataas (bottom up)

-Itaas Pababa (top down)

-Interaktibo

**PROSESO**

Persepsyon->Komprehensyon->Reaksyon->Asimilasyon

**IBAT IBANG URI NG TEKSTO**

**1. EKSPOSITORI** – magsiwalat ng kaalaman

**2. DESCRIPTIBO** – maglarawan

**3. NARATIBO** – magkwento

**4. ARGUMENTATIBO** – dalawang panig

**5. PERSWEYSIB** – isang panig ang focus

**6. PROSIDYURAL** – step by step

**MGA URI NG PAGSULAT**

**1. JOURNALISTIK** – balita

**2. MALIKHAIN** – tayutay, pampanitikan

**3. AKADEMIK** – intelektwal

**4. REPERENSYAL** – pinaghanguan

**5. TEKNIKAL** – tiyak na larangan

**PAMAMAHAYAG**

**1. ULO NG BALITA/HEADLINES**

**2. BALITA** – mahahalagang pangyayari

**3. LATHALIAN** – karagdagang interpretasyon sa pagsasaliksik/paraang kawili-wili

**4. EDITORYAL** – Pangulong Tudling – opinion sa isang issue

**5. KOLUM** – opinion ng manunulat lang

**6. PAMPALAKASAN** – sports and pageant

**7. PANLIBANGAN**- komiks, crosswords, sodoku, horoscope

**Lead**- first sentence/pamatnubay

1. KOMBENSYUNAL – date ang start

2. DI KOMBENSYUNAL – hindi date

**PANANALIKSIK**

Katangian

-tapat

-bukas ang isipan

-sistematiko

**BAHAGI NG PANANALIKSIK**

KABANATA I- Ang Suliranin at Kaligiran nito

KABANATA II- Mga Kaugnay na Pag-aaral at Literatura

KABANATA III- Metodolohiya o Pamamaraan

KABANATA V- Lagom, Kongklusyon at Rekomendasyon

**KABANATA I**

-Panimula – Kahalagan ng Pag-aaral

-Suliranin – Saklaw at Delimitasyon

-Layunin – Konseptwal na Balangkas

-Katuturan ng mga Katawagan

**KABANATA II**

-Pag aaral

-Literatura

**KABANATA III**

-Disenyo ng Pananaliksik

-lunan

-kalahok

-Instrumento

-Estradistika

-proseso

**KABANATA IV**

-tekstuwal

-grapikal

-tabular

**KABANATA V**

-lagom

-konklusyon

-rekomendasyon

**KOMUNIKASYON**

>TSANEL>

TAGAPAGHATID TAGATANGGAP

<FEEDBACK

**-PRETTY RIANNE SANTOS**

***PROFESSIONAL EDUCATION***

**LEARNING**

**Cognitivism**

-mind

-internal

-not observable

-acquisition of skills

**Behaviorism**

-behavior

-observable

-conducive environment

-external

**THEORY OF BEHAVIORISM**

**1. CLASSICAL CONDITIONING** - **Ivan Petrovich Pavlov**

**3 STAGES (before, during and after)**

Stimulus- trigger reaction

Reaction- response

**3 TYPES OF STIMULUS**

1. Neutral- no reaction

2. Unconditioned- unconditioned response

3. Conditioned- conditioned response

**PRINCIPLES OF CLASSICAL CONDITIONING**

1. Generalization- nilahat

2. Extinction- nawala

3. Spontaneous Recovery- bumalik

4. Discrimination- natuto

5. Higher Order Conditioning- pinalitan

6. Adhesive- magkadikit

7. Principle Excitation- nalipat

**2 TYPES OF LEARNER**

1. Expert

-deeper knowledge

-High standards

2. Novice

-limited knowledge

-mediocre

**2. OPERANT/INSTRUMENT CONDITIONING - BF Skinner**

-based on the association of consequences to one’s behavior.

Reinforcer (reward)- something that increases the like hood of behavior.

**REINFORCEMENT**

2 TYPES

**1. Positive**- adds something pleasant.

1. Verbal

2. Physical

3. Non-verbal

4. Activity

5. Token

6. Consumable

**2. Negative**- takes away something unpleasant.

**2 TYPES OF PUNISHMENT**

1. Positive- may binigay ka na ayaw nya

2. Negative- may tatanggalin ka

**PRINCIPLES OF OPERANT CONDITIONING**

1. Shaping- reinforcing successive steps

2. Chaining- reinforcing series of behavior

3. Extinction- no longer reinforced

**SCHEDULE OF REINFORCEMENT**

**2 Major Divisions**

1. Continuous Reinforcement (lahat)

2. Partial- some correct responses

a. Fixed- (every 5 minutes)

b. Variable- (average amount of time)

c. Fixed-ratio (correct responses)

d. Variable-ratio (average of responses)

**3. INFORMATION PROCESSING THEORY** - **Richard Atkinson and Richard Shiffrin**

Memory System

Sensory

**Short term**

-small capacity

-short duration

**Long term**

-semantic

-episodic

-procedural

Chunking- increased capacity of STM.

Rehearsal- through repetition of information.

**\*ASEAN COUNTRIES**

(MyThai SiLa Bru MaCa InViPhi)

-Myanmar -Thailand

-Singapore -Laos

-Brunei -Malaysia

-Cambodia -Indonesia

-Vietnam -Philippines

**FORGETTING**

Decay- memory becomes eroded because we have not used it.

Displacement- items are pushed out by others.

Recall task findings

1. Primary effect (first)

2. Recency effect (latest)

Interference LTM

1. Proactive Interference

2. Retroactive Interference

**JOHN B. WATSON**

-father of behaviorism

-experiment on Albert (bata)

-understanding emotions

**4. CONNECTIONISM - Edward Lee Thorndike**

**MAJOR LAWS OF LEARNING**

**1. Law of Readiness**

- The learner should be biologically prepared.

**2. Law of Exercise**

- Practice alone is not enough for improvement.

**3. Law of Effect**

S-R strengthened=positive

S-R weakened=negative

\*Law of Belongingness- paired stimuli

\*Law of Multiple Response- different reaction

\*Law of Frequency- often

\*Law of Contiguity- events occur together

**NEW TYPE OF BEHAVIORISM**

**1. NEO BEHAVIORISM**

-link between behaviorism and cognitive

**PURPOSIVE LEARNING THEORY- Edward Tolman**

**SOCIAL LEARNING THEORY - Albert Bandura**

**4 STAGES OF MODELING**

1. Attention

2. Retention

3. Motor Reproduction

4. Motivation

**ALBERT BANDURA**

-vicarious learning

-Bobo doll

-people learn through observation, simulation, and modeling.

**2. GESTALT THEORY** “discovery learning”

- **Marx Wertheimer, Wolfgang Kohler and Kurt Koffka**.

**3. WOLFGANG KOHLER’S INSIGHT LEARNING**

-discovery learning

-experimented on apes (Sultan)

**4. DAVID AUSUBEL’S MEANINGFUL LEARNING THEORY**

-occurs when new experiences are related to what a learner already knows.

**ADVANCE ORGANIZERS**

1. Expository

2. Narrative

3. Skimming

4. Graphic Organizers (fish bone, Venn diagram)

**5. ROBERT GAGNE’S CUMMULATIVE THEORY**

\*9 Events of Instruction

1. Gaining attention

2. Informing learner of objectives

3. Recalling Prior Knowledge

4. Presenting Material

5. Providing Guided Learning

6. Eliciting Performance

7. Providing Feedback

8. Assessing Performance

9. Enhancing Retention and Transform

**COGNITIVE PROCESS**

-constructivism

-Bloom’s taxonomy

-metacognition

-transfer of learning

**6. JEROME BRUNER’S THEORY OF INSTRUCTION**

-instrumental conceptualism

-learning by discovering the solution

-spiral curriculum

\*Representations of Knowledge

3. Symbolic= words

2. Iconic= model/picture

1. Enactive= physical objects

Judge= evaluation

Take apart, examine, compare= analysis

Describe, retell, explain= comprehension

Combine, formulate, design= synthesis

Use, work with, utilize= application

Enumerate, list, define= knowledge

Design, invent, imagine= creating

Recall, name, list= remembering

Separate, compare, organize= analyzing

Assess, judge, appraise= evaluation

Explain, discuss, define= understanding

**MOTIVATION**

Extrinsic- long lasting

Intrinsic- much better

Bernard Weiner’s Attribution Theory

Self Determination Theory

**COGNITIVE DEVELOPMENT THEORY**

-Jean Piaget

Assimilation- acquiring knowledge

Accommodation- modify

**STAGES OF COGNITIVE DEVELOPMENT**

**1. Sensory motor stage**

-reflexes

-grasping reflex

-sucking reflex

-curling reflex

-rooting reflex

-balance reflex

**2. Pre-Operational**

-illogical thinking

Characteristics

1. Animism- kumakausap ng toy

2. Ego centrism- selfishness

3. Symbol function- symbols

4. Centration- seeing one only aspect

**3. Concrete-Operational Stage**

-decentration

-elimination of ego-centrism

-conservation

**4. Formal Operational Stage**

-the use of hypothesis

**SELF-DETERMINATION THEORY**

**Factors affecting Self-Determination**

**-**Choices

-Threats and deadlines

-Controlling statements

-Extrinsic rewards

-Surveillance and evaluation.

**THE TEACHING PROFESSION**

**ELEMENTS OF A PROFESSION**

1. Initial Professional Education

2. Accreditation

3. Licensing- privilege

4. Professional Development

5. Professional Organization

6. Code of Ethics

**LAWS ON THE PROFESSIONALIZATION OF TEACHING**

**PD 1006**

-PBET

-1977

-70 passing rate

**RA 7836**

-PRC

-75 passing rate

-LET

-1996

**RA 9293**

-Para teachers

-no license

-special permit 2 years

-4 year service

**RA 10912**

-CPD Law

**PPST**: The new **NCBTS**

**“PHILIPPINE PROFESSIONAL STANDARDS FOR TEACHERS”**

1. Content Knowledge and Pedagogy

2. Learning environment

3. Diversity of Learners

4. Curriculum of Learners

5. Assessment and Reporting

6. Community Linkages and Professional Engagement

7. Personal Growth and Professional Development

**PHILIPPINE QUALIFICATIONS FRAMEWORK**

1. NCI

2. NCII

3. NCIII

4. NCIV

5. DIPLOMA

6. BACHELOR’S DEGREE

7. MASTER’S DEGREE

8. DOCTORAL

**RA 10931**

-Free Tertiary Education

**ARTICLE XIV OF 1987 PHILIPPINE CONSTITUTION**

1. Free Public Education

2. Compulsory Education

3. Learning System

4. Religious Instruction

5. Ownership of Educational Institution

6. Number of Foreign Students

7. Academic Freedom

8. Budget for Education

9. Language

**RA 11713**

-Teacher Education of Center Excellence Act

**NEAP**- National Educators Academy of the Philippines.

**K-12 GRADING SYSTEM**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Language, ESP, AP | Science, Math | Mapeh, TLE |
| Written Work | 30% | 40% | 20% |
| Performance Task | 50% | 40% | 60% |
| Quarterly Assessment | 20% | 20% | 20% |

1. No numerical grades for Kindergarten

2. Minimum initial grade of 60 to pass

3. Minimum quarterly/ final grade of 75 to pass

4. Floor grade for quarterly/ final grade is 60.

OUTSTANDING 90-100

VERY OUTSTANDING 85-89

SATISFACTORY 80-84

FAIRLY SATISFACTORY 75-79

DID NOT MEET EXPECTATION BELOW 75

**STRUCTURE OF LANGUAGE**

1. Phonology- sounds

2. Morphology- root words

3. Semantics- meaning of words

4. Syntax- grammars

5. Pragmatics- context

**PRINCIPLES OF TEACHING AND LEARNING**

Quality Teacher Indicator

Content Knowledge- mastery

Pedagogical Knowledge- methods, strategies and techniques.

