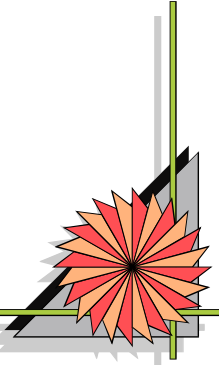


SCHEME OF WORK

GRADE-8, TERM 01, 2011



UNIT	TOPICS	OBJECTIVES	LEARNING ACTIVITY	T.AIDS & REF	EVALUATION
The Marine Environment	Earth	* To study about the structure of earth (core, mantle , crust)	*Discussing the major layers of the earth and describing the features of each layer.	Text book, Blackboard, Chalk, Charts.	Oral questions,
		* To study the formation of continents - Plate tectonic theory.	*Describing the plate tectonic theory with the help of charts and making the children to understand how different continents are formed due to the movement of plates.		
		* To familiarize about the Earth's structure in the marine environment.	*Describing the geomorphology of the marine environment.		
		* To understand the formation of Oceanic ridge, Ocean trench and Volcanic islands.	*Making the children to complete a worksheet.		

WEEK NO **2**

NO. OF PRDS **5**

UNIT	TOPICS	OBJECTIVES	LEARNING ACTIVITY	T.AIDS & REF	EVALUATION
The Marine Environment	Earth	* To study about the coral reefs and its types.	*Explaining the term Coral reefs and describing the types of coral reefs with the help of a chart.	Text book , Blackboard, Chalk, Pictures	Oral questioning
		* To learn the theories that explains the formation of the atolls.	*With the help of charts, explain the various theories that explain the formation of atoll.		
		* To study about the formation of oceanic islands and the fresh water lens.	*Discussing the possibilities of the formation of sandbank and the vegetation in the islands.		
			*Describing the method of freshwater lens formation.		
		*To revise the concepts and to assess the level of understanding	*Making the students to complete a test		

UNIT	TOPICS	OBJECTIVES	LEARNING ACTIVITY	T.AIDS & REF	EVALUATION
The Marine Environment	Sea	* To understand the similarities and differences in the aquatic environment.	*Describing the various terms that are associated with the aquatic environment.	Text book , Worksheet, Blackboard, Chalk	Oral questioning
		* To differentiate standing water - flowing water, True sea - Lake, Fresh water-Saline water.			
		* To locate the positions of various Oceans and Seas in the world map.	*familiarize the students to point out the Oceans and Seas in the World map.		
		* To learn how the chemical properties of sea water (Dissolved oxygen, concentration of oxygen, salinity) change in the seawater.	*Listing and discussing the various chemical properties that change in the sea water.		

UNIT	TOPICS	OBJECTIVES	LEARNING ACTIVITY	T.AIDS & REF	EVALUATION
The Marine Environment	Sea			Text book , Blackboard, Chalk	Oral questioning
		* To list the various physical properties of seawater	*Listing the various physical properties that change in the sea water.		
		* To study the water cycle	*Describing the water cycle with the help of charts.		
		* To understand the variations of the water density in sea water with depth.	* Explaining how the density of sea water change with depth.		
		* To study how light penetrations, Temperature vary in the various depth of sea water.	* Discussing about the light penetrations, temperature differences in the various depth of sea water.		
		* To learn about the formation of tides and to differentiate about the spring and neap tides.	* Explaining the formation of tides and to differentiating the spring and neap tides.		

UNIT	TOPICS	OBJECTIVES	LEARNING ACTIVITY	T.AIDS & REF	EVALUATION
The Marine Environment	Sea	* To learn the formation of wave and the	* Discussing about the formation of wave and the	Worksheet, Blackboard, Chalk	Oral questioning
		patterns of wave motion in deep water wave.	patterns of wave motion in deep water wave.		
		* To differentiate swash and backwash.	* Discussing about the swash and backwash and		
		* To study about the sea currents and its	describing its difference.		
		formation.	* Discussing about the formation of sea currents		
		* To learn about upwellings and Downwellings.	* Describing the upwellings and Downwellings.		
		*To revise the concepts and to assess the	*Making the students to complete a test		
		level of understanding			

UNIT	TOPICS	OBJECTIVES	LEARNING ACTIVITY	T.AIDS & REF	EVALUATION
The Marine Environment	Monsoons , Global Warming			Text book , Worksheet, Blackboard, Chalk	Oral questioning
		* To explain the features of Monsoons.	* Discussing the features of Monsoons.		
		* To describe the characteristics of South-	* Describing the characteristics of South-		
		West and North-East monsoon.	West and North-East monsoon with the help of		
		* To explain Nakaiy and the features of EL	charts.		
		Nino phenomenon.	* Describing the Nakaiy and the features of EL		
			Nino phenomenon.		
		* To explain the green house effect and the	*Discussing about the different layers of		
		gases that help in maintaining green house	atmosphere and explaining the characteristic		
		effect.	features of the gases in the atmosphere.		

