

### ISLAMIC EDUCATION FORM 3

<b>TIME</b>	80 minutes
<b>CHAPTER</b>	Understanding of Al-Quran
<b>TOPIC</b>	Paragraphs 1 and 3 of Surah Al-Maidah
<b>SUB-TOPIC</b>	The animals are halal to be consumed and its wisdom, and the animals that forbidden to be consumed and its dangerous.
<b>OBJECTIVES</b>	<p>Students will be able to:</p> <ol style="list-style-type: none"> <li>1. State the animals that are halal and forbidden to be consumed.</li> <li>2. State the reasons that certain animals are forbidden to be consumed.</li> <li>3. Explain the wisdom of the halal animals, and the dangerous of consuming the forbidden animals.</li> </ol>
<b>ENVIRONMENTAL VALUES</b>	<p>(5) The principle of emphasizing the establishment of ecosystem</p> <p>(7) The principle of minimal damage.</p>
<b>TEACHING AIDS</b>	A mural of coral reefs.
<b>METHODS</b>	<ol style="list-style-type: none"> <li>1. Brainstorming.</li> <li>2. Explanation</li> <li>3. Question and answer.</li> </ol>
<b>TEACHING PROCEDURES</b>	<ol style="list-style-type: none"> <li>1. Induction Set Students brainstorm about the wildlife that can be consumed based on the mural of coral reefs.</li> <li>2. Students discuss in groups about:             <ol style="list-style-type: none"> <li>(a) Type of water and land animals that can be consumed either farmed or hunted.</li> <li>(b) Identification of attributes of the animals which are forbidden to be consumed</li> </ol> </li> <li>3. Teacher gives explanation and discuss with the students about the reasons for the animals which are original halal become forbidden to be consumed.</li> <li>4. Teacher discusses the factors that promote the proliferation of polyps that form the basis of the formation of coral reefs.</li> <li>5. Students are able to explain the position of the reefs based on the reasons that have been discussed.</li> </ol>

6. Students discuss and present the conclusion of the importance of coral reefs to the wildlife.

## **EVALUATION**

Questions and Answers.

1. Why the coral reefs are not found at the confluence of the river and the west coast of the continental?
2. Why we should preserve coral reefs?
3. Specify the threats to coral reefs?

## **FURTHER ACTIVITIES**

Students are asked to prepare a brief article about coral reefs in Malaysia.

**FORM 2 SCIENCE**

<b>TIME</b>	80 minutes
<b>TITLE</b>	Water and Solution
<b>OBJECTIVES</b>	A student is able to 1. Explain ways to save water
<b>ENVIRONMENT NOBLE VALUES</b>	(5) The importance of sustaining our ecosystem principle (4) Life balance principle (16) The importance of taking care of the environment principle
<b>TEACHING AID</b>	Laptop , Projector
<b>METHOD</b>	1. ‘Aqualator’ Game 2. Observation 3. Q & A 4. Discussion 5. Explaining
<b>STEPS</b>	1. Induction set Teacher asks the students’ to state the importance of water. Teacher attracts the students’ attention about the usage of water in everyday life. 2. Teacher introduced Aqualator game to the students. Aqualator game uses a rain soaked cat to calculate how much water you waste or save. 3. Students are divided into groups to play the game. 4. Each student in the group will get the chance to play the game. 5. Each group will discuss the outcome of the result of the game and present. 6. Other groups are encouraged to give their comments and give their opinions. 7. Teacher summarized the importance preserving and conserving water.
<b>EVALUATION</b>	1. Explain the importance of water. 2. State ways to save water.
<b>FURTHER ACTIVITY</b>	1. Students are required to carry out a project to study the average volume of water used at home.

