## Teacher's Manual

Theme: Management and continuity of life
Learning Area: Nutrition
Learning Objectives: Evaluating the importance of balanced diet
Elements Assessed: Element 1:Science Process Skill
Element 3: Scientific attitude and noble values
Construct: E1(C2, C4, C5, C6, C8)
E3(C17)

Scoring Table Guideline:

| Element assessed | Construct/Criteria |  | Score |
| :---: | :---: | :---: | :---: |
| E1:C2 | C2 - Classifying <br> (a) Identify the differences and similarities. <br> (b) Classify common characteristics. <br> (c) Use other criteria to group objects. <br> (d) Explain method of classification used. | 3 | Able to master all the criteria. |
|  |  | 2 | Able to master criteria (a) and (b) and state briefly the method of classification. |
|  |  | 1 | Able to show the idea of classification using criteria (a) and /or criteria (b). |
| E1:C4 | C4 - Making Inferences <br> (a) Make various possible Interpretations from an observation using past experiences. <br> (b) Use information from an observation to make an initial conclusion. <br> (c) Use the inference made as a tool to determine the following observation. | 3 | Able to master all the criteria and make inference correctly and logically. |
|  |  | 2 | Able to master criteria (a) and (b). |
|  |  | 1 | Able to make at least one interpretation from an observation. |
| E1:C6 | C6 - Communicating <br> (a) Identify the general characteristic of a group of item. <br> (b) Explain ideas (orally/written) record information. <br> (c) Choose the suitable method <br> (d) Prepare and plan required materials. <br> (e) Prepare and plan required materials to be used. | 3 | Able to choose the appropriate method to present all the data correctly and accurately. |
|  |  |  | Able to present only some of the data. |
|  |  |  | Able to choose or arrange data only. |


| E1:C5 | C5 Predicting <br> (a)Use the previous or present data to predict a possible occurrence. <br> (b)Use pattern as evidence in making prediction. <br> (c) Determine the possible outcome from any activity. <br> (d) Verify prediction based on a set of data of past experience | 3 <br>  <br> 2 <br> 1 | Master all the criteria and make a correct prediction based on an observation in any activity. <br> Apply criteria (a), (b) and (c) to limited activity. <br> Apply criteria (a) or (b) to make a partially correct prediction. |
| :---: | :---: | :---: | :---: |
| E1:C8 | C8 Interpreting Data <br> (a) Gather various data through observation. <br> (b) Detect pattern from the information gathered. <br> (c) State the relationship. <br> (d) Make rational explanations based on the data gathered. |  | 3 = master all the criteria and interpret data correctly |
|  |  |  | master criteria (a), (b) and (c). |
|  |  |  | extract at least a set of data and identify the pattern. |
| E3:C17 | C17 Scientific Attitudes \& Noble values <br> (a) Intrinsic attitude <br> (b) Extrinsic attitude <br> (c) Thinking ability <br> (d) Nobel values |  | Able to exhibit all four criteria continuously. |
|  |  | 3 | Able to exhibit two or three criteria continuously. |
|  |  | 2 | Able to exhibit two to three criteria. |
|  |  | 1 | Able to exhibit only one criteria. |

## Student's Manual

Theme: Management and continuity of life
Learning Area: Nutrition
Learning Objectives: Evaluating the importance of balanced diet
Elements Assessed: E1
E3
Construct: $\quad \mathrm{E} 1$ (C2, C4, C5, C6, C8 ) E3(C17)

E1:C6
Instructions:Aid

1. You are required to interview your friends regarding their daily intake of food
2. Tabulate your case study below

E1:C2

| Names | Food Intake | Classes of food |  |  |  |  |  |  |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Carbohydrates | Protein | Fats | Vitamins | Minerals | Water | Fiber |
| A |  |  |  |  |  |  |  |  |
| B |  |  |  |  |  |  |  |  |
| C |  |  |  |  |  |  |  |  |
| D |  |  |  |  |  |  |  |  |
| E |  |  |  |  |  |  |  |  |

3. Prepare a folio to investigate the food intake in planning a balanced diet. Your folio should have the headings in the following sequence :
a) Topic
b) Introduction / Background
c) Objectives of the folio
d) Tabulate your case study
e) Discussion
i. Is your friend's diet balanced?
ii. If not, what is deficient / excess?
iii. Make an inference based on the data collected.

iv. Predict what happens if there is a lack of a) protein and b) fibre in a person's diet.
f) Conclusion
g) Reference source
4. You are given one weeks to complete the folio.

## EXAMPLES

Topic : Balanced diet
Background : What is nutrition?
Nutrition is the process by which living organisms obtain the food they need to grow and repair body tissues.

## Classes of food

Food can be classified into 7 classes : Refer to text book page 41
Food Pyramid : Refer to text book page 42
Objective : To investigate the food intake in planning a balanced diet.
Data

| Names | Food Intake | Classes of food |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Carbohydrates | Protein | Fats | Vitamins | Minerals | Water | Fiber |
| A | Nasi lemak, egg, <br> groundnut | $l$ | $l$ | $l$ | $l$ | $l$ |  |  |
| B | Maggi mee | $l$ |  |  |  |  | $l$ |  |
| C | Milk, butter, wheat <br> bread | $l$ | $l$ | $l$ | $l$ | $l$ | $l$ | $l$ |
| D | Orange juice |  |  |  | $l$ | $l$ | $l$ | $l$ |
| E | Porridge, egg, <br> apple | $l$ | $l$ | $l$ | $l$ | $l$ | $l$ | $l$ |

## Discussion :

v. Is your friend's diet balanced?

C and E have balanced diet.
vi. If not, what is deficient / excess?

A lacks water and fibre.
B lacks protein, fat, vitamins, mineral salts and fibre.
D lacks carbohydrate, protein and fat.
vii. Make an inference based on the data collected.

A balanced diet consists of food that has all the nutrients.
viii. Predict what happens if there is a lack of a) protein and b) fibre in a person's diet.
(a) Kwashiorkor
(b) Constipation

Conclusion :
A balanced diet consists of carbohydrates, protein, fats, mineral salts, vitamins, water and fibre.