Pedagogical Content Knowledge- suitable

**FIVE KEY BEHAVIORS CONTRIBUTING TO EFFECTIVE TEACHING**

A. Lesson Clarity

B. Instructional Variety

C. Teacher Task Orientation

D. Engagement in the Learning Process

E. Student’s Success Rate

**INSTRUCTIONAL PLANNING**

Lesson Plan- the instructor’s road map

(OSLEA)

1. Objectives- learning goals

2. Subject Matter- topic

3. Learning Activities- prayer, checking of attendance, review etc.

4. Evaluation- assess

5. Assignment- supplement

**TAXONOMY OF OBJECTIVES**

Cognitive- mental abilities

Affective- emotional

Psychomotor- skills

**COGNITIVE DOMAIN**

|  |  |  |
| --- | --- | --- |
| Original (Bloom) | Revised |  |
| Knowledge | Remebering | Recognizing, recalling |
| Comprehension | Understanding | Interpreting, exemplifying, comparison |
| Application | Applying | Executing, implementing |
| Analysis | Analyzing | Differentiating, organizing |
| Synthesis | Evaluating | Checking, critiquing |
| Evaluation | Creating | Generating, planning, producing |

**AFFECTIVE DOMAIN**

Receiving- perceive

Responding- react

Valuing- show

Organization- priority

Characterization- habitual

**PSYCHOMOTOR DOMAIN**

Perception- sensory cues/perceived

Set- prepare

Guided Response- mimicking/imitation

Mechanism- basic skills

Complex Overt Response-

Adaptation- modify

Origination- create

**PRINCIPLES IN SELECTION OF LEARNING MATERIALS**

-aids to instruction

-they do not replace the teacher

-best suits your objectives

-use variety of tools (audio visual aids)

-check out before class starts.

**PRINCIPLES IN DETERMINING LEARNING ACTIVITIES**

-learners must profit from the experience

-must provide for the experience

-must be authentic and contextualized

-must challenge the learners to ask questions

-must provide opportunities for content mastery

**TYPES OF INSTRUCTIONAL MATERIALS**

Print- textbooks, pamphlets, handouts, study guides, manuals

Audio- cassettes, microphones, podcast

Visuals- charts, real object, photographs

Audio visual- slides, tapes, films, filmstrips

Electronic Interactive- computers, calculators, tablets

**PRINCIPLES UNDERLYING**

Approach- viewpoint

Strategy- long term plan, list of concepts/duration

Method- step by step process/procedure

Technique- way of teaching, personal touch

**GENERAL APPROACHES TO TEACHING**

|  |  |
| --- | --- |
| TEACHER-CENTERED | STUDENT-CENTERED |
| Subject matter centered | Learner centered |
| Teacher dominated | interactive |
| Banking approach | constructivist |
| disciplinal | integrated |
| individualistic | collaborative |
| Direct-passive | Indirect-active |

**PRINCIPLE IN CHOOSING A METHOD**

1. Utilize the laws of learning

2. Start from what is known already to the students

3. Provide the learners with numerous and diverse learning

4. Provide opportunity for the learner to ask and answer question.

**DIFFERENT METHODS**

|  |  |
| --- | --- |
| EXPOSITORY (teacher-centered) | EXPLORATORY (learner-centered) |
| Less student involvement | High student involvement |
| Deductive method- general to specific | Inductive method- specific to general |
| Less delivery time | More delivery time |

**DIFFERENT STRATEGIES**

Problem-based- scientific method used

Project-based- end product

Constructivism- related prior knowledge

Metacognitive- thinking about thinking

Reflective- apply/teaching and learning

Cooperative- teach in group

**MULTIPLE INTELLIGENCE BY HOWARD GARDNER** (INVISBLEM)

Intrapersonal- self smart

Naturalist- nature smart

Verbal linguistic- word smart

Interpersonal- people smart

Spatial Visual- picture smart

Bodily Kinesthetic- body smart

Logical mathematical- number smart

Existential- life smart

Musical- sounds smart

**TYPES OF PROCEDURE**

A. Panel- 5 to 6 members

B. Symposium- 2 to 3, formal, social and academic issues

C. Debate- opposing ideas

D. Round table- own viewpoints

Art of Questioning- to make the student think

**TYPES OF QUESTIONS**

\*according to the thinking process

Low Level- what, where, when

High Level- HOTS

\*According to the purpose of answering during an open discussion.

Convergent- specific answer

Divergent- open ended

\*according to the purpose of the teacher

Eliciting- answer immediately

Probing- follow up question, take stand

Closure seeking-

**4 MISTAKEN GOALS/HIDDEN GOALS**

**1. Attention Seeking**- special treatment “notice me”

**2. Power Getting**- gets bossy “I want to help”

**3. Revenge Seeking**- violent, hurt others “I am hurt”

**4. Isolation/Withdrawal/Assumed Inadequacy**- refuses to participate “Guide me, Push me, Reassure me”

**MANAGEMENT OF TIME**

Mandated time- school year

Allocated time- schedule of students

Academic Instructional time- teaching time

Academic engage time- students are making activities

**ROUTINE**

-attendance, distribution of materials, in and out.

-established in first day.

**TYPES OF CONTROL**

Preventive- establish rules

Supported- signal, non-verbal

Corrective-

**TEACHER PITFALLS THAT AFFECT MANAGEMENT**

**JACOB KOUNIN-** classroom management

**Withitness**- eyes at the back, see the four corners of the room.

**Stimulus bounded**- gets easily distracted

**Thrust**- students are not ready, surprise quiz

**Dangling**- topic hang

**\*Truncation**- not able to return

**\*Flip-flop**- 2 topics and able to return

**Overlapping**- multi tasking

**Ripple effect**- escalating, domino effect

**Over dwelling**- matagal magturo

**Fragmentation**- hinati

**Jerkiness**- no momentum and no smoothness

**MANAGING SURFACE BEHAVIOR**

**Planned Ignoring**- hindi papansinin

**Signal Interference**- nonverbal cues

**Proximity Control**- lalapit sa bata

**Antiseptic Bouncing**- papalabasin

**Removal of Seductive Object**- tatanggalin

**Hurdle help**- need assistance

**Direct appeal**- confront

**PPPF (NAGEL AND SMITH)**

Prepare yourself

Prepare your students

Present the materials

Follow up

**MOTIVATION-** driving force

1. Extrinsic Motivation- external source, reward

2. Intrinsic Motivation- one’s own goal

**SOCIAL DIMENSIONS OF EDUCATION**

Code of Ethics- roles and obligations

Functionalism

-anong ambag mo sa society?

-Skills-anong kaya mong gawin?

-Cohesion- unity

**FUNCTIONS OF A SCHOOL**

**Social**- placement, socialization, integration

**Economic**- productivity (applied skills), creativity (imaginations), progress (new ideas)

**Cultural**- differences, similarity, harmony, preserve, change

**Political**- patriotism (love and loyalty for the country) Authority, harmony, change

Authority- government

Batas- to solve societal issues/crisis.

**Xenocentrism**- view others superior than yours (Colonial Mentality)

**Ethnocentrism**- mas mataas ka kesa sa iba.

**Culture**- way of life/living.

**CULTURE TRANSFER**

**Enculturation**- sariling kultura

**Acculturation**- natutunan ang kultura ng iba

**Accomodation**- both culture ay pinractice

**Assimilation**- kinalimutan ang dating kultura

**Immersion**- contextual

**Animism**- supernatural things

**Euphemism**- pinapaganda ang salita/sitwasyon.

**Fatalism**- masyadong negative

**Optimism**- masyadong positive

**Rationalism**- lahat ng bagay may rason.

**NEGATIVE SOCIAL TRAITS**

**Stereotype**- negative thinking

**Prejudice**- negative feeling

**Discrimination**- negative action

**Talangka Mentality**- nanghihila ng nakakaangat

**Ningas Cogon**- magaling sa umpisa

**Manana Habit**- mamaya na

**Split Personality**- iniiba ang personality

**Kanya kanya Syndrome**- kung ano lang sayo yun lang ang papakealaman mo.

**Superficial Religiosity**- puro dasal, walang gawa

**AMBIVALENT SOCIAL TRAITS**

**Extreme Personalism**- masyadong namemersonal, family centered

**Utang na loob**- kailangan ibalik

**Bahala Na**- Si God na ang bahala

**Pakikisama**- foster harmony, fit majority

**PERSONAL VALUES**

**Resilience**- ability to recover immediately

**Tolerance**- accept diversity

**Emotional Stability**- control emotion

**Drive**- motivation

**Fair**- objective and consistent

**Buoyancy**- ability to smile despite of difficulty

**Cooperativeness**- ability to work well with others

**Intelligence**- knowledge

**Self Confidence**- trust one’s ability

**Innovativeness**- making original and new ideas

**Reliability**- trustworthy

**UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION**

-International Cooperation

-Jacques Delors

-International Commission on Education for the 21st century.

-Learning the treasure within (report)

-4 Pillars of Learning (content)

**5 PILLARS OF LEARNING**

Learning to know- gaining information

Learning to do- applying what you know

Learning to be- self-development (holistic development)

Learning to live together- society, diversity, respect and harmony

Learning to transform- highest, change, sustainability

**RIGHTS OF A CHILD**

Life- (abortion issue)

Acquire- name, nationality and parents

Not separated- from parents

Views- free express of opinions

Privacy- protection

Access- any documents relating to him

Parents- prime responsibility

Protect- against violence

Health and Education- free access

Culture- freedom to practice and enjoy

Leisure- enjoy, play

Crime- not life imprisonment and not capital punishment

A nation’s culture resides in the hearts and in the soul of its people. (Culture is not just on material things)

A people without knowledge of their past history, origin and culture is like tree without roots. (Cultural identity)

Alone we can do much but together we can do so much. (Cultural cooperativeness)

Be careful who you hate, it could be someone you love. (openmindness to other culture)

Culture of the mind must be subservient to the heart. (Love for culture)

Culture: the cry of men in face of their destiny. (Cultural identity)

Different roads sometimes lead to the same castle. (Unity amid cultural diversity)

Diversity count friends not skin color. (Cultural diversity)

It’s not a sin or a crime to be different. (Cultural diversity)

Our true nationality is mankind. (The cosmopolitan man)

**EFA- Education For All**

-access and inclusivity

Values Education- good useful and valuable

ESD- Education for Sustainable Development

Multiculturalism- diversity and similarities

**TYPES OF EDUCATION**

**Environmental Education**- problem, solution, implements

**Human Rights Education**- freedom

**Global Education**- diversity and similarity

Localization- specify, product services

Globalization- worldwide

**21st CENTURY THEMES**

Global Awareness- diversity, similarity, dos and don’ts, issues. (Social Studies)

Financial, Economic, Business and Entrepreneurial Literacy- value resources

Civil Literacy- town city/public, rights and obligations.

Health Literacy- health and environment

Rote Memorization- words by words

Paradigm Shift- pagbabago

**CONSCIENCE**

Right Conscience- right as right, wrong as wrong

Enormous Conscience- regards right and wrong

Pharisaical- sinasabi mo pero di mo ginagawa (hypocrite, self-righteous)

Certain- sure decision, absolute

Doubtful- unsure

Scrupulous- he thinks he is wrong, but he is not. (Guilt ridden)

Lax- he thinks he is right, but he is not.

Callous- insensitive, criminal minds

**MORAL DEVELOPMENT THEORY- KOHLBERG**

|  |  |  |
| --- | --- | --- |
| PRE-CONVENTIONAL | CONVENTIAL | POST-CONVENTIONAL |
| Punishment Obedience | Social approval | Social Contract |
| Instrumental Relativism | laws | Universal Ethical Principle |

**GOOD MORAL CHARACTER**

-being fully human (full potential)

-being a loving person (unselfish and caring)

-being virtuous (consistent)

-being morally nature (developed)

**RESEARCH**

Action Research- solved instructional/classroom problems

Case Study- specific

Population- gustong pag aralan

Sample- yun lang ang pag aaralan, actual

Dependent- minemeasure

Independent- input and difference set up

**RESEARCH STRATEGIES**

Questionnaire- walang choices

Survey- may choices

Observation- quanti, anecdotes

Pessimist- negative

Optimist- positive

Altruist- selfless

Utilitarianist- iba at sarili

Hedonist- selfish

Principle of Lesser Evil (2 choices)

Principle of Double Effect (2 effects)

Principle of Formal Cooperation (direct)

Principle of Material Cooperation (indirect)

**VALUES HIERARCHY- MARX SCHELER**

1. Values of the Holy- divine and idols/religion.

2. Spiritual Values- right and wrong, beauty and ugliness, truth and false.

3. Vital Values- novel and vulgar (needs)

4. Pleasure- pleasant and painful (wants)

Universal- applicable to anyone

Unchanging- constant

**VALUES IN PHILIPPINE EDUCATION**

Makadiyos

Makatao

Makakalikasan

Makabansa

**EDUCATIONAL AND PHILOSOPHICAL FOUNDATION**

**IDEALISM**

-Plato

-mind and spirit

-stress on mental development

-perfectionism when you are with God

-Value-laden

-focus on the development of the mind

-knowledge is independent of sense

-“I want to be”

**REALISM**

-Aristotle

-Actualities

-Realities in life

-truth should be tested

-to see is to believe

**NATURALISM**

-Jean Jacque Rousseau

-nature of the self

-nature of the child

-innate

-natural stages of development

-Book (Emile)

**PERENNIALISM**

-Robert Hutchins

-forever

-ever changing

-permanent

-tested by time

-rational thinking is developed

-Perpetual Learning

-unchanging

-constant

-classics

-humanities

-great books (Bible, Koran, Analects)

