



مدرسة القديسة مريم الكاثوليكية الثانوية – دبي
ST. MARY'S CATHOLIC HIGH SCHOOL, DUBAI

Lesson Plan

Subject	Science
Class/ Section	Year 8 ____
Week	Week 3 (September 12 - September 16)
Work send to students by	Google classroom
Total number of lessons per week	4
Unit/Topic	Food and Nutrition
Key Vocabulary	Nutrients, Nutrition, Kwashiorkor, malnutrition, Balanced diet.
Learning objectives	<u>Lesson 1: 8 Ac . Balanced diet</u> Describe the benefits of a balanced diet
<u>Specific Intended Learning Outcomes:</u>	List the benefits of a balanced diet. Understand that excess food is stored as fat. Explain What is wrong with fast food? (High in unhealthy nutrients such as saturated animal fats, sugar and salt . Fast food usually contains very little fibre, vitamins, minerals or unsaturated vegetable oils, which are important for a healthy diet.) Describe What happens when we don't get a balanced diet? Explain the causes and the effects of some different types of malnutrition.

<p>Tasks</p>	<p>1. How healthy is your diet : Activity: Ask students few probing questions like below and based on their individual response; let them make a conclusion of how healthy their diet is. Ask them to write their individual findings in their book with the recommendations.</p> <ol style="list-style-type: none"> 1. Do you eat fried food every day (this includes chips and crisps) 2. Do you eat the fat on meat? 3. Do you only ever eat white bread, pasta and rice? (no wholemeal) 4. Do you drink fizzy drinks every day? Do you eat less than 5 portions of fruit and vegetables a day? <p>2. Write at least 5 benefits of a balanced diet in their notebook.</p> <p>3. Do question number 5 to understand that excess food is stored as fat and its known as obesity.</p> <p>4. Show the AL video of malnutrition which contains footage to illustrate the different nutrient (protein, calcium, and vitamin) deficiencies, its symptoms and its cause. Ask the children to write the main nutrient deficiencies with its cause and symptoms in the note book.</p>
<p>Assessment Criteria/ Essential questions</p>	<p>Support Question 1 & 2 helps the children to define balance diet and malnutrition.</p> <p>Stretch Question 3-5 in the students’ books helps them understand the main nutrient deficiencies with its cause and symptoms.</p> <p>Extend Question 6 in the student’s book helps them to compare Reference Intake (RIs) of different nutrients.</p>
<p>Resources</p>	<p>Exploring science book 8, AL video Nutrients/ power point</p>
<p><u>Specific Learning objectives:</u></p> <p><u>Specific Intended Learning Outcomes:</u></p>	<p><u>Lesson 2: 8Ad Digestion</u></p> <p>Describe the parts of the digestive system and its functions.</p> <p>Recall the parts of the digestive system and their functions</p> <p>List the name the organs the food passes through in order, starting with the mouth.</p> <p>Understand the differences between ingestion and egestion.</p>

	<p>Describe working of gut bacteria in intestine.</p> <p>Explain how the enzymes are helping in digestion process.</p>
<u>Tasks</u>	<ol style="list-style-type: none"> 1. Ask students to look at image A (pg: 14) and draw a flow chart to show what happens in each organs of the gut in order, starting with the mouth. 2. Let the students understand the concept of digestive system with the help of the AL video of human digestive system and do question number 3 to understand ingestion and egestion. 3. Write at least 5 benefits of Gut bacteria in their notebook. 4. Show the scissors model of enzyme action (image D/ pg: 15) or video to explain how enzyme works.
<u>Assessment Criteria/ Essential questions:</u>	<p>Support Question 2 helps the children to list the parts of the digestive system and their functions.</p> <p>Stretch Question 5 in the students' books helps them understand the main advantage and disadvantage of gut bacteria.</p> <p>Extend Question 6 in the student's book helps them to compare the working of an enzyme to a scissor. (The enzymes help to cut through the connections that hold the molecule together.</p>
<u>Resources:</u>	Exploring science book 8, AL video Nutrients/ power point
<p><u>Specific Learning objectives:</u></p> <p><u>Specific Intended Learning Outcomes:</u></p>	<p><u>Lesson 3: 8Ae. Absorption</u></p> <p>Describe how digested food gets in to the blood.</p> <p>Define diffusion.</p> <p>Explain how diffusion enables absorption by the small intestine.</p> <p>Understand the structure of the small intestine.</p> <p>Explain how the small intestine is adapted to its function.</p>

<p><u>Tasks:</u></p>	<p>1. Ask students to look at image C (pg: 18) to understand the mechanism of diffusion in the small intestine. Do question number 5 to reinforce the diffusion mechanism.</p> <p>2. Let the students understand the small intestine structure with the help of the AL video of absorption</p> <p>3. Do question number 7 in their notebook.</p> <p>4. Write the small intestine adaptations in their notebook.</p>
<p><u>Assessment Criteria/ Essential questions:</u></p>	<p>Support Question 1 helps the children to write the location of diffusion.</p> <p>Stretch Question 5 - 7 in the students' books helps them understand the mechanism of diffusion and the structure of small intestine.</p> <p>Extend Question 8-9 in the student's book helps them to compare the absorption rate of a healthy individual to a someone who drinks alcohol.</p>
<p><u>Resources:</u></p>	<p>Exploring science book 8, AL video Nutrients/ power point</p>

<p><u>Specific Learning objectives:</u></p> <p><u>Specific Intended Learning Outcomes:</u></p>	<p><u>Lesson4:</u></p> <p>Revise the whole unit to reinforce the student's understanding on Nutrients, Uses of nutrients, nutrient deficiencies, digestive system and small intestinal adaptations.</p> <p>To apply students' previous knowledge on Nutrients in various scenarios.</p> <p>By the end of the lesson, pupils will be able to answer the scientific enquiry based and application level questions.</p>
<p><u>Tasks:</u></p>	<p>Discussion of text book and workbook questions.</p>

<u>Assessment Criteria/ Essential questions:</u>	Discussion of text book and workbook questions. 8Ad : Digestion q:5&6 8Ae : Absorption q:8&9 8 Ad – 8 Enzymes and digestion 8Ae – More digestive enzymes
<u>Resources:</u>	Exploring science book 8, AL video Nutrients/ power point