**FORM 3 MALAY LANGUAGE**

<b>TIME</b>	40 minutes
<b>TITLE</b>	Pictorial composition
<b>OBJECTIVE</b>	A student is able to write a composition that describe the condition and the diversity of marine life species
<b>ENVIRONMENT NOBLE VALUES</b>	(1) The importance of sustaining ecosystem principle (6) The importance of maintaining the wildlife and the diversity of life principle (16) The importance of taking care of the environment principle
<b>ASSIMILATION OF KNOWLEDGE TEACHING AID</b>	Marine life Coral Reefs Mural
<b>METHOD</b>	Group discussion
<b>STEPS</b>	<ol style="list-style-type: none"><li>1. Induction set Teacher attracts the student attention by describing the pleasure of swimming in the sea. The student briefly tells their experience about it.</li><li>2. Students are divided into 5 groups to discuss about the aspect of the varieties of marine life depending on each other base on the coral reefs mural.</li><li>3. Each group representative will do their presentation and other groups are encouraged to give their comments or any new information related.</li></ol>
<b>EVALUATION</b>	Teacher will conduct <ol style="list-style-type: none"><li>1. Observation during group discussion</li><li>2. The outcome of the students' discussion</li></ol>
<b>FURTHER ACTIVITY</b>	Student will write an essay (pictorial composition) of not less than 180 words on the condition and the diversity of marine life as their homework.

**MATHEMATICS FORM 2**

<b>TIME</b>	80 minutes
<b>UNIT</b>	11
<b>TOPIC</b>	Circles
<b>SUB-TOPIC</b>	Estimate the value of $\pi$
<b>OBJECTIVES</b>	Students will be able to explain the ways used to obtain the value of $\pi$
<b>ENVIRONMENTAL VALUES</b>	<ul style="list-style-type: none"> <li>(3) The principle of respecting the nature/ earth.</li> <li>(5) The principle of emphasizing the establishment of ecosystem</li> <li>(6) The principle of maintaining wildlife and diversity of lives.</li> <li>(12) The principle of moderation.</li> <li>(13) The principle of protection and conservation of ecosystem.</li> <li>(160) The principle of loving the environment.</li> </ul>
<b>TEACHING AIDS</b>	<ul style="list-style-type: none"> <li>1. Coral reef mural.</li> <li>2. Several circle bracelet with different sizes.</li> <li>3. Manila card which are same size as the circle bracelet.</li> <li>4. String.</li> <li>5. Meter ruler</li> </ul>
<b>METHODS</b>	<ul style="list-style-type: none"> <li>1. Practical.</li> <li>2. Questions and Answers.</li> <li>3. Brainstorming.</li> </ul>
<b>TEACHING PROCEDURES</b>	<ul style="list-style-type: none"> <li>1. Induction set. Students complete a table of number and percentage of each species of marine life in the mural.</li> <li>2. Put every circle bracelet on the mural.</li> <li>3. Measure the circumferences of each of the circle bracelet by using string. Record.</li> <li>4. Measure the diameter of each of the circle bracelet. Record.</li> <li>5. (a) Divide every circumference by its corresponding diameter. Record. (b) Calculate the mean of the values obtained.</li> </ul>
<b>CONCLUSION</b>	The value obtained is an approximation value named pi, and its symbol is $\pi$ .

The value of  $\pi$  is 3.142 or  $\frac{22}{7}$

## **FURTHER ACTIVITIES**

1. Students cover the surface of coral reef mural by using various cards. Then, students calculate the number and percentage of the marine life under the manila card.

Explanation:

- (i) Teacher explains that trawlers have the almost circle-shaped face cuttings.
  - (ii) Teacher makes the assumption that surface area of mural covered with the manila card is the mouth of a trawl which is towed to the reef. The number and percentage of the covered marine life is the amount of marine life caught in the trawl nets.
  - (iii) The coral reefs exist around the coast. The intrusion by trawlers in the coastal area will lead to the destruction of coral reef ecosystem.
  - (iv) The manila card which covers the coral depicts the damage to the coral reef ecosystem.
  - (v) The larger the trawlers, the faster and larger area of coral reefs destruction.
2. Thinking questions  
If you are the chief of branch of Marine Park and Recreational Fishery, what steps will you take to overcome this intrusion?