-tried and proven

-generalist

**PRAGMATISM**

-John Dewey

-change

-practice

-practical use

-apply

-Natural Science

**ESSENTIALISM**

-William Bagley

-basic 3R’s

-mastery of learning

-specialization

-Teacher-centered

-uniform

-traditional

-foundation

-drill and memorization

-develop student to become competent

**PROGRESSIVISM**

-learning by doing

-active

-modern

-improvement

-development in learners and education system

**EXISTENTIALISM**

-John Paul Sartre

-exist

-self-will, choice, freewill

-self unique

-freedom

-responsibility

-choices

-unique individual

-presence of elective subject

**BEHAVIORISM**

-environment (control)

-rewards and punishment

-passive

**HEDONISM**

-pleasure of the body

**EPICUREANISM**

-pleasure of the mind

-a state of tranquility

-freedom for fear

-absence from bodily pain

**EMPIRISM**

-senses

-sight, smell, touch, hearing and taste

**HUMANISM**

-welfare of an individual

**RATIONALISM**

-reason

-mental power

**SOCIAL RECONSTRUCTIONISM**

-Counts; Rugg

-society

-reform

-crisis

-laws

**STOICISM**

-hardships

-better life

**NATIONALISM**

-love for country

-patriotism

**CONSTRUCTIVISM**

-schema

-based on prior knowledge

**UTILITARIANISM**

-use for greater good/society

**METAPHYSICS**

-study of beyond knowledge

-existence

**EPISTEMOLOGY**

-study of knowledge

**LOGIC**

-systematic and organized

**AXIOLOGY**

-study of ethics

-good or bad, right or wrong

-values

**ELECTRIC APPROACH**

-combination of 2 ism

**LEARNER’S REFERENCE NUMBER**

-starts in kindergarten

-12 digits

-6 school ID, 2 school year, 4 students’ number

**HISTORY OF PHILIPPINE EDUCATION**

-timeline

-chronological/series of events

**PRE-COLONIAL**

-basic skills

-survival

-conformity

-tribes

-communal

-apprenticeship

-informal

-oral traditions

**SPANISH PERIOD**

-333 years (1565-1898)

-Spread Christianity

-doctrines, bibles, prayers, hymns

-friars/priest

-Spanish and vernacular language

-education is for elites (Illustrados)

-Colegios (high school for boys)

-Beaterios (high school for girls)

-corporal punishment

-Royal decree of 1863

-catechism (pedagogy)

-Parochial schools

-Escuela Pia (Ateneo)

**AMERICAN PERIOD**

-education is a right

-treaty of paris (20 million dollar)

-december 10, 1898

-Schurman Commission

-Taft Commission

-Education Act of 1901

-Centralization

-American Soldiers (first teachers)

-Thomasites (first formal teachers)

-1908 free public education

-basic literacy

-English as medium

-PH normal school

-Monroe Survey 1925

**COMMONWEALTH**

-Manuel L. Quezon (Ama ng Wikang Pambansa)

-Filipino as separate subject

-Only the Filipino authors

-Nationalism focus (Patriotism)

-Double single session

**JAPANESE PERIOD**

-technical and vocational skills

-TESDA

-love for labor

-love for arts

-1943 Ministry of Education

-friendly relations

-values, vocational and health

-culture

-language, vernacular

-termination of English

-love your neighbor

**3rd REPUBLIC**

-Manuel Roxas

-right of everyone to be educated

-full realization of democracy

-provisions for Philippine Constitutions

-1947 DepEd

-1972 DepEd and Culture

-1978 Ministry of Education

-Education Act of 1982 Ministry of Culture and Sports

-1987 DepEd culture and sports

-2001 DepEd RA 9155

**NEW SOCIETY**

-Ferdinand Marcos

-Martial Law

-National Development and Ideas

-High professionals

-Education Act of 1982

**4TH REPUBLIC**

-quality education

-human rights

**AQUINO ADMINISTRATION**

-Congressional Commission on Education (EDCOM) provided the impetus for congress to pass

-creation of TESDA (RA 7796)

-creation of CHED (RA 7722)

**ESTRADA ADMINISTRATION**

-Presidential Commission on Educational Reform (EO 46)

-to transform school structures with the aim of raising quality of education in a country

**ARROYO ADMINISTRATION**

-DECS to DEPED

-HSRT and Bridge Program for March 2004 Elementary Graduate

**DUTERTE ADMINISTRATION**

-Kindergarten Education Act

-Enhanced Basic Education Act (K-12)

-CPD Law

-Free Tertiary Education

**SOUTHEAST ASIAN MINISTER OF EDUCATION, ORGANIZATION, INNOVATION AND TECHNOLOGY**

-check education

-propose solutions

-help implement

**VIOLENCE**

Direct Violence- body

Structural Violence- poverty

Cultural Violence- tradition

Emotional Violence- unworthy

Psychological Violence- threatened

Spiritual Violence

**EDUCATIONAL TECHNOLOGY**

**KEY TERMS**

**Technology**- concrete objects, planned and systematic method

**Instructional Technology**- concerned with institutions

**Technology in Education**- application of technology

**Educational Technology**- discoveries/inventions by experts

**Educational Media**- channels and avenues

**Audio Visual**- (3 forms) media, aids, technology (3 properties) fixative, manipulative, distributive

**5 DIMENSIONS OF EDUCATIONAL TECHNOLOGY**

1. Design- planning phase

2. Development- finalization/production

3. Utilization- application/action phase

4. Evaluation- assessment, judgment, effectiveness

5. Management- “linchpin” key player

**LEVELS OF TECHNOLOGY INTEGRATION (TIM MODEL)**

Entry

Adoption

Adaptation

Infusion

Transformation

**MEANINGFUL LEARNING ENVIRONMENT**

Active

Collaborative

Constructive

Authentic

Goal Directed

**SAMR MODEL**

Substitution

Augmentation

Modification

Redefinition

**FACTORS AFFECTING THE SELECTION OF EDUCATIONAL TECHNOLOGY**

**LEARNERS FACTORS**

Individual Differences- free from biased, multiple intelligences

Attention Span

Number of Learners

Physical Disability

**TEACHERS FACTORS**

-strategies/methods

-practice constraints (limitations)

**CRITERIA FOR SELECTION OF TECHNOLOGY TOOLS (ROQAOA)**

Relevance- carrying out the objects

Objectivity- free from bias

Quality- durable

Appropriateness- fitted/suited (interest)

Organize- set/sequence

Availability- checking in advance

**PRINCIPLES IN THE SELECTION AND UTILIZATION OF ED. TECH**

Responsiveness

Usefulness

Meaningfulness

Breadth

Accuracy

Simplicity

Authenticity

Purpose

Interest

Correctness

Communication Effectiveness

Availability

Presentation

Portability

Cost Effectiveness

**TEACHING WITH MEDIA TOOLS**

Overhead transparency

Chalkboard- traditional board

Bulletin board- movable board, values

Cloth board- push pins

Hook and loop board

Magnetic board- metal

Pegboard- holes

Models

Mock up- detachable

Computers

Replica- distinguishable

Realia- most direct

Simulation- association of technology

Plays- musical play

Pageants- personality and their contribution

Pantomine- can go place to one another, no sounds

Role playing- unprepared, unrehearsed, let’s pretend

Cartoons- captions, political issues, drawings

Fishbone- cause and effect

Attribute wheel- characteristics

Time chart- time line, bar graphs

Organizational charts- highest and lowest

Venn diagram- compares and contrast

Bar graph

Histogram- no gap, no space

Pie graph- parts of a whole

Pictoral graph- pictures figure

KWL chart- entrance and exit

Spider Map- specific to general vice versa

Sequence chart

Globe- 3D ng mundo

Map- 2D ng mundo

Diorama- 3D and 2D

**INFORMATION COMMUNICATION TECHNOLOGY**

-whole range technology integration

**COMPUTER**

-biggest

-most expensive

-fastest

-trillions

**MAINFRAME**

-millions

**MINI COMPUTER**

-less memory and storage

-not very sensitive

**MICRO COMPUTER**

-small in size

-personal computer

**DESKTOP**

-single location

**LAPTOP**

-integrated screen and keyboard

**PALMTOP**

-hand carry

-tablet, i-pad

**NOTEBOOK/NETBOOK**

-easy to carry

**ACCORDING TO TYPE OF DATA HANDLED**

Analog- engineering (traditional)

Digital- numbers

Hybrid- combination

**PEOPLE WARE**

-role play

-human interaction

**HARDWARE**

-parts that one can touch (tangible)

**INPUT DEVICES**

-accept data

-keyboard

-mouse

-joystick

-stylus

-scanner

-sensor

-pointing device

-light pen

-digitizing table

-trackball, touch pad

-track pad, touch screen

|  |  |  |
| --- | --- | --- |
| A- select all | B- bold | C- copy |
| D- fonts | E- center | F- find |
| E- center | G- go to | H- replace |
| I- italicize | J- justify | K- hyperlink |
| L- left indent | M- indent | N- new doc |
| O- open file | P- print | Q- remove text format |
| R- right align | S- save | T- hanging indent |
| U- underline | V- paste | W- close file |
| X- cut | Y- re do | Z- undo |

**OUTPUT DEVICES**

-processed data back to the user

-to another computer system

-speakers

-monitors/displays

-printer

-plotter

**INPUT-OUTPUT DEVICES**

-dhom

-disk drive

-hard disk drive

-optical disc

-modem

**SOFTWARE**

-also known as programs

**SYSTEM SOFTWARE**

-facilitate

**Operating System**- manage

**Language**- converts the English-like instruction

**Utility Program**- organizing and maintaining data

**Word Processing**- accept words typed into a computer

**Spreadsheets**- arrange rows and columns (excel)

**Electronic Games**- interactive hardware or software

**Graphic Packages**- create highly stylized images

**Communication Program**- connect with another computer

**INSIDE THE MACHINE**

Motherboard

Processor (Central Processing Unit or CPU)

Memory

-Random Access Memory (RAM)

-Read Only Memory (ROM)

-Universal Serial Bus (USB)

**NETWORKS**

-connect computers so that they can communicate exchange information.

Local Area Networks (LANs)- near each other

Wide Area Network (WANs)- two or more LANs connected

Internet- information super highway

Uniform Resource Locator (URL)- unique address for a file

E-mail- electronic mail

Productivity Tools- presentation

Database- organized collection of data

**NEW NORMAL**

**DEPED’S LEARNING DELIVERY MODALITIES**

LCP- Learning Continuity Plan

Face to face (f2f)- 20 students

Distance Learning

Online Distance Learning (ODL)- synchronous

Modular Distance Learning (MDL)- asynchronous

Home Schooling- computer assisted/computer manage

**ONLINE LEARNING TECHNOLOGIES**

Online- connected to the internet

Offline- disconnected

Synchronous- at the same time

Asynchronous- at different times

Webinars- seminars conducted in the internet

G suites- Google workplace

**SHORTCUT KEYS**

ALT- alter key

URL- Uniform Resource Locator

USB- Universal Serial Bus

HTML- Hyper Text Mark-up Language

CPU- Central Processing Unit

**CURRICULUM DEVELOPMENT**

**DEFINITION AND CONCEPTS OF CURRICULUM**

What of Teaching- guides of direction

Heart of Teaching- guides of direction

Articulated- smoothly connected, integration

Transmission- organized

Sum total of experience- learning experiences

Intended Goals- competencies, learning outcomes

Evolving- dynamics

Curriculum- the sum total of all learning content, experiences and resources

**VIEWS**

|  |  |
| --- | --- |
| TRADITIONAL | PROGRESSIVIST |
| Cognitive | Learner-centered |
| Knowing and perceive | Indirect-approach |
| Intellectual capacity | Schema- prior knowledge |
| Empty receptacles (students) | Facilitator teacher- guide |
| Dispenser of knowledge | Holistic development |
| All knowing (teacher) |  |
| Passive learners |  |
| Teacher-centered |  |

**PSYCHOLOGICAL FOUNDATIONS**

**1. COGNITIVE/COGNITIVISM**

-mind

-how the brain works

-Information Processing Theory (IPT)

**2. BEHAVIORISM**

-reinforcement

**3. HUMANISM**

-Emotions and feelings

**SOCIOLOGICAL FOUNDATION**

**MAINSTREAMING**

-variety/diverse

-teaching with difficulty

**ADHD**

-Attention Deficit Hyperactivity Disorder

**DYSLEXIA**

-difficulty in reading and writing

**DYSGRAPHIA**

-difficulty in writing

**LEVELS OF CURRICULUM**

**SOCIETAL LEVEL**

-stakeholders/experts (community centered)

