

MINISTRY OF EDUCATION



Republic of Ghana

TEACHING SYLLABUS FOR FOOD AND NUTRITION (SHS 1 - 3)

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TEACHING SYLLABUS FOR FOOD AND NUTRITION

RATIONALE FOR TEACHING FOOD AND NUTRITION

Home Economics consists of three subjects: Food and Nutrition, Clothing and Textiles, and Management In-Living. The subjects of Home Economics emphasize the study of the physical, emotional, intellectual and social needs of the individual, the family and society. The welfare of the individual, the family and society is therefore the primary concern in Home Economics. This concern is manifested by assisting the student to acquire skills that he/she would need to be able to improve the quality and meaning of life in a changing society.

Without good food, an individual would not be able to function well in all spheres of life. It is therefore important that students are exposed to ways of selecting and cooking wholesome food for themselves and others. In addition, Food and Nutrition as a vocational subject, prepares students for the world of work. Food and Nutrition involves a study of the selection, processing, storage and utilization of food. The subject also encourages the creative use of local foods and associated food service to meet the nutritional needs and other demands of consumers.

GENERAL AIMS:

The syllabus is designed to help students to:

1. acquire basic knowledge about foods, their nutritive value and utilization.
2. develop understanding of the relationship between nutrition and health.
3. recognize the need for efficiency in planning kitchens and in the selection, use and care of kitchen equipment.
4. apply the general principles underlying meal planning, selection, preparation and serving of food to feeding self, family and other consumers.
5. appreciate the importance of sanitation in the kitchen, food preparation and service.
6. apply the basic principles underlying food processing and preservation.
7. acquire the requisite knowledge and skills for further studies.
8. use research data and other sources of information for developing and improving local dishes.
9. set up a business in the food industry using all the basic skills acquired.

SCOPE OF CONTENT

Food and Nutrition at the SHS level covers the following areas:

- Nutrients in foods, functions and deficiency diseases
- Nutrition throughout the life cycle
- Food selection and purchase.
- Meal management
- Safety and Sanitation.
- Processing, preservation and storage of foods
- Career opportunities in the food industry

PRE-REQUISITE SKILLS AND ALLIED SUBJECTS

Success in Foods and Nutrition requires foundation study in Integrated Science and Basic Design and Technology at the JHS. Management-In-Living and Chemistry/Biology are compulsory for students offering Food and Nutrition at SHS level.

To qualify for further studies in tertiary and other advanced institutions and professions such as nursing, students of Food and Nutrition may select any one of the following (General Knowledge in Art, Economics, French and ICT) in addition to core science.

STRUCTURE AND ORGANIZATION OF THE SHS FOOD AND NUTRITION SYLLABUS

SHS 1	SHS 2	SHS 3
TERM 1	TERM 1	TERM 1
<p>SECTION 1: NUTRITION AND HEALTH</p> <p>Unit 1: Introduction to Nutrition</p> <p>Unit 2: Introduction to Food</p> <p>Unit 3: Food Habits</p> <p>Unit 4: Digestion of Food and Absorption of Nutrients</p> <p>Unit 5: Metabolism</p>	<p>SECTION 1: FLOUR COOKERY AND CONFECTIONERY</p> <p>Unit 1: Types of flour</p> <p>Unit 2: Basic ingredients in flour cookery</p> <p>Unit 3: Raising Agents</p> <p>Unit 4: Batters and Dough</p> <p>Unit 5: Cakes and Biscuits</p> <p>Unit 6: Pastries</p> <p>Unit 7: Yeast mixtures</p>	<p>SECTION 1: THE ART OF ENTERTAINING</p> <p>Unit 1: Types of Entertainment</p> <p>Unit 2: Table Setting and Table Etiquette</p> <p>Unit 3: Meal Service Styles</p>
<p>SECTION 2: FOOD LABORATORY AND EQUIPMENT</p> <p>Unit 1: The Kitchen</p> <p>Unit 2: Kitchen Equipment</p> <p>Unit 3: Fuels used in the Kitchen.</p> <p>Unit 4: Kitchen Safety and Sanitation</p>	<p>SECTION 2: SUGAR CONFECTIONERY</p> <p>Unit 1: Sugars</p> <p>Unit 2: Icings</p> <p>Unit 3: Cake Decoration</p>	<p>SECTION 2: EXPERIMENTAL COOKERY</p> <p>Unit 1: Research into Local Dishes and Drinks</p> <p>Unit 2: Improvement of Existing Recipes</p>