**ENGLISH LANGUAGE FORM 2**

<b>TIME</b>	80 minutes
<b>UNIT</b>	7
<b>TOPIC</b>	Descriptions
<b>SUB-TOPIC</b>	Coral Reef
<b>OBJECTIVES</b>	Students will be able to: <ol style="list-style-type: none"> <li>1. Name and describe sea lives based on the mural.</li> <li>2. Write a paragraph on sea lives based on mural.</li> </ol>
<b>ENVIRONMENTAL VALUES</b>	(3) The principle of respecting the nature/ earth. (6) The principle of maintaining wildlife and diversity of lives.
<b>TEACHING AIDS</b>	A mural of a coral reef.
<b>METHODS</b>	<ol style="list-style-type: none"> <li>1. Brainstorming.</li> <li>2. Question and answer.</li> <li>3. Discussion.</li> <li>4. Free writing.</li> </ol>
<b>TEACHING PROCEDURES</b>	<ol style="list-style-type: none"> <li>1. Teacher asks questions about diversity of sea lives. Students name the type of sea lives found in the normal.</li> <li>2. Students describe the sea lives based on cue words given.</li> <li>3. In groups, students write a paragraph describing a particular sea life. Each group will write on a different sea life.</li> <li>4. Groups, exchange the written paragraphs and write in their exercise books.</li> </ol>
<b>EVALUATION</b>	Based on: <ol style="list-style-type: none"> <li>1. Observation while students are naming and discussing the different sea lives.</li> <li>2. Write exercises done by students on different sea lives.</li> </ol>
<b>FOLLOW-UP ACTIVITIES</b>	Imagine that you are one of the sea animals. Write a letter to a sea animal friend living in a different area, telling about your problems regarding food, water conditions, pollution and other disturbances. Create your own name and address in the sea.

## FORM 4 GEOGRAPHY

<b>TIME</b>	80 minutes
<b>TITLE</b>	Sea and Ocean
<b>OBJECTIVES</b>	A student is able to <ol style="list-style-type: none"><li>1. List down the location of coral reefs</li><li>2. State the factors affecting the growth of corals polyps</li><li>3. State the importance of corals reefs to the environment.</li></ol>
<b>ENVIRONMENT NOBLE VALUES</b>	<ol style="list-style-type: none"><li>(3) Respecting the earth principle</li><li>(5) The importance of sustaining our ecosystem principle</li><li>(7) The importance of minimal damage principle</li></ol>
<b>TEACHING AID</b>	<ol style="list-style-type: none"><li>1. Coral reefs</li><li>2. Pictures of corals reefs which are cut to few pieces</li><li>3. Printed material – world map</li><li>4. Video of the economic activities in Sabah</li></ol>
<b>METHOD</b>	<ol style="list-style-type: none"><li>6. Observation</li><li>7. Q &amp; A</li><li>8. Discussion</li><li>9. Explaining</li></ol>
<b>STEPS</b>	<ol style="list-style-type: none"><li>1. Each group are asks to complete the puzzle of the picture of the coral reefs which were cut into few pieces.</li><li>2. Students list down the elements that can be found on the coral reefs mural</li><li>3. Students mark and labelled the location of the corals reefs on the world map provided.</li><li>4. Students watch a video and write down the economic activities in Sabah.</li><li>5. The students are divided into groups. Each group will discuss the type of economic activities base on the important points and notes taken. They are also required to list down the type of pollution due to the economy activities in Sabah.</li><li>6. The leader of each group will present the outcome of their discussion. The other student are encourage to give comments and ask questions</li><li>7. Teacher will noted all the report and summarize that the economy development are good if the pollution are in control.</li></ol>



Mankind must love their environment and not to exploit it for gains only.