**Parents**

-support progress of child

-PTA/PTC

-home visitations

**Government**

-budget (local and national)

-fiscal funding (budget in education)

**Church**

-spiritual life

**NGO**

-red cross, UNICEF

**Trifocalization**

-DepEd, CHED, TESDA

-curriculum expert

**Grade Placement**

-topic based on the level

**INSTITUTIONAL LEVEL**

-local educators/supervisors

-modification

**INSTRUCTIONAL LEVEL**

-teachers

-deliver

**EXPERIENTAL LEVEL**

-learners (outcome/product of curriculum

-experience the curriculum

**MAJOR TYPES AND PATTERNS OF CURRICULUM**

**1. Learner Centered**

Activity- specialized activity for specialized subject

Child centered- in line with multiple intelligences

Experience based- felt the needs and interest of the students

Process Oriented- analization

**2. Subject Centered**

Subject- compartamentalized (elementary)

Discipline- specific (college)

Correlated- connected or integrated

Fused- lost identity (Social Science)

Broadfield- relationship (Mapeh, TLE)

Spiral- simple to complex (K-12 Curriculum)

Separate subject- dividing school day

**3. Problem Based**

-life situation

-background information and experiences

-relevant and authentic (real life experiences)

-contextualized

-localized

**Core design**

-social function

-important skills

**OTHER TYPES OF CURRICULUM**

**WRITTEN CURRICULUM**

-lesson plan

-curriculum

-documents

**ASSESSED CURRICULUM**

-it is tested and evaluated

-quizzes, test, activities, ptask

**SUPPORTED CURRICULUM**

-materials that will aid the teacher

-powerpoint and other technological tools

**HIDDEN CURRICULUM**

-unplanned

-implicit

-covert

**LEARNED CURRICULUM**

-everything that the students learned

**TAUGHT CURRICULUM**

-everything that the teacher teach

**RECCOMENDED CURRICULUM**

-National agency

-CHED, TESDA, DEPED (trifocalization)

**SEAMEO INNOTECH**

-test and assess the curriculum

**TEACHER AS A CURRICULARIST**

Knower- learner/life long

Initiator- you start or begin/first move

Writer- you take down notes

Innovator- create something out of the box

Planner- you conceptualize at the beginning

Implementer- delivers the curriculum

Evaluator- judge the worth

**CURRICULUM THEORIES**

**RALPH TYLER**

-school and administrators focus

**4 BASIC PRINCIPLES**

Purpose of the school

Extension of school philosophies

Organization of content

Evaluation of experiences

**HILDA TABA**

-learners and classroom focus

-Grassroots Approach

Content

Environment

Experiences

Activities

**PROPONENTS**

Franklin Bobbit- adult preparation in life

Werret Charters- subject matter

William Kilpatrick- learner centered (project method)

Harold Rugg- holistic and whole development

Hollis Caswell- organized/set of experiences

John Dewey- learning by doing

**CURRICULUM PROCESS**

Curriculum Planning- objectives

Curriculum Organizing- content, subject matter

Curriculum Implementing- put the plan into action

Curriculum Evaluation- judge the effectiveness

Curriculum Alteration- modify and change basic features but fundamentals are as is.

Curriculum Change- new, totally changed

**CRITERIA IN SELECTING CONTENT- AVIC AND SUSI**

Appropriateness- parallel to the learners and subject matter and objectives.

Validity- authenticity of the information

Integration- connected

Continuity- recur and repeated

Utility- usefulness

Scope- range of information

Interest- easy to learn/learnability

**ELEMENTS OF A CURRICULUM**

Balance

Articulation

Scope

Integration

Continuity

Sequence

**MAJOR CURRICULUM REFORMS**

**NESC**- National Elementary School Curriculum (3 hours)

**NSEC**- New Secondary Education Curriculum (unitary disciplinary)

**2022 BEC**- Basic Education Curriculum

**UBD**- Understanding By Design (backward design HOTS)

**K-12 Curriculum**- Enhanced Basic Education

Curriculum of 2013- EBEC

**RA 10533 EBEC Act of 2013**

-Benigno Aquino III

-k+6+4+2 Model

-Senior High School (16-18 yrs old)

-Junior High School (12-15 yrs old)

-Elementary School (6-11 yrs old)

-Kindergarten (5 yrs old)

**PHASES OF K-12**

|  |  |
| --- | --- |
| 2013 | RA 10533 |
| Sy 2012-2013 | Kindergarten |
| Sy 2016-2017 | Grade 11 |
| Sy 2017-2018 | Grade 12 |
| 2018 | Graduates |

**CHARACTERISTICS**

1. Stronger early childhood education

2. Building skills through the use of second languages and mother tongue

3. Child and community centered

4. Learning is in spiral progression (developmentally appropriate)

5. Globalization, Indigenization and Localization

6. Inclusion of 21st century skills

**BASIC EDUCATION**

**ALS**- Alternative Learning System (equivalency exam)

**SPED**- Special Education

**ECE**- Early Childhood Education

**Elementary Education**

**Secondary Education**

**AQRF**- Asean Qualifications Reference Framework

**PQF**- Philippine Qualifications Framework

**MOOC**- Massive Open Online Course

**PPST**- Philippine Professional Standards for Teachers

**SULONG EDUKALIDAD**

-D.O 31, S.2020

-Interim Guidelines for Assessment and Grading in Light of the Basic Education Learning Continuity Plan

-Learning activities sheet

-School learning action cell

-Most Essential Learning Competencies (MELCS)

-Modules

**HUMAN GROWTH AND DEVELOPMENT**

**PRINCIPLES**

**1. Development**

-is influenced by heredity and environment

**Heredity**

-nature

-is a process of transferring traits from one generation to another.

**Environment**

-nurture

-pertains to surrounding conditions that influence growth and development.

-proceeds from head to toe (cephalocaudal principle) and from the center of the body outward (proximodistal principle)

-depends on maturation and learning

**Maturation**

-refers to developmental changes in the body or behavior as a result of aging process not from various life experiences.

-development that goes with age

-proceeds from simple to complex

**2. Growth and Development**

-are continuous processes

-proceed from general to specific

-rates vary

**Growth**

-pertains to a physical change or an increase in size (quantitative)

-indicators (height, weight, bones size and detention)

-is rapid during (pre-natal, neo natal, infancy, adolescence)

-shown during (childhood)

-is minimal during (adulthood)

**Development**

-pertains to an increase in the complexity of functions or skill progression.

-this refers to the behavioral aspect. (Qualitative)

**STAGES OF HUMAN GROWTH AND DEVELOPMENT (PIBEL PAA O)**

**1. PRE-NATAL STAGE**

-from conception to birth

**Substages**

**A. Germinal**

-from fertilization to 2 weeks

-also known as period of zygote

-this is where cell division begins

Nidation occur in uterus (implantation)

Sperm- smallest cell

Egg- largest cell

**2 Types of Sperm Cells**

**a. Gynosperm**

-the x carrying sperm cells

-are more numerous

-love acidic environment

**b. Androsperm**

-the y carrying sperm cells

-love alkaline environment

**B. Embryonic**

-from 2 weeks to 8 weeks

-from zygote to embryo

-the most critical period

-period where most organ are formed and developed

-Organogenesis (form actions of organs)

**C. Fetal Satge**

-from 8 weeks to birth

-Teratogens are substances that can cause harm to the fetus.

**2. INFANCY**

-from birth to 2 weeks (first year of life)

-the shortest period

-characterized by children who are highly helpless.

**3. BABYHOOD**

-from 2 weeks to 2 years

-characterized by a decreasing dependency

**4. EARLY CHILDHOOD**

-from 2 years to 6 years

-the problem and troublesome age

**5. LATE CHILDHOOD**

-from 6 years to 12 years

-growth is at slow but relatively even rate

-characterized by increasing understanding and accuracy of concepts.

**6. PUBERTY STAGE/PRE-ADOLESCENT STAGE**

-from 12 years to 14 years

-is a unique and distinctive stage

-is an overlapping stage

**Substages**

**A. Pre-pubescent**

-secondary sex characteristics begin to develop.

**B. Pubescent**

-characterized by menarche (girls) nocturnal emissions (boys)

**C. Post-pubescent**

-sexual capacity starts to develop

**7. ADOLESENCE**

-from 14 years to 18 years

-a period of heightened emotionality

-is a period of storm and stress

**8. ADULTHOOD**

-from 18 years to 65 years

-the need for love and intimacy should be met.

-the need for generativity is through achievement.

**9. OLDER ADULTS/OLD AGE**

-from 65 to death

-is characterize by slow physical, mental and social activities.

**THEORIES OF GROWTH AND DEVELOPMENT**

**1. PSYCHOANALYTIC THEORY “SIGMUND FREUD”**

-it defines personality as the sum total of all human dimensions.

a. Id

-is the “pleasure principle”

-“I love this” “I like this”

b. Ego

-the “reality principle”

-the decision maker

-balances the conflicts between the Id and superego.

c. Superego

-is the “conscience principle”

-mostly contradicts Id

**2. PSYCHOSEXUAL THEORY “SIGMUND FREUD”**

**Stages (OA PLG)**

**a. Oral**

-0 to 18 months

-center of pleasure: MOUTH

-if needs through mouth are not met they may continue to resurface later in life in forms smoking and over eating (Oral Fixation)

**b. Anal**

-18 months to 3 years

-center of pleasure: ANUS

-voluntary defecation is the primary method to satisfy/gratify sexual needs.

-the best way to toilet train is when the children can sit, walk or squat.

**c. Phallic**

-3 years to 6 years

-center of pleasure: GENITALS

-the period of penis envy (girls) and gastration (boys)

-the period of pseudo masturbation

-fondling

-the period of oedipus-electra complexes

**d. Latency**

-6 years to 12 years

-the “dormant stage” (inactive)

-sexual drive is suppressed and is channeled to other socially- appropriate activities such as school works sports.

**e. Genital**

-from 12 and above

-there is biologic capacity for reproduction.

-where individuals get attracted to others of opposite sex.

-reactivation of oedipus-electra complexes

**3. PSYCHOSOCIAL DEVELOPMENT “ERIK HOMBURGER ERIKSON”**

**Stages**

**a. Infancy**

-0 to 1 year

-Trust vs. Mistrust

-factor: feeding

**b. Toddlerhood**

-1 to 3 years

-Autonomy vs. Shame and Doubt

-factor: Independence through environment exploration

-self regulation

**c. Pre-school**

-3 to 6 years

-Initiative vs. Guilt

-factor: Exploration (imaginative play)

**d. School Age**

-6 to 12 years

-Industry vs. Inferiority

Factor: Competition

**e. Adolescence**

-12 to 18 years

-Identity vs. Role Confusion

-factor: Peers and Friends

**f. Young Adulthood**

-18 to 25 years

-Intimacy vs. Isolation

-factor: Family/Love

**g. Middle Adulthood**

-25 to 65 years

-Generativity vs. Stagnation

-self absorption

-factor: Job

**h. Old Age (Late Adulthood)**

-65 to death

-Ego Integrity vs. Despair

-factor: Reflection

**4. MORAL DEVELOPMENT THEORY “LAWRENCE KOLHBERG”**

**3 Levels**

**1. Pre-Conventional Level**

-0 t0 9 years

-children do not understand the conventions or norms of society

**2 Stages**

**a. Punishment-Obedience-Orientation**

-those in authority have the superior power and should be obeyed.

-punishment can be avoided by staying out of trouble.

**b. Instrumental Relativist Orientation**

-an act is right if it is instrumental to satisfy one’s own needs.

**2. Conventional Level**

-9 to 20 years

-conventions or norms of society are understood and being conformed to.

**2 Stages**

**c. Good boy-Nice girl Orientation**

-aka Interpersonal Concordance

-authority is respected

**d. Law and Order Orientation**

-social order and maintain when fixed rules are established and obeyed.

**3. Post Conventional Level**

-20 years and above

-most ideal stage

-moral principles underlying the conventions or norms of society are clearly understood.

**2 Stages**

**e. Social Contract Orientation**

-principles should be consistently applied

-trust is the foundation of a strong relationship

**f. Universal Ethical Principle**

-principle should be a way of life.

**5. BIOECOLOGICAL SYSTEM THEORY “URIE BRONFENBRENNER”**

-environment plays a vital role in child development.

**Levels**

**a. Microsystem**

-the setting in which the child lives

-innermost level

**b. Mesosystem**

-connection between microsystem

**c. Exosystem**

-3rd level social system in which the child does not have action role.

**d. Macrosystem**

-outermost level in which most cultures interact

-a large system

**e. Chronosystem**

-events affecting the lifespan.

**6. COGNITIVE DEVELOPMENT THEORY “JEAN PIAGET”**

-views children as constructivist

-active learners

**Stages**

**a. Sensori-motor Stage**

-0 to 2 years

-based primarily on behaviors and perceptions

-learning through senses

-is characterized by object permanence

-Object Permanence is continue to exist even if they already gone.