UNIT	TOPICS	OBJECTIVES	LEARNING ACTIVITY	T.AIDS & REF	EVALUATION
The Marine Environment	Global Warming	* To describe the sources of green house gas (carbon dioxide , methane, CFC, nitrous oxide)	*Describing the green house effect and listing the gases that help in maintaining green house	Text book , Worksheet, Blackboard, Chalk	Oral questioning, Worksheet.
		* To explain the term Global warming and its effects.	effect.		
			* Describing the sources of green house gas (carbon dioxide , methane, CFC, nitrous oxide)		
			* Explaining the term Global warming and its effects.		
		*To revise the concepts and to assess the level of understanding	*Making the students to complete a test		

UNIT	TOPICS	OBJECTIVES	LEARNING ACTIVITY	T.AIDS & REF	EVALUATION
Diversity of marine Life	Classification	* To understand the term Taxonomy and its importance.	* Introducing the term Taxonomy and its importance.	Text book , Worksheet, Blackboard, Chalk	Oral questioning, Worksheet.
		* To list and describe the order of classification.	* Listing and describing the order of classification and explaining each taxa.		
		* To differentiate the Species and Genus.	*Discussing the problems faced by scientists and explaining the need of scientific naming of organisms.		
		* To explain the need of scientific naming of organisms.	organisms.		
		* To describe Binomial nomenclature and its characteristics.	*Describing Binomial nomenclature and its characteristics.		
		* To explain the taxonomic keys and learn how it is used to identify the organism	* Explaining the taxonomic keys and giving practise to the students.		
		* To list the various other ways of classifying marine organisms.	* Listing the various other ways of classifying marine organisms.		
		*To differentiate catadromous and anadromous fish.	*Differentiating the catadromous and anadromous fish.		

UNIT	TOPICS	OBJECTIVES	LEARNING ACTIVITY	T.AIDS & REF	EVALUATION
Diversity of marine Life	Diversity			Text book , Worksheet, Blackboard, Chalk	Oral questioning, Worksheet.
		* To classify the organism according to their position in the water column and diet.	* Recalling the different methods that are used to classify the marine organisms.		
			*Discussing how to classify the organism according		
		* To explain the formation of first living things.	to their position in the water column and diet.		
			*Discussing how the fist living thing is formed and		
		* To define the term Evolution.	explaining the term evolution.		
		* To discuss about the diversity of organisms.	* Discussing about the diversity of organisms.		
		* To classify the organisms according to the way they get their energy.	* Describing the method to classify the organisms according to the way they get their energy.		

UNIT	TOPICS	OBJECTIVES	LEARNING ACTIVITY	T.AIDS & REF	EVALUATION
Diversity of marine Life	Diversity			Text book , Worksheet, Blackboard, Chalk	Oral questioning, Worksheet.
		* To describe the five kingdoms and their characteristics.	* Describing the five kingdoms and their characteristics.		
		* To differentiate five kingdoms using dichotomous keys.	* Giving practice to the students how to differentiate five kingdoms using dichotomous keys.		
		*To revise the concepts and to assess the level of understanding	*Making the students to complete a test		

WEEK NO

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UNIT	TOPICS	OBJECTIVES	LEARNING ACTIVITY	T.AIDS & REF	EVALUATION
MID TERM HOLIDAYS					

UNIT	TOPICS	OBJECTIVES	LEARNING ACTIVITY	T.AIDS & REF	EVALUATION
Major Phyla	Algae and Sea grass, Porifera- Introduction , External features , Internal features	*Students should be able to understand about Algae, its major groups and the life cycle.	*Explanation with the help of specimen and making the students to complete a worksheet based on the concepts.	Specimens, Charts, Text book ,Blackboard, Chalk	Oral questions and Worksheet
		*Students should be able to understand about the seagrass and its life cycle.	*Explanation with the help of specimen and making the students to complete a worksheet based on the concepts		
		* Students will be able to recall the facts learnt about Algae and Sea grass	*Making the students to complete a Questionnaire in groups.		
		*Students should be able to understand about Sponges and its external structure.	*Explanation and discussion with the help of chart.		