**EVALUATION &  
FURTHER ACTIVITY**

1. Students are required to mark the places of the main economic activities in Sabah on the map.
2. Students noted down the type of economic activities in Sabah and the pollution effect from these activities

**FORM 3 SCIENCE**

<b>TIME</b>	80 minutes
<b>TITLE</b>	Land and its resources
<b>OBJECTIVES</b>	A student is able to <ol style="list-style-type: none"> <li>2. Explain the formation of petroleum</li> <li>3. Describe the fractional distillation of petroleum</li> <li>4. State the effect of oil spills towards the aquatic organisms</li> </ol>
<b>ENVIRONMENT NOBLE VALUES</b>	(6) The importance of maintaining the wildlife and the diversity of life principle (16) The importance of taking care of the environment principle
<b>TEACHING AID</b>	Delivery tube, Boiling tubes, Thermometer, Beaker
<b>MATERIALS</b>	Coral reefs mural, petroleum, larvae
<b>METHOD</b>	Demonstration, Brain storming, explanation, Q&A in Group
<b>STEPS</b>	<ol style="list-style-type: none"> <li>1. Induction set Teacher asks the students to state the things they can observe from the mural. Teacher attracts the students' attention about the formation and the uses of petroleum.</li> <li>2. Students are brought into the laboratory to carry out the experiment on the fractional distillation of petroleum.</li> <li>3. Teacher asks the students to observe the viscosity and the colour of each fraction of the petroleum at different temperature.</li> <li>4. Students carry out the experiment.</li> <li>5. The students put one of the petroleum fractions into the beaker that contains larvae. They are instructed to do observation after two days.</li> <li>6. Students will do discussion on the formation of petroleum based on the decomposition process and the effect of oil spill on marine organisms.</li> </ol>
<b>OBSERVATION</b>	Students are required to do observation and record their findings.
<b>EVALUATION</b>	<ol style="list-style-type: none"> <li>1. Explain the formation of petroleum.</li> </ol>

2. Name the method to separate petroleum into its components / fractions.
3. State the effect of oil spill to marine life.

#### **FURTHER ACTIVITY**

1. a. States whether the coral reefs is plant or animal  
b. Give your reasons.
2. Discuss the need to conserve our lake, river and sea.

## **PHYSICAL AND HEALTH EDUCATION**

<b>TOPIC</b>	Creative Movement
<b>TIME</b>	40 minutes
<b>LOCATION</b>	Station of Physical and Health Education Hibiscus Garden
<b>MATERIALS AND TOOLS</b>	No
<b>OBJECTIVES</b>	Students will be able to: <ol style="list-style-type: none"><li>1. Perform good creative movement according to the level and space provided.</li><li>2. State the importance of preservation and conservation of biodiversity.</li><li>3. Explain the consequences of species extinction.</li></ol>
<b>ACTIVITIES</b>	<ol style="list-style-type: none"><li>1. In groups, the students do the stretching and relaxing for 5 minutes, and then jog to Hibiscus Garden.</li><li>2. Students perform the following movements:</li><li>3. State 5 colours of hibiscus</li><li>4. What sources of food are available from hibiscus</li><li>5. Give the ways to control the extinction of species.</li></ol>

### ENGLISH LANGUAGE FORM 3

<b>SUBJECT</b>	<b>English Language</b>
<b>TOPIC</b>	It's Raining, It's Pouring! – DEBATE
<b>THEME</b>	Environment
<b>LEARNING OUTCOMES</b>	2.2 a) skimming and scanning for specific information and ideas b) extract main ideas and details c) read material in print such as a newspaper report. f) draw conclusions
<b>BEHAVIORAL OBJECTIVES</b>	By the end of this lesson, the students should be able to: <ul style="list-style-type: none"> <li>- participate in the conversations and discussions about environmental issues effectively,</li> <li>- to rebut and Debaters are able to deliver their arguments effectively</li> <li>- other students as members of the house gain knowledge on the motion being debated.</li> <li>- the students are able to ascertain if to ACCEPT or DECLINE the motion and to decide the best speaker.</li> </ul>
<b>EDUC. EMPHASIS TEACHING AIDS</b>	Values and citizenship, Thinking Skills
<b>ACTIVITIES / DEVELOPMENT OF LESSON</b>	<b><u>Teaching &amp; Learning Activities:</u></b> <ul style="list-style-type: none"> <li>- give a situation on an issue of the environment to the students for them to discuss, argue and come to a conclusion on the best approach to tackle the problem,</li> <li>- group discussion</li> <li>- debating</li> </ul>
<b>EVALUATION</b>	Students' ability to argue, to specify and affirm their stand in the discussion.
<b>ASSIGNMENT</b>	