**b. Pre-operational Stage**

-2 to 7 years

-they can easily be fooled by appearances

-characterized by (animism) giving life to an object.

**c. Concrete-operational Stage**

-7 to 11 years

-children are ego-centric and pretentious

-develop conservation principle

**d. Formal Operational Stage**

-11 and above

-they think logically, abstractly and scientifically

-they have moral idealism

-best activity formulation of hypothesis

**ASSESSMENT OF LEARNING**

-collection, interpretation and use of information to help teachers make better decisions.

**BASIC CONCEPTS**

Test- instrument, tool

Measurement- quantification

Assessment- gathering, collecting, documenting

Evaluation- judgment

**TEST**

-procedure

-instrument, tool

**DIFFERENT TYPES OF TEST**

|  |  |  |
| --- | --- | --- |
| **Achievement Test**  -measures the result of instruction | vs | **Psychological Test**  -measures the mental abilities in general |
| **Group Test**  -given to many at one time | vs | **Individual Test**  -given to one person at one time |
| **Norm-referenced**  -compare to others | vs | **Criterion-referenced**  -compare to standard/criteria |
| **Mastery**  -specific objective and scope | vs | **Survey**  -broader scope  -general |
| **Standardized**  -expert made  -national | vs | **Informal**  -teacher made  -intended for classroom |
| **Subjective Test**  -personal biases or opinion could affect the score | vs | **Objective Test**  -one possible answer |
| **Speed Test**  -time limit  -with the same level of difficulty | vs | **Power Test**  -increased level of difficulty  -with ample time |
| **Selective Test**  -choices | vs | **Supply Test**  -no choices |

**MEASUREMENT**

-assigning numbers

**SCALES OF MEASUREMENT**

Nominal- labeling

Ordinal- ranking

Interval- equal difference

Ratio- zero has a true value

**ASSESSMENT**

Formative- to inform/adjust teaching

Summative- for grading purposes

**ASSESSMENT FOR LEARNING**

1. Placement- entry performance of student

2. Diagnostic- identifies strength and weaknesses

3. Formative- monitors student progress

**ASSESSMENT OF LEARNING**

1. Summative- certifies mastery used for assigning numbers

**Traditional**- paper and pencil test

**Alternative**- perform task

a. Perform based (product based/process based)

b. Porftfolio

b.1 Show Portfolio- best

b.2 Working Portfolio- growth, improvement

b.3 Assessment/Evaluation Portfolio

b.4 Process Portfolio- all faces

**Authentic**- real life task

**TYPES OF RUBRIC**

Holistic- as a whole

Analytic- separate, individual parts

**EVALUATION**

-making judgments

Formative- before and during

Summative- after

**ASSESSMENT TOOLS**

1. Attitude Scale- feeling

2. Questionnaire

a. Checklist type

b. Semantic Differential

c. Likert Scale- strongly agree/disagree

3. Simple Projective Technique

a. Word Association

b. Unfinished Story

c. Unfinished sentence

Sociometric- interpersonal relationship

**TYPES OF VALIDITY**

1. Content- based on objectives

2. Concurrent- present and past

3. Predictive- compare present and future

4. Construct- follows the different principles

5. Face- physical appearance of the test

**SCORING BIASES AND ERRORS**

Leniency Error- being generous in giving grades

Severity Error- strict in giving grades.

Central Tendency- neutral

Halo Effect- generalization

**DISHONEST WAYS OF MARKING**

1. Becoming a zealot- survival of the fittest

2. Changing rules in the midgame- changing criteria

3. Becoming a psychic grader- hula hula

4. Anchoring everyone in a system of impossible perfection

5. Employing the carrot and clubbing system

6. Default

**FOUNDATION OF EDUCATION**

**PHILOSOPHICAL FOUNDATION**

Philosophy

-“philo” + “Sophia”

-love of wisdom

-compass of life

Speculative- world view

Perspective- nominative, reflective

Analytical- logic, reasoning, experimenting

**ORIENTAL PHILOSOPHIES**

**CHINESE PHILOSOPHY**

-emphasizes balance

-(+) and (-) side of life

**CHINESE PHILOSOPHERS**

**Confucius- Kung Fu Tzu**

-Golden Rule

**Confusianism**

-cardinal virtues

-five constant or Wu Chang

-In descending order of importance, the virtues are;

Benevolence or ren

Righteousness or yi

Property or li

Wisdom or zhi

Fidelity or xin

**Mencius**

-love covers all, think with your heart

-man is good

**Lao Tzu**

-Taoism

-Tao has not a home

-WU WEI (let things come naturally)

-life and nature

**INDIAN PHILOSOPHY**

**BUDDHISM**

-Sidarth Gautama Buddah

-the cause of pain and suffering is because of selfish craving

-suffering could be ended through the eightfold path

**FOUR NOBLE TRUTHS**

1. The truth of suffering (DUKKHA)

2. The truth of the origin of suffering (SAMUDAYA)

3. The truth of the cessation of suffering (NIRODHA)

4. The truth of the path to the cessation of suffering (MAGGA)

**EIGHTFOLD PATH**

1. Right Faith

2. Right Aspiration

3. Right Speech

4. Right Actions

5. Right Living/Life

6. Right Effort

7. Right Thought

8. Right Connections

**HINDUISM**

-Mohandas Ghandi

-Reincarnation

-Yoga

**ZEN BUDDHISM**

-doing one thing at a time with purpose and integrity

-emphasis on simplicity

**SHINTOISM**

-polytheistic and revolves around the kami, supernatural entities believed to inhabit all things.

-God is everywhere

**MUSLIM/ISLAM PHILOSOPHY**

Mohammad- Abu

Bakr- Umar

**5 PILLARS OF ISLAM**

Ramadan- fasting

Haji- need to go to the mecha once in their lifetime (pilgrimage)

Shada- declaration of faith

Salat- prayer 5 times a day

Zakat- almsgiving 25%

**Koran/Quran**- Book

Hadith- life of Mohammad book

Sharia- law

Sunna- standards of living to follow

**METAPHYSICS**

-beyond natural

**THEORIES OF REALITY**

Cosmology- universe

Theology- purpose of being

Onthology- meaning of existence

**EPISTEMOLOGY**

-study of knowledge

**3 POSITIONS**

**Agnostics**

-does not believe in the existence of knowledge

**Skeptics**

-doubt in the existence of knowledge

**Affirmative**

-believes in the existence of knowledge

**TYPES OF KNOWLEDGE ACCORDING TO OBSERVATION**

Priori- before

Posteriori- after

Experimental- test first, scientific method

**HOW WE ACQUIRE KNOWLEDGE**

Empirical- use of senses to acquire knowledge

Reasoning- rational

Invitation- instinct

Authoritative- taught/acquired knowledge by experts

Revealed- religious, given by God.

**LOGIC**

-study of reasoning

**Deductive**

-general to specific

-teacher centered

-direct method

-spoon feeding

**Onductive**

-specific to general

-student centered

-Inductive

**Dialectic**

-anti thesis, comparison of ideas

-contrast

**HISTORY OF EDUCATIONAL SYSTEM**

**ANCIENT EDUCATION**

**1. PRIMITIVE EDUCATION**

Aim: survival, security, preservation of tradition

Students: children

Method: informal, vocational, practical

Curriculum: hunting, fishing, songs, poems, dances

Agents: parents, tribal leaders, religious leaders

Influence on Education: transmission of skills

**2. SUMERIAN EDUCATION**

Aim: training of scribes, book keepers, teachers

Students: children

Method: imitation, copying, tablet, preparation

Curriculum: 3r’s, astronomy, art, vocational training, law

Agents: home, school, temple/apprentice school

Influence on Education: cuneiform writing

**3. ORIENTAL EDUCATION**

-stability

-retain/sustain the culture

Egypt- religious practices

Persia- military practices

China- ancestral practices

India- caste system

**CASTE SYSTEM**

1. Brahmins- priest

2. Kshatriyas- elites

3. Vaishyas- average

4. Shudras- normal people

5. Daltis- poor

**GREEK EDUCATION**

-Individual Development

Spartans- military training

Athenians- mind and body, arts or aesthetics

**SPARTAN EDUCATION**

-1600 BC to 300 BC

Aim: military and discipline

Students: male ages 7-30

Methods: training participation, discipline, motivation

Curriculum: military, moral training, music, gymnastic and vocational

Agents: state/military teachers

Influence: military education, patriotism, discipline

**ROMAN EDUCATION**

-Utilitarianism

-education for national ideals

-preparation for the different functions

-social transformation

**EARLY CHRISTIAN EDUCATION**

-Hebrew 120 BC to 70 AD

Aim: moral, holiness, religion, preparation for destiny

Students: male ages 6-15 (compulsory elementary education) higher-lay prophets, scribes

Methods: memorization, AV aids, exposition, workshop

Curriculum: history, religion, foreign language, PE agents, home, public schools, temple, scribe college.

Influence: 10 commandments of the bible, monotheism.

**MEDIEVAL PERIOD**

Aim: spiritual and moral

Students: age 10 (monastic schools) at 18 (order)

Methods: catechetical method, dictation, memorization, meditation, contemplation, language

Curriculum: 7 Liberal Arts: Trivium (dialectic, grammar, rhetoric) and Quadrivium (geometry, arithmetic, music, astronomy)

Agents: monastic schools

Influence: Opposed corruption, industrial skills, dignity of manual labor

**SCHOLASTICISM**

Aim: intellectual discipline, reasoned faith

Students: age 14 (university) bachelor continued studying (4-7 years) Licentia docendi – master

Methods: lecture, repetition, disputation, exam, scholastic method, Aristotelian logic

Curriculum: Theology, religious philosophy

Agents: parish, monastic, cathedral, palace school

Influence: university, intellectual learning

**CHIVALRY**

Aims: morality, horsemanship, gallantry, responsibility, social grace, religiosity

Students: birth age 7 (mother) 7-14 (castle) 14-21 (squire) 21 (inducted as a knight)

Methods: observation, imitation, apprenticeship

Curriculum: boys (horse riding, good manners) girls (religion, music, dancing, chores)

Agents: home, castle, court, tournament/battle field

Influence: learning of social grace, etiquette

**GUILD SYSYTEM**

Aims: vocational preparation (industrial life)

Students: apprentice, journeyman, master craftman

Methods: observation, imitation, practice

Curriculum: 3R’s, vocational religion

Agents: Burgher School (supported by cities)

**MODERN PERIOD**

**RENAISSANCE PERIOD**

Aims: cultivate humanist expert in Greek and Latin classics, prepare to serve dynastic leaders.

Students: male children of aristocracy and upper class, ages 7-20

Methods: memorization, translation, analysis of Greek and Roman classics literature, poetry and art

Curriculum: Greek Classical Literature

Agents: classical humanist educators, school (lyceum, gymnasium, latin school)

Influence: literary knowledge, style in classical

**REFORMATION**

Aims: commitment to a particular religious denomination, general literacy

Students: boys, girls ages 7-12 in vernacular schools, young elite men in humanist schools.

Methods: memorization, indoctrination, catechetical instruction in vernacular schools, translation, analysis of classical literature in humanist schools.

Curriculum: 3R’s, catechism, religious concepts and rituals, Latin/Greek Theology

Agents: vernacular elementary school for general public, classical schools for upper class

Influence: commitment to universal education to provide literacy, origins of school system, dual track school system

**SOCIOLOGICAL FOUNDATION**

-how man deals with society

Status- position designated to a person, based on wealth, based on achievements

**SOCIAL MOBILITY**

-change from one position to another

-horizontal

-vertical ranking

-intergenerational (family)

-intragenerational (self-success)

**SOCIAL NORMS**

**Folkways**

-the learned behavior shared by a social group, that provides a traditional mode of conduct.

**Mores**

-moral attitudes

**Laws**

-a binding custom or practice of a community

-a rule of conduct or action prescribed

**Socialization**

-adapting to groups

-conforming to its norms values tradition

**Ethnocentrism**

-comparing your own culture to others

**Xenocentrism**

-preferring a culture other than one’s own

**Social Inequality**

-a condition in which members of a society have different amounts of wealth, prestige, and power.