UNIT	TOPICS	OBJECTIVES	LEARNING ACTIVITY	T.AIDS & REF	EVALUATION
Phylum-Cnidaria	Sponge (Life cycle & Reproduction), Cnidaria (Introduction , External features, Internal features and Life cycle)	*Students should be able to understand the life of a sponge and reproduction	*Explanation and discussion with the help of chart and making the students to draw the life cycle and reproduction of Sponge	Charts, Text book , Worksheet, Computer , Blackboard, Chalk	Oral questioning, Worksheet.
		*Students should be able to recall the facts learnt about Porifera	*Making the students to complete the worksheet		
		*Students should be able to apply the concepts learnt about Algae, Sea grass and Porifera.	*Making the students to complete the worksheet		
		*Students should be able to understand about the external features, Internal feature and the life cycle of phylum Cnidaria	*Explanation with the help of charts. *Allowing the students to explore about the corals in power point.		

UNIT	TOPICS	OBJECTIVES	LEARNING ACTIVITY	T.AIDS & REF	EVALUATION
Phylum-Platyhelminthes	Cnidaria (Growth and Reproduction), Platyhelminthes(Introduction, External features, Internal features and Life cycle)	*Students should be able to understand about the growth and reproduction of Cnidarians	*Explanation and discussion about the Growth and reproduction of corals with the help of chart.	Charts, Text book, Worksheet, Blackboard, Chalk	Oral questioning, Worksheet.
		*Students will be able to recall the facts learnt about Cnidaria	*Making the students to complete the worksheet		
		*Students should be able to understand the external features, internal features and the life cycle of Platyhelminthes	*Explanation with the help of chart and Making the students to draw the structure of Platyhelminthes.		
		*Students will be able to recall the facts learnt about Platyhelminthes	*Making the students to complete the worksheet		
		*Students will be able to apply the concept learnt about Cnidaria & Platyhelminthes	*Making the students to complete the worksheet		

UNIT	TOPICS	OBJECTIVES	LEARNING ACTIVITY	T.AIDS & REF	EVALUATION
Phylum: Arthropoda	Arthropoda (Introduction , External features, Internal features and Life cycle)	*Students should be able to under-	*Explanation and discussion about the	Charts, Text book , Worksheet, Blackboard, Chalk	Oral questioning, Worksheet.
		stand the General features ,External	General features ,External features,		
		features, Internal features and Life	Internal features and life cycle of		
		cycle of Arthropoda.	Arthropoda.		
			*Making the students to draw the		
			Label the structure of Lobster.		
		*Students will be able to recall the	*Making the students to complete the		
		facts learnt about Arthropoda.	worksheet		

UNIT	TOPICS	OBJECTIVES	LEARNING ACTIVITY	T.AIDS & REF	EVALUATION
Phylum: Mollusca	Mollusca (Introduction , External features, Internal features and Life cycle)	*Students should be able to understand the General features ,External features, Internal features and Life cycle of Mollusca.	*Explanation and discussion about the General features ,External features, Internal features and life cycle of Mollusca.	Charts, Text book , Worksheet, Blackboard, Chalk	Oral questioning, Worksheet.
			*Helping the students to identify the different molluscans with the help of Dichotomous keys.		
		*Students will be able to recall the facts learnt about Mollusca.	*Making the students to complete the worksheet		
		*Students will be able to apply the concepts learnt about Arthropoda and Mollusca	*Making the students to complete the worksheet		

UNIT	TOPICS	OBJECTIVES	LEARNING ACTIVITY	T.AIDS & REF	EVALUATION
Phylum: Echinodermata	Test paper correction, Echinodermata (Introduction, External features, Internal features and Life cycle)	*Students will be able to correct the mistakes made in the test paper	* Making the students to do correction.	Charts, Text book , Worksheet, Blackboard, Chalk	Oral questioning, Worksheet.
		*Students should know about the general characteristic features, ext-	*Explanation and discussion about the General features ,External features,		
		ernal features, Internal features and	Internal features and life cycle of		
		Life of Echinodermata.	Echinodermata.		
			* Making the students to draw the str.		
			of echinoderms.		
		*Students will be able to recall the	*Making the students to complete the		
		facts learnt about Echinodermata.	Worksheet.		

UNIT	TOPICS	OBJECTIVES	LEARNING ACTIVITY	T.AIDS & REF	EVALUATION			
	REVISION			Text book , Worksheet, Blackboard, Chalk	Oral questioning, Worksheet.			
			* Students will be able to revise and clear the doubts			*Discussion of correct answers		

WEEK NO

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UNIT	TOPICS	OBJECTIVES	LEARNING ACTIVITY	T.AIDS & REF	EVALUATION
Term Test	TEST			Test paper	Correcting the test paper
		* Students will be able to access their			
		level by answering the test paper			