**FORM 2 HISTORY**

<b>TIME</b>	80 minutes
<b>CHAPTER</b>	10
<b>SUBTITLE</b>	PROGRESSIVE ECONOMY DEVELOPMENT
<b>TITLE</b>	ECONOMY DEVELOPMENT IN SABAH
<b>OBJECTIVES</b>	A student is able to <ol style="list-style-type: none"> <li>1. List down the economy activities in Sabah</li> <li>2. Give the type of environment that might happen due to the economy activities in Sabah.</li> </ol>
<b>ENVIRONMENT NOBLE VALUES</b>	<ol style="list-style-type: none"> <li>(2) Cooperation principle</li> <li>(3) Respecting the earth principle</li> <li>(4) Life balance principle</li> </ol>
<b>TEACHING AID</b>	<ol style="list-style-type: none"> <li>1. Coral reefs mural</li> <li>2. Form 2 History Text Book</li> <li>3. Video ‘To Know Sabah’</li> <li>4. Sabah map</li> </ol>
<b>METHOD</b>	<ol style="list-style-type: none"> <li>1. Reading</li> <li>2. Discussion</li> <li>3. Watching Video</li> <li>4. Brain storming</li> </ol>
<b>STEPS</b>	<ol style="list-style-type: none"> <li>1. Induction set. Base on the coral reefs, the teacher asks the students to list down 5 type of marine life that can be the source of income.</li> <li>2. Students read the article on the Economy Development of Sabah from the texts book and note down the important point.</li> <li>3. Each group will discuss how the energy from the coral is produce.</li> <li>4. Each group list down the steps to conserve and preserve the coral reefs.</li> <li>5. Each group will present the outcome of their discussion.</li> <li>6. Teacher will summarize how coral reefs can be a source of energy.</li> <li>7. Students are required to sing “Pantun” together.</li> </ol>

## **EVALUATION**

1. Name 3 types of fossil fuels that are used.
2. Name 3 sources of renewal energy.
3. List down 3 activities that are treats to the corals reefs.
4. State 2 uses of coral reefs.

### LIST OF ENVIRONMENTAL EDUCATION LEARNING STATIONS

No	Learning Station	Description
1.	School Canteen	Students learn how to maintain the cleanliness of the canteen with the cooperation from other students without depending on the canteen workers. While in the canteen, the students have to apply what was learnt on separating organic kitchen waste with recyclable waste. In the canteen, the students are not allowed to use plastic-based materials such as plastic straw and plastic bag.
2.	Rain Water Harvesting Station	At the Rain Water Harvesting Station, students understand the need and importance of harvesting rain water. They will learn to value water and started using rain water for various purposes.
3.	Mud balls and Effective Microorganism Vegetable Enzyme Juice (EM Juice)Station	Producing mud balls is one of the main products produced by the school students. At the mud balls stations, students' self confidence is built as they learn how to present or share information about how mud balls is made to school visitors when asked about it. Students also will learn how to manage their kitchen waste wisely. This is because in the EM Vegetable Enzyme Station, they learn how the kitchen waste can be used to make EM vegetable enzyme juice. This enzyme can be used as fertilizer and pesticide.
4.	Drug Awareness Corner	Our youth nowadays are facing major problem in drug abuse. So to help to tackle this problem, the counselor set up the "Drug Awareness Corner". This corner helps the students to be more aware on the dangers of drug abuse. The students also play an important role in achieving the objective of this Station. The students cooperate with each other to find related information about drug abuse, organize poster drawing competition based on the suitable theme, and making pamphlet.
5.	School Toilet	The condition of the toilet resembles the personality of a person. In St Michael, students are taught to be responsible of their own action. In using the toilet, the students have to ensure the cleanliness of the toilet. They have to obey certain rules that have been set up such as using flippers before entering the toilet.
6.	Mini Hall/ Open Court	St Michael school's mini hall is fully equipped with facilities such as table, chairs, television and wi-fi. These facilities helped the students to fully use their time beneficially.
7.	Herbs Garden	Lacking of knowledge regarding the traditional herbs is very obvious amongst the younger generation nowadays. By having the Herbs Garden in the school, the students will get the benefits that other students might not get. Extra knowledge that the students get in school will make them more appreciative towards