**ANTHROPOLOGICAL FOUNDATION**

**Language**

-verbal

-non verbal

**Norms**

-established standards of behavior

**Values**

-desirable good

**Sanctions**

-punishment

-review

**CHARACTERISTICS OF CULTURE**

-changing/dynamic

-learned

-transferable

-relative

-distinct

-shared

**WAYS TO TRANSFER CULTURE**

**ENCULTURATION**

-individual learns the traditional content

**ACCULTURATION**

-cultural modification

**ASSIMILATION**

-process of receiving new facts or of responding to new situations

**CULTURE SHOCK**

-a sense of confusion and uncertainty sometimes with feelings of anxiety

**CULTURE LOG**

-that culture takes time to catch up with technological innovations

**OTHER CHARACTERISTICS OF FILIPINO VALUES**

**Indolence**

-inclination to laziness

**Ningas cogon**

-enthusiastically starting things but then quickly losing enthusiasm soon after

**Manana habit**

-mamaya na

**Hospitality**

-the friendly and generous reception and entertainment of guests, visitors or stranger

**The fiesta syndrome**

-an obsession of fixation of Filipinos in holdings several feasts

**PERSONAL VALUES**

**Resilience**

-the capacity to recover quickly from difficulties

**Tolerance**

-capacity to endure pain or hardship

**Emotional Stability**

-is the capacity to maintain one’s emotional balance under stressful circumstances

**Drive**

-an innate, biologically determined urge to attain a goal or satisfy a need

**Fairness**

-the quality or state of being impartial

**Buoyancy**

-the ability to recover quickly from depression

**Motivation**

-a motivating force, stimulus, influence, incentive

**Intelligence**

-the ability to learn or understand, the ability to apply knowledge to manipulate one’s environment

**Compassion**

-a sympathetic consciousness of other’s distress together with a desire to alleviate it

**Self Confidence**

-confidence in oneself and in one’s power and abilities

**Innovativeness**

-introduce something new or different

**Reliability**

-dependable, suitable or fit, to be dependent, confidence based on experience

**Cooperativeness**

-willingness and ability to work well with others

**ETHICOLEGAL**

**A. CONSTITUTIONAL**

**1987 Philippine Constitution**

-free public education

-language of instruction

-religious instruction

-academic freedom – HEI

-highest budgetary allocation – education

**ARTICLE XIV**

Section 2.1

-complete, adequate and integrated

Section 2.2

-free public education

Section 3.3

-express the writing by the parents or guardians

Section 5.2

-all institutions of higher learning

Section 5.5

-highest budgetary priority to education

Section 6

-national language (Filipino)

**B. STATUTORY BASIS**

1. Batas Pambansa

-“noblest profession”

-cordial relationship (teacher and parents)

-preventive, supportive, corrective (discipline)

**ASSESSMENT OF LEARNING**

**MEASURES OF CENTRAL TENDENCIES**

**1. MEAN**

-average

-most reliable

-greatly affected by outliers

**2. MEDIAN**

-middlemost

-arranged

-most reliable with outliers

**3. MODE**

-most frequent

-not unique

**MEASURES OF VARIABILITY**

-dispersion

**1. RANGE**

-simplest/most crude

-least reliable

**2. STANDARD DEVIATION**

-how spread scores are from the mean

-most reliable

**3. VARIANCE**

Low- clustered; near from the mean

High- scattered; hetero; far from the mean

**MEASURES OF RELATIVE POSITION**

**1. PERCENTILE**

-100

-P85 higher than 85% of the class

**2. DECILE**

-10

-D4 higher than 40% of the class

**3. QUARTILE**

-4

**4. STANINES**

-9

-(S1-S3) below average

-(S7-S9) above average

**DIFFICULTY INDEX**

-easeness

|  |  |  |
| --- | --- | --- |
| 0-0.20 | Very Difficult | Reject |
| 0.21-0.40 | Difficult | Revise |
| 0.41-0.60 | Average | Retain |
| 0.61-0.80 | Easy | Revise |
| 0.81-1 | Very Easy | Reject |

**DISCRIMINATION INDEX**

1. Positive- more from upper group

2. Negative- more from lower group

3. Zero- cannot discriminate

**VALIDITY**

-measure what intends to measure

**RELIABILITY**

-consistency

-not all reliable tests are valid tests

**CRITERION**

-referenced testing

-standards

-criteria

-objectives

**NORM-REFERENCED TESTING**

-others

-batch mates

-class

**TRADITIONAL ASSESMENT**

-pen and paper

-holistic

**FOR LEARNING**

-enhance learning

-before and during

**OF LEARNING**

-evaluate learning

-after

**AS LEARNING**

-self assessment

**DIAGNOSTIC**

-before

-strengths and weaknesses

**FORMATIVE**

-during

-progress

-quiz

**SUMMATIVE**

-after

-evaluate

**BLOOM’S TAXONOMY “BENJAMIN BLOOM”**

**(KC ApAnSE)**

1. KNOWLEDGE- remembering

2. COMPREHENSION- understanding

3. APPLICATION- using, utilizing

4. ANALYSIS- breaking down

5. SYNTHESIS- putting together

6. EVALUATION- judging

**REVISED VERSION “ANDERSON AND KRATWOL”**

**(RU ApAnEC)**

1. Remebering

2. Understanding

3. Applying

4. Analyzing

5. Evaluating

6. Creating

**CONVERGENT THINKING**

-narrow

-close ended

**DIVERGENT THINKING**

-wide

-open ended

**RUBRICS**

-guide for scoring

-objective

1. Holistic- general, global, single

2. Analytic- multiple bases, specific

**IVAN PAVLOV**

-Classical/Respondent Conditioning

-automatic

**BF SKINNER**

-Operant Conditioning

-modeling

**ALBERT BANDURA**

-Social Learning Theory

-modeling

**EDWARD THORNDIKE**

-Connectionism

1. Exercise- repetition

2. Readiness- preparedness

3. Effect- motivation

**LEV VYGOTSKY**

-Zone of Proximal Development

-potential

-more knowledgeable others

-scaffolding “bruner” (assistance/guidance)

**Deductive Reasoning**- general to specific

**Inductive Reasoning**- specific to general

**Extrinsic Motivation**- tangible; material

**Intrinsic Motivation**- aultruistic

**RA 7836 - PHILIPPINE TEACHERS’ PROFESSIONALIZATION ON ACT OF 1994**

-regulation of the teaching profession

LET- pre requisite for employment, competencies, at par with other professionals

**QUALIFICATIONS**

1. Filipino Citizen (natural born/naturalize)

2. Good Moral Character

3. Bachelor’s in Education or any Bachelor’s degree (Prof Ed at least 18 units)

**Ratings**- at least 75%

**Oath**- required

**Registration**

-license (3 years)

-birthdate

-privilege

**Renewal**- CPD (45 units before) IRR 15 units

**Inactive Teachers**- at least 5 years no practice

**Refresher**- DepEd 12 units (6 pedagogy and 6 content)

**PERIODIC MERIT EXAM**

-LPT

-optional

-5 years

-free

-2 exams (1 oral, 1 written)

-maximum of 2 takes

-promotion

-scholarship

-professional development

**RA 9293 - AMENDMENTS OF RA 7836**

Special/Temporary Permit

a. expert

b. gained international recognition

**PARA TEACHERS**

-5 years

-DepEd w/ ARMM

-remote areas

-70 above

**RA 10533 – ENHANCED BASIC EDUCATION OF 2013**

-at par with international standards

-main focus of K-12 (Gen Ed)

-main focus of SHS (TVL)

-Spiral Progressive is widening and deepening

-purpose (mastery)

**RA 10157 – KINDERGARTEN ACT**

-at least 5 years old

-Duterte

**BOARD FOR PROFESSIONAL TEACHERS**

-5 (3 members, 1 chair, 1 vice)

-natural born Filipino citizen

-resident of Philippines

-at least 35 years old

-at least 10 years of teaching experience

-not convicted

**RA 4670 – MAGNA CARTA FOR PUBLIC SCHOOL TEACHERS**

-elementary and secondary public

-teaching hours (6 hours) – mandated time

-plus 2 hours equal 25% of salary

-hardship allowance to hazardous areas (+25%)

**INDEFINITE LEAVE**- an illness that requires 1 year of treatment

**STUDY LEAVE**- at least 7 years of service, 1 year leave, at least 60% of basic salary

**ARTICLE XIV – PHILIPPINE CONSTITUTION**

State- EFA

-inclusive

**RELIGION**

-within school

-written consent from parents

**Academic Freedom**- tertiary only

**Primary Language**- Filipino and English

**Promote**- mother tongue

**Scholarship**- higher learning skills

**BRUNER REPRESENTATION**

1. Enactive- action

2. Iconic- image

3. Symbol- language

**DEVELOPMENTAL READING**

**THE READING PROCESS**

**1. WORD RECOGNITION**

-recognition of words individually

**2. COMPREHENSION**

-fusion of meaning of words

**3. REACTION**

-evaluation of text’s quality or worth

**4. INTEGRATION**

-assimilation and application of new ideas with previous experiences

**THE LEVELS OF COMPREHENSION**

**LITERAL**

-information/facts

-“reading the lines”

**INTERPRETATIVE**

-author’s intent and message

-“reading between the lines

**CRITICAL**

-judgment of validity/worth

-“reading through the lines”

**APPLIED**

-synthesis and reaction

-“reading beyond the lines”

**MODELS OF READING STRATEGIES**

**BOTTOM-UP MODEL**

-reading is a decoding process

-Phonic Approach

-focused on the text

-from book to reader

**TOP-DOWN MODEL**

-reading is psycholinguistic guessing game

-Whole Language Approach

-focused on the reader

-schema

-from reader to text

**INTERACTIVE MODEL**

-both models are used

-focused on interaction

-Balance Approach to Reading

**GRACE GOODELL’S READING SKILLS LADDER**

**BASIC SIGHTS WORDS (DOLCH LIST)**

-220 most frequently found words in books that children read

-cannot be sounded out because they do not follow decoding rules, so they must be learned as sight words

**STRUCTURAL ANALYSIS**

-breaking down unknown words into prefixes and suffixes, then into syllable

**CONTEXT CLUE**

-helps readers understand unfamiliar words

-offers insight, either directly or indirectly, into the words meaning

**TYPES OF CONTEXT CLUE**

**Synonyms**

-Bill felt remorse, or shame, for his harsh words.

**Antonyms**

-Marty is gregarious, not like his brother who is quiet and shy.

**Cause and Effects**

-The intrepid warrior led the assault on the well-guarded fortress.

**Explanation**

-Something in the refrigerator has a putrid odor; the smell was rotten when we opened the door.

**Example**

-There is a 30 percent chance of precipitation, such as snow or sleet

**Appositive**

-At night you can see constellations, groups of stars, in the sky.

**READING SKILLS: EYE MOVEMENTS**

**FIXATION**

-a point where your eyes rest when you read (fix)

**INTERFIXATION**

-movement from one stopping to another

**RETURN SWEEP**

-eyes from one end to beginning of next line

**REGRESSION**

-backward, from right to left movement

**SPAN OF RECOGNITION**

-number of words eyes can recognize in every stop

**DURATION OF FIXATION**

-time you spent in one stop

**KINDS OF READING**

**SKIMMING**

-looking for gist, what the reading is about

**SCANNING**

-looking for specific information

**INTENSIVE**

-thorough reading (intensive)

**EXTENSIVE**

-pleasure reading

**CREATIVE**

-interpretation of text for the purpose of comprehension

**EXPLORATORY**

-how the whole selection is presented

**ANALYTICAL**

-identifying word relationships

**CRITICAL**

-evaluating information to make conclusions

**DEVELOPMENTAL**

-comprehensive reading program

**EFFECTIVE READING COMPREHENSION** **STRATEGIES**

**1. VOCABULARY PREVIEW**

-introduction of new and unfamiliar words prior to reading

**2. GUIDED READING**

-students apply strategies they know to new texts with the teacher’s support

**3. RECIPROCAL QUESTIONING**

-students formulate their own questions about the text

**4. SQ3R (Survey, Question, Recite, Read,** **Review)**

-Francis Robinson, “Effective Study”

-more efficient and active approach learning information from content-area materials

**5. PQ5R (Preview, Question, Read, Record,** **Recite, Review, Reflect)**

-an effective student regulated approach to studying the kind of material assigned every day – “textbooks”

**6. STRUCTURAL/GRAPHIC ORGANIZERS**

-effective visual learning strategies

-facilitate students’ learning by helping them identify areas of focus within a broad topic

-make connections and structure thinking

**TYPES OF STRUCTURAL ORGANIZERS**

**K-W-L CHARTS**

-It helps students organize information before, during, and after a unit or a lesson.

-can be used to engage students in a new topic, activate prior knowledge share unit objectives, and monitor students’ learning.

**FISHBONE DIAGRAM**

-also called a cause and effect diagram or Ishikawa diagram

-is a visualization tool for categorizing the potential causes of a problem in order to identify its root causes.

**SEMANTIC MAPS**

-web of words

-it displays the meaning- based connections between a word or phrase and a set of related words or concepts.

**VENN DIAGRAM**

-A Venn diagram is a diagram that shows all possible logical relations between a finite collection of different sets.

-A Venn diagram consists of multiple overlapping closed curves, usually circles, each representing a set.

**STORY MAP**

-A story map is a strategy that uses a graphic organizer to help students learn the elements of a book or story.

**PHASES OF READING DEVELOPMENT**

**1. READING READINESS PERIOD**

-the child is ready to learn how to read (phonological awareness) (K)

**2. BEGINNING READING**

-recognize words, phrases, and sentences (how are they connected) (G1-G2)

**3. RAPID GROWTH/EXPANDING POWER**

-the child will have mastered techniques of reading. (skimming, scanning, summarizing)

**4. REFINEMENT PERIOD**

-great deal of serious and interpretative reading

(independent, note-taking)

**STAGES OF READING DEVELOPMENT**

**1. EMERGENT LITERACY**

-“Emerging Readers”

-oral language skills

-exposure to print

-letters of the alphabet

-mimic stories

**2. EARLY READING**

-“Novice Readers”

-read sight words

-relationships between letters and sounds

-gradual speed reading (combination of sounds)

**3. GROWING INDEPENDENCE**

-“Decoding/Transitional Readers”

-focused on meanings instead of words alone

-become more fluent

**4. READING TO LEARN**

-“Comprehending/Fluent Readers”

-independent

-more purposeful reading

-recognize themes

-gain more complex concepts

**5. ABSTRACT READING**

-“Expert/Advanced Readers”

-read from wide variety of sources

-synthesize ideas into essays

-understand figurative language

**LEVELS OF READING**

**Philippine Informal Reading Inventory (PHIL-IRI)**

-determines the level of reading of the learners

-a standardized tool developed in order to help teachers identify the level of reading of the learners

**1. INDEPENDENT READING LEVEL**

-essay reading

-one or less word calling errors in 100 words of text

-acquired 100 percent accuracy on comprehension questions about the story.

**2. INSTRUCTIONAL READING LEVEL**

-best level for learning new vocabulary

-word error while reading orally is from 2 to 5 word calling errors per 100 words of text (95% accuracy or better)

-at least 80 percent comprehension on simple recall questions about the story

**3. FRUSTRATION READING LEVEL**

-word errors are over 5 per 100 words of text.

-comprehension questions are below 70 percent accuracy.

**PHONOLOGICAL AWARENESS**

-refers to the ability to segment and manipulate the sounds of oral language

-not the same as phonics, which involves knowing how written letters relate to spoken sounds

- provides practice with rhyme, beginning sounds, and syllables

**REMEMBER**

1. Phonological awareness is not just phonics.

2. Phonological awareness is auditory and does not involve words in print.

3. Phonological awareness is not a curriculum.

**TYPES OF PHONOLOGICAL AWARENESS**

**PHONEME SEGMENTATION**

-Students break a word into its separate sounds, saying each sound as they tap or count.

Example:

Teacher: How many sounds are in clap?

Student: /k/ /l/ /a/ /p/. Four sounds.

**PHONEME IDENTITY**

-Students recognize the same sounds in different words.

Example:

Teacher: What sound is the same in man, mop, and mill?

Student: The first sound, /m/, is the same.

**PHONEME ADDITION**

-Students make a new word by adding phoneme to an existing word.

Example:

Teacher: What word do you have if you add /s/ to the beginning of nail?

Student: Snail.

**PHONEME BLENDING**

-Students listen to a sequence of separately spoken phonemes, and then combine the phonemes to form a word.

Example:

Teacher: What word is

/p/ /i/ g/?

Student: /p/ /i/ /g/ is pig.

**PHONEME SUBSTITUTION**

-Students substitute one phoneme for another to take a new word.

Example:

Teacher: The word is run. Change /n/ to /g/. What's the new word?

Student: Rug.

**PHONEME ISOLATION**

-Students recognize individual sounds within a word.

Example:

Teacher: What is the first sound in cap?

Student: The first sound in cap is /k/.

**THE 3C’S OF VOCABULARY**

**COLLOCATION**

-words that are placed together in some order

-sweet potato, sweet corn, sweet dreams

**CLINE**

-scale of language items (extremes to extremes)

-freezing, cold, cool, mild, warm, hot, boiling

**CLUSTERS**

-group of similar or related things (cover term)

**WORD FORMATION**

**1. COMPOUNDING**

-two words combined to form a new word

-class + room = classroom

**2. BLENDING**

-words are combined but meaning is often combination of the original words (some letters are omitted)

-stay + vacation = staycation

**3. CLIPPING**

-words are shortened (read as is)

-examination – exam

**4. ACRONYM**

-initial letters of words are combined (pronounced as words)

-PAGASA

**5. ABBREVIATION**

-shortened words but read as a whole

-Doctor – Dr.

**6. AFFIXATION**

-adding affixes to form new words (derivational/ inflectional)

-un + believe + able = unbelievable

**7. REDUPLICATION**

-double the word/sound (total/partial)

-zigzag, hocus-pocus

**WORD ASSOCIATION**

**1. SIMILARITY**

-words with same meaning (synonyms)

Example: beautiful – charming

**2. CONTRAST**

-words with opposite meaning

Example: volatile – calm

**3. CAUSE AND EFFECT**

-shows reason and result of events

Example: signal words – (“because” and “so”)

**4. PART TO WHOLE**

-a part stands for a whole (synecdoche)

Example: “Nice wheels!” (car)

**5. CLASSIFICATION**

-words that belong to same group/genus

Example: mammals – ape, dog, whale

**6. PREDICATION**

-relationship between a noun and its verb, a doer and its action, and the action and its receiver

Example: teachers – facilitate; wrap – gift

**7. SOUND**

-homonyms, homophones, homographs

**8. MODIFICATION**

-relationship between the word and its modifier

Example: An extravagant party (adjective)

Dismissed early (adverb)