		the knowledge supplied to them and eventually they will realize it is very important for them to be equipped with knowledge. The knowledge can be later on be shared with others.
8	Soil Studies Station	This station is used to study the profile of the soil, the different types of soil and the living organism in the soil. It is fully utilized by the subjects of Geography and Science.
9	Pollution, Waste Management & Recycling Station	Waste Disposal Areas, Recycling Centre, drains, fish ponds are the places used for this purpose. Here, the students practice recycling and eventually they give good examples to others when they are outside the school. As for composting, instead of using chemical –based fertilizer, the students learn to conserve the environment by using organic fertilizer. In this centre, students work together to produce organic fertilizer by using organic materials. It is useful in the subjects of Languages, Science, Geography, Moral Studies and Islamic Studies. This learning station also includes: <ul style="list-style-type: none"> <li>- kitchen waste for composting,</li> <li>- used auto tyres to make flower pots and fences,</li> <li>- plastics, cans, cardboards and papers for recycling and crafts,</li> <li>- woods from broken furniture to make vegetable plots and crafts</li> </ul>
10	Plants Studies Station	The Herbs and Spice Garden, Rubber Plant Nursery, Flowers Nursery and Vegetables plots are used as learning station about plants for these subjects: Science, Geography, Moral Studies, Islamic Studies, Visual Arts, History and Living Skills. This station is used to educate the students on the types of plants and to discuss on the importance of biodiversity conservation. In addition, students learn how to appreciate the works of others and cooperate with other students to take care of the vegetable patches.
11	Station to study on the Usage of Water & Electricity	This station is used to teach the students on the value of not wasting energy and water. The places for electric meters, water meters, solar battery and water tanks reading meter are used teach the students on water and energy auditing. This station is most popular for the subjects such as Mathematics, science and Living Skills.
12	Aloe Vera Trail	Being physically and mentally fit is very important in a student body. Activities conducted along the Aloevera Trail give additional benefit to the students. Students become more appreciative and start to value the healthy and peaceful environment as the pathway along this trail is planted with herbs and plants such as rubber trees, Agar wood, aloe vera, mother-in-law tongue plant and also bird nest fern.

**FORM 5 SCIENCE**

<b>TIME</b>	80 minutes
<b>TITLE</b>	Preservation & Conservation of the Environment
<b>OBJECTIVES</b>	A student is able to 1. Practise responsible attitudes to preserve & conserve the environment
<b>ENVIRONMENT NOBLE VALUES</b>	(5) The importance of sustaining our ecosystem principle (4) Life balance principle (16) The importance of taking care of the environment principle
<b>TEACHING AID</b>	Material for recycle
<b>METHOD</b>	10. Demonstration 11. Observation 12. Q & A 13. Discussion 14. Explaining
<b>STEPS</b>	1. Induction set Teacher asks the students' to state the importance to preserve and conserve the environment. Teacher attracts the students' attention about activities that can be carried out to preserve and conserve the environment. 2. Teacher brings the students to the recycling centre in the school ground. 3. Students are divided into groups to carry out the recycling activities. 4. Each group are required to discuss the importance of this activity and present the outcome of their discussion in class. 5. Other groups are encouraged to give their comments and give their opinions. 6. Teacher summarized the importance preserving and conserving the environment.
<b>EVALUATION</b>	1. Suggests three roles which an individual can play to preserve and conserve the environment. 2. What does 3R stand for.

**FURTHER ACTIVITY**

2. Students are required to carry out a recycling project in their own house. A report on this project must be submitted.