**9. COMPLETION**

-relationship between words in compound words

Example: rain + bow = rainbow

**10. ASSOCIATION**

-ideas are brought to mind when a word is perceived

**PRC BR 435** – Code of Ethics for Professional Teachers

**PD 1006** – Decree Professionalizing Teachers

**RA 7836** – Philippine Teachers

Professionalization Act of 1994

**RA 9293** – Amendments of RA 7836

**RA 4670** – Magna Carta for Public School Teachers

**RA 10912** – CPD Law

**RA 7722** – CHED

**RA 7796** – TESDA Act of 1994

**RA 9155** – Governance of Basic Education Act of 2001

**RA 10533** – Enhanced Basic Education of 2013 (K-12)

**RA 10157** – Kindergarten Act

**RA 1079** - An Act providing that Civil Service Eligibility Shall be Permanent

**RA 6655** – Free Public Secondary Education Act of 1988

**RA 10931** - Free Tertiary Education

**RA 11713 -** Teacher Education of Center Excellence Act

**RA 6728** – Act Providing Government Assistance to Students and Teachers in Private Education

**RA 7277** – Magna Carta for PWD

**RA 7610** – Anti-Child Abuse Law (Amendment of RA 9231)

**RA 7743** – Establishment of public libraries

**RA 7877** – Anti-Sexual Harassment Act of 1995

**RA 7880** – Fair and Equitable Access to Education Act

**RA 8049** – Anti-Hazing Law

**RA 8187** – Paternity Leave Act of 1996

**RA 10627** – Anti-Bullying Act of 2013

**WILHELM WUNDT**- father of psychology

**CAROLUS LINNAEUS**- father of taxonomy

**GREGOR JOHANN MENDEL**- father of genetics

**CHARLES DARWIN**- father of evolution

**RENE DESCARTES**- father of philosophy

**FRIEDRICH FROEBEL**- father of kindergarten

**ROBERT HOOKE**- father of cytology

**SIGMUND FREUD**- father of psychoanalysis

**MICHAEL FARADAY**- father of electronics

**LOUIS PASTEUR**- father of bacteriology

**HERODOTUS**- father of history

**GEOFREY CHAUCER**- father of English poetry

**BENJAMIN FRANKLIN**- father of electricity

**AUGUSTE COMTE**- father of sociology

**ARISTOPHANES**- father of comedy

**ADAM SMITH**- father of economics

**CHARLES BABBAGE**- father of computer

**EDWARD WILSON**- father of biodiversity

**JOHN B. WATSON**- father of behaviorism

**NAPOLEON ABUEVA**- father of modern sculpture

**PYTHAGORAS**- father of numbers

**CHRISTOPHER MARLOWE**- father of English tragedy

**EDGAR ALLAN POE**- father of horror/detective stories

**GUY DE MAUPASSANT**- french short story

**HOMER**- mythical geographer

**FRANCIS BACON**- father of English essay

**LINDLEY MURRAY**- father of English grammar

**WILLIAM SHAKESPEARE**- greatest English/sonnet writer

**WOLFGANG KOHLER**- insight learning theory

**IVAN PAVLOV**- classical conditioning

**BF SKINNER**- operant conditioning

**ALBERT BANDURA**- social learning

**EDWARD THORNDIKE**- connectionism

**JEAN PIAGET**- cognitive development theory

**JOHN LOCKE**- tabula rasa

**LEV VYGOTSKY**- zone of proximal development

**ERIK ERIKSON**- psychosocial

**JEROME BRUNER**- instrumental conceptualism

**LAWRENCE KOHLBERG**- moral development theory

**JOHANN PESTALOZZI**- learning by head, hand and heart

**JACOB KOUNIN**- classroom management

**EDGAR DALE**- cone of experience

**HOWARD GARDNER**- multiple intelligences

**MARX SCHELER**- values hierarchy

**BENJAMIN BLOOM**- bloom’s taxonomy

**FRANKLIN BOBBIT**- adult preparation in life

**WERRET CHARTERS**- subject matter

**WILLIAM KILPATRICK**- learner centered (project method)

**HAROLD RUGG**- holistic/whole development

**HOLLIS CASWELL**- organized/set of experience

**JOHN DEWEY**- learning by doing

**LAO TZU**- Taoism

**CONFUCIUS**- golden rule

**MENCIUS**- think with your heart

**CARLOS V. FRANCISCO**- visual arts

**CECIL LICAD**- renowned pianist

**LIZA MACUJA**- prima ballerina

**EDUARDO CASTRILLO**- sculpture landmarks

**JUAN LUNA**- painter of spolarium

**FABIAN DELA ROSA**- amorsolo’s mentor

**GILOPEZ KABAYAO**- classical violin

**PREVIOUS LET Q&A**

**DIFUSSION**- the movement of material from a more crowded are

**PHOTOSYNTHESIS**- light energy to chemical energy

**HERMAPHRODITES**- two sexes

**REGENERATION**- starfish and lizards

**TROPHIC LEVELS**- the successive levels of organisms consuming one another

**7x2x2x2**- Prime factors of 56

**40, 41, 42**- sum of three consecutive integers 1,2,3

**Php 6,120.00**- total amount after adding 8% interest of 3 months of Php 6,000.00

**12**- least common multiple of 2, 3 and 4

**25**- prime numbers between 1 to 100

**50 km per hour**- Toyota kia car

**120**- 5 girls can be seated in a row of 5 seats

**½**- die is rolled – probability of getting a number divisible by 2

**20%**- Percent of 75 is 15

**PROTEIN**- gastric juice

**GREGOR MENDEL**- father of genetics

**WALRUS**- arctic environment

**NITROUS OXIDE**- laughing gas

**FERROMAGNETIC**- magnetic material

**HYDROGEN**- lightest element

**FATS**- bile

**HERBIVORES**- eat plants only

**373 DEGREES**- boiling point of water in degrees kelvin (absolute)

**TROPICAL RAINFOREST**- biome does the Philippine belong

**1987**- nagsimula ang pagkakaroon ng modernisasyong pambansa

**KABANATA 1**- panimula, kaligiran ng pag-aaral at conceptual framework

**ELIPSIS**- tatlong tuldok na sunod sunod

**KUWIT**- naghihiwalay sa mga salita

**PAMUKOD**- pangatnig na namumukod

**IMPROPTU**- ang paksa ay binibigay bago magsimula ang talumpati

**GITLING**- bantas na ginagamit sa pagitan ng panlaping ika at tambilang

**LIZA MACUJA**- Ballet

**PAYNE-ALDRICH ACT**- Partial free foreign trade

**JAENA**- first editor of La Solidaridad

**CONSTITUTION**- fundamental law of the Philippines

**ALIBATA**- earliest form of writing

**EXTENDED**- close family ties

**CPU**- brain of the computer

**HYPERTEXT MARK-UP LANGUAGE**

**SOFTWARE**- computer program

**SPREADSHEET**- performs computation

**BLOG**- journal writing using the internet and useful for teachers who can publish lesson ideas to digital students

**MODEM**- enables the computer to communicate with other computers over the telephone

**NETWORK**- activities connected by a computer

**E-MAIL**- messages are easily transported anywhere in the world

**COSMOPOLITAN**- sophisticated

**WAS LEFT**- empty board \_\_\_\_ on the table

**HELEN OF TROY**- “the face that launched a thousand ships”

**LATEST**- I watched the \_\_\_\_\_ news on television

**MORAL**- The hard work has its rewards appears to be the \_\_\_\_\_ of the story

**YOUR; MINE**- If you forgot \_\_\_ textbook, you can use \_\_\_\_\_, Michael?

**MARK TWAIN**- Pen name of Samuel Clemens

**HAIKU**- Japanese poem – 3 lines with 17 syllables

**BAR GRAPH**- illustrates a particular data series through rectangles

**RECTANGLE**- shape of a brick

**362,880**- Permutation (9P9)

**14.35/14.15**- absolute mean

**P3,200**- manufactured bed P4,000 less 20%

**20**- digit 7 appears between 1 t0 100

**45,46**- consecutive numbers whose sum is 91

**51**- not a prime number (41, 11, 31, 51)

**RECTANGLE**- opposite sides are equal

**199**- largest prime number less than 200

**MICROFILAMENTS**- cytokinesis, amoeboid movement and changes in cell shape

**GROUP O BLOOD INTO GROUP AB PERSONS**- only safe blood transfusion

**GRASSHOPPER**- heterotroph

**NUCLEOLUS**- prokaryotic cell lacks

**MAGNOLIDAE**- kingdom plantae

**NIACIN**- vitamin

**PLASMA**- fourth form of matter

**LUNGS**- main organ for respiration

**CHLOROPHYLL**- molecule that allows to capture energy from sunlight

**ANTHROPODA**- dengue

**GALIT**- salubong ang kilay

**DON RAFAEL**- tauhan sa Noli Me Tangere na may pinakamalawak na lupain

**BARBERSHOP**- tagalog ng barbershop

**TALASTASAN**- pagpapahayag ng mga ideya, opinion at salaysay sa pamamagitan ng mga sagisag

**KURIPOT**- malalim ang bulsa

**WIKA**- simbolong kumakatawan sa mga bagay at pangungusap na nais ipahayag ng tao sa kanyang kapwa

**METATESIS**- pagpapalit ng posisyon ng ponema sa salita

**WRIT OF AMPARO**- the right to life, liberty and security

**COMMUNITY TAX**- tax required to be paid annually by all adults

**AUGUSTINIANS**- religious missionaries first arrived in the Philippines

**RICE TERRACES**- man made wonder of the Philippines

**THE RIGHT TO INFORMATION PRIVACY**- writ of habeas

**HINDUISM**- oldest religion in Asia

**MATURATION**- lowest form of learning commonly used in animals

**CERTAIN**- USA decided to drop the atomic bomb to Nagasaki

**SINGAPORE**- largest paid teacher’s salary in Southeast Asia

**BODY LANGUAGE**- eye wink, waving of hands and nodding oh head are example

**SLEEP**- natural altered state of awareness

**BEFORE MEAL**- the correct way of eating fruits

**ELECTRA COMPLEX**- daughter competes to the attention of the father

**PERCEIVING**- lowest form of learning

**CHINA**- country where teachers are most respected

**NICK JOAQUIN**- Quijano de Manila

**METAPHOR**- black sheep

**KALIDASA**- Indian Shakesperean poet

**FRANK**- candor

**ROMEO AND JULIET**- two ill-starred lovers who came from warring families

**OPHELIA DIMALANTA**- love sonnet

**METAPHOR**- phantom of delight

**ONOMATOPOEIA**- tinkle, tinkle, tinkle

**Php 300, 000**- how much was borrowed if the interest at 8% after 3 months is Php 6,000?

**PERIMETER**- sum of the sides of a polygon

½- fraction halfway between 3/7 and 4/7

56- 2 eggs: 1 cup of flour: \_\_\_\_: 28 cups of flour

**Php 12,400.00**- total amount after adding interest of 8% on Php 10,000.00 for three years?

**MODE**- measure of central tendency – size of t-shirts commonly used by teenagers

**MEDIAN**- not influenced by outliers

**102.5 DEGREES**- 25 more than its supplement – larger angle

**LINE GRAPH**- shows the progress in academic grades over four quarters

**IN VITRO FERTILIZATION**- union of an ovum and sperm inside a test tube

**CILIA**- small hair-like structure

**CHROMOSOMES**- duplicated during the process of mitosis

**CONAGE**- element X (1s2 2s2 2p2)

**CARBOHYDRATES**- polysaccharides, triglycerides, polypeptides and nucleic acids

**TRUE OF METALLOIDS**- have properties of both metals and nonmetals

**CLEAN AIR ACT**- environmental law requires to install anti-pollution devices and bans the use of incinerators

**14**- Silicon mass number of 28 – atomic number of 14 protons

**40.0 KG OF GOLD**- largest amount of gold (Au= 197)

**ENVIRONMENTAL PROTECTION**- Kyoto Protocol

**MATRIARCHAL**- a woman is the ruler of the family

**FRAILOCRACIA**- term of Marcelo H. Del Pilar to friars

**SEVERINO MONTANO**- Arena theater proponent

**NATY CRAME ROGERS**- Sala theater proponent

**REDUCCION**- pagbabagong anyo ng bayan

**UMALOHOKAN**- town crier

**JONES LAW**- bicameralism

**EPISTOLARY**- novels in letters

**TANKA**- Japanese poem – 5 lines with 31 syllables

**EULOGY**- message for the dead

**PANCREAS**- insulin

**VACUUM**- light travels fastest

**ECOLOGICAL NICHE**- ant colony

**ALEXANDER FLEMING**- penicillin

**FOOD WEB**- feeding connection among organisms

**SAHARA**- largest desert

**CARBON DIOXIDE**- released by plants at night

**CAPSID**- protein shell of virus

**EVENING**- tree releases carbon dioxide during

**FAVORITISM**- negative effect of extended family

**POLKA**- not a folk dance from Mexico

**BODABIL**- not a play from Spanish era

**SPENCER**- survival of the fittest

**LUPANG HINIRANG**- national anthem

**TAX REFORM FOR ACCELERATION AND INCLUSION**- train law meaning

**HOUSE OF REPRESENTATIVES AND SENATE**- the Philippine legislature has two chambers and is described as

**CHECK AND BALANCE**- principle behind the power given in the legislature to impeach the president

**JULIAN FELIPE**- composer of Lupang Hinirang

**PRODIGY-OFFSPRING**- two words lack correlation

**FORMERLY-HERETOFORE**- two words lack correlation

**METAPHOR**- “she is a lovely rose”

**RESONATION-** amplifying and enriching the voice

**SIMILE**- “it droppeth as a gentle rain from heaven”

**MANUEL ARGUILLA**- “how my brother Leon brought home a wife?”

**ELEGY**- poem of a grief

**CARBON DIOXIDE**- end product of citric acid cycles

**SEGMENTED: WORM**- leeches: anticoagulation

**OXYGEN**- waste product of photosynthesis

**TISSUE**- group of cells

**ARCHIPELAGO**- Philippines

**AIR, WATER AND LAND**- biosphere

**VILLI**- finger like structure

**EPIGLOTIS**- flap like structure

**FLAGELLA**- whip like structure

**DECEMBER 19, 2017-** RA 10963 was signed by President Duterte

**LIMASAWA**- first mass

**MUKDUM**- Islamic religion

**MAY 23, 2017**- declaration of martial law in mindanao

**NIGARA FALLS**- boundary between Canada and America

**MINDANAO**- land of promise

**AFRICA**- least developing continent

**CAPITALISM**- economic system based on free enterprise

**CONFIRM**- corroborate

**EASILY DECEIVE**- gullible

**SOLILOQUY**- speech made by a person who reveals his thoughts

**HYPOCHONDRIAC LIVING IN MORBID FEAR**- fall of the House of Usher

**THE ILIAD OF HOMER**- epic poem – anger and wrath of Achilles against Agamemnon

**FOLKTALES**- literature reflects the people’s belief and handed down from generation to generation by word of mouth

**WEAK**- feeble

**POLYGOT**- speak many languages

**ONE THOUSAND AND ONE NIGHT**- Arabian setting

**AIR**- light travels faster

**SOLID**- sounds travel faster

**GULF**- a sea partly enclosed by land

**ZONE**- a surface between tropic of cancer and arctic circle

**METALLOIDS**- display properties of both metals and non-metals

**BRIGHT GREEN**- flame test – presence of boron

**HURRICANE**- storm in Atlantic Ocean

**LEECHES**- anticoagulation

**RECEIVES SUN RAYS CLOSER TO VERTICAL POSITION**- the Philippines is much hotter than Canada

**COMMA-SHAPED BACTERIA**- vibrio cholera

**LOPE DE VEGA**- national theater in spain

**ST. AUGUSTINE**- faith

**NEGRITOS**- aboriginal settlers

**MINDORO**- land of Gold or Ma-i

**CONGRESS**- has the power to declare the existence of a state of war

**ELECTORAL TRIBUNAL**- a losing senatorial candidate may file a protest against the winner

**PAYING THE FALLA**- exemption of forced labor

**CLARO M. RECTO**- the great dissenter

**WRIT OF HABEAS CORPUS**- right to seek public attorney

**SCORNFUL**- contemptuous

**AWKWARD LOOKING**- baduy

**EDITORIAL SECTION**- opinion of the people

**FORMAL GATHERING**- black tie affair

**COMPARATIVE**- he is taller of two brothers

**DESTINY**- grand design

**LIMITED**- mother’s financial resources

**VERBOSE**- loquacious

**ATOM**- smallest particle

**OPTICAL EFFECT OR ILLUSION**- mirage

**MICROSPORIDIA**- kingdom fungi

**ENDOCRINE GLAND**- controls emotions

**MILK**- example of colloid

**VEINS**- blood vessels carry blood back to the heart

**EYES**- myopia

**COMMENSALISM**- relationship between an organism and a host which neither is benefited nor harmed

**SEISMOGRAPH**- detect the magnitude of an earthquake

**STOMATA**- opening holes of the plant leaves

**ACTA DE TEJEROS**- the act that rejected Aguinaldo as the president

**NATURAL LAW**- most basic foundation for moral principles

**HEINOUS**- rape

**LEGISLATIVE**- senate

**ST. THOMAS AQUINAS**- reason

**INCOME TAX**- tax imposed on all employed and practicing professionals

**MALABON BAND**- band played on June 12, 1896

**OLIGARCHY**- a rule of few

**BIOTECHNOLOGY**- use of organisms to produce things that people need

**WALRUS**- arctic island

**COAL**- energy source which is not sustainable

**GAS**- renewable resource that have not yet developed in the Philippines

**OZONE LAYER**- earth’s shield against the sun’s harmful radiation

**BECAUSE THE EARTH ROTATES ON ITS AXIS**- day and night every 24 hours

**ECOLOGY**- study of the relationship between plants, animals and other living things in a habitat

**GREENHOUSE EFFECT**- excessive presence of CO2 in the air trapping heat near earth’s surface

**GOLD**- Au

**PARASITISM**- one is harmed; the one is benefited

**FRANCISCO DAGOHOY**- revolted due to improper burial of his sibling

**PORTUGEUSE**- Magellan

**ARISTOCRACY**- rule of the best

**JULIUS CAESAR**- might is right

**ASIA**- biggest continent (30.1% of the earth)

**MEXICO**- galleon trade

**ARTICLE XIII SECTION 14 WOMEN**- maternity leave

**INDUSTRIALIZED COUNTRIES TOXIC DISPOSED TO POORER COUNTRIES**- interconnectedness between social and environmental injustice

**MERITOCRACY**- leadership by people of talent

**OPTIMISM**- predominant characteristic of eastern religion

**RA 8749**- environmental law requires to install anti-pollution devices and bans the use of incinerators

**SAVANNA**- biome with scattered trees

**SKIN**- largest organ of the body

**PLANTS**- flora

**ANIMALS**- fauna

**RITALIN**- drug used on someone who has ADHD

**BAMBOO**- grass family

**CELLULAR RESPIRATION**- plants release CO2 in the process

**HELIOCENTRIC**- the sun is the center of the solar system

**ACIDIC**- pH below 7

**VENUS**- earth’s twin planet

**PROBIOTICS**- non-pathogenic microorganisms

**MIDNIGHT SUN**- sun shines all the time both day and night

**OLYMPUS MONS IN MARS**- highest mountain in the solar system

**DEOXYRIBONUCLEIC ACID**- DNA

**PHOTOSYNTHESIS-** process used by plants to convert the energy from sunlight into chemical energy

**MOLLUSKS**- red tide

**SURFACE TENSION**- a toothpick can sit on the surface of water due to.

-PRETTY RIANE SANTOS