SHS 1	SHS 2	SHS 3
TERM 2	TERM 2	TERM 2
<p>SECTION 3: COOKING FOOD</p> <p>Unit 1: Principles underlying cooking</p> <p>Unit 2: Transfer of Heat</p> <p>Unit 3: Methods of Cooking</p> <p>Unit 4: Cooking Terms</p>	<p>SECTION 3: FAMILY MEAL MANAGEMENT</p> <p>Unit 1: Meal Planning</p> <p>Unit 2: Meals for Special Groups</p> <p>Unit 3: Rechauffé/Left-over Foods</p> <p>Unit 4: Convenience Foods</p> <p>Unit 5: Fats foods</p>	<p>SECTION 3: THE FOOD INDUSTRY</p> <p>Unit 1: Catering on a Large Scale</p> <p>Unit 2: Food Purchasing</p> <p>Unit 3: Career Opportunities in Foods and Nutrition</p> <p>Unit 4: Entrepreneurial Skills</p> <p>Unit 5 : Food Packaging</p> <p>Unit 6: Work Ethics</p>
<p>SECTION 4: FOOD COMMODITIES</p> <p>Unit 1: Animals and Animal Products</p> <p>Unit 2: Cereals/Grains</p>	<p>SECTION 4: STOCKS, SOUPS AND SAUCES</p> <p>Unit 1: Stocks</p> <p>Unit 2: Soups</p> <p>Unit 3: Sauces</p>	<p>SECTION 4: EXHIBITION</p> <p>Unit 1: Planning and Mounting Exhibitions</p>
		<p>WASSCE in Progress</p>

SHS 1	SHS 2	SHS 3
TERM 3	TERM 3	TERM 3
<p>SECTION 5: FOOD COMMODITIES</p> <p>Unit 1: Fruits and Vegetables</p> <p>Unit 2: Legumes and Oily Seeds</p> <p>Unit 3: Fats and Oils</p> <p>Unit 4: Starchy Roots and Plantain</p> <p>Unit 5: Food Additives</p>	<p>SECTION 5: BEVERAGES</p> <p>Unit 1: Types of Beverages</p> <p>Unit 2: Principles underlying the Preparation of Beverages</p>	<p>WASSCE in Progress</p>
<p>SECTION 6: FOOD STORAGE AND PRESERVATION</p> <p>Unit 1: Food Spoilage</p> <p>Unit 2: Food Preservation</p> <p>Unit 3: Food Storage</p>	<p>SECTION 6: FESTIVE AND FESTIVAL DISHES</p> <p>Unit 1: Festive Dishes</p> <p>Unit 2: Festival Dishes</p>	<p>WASSCE in Progress</p>

TIME ALLOCATION

A minimum of six (6) periods a week each of 40 minutes is recommended for teaching Food and Nutrition in SHS 1, a minimum of six (6) for SHS 2 and a minimum of six (6) for SHS 3.

CLASS	NUMBER OF PERIODS		
	TOTAL	THEORY	PRACTICALS
SHS 1	6	2	3
SHS 2	6	3	4
SHS 3	6	2	4

SUGGESTIONS FOR TEACHING THE SYLLABUS

New concepts and methodologies and the use of ICT have been introduced into the revised syllabus to meet the demands of the present educational system and also improve instructional delivery and learning. Read this section carefully to enrich your knowledge and teaching method. It is assumed that most of the materials and equipment to be used for teaching this subject will be obtained or produced locally.

As much as possible, teachers should co-operate with Science, Business Education and ICT teachers in the teaching of related topics in the syllabus. Teachers are encouraged to seek the assistance of experienced persons in the community as “resource persons” for teaching some of the specific topics in the syllabus.

The syllabus has been structured to cover each of the terms of the three years in the SHS programme. Teachers are required to develop a scheme of work for each term so as to cover each year’s work appropriately. Teaching should be participatory and should be based on student-centred methods such as role-play, brainstorming, case studies, field trips, experiments, inquiry, future’s wheel, demonstrations, practical work and project work. The lecture method must be used very sparingly. Students should be motivated to find new information about topics treated from other sources like the internet where available, print and electronic media and libraries.

General Objectives: General Objectives have been listed at the beginning of each Section. The general objectives specify the skills and behaviours students should acquire as a result of instruction in the units of a section. Read the general objectives very carefully before you start teaching the section. After teaching all the units of the section go back and read the general objectives again to be sure you have covered the objectives adequately in the course of your teaching.

Sections and Units: The syllabus has been planned on the basis of Sections and Units. Each year’s work is divided into sections. A section consists of a fairly homogeneous body of knowledge within the subject. Within each section are units. A unit consists of a more related and homogeneous body of knowledge and skills.

The syllabus is structured in five columns: Units, Specific Objectives, Content, Teaching and Learning Activities and Evaluation. A description of the contents of each column is as follows:

Column 1 – Units: The units in Column 1 are divisions of the major topics of the section. You are expected to follow the unit topics according to the linear order in which they have been presented. However, if you find at some point that teaching and learning in your class will be more effective if you moved to another specific objective in the unit or to another unit completely before coming back to the next specific objective or unit in the appropriate sequence, you are encouraged to do so.

Column 2 – Specific Objectives: Column 2 shows the Specific Objectives for each unit. The specific objectives begin with numbers such as 1.3.5 or 2.2.1. These numbers are referred to as “Syllabus Reference Numbers”. The first digit in the syllabus reference number refers to the section; the second digit refers to the unit, while the third digit refers to the rank order of the specific objective. For instance, 1.3.5 means Section 1, Unit 3 (of Section 1) and Specific Objective 5. In other words, 1.3.5 refers to Specific Objective 5 of Unit 3 of Section 1.

Similarly, the syllabus reference number 2.1.1 simply means Specific Objective number 1 of Unit 1 of Section 2. Using syllabus reference numbers provides an easy way for communication among educators. It further provides an easy way for selecting objectives for test construction. For instance, Unit 1 of Section 2 of year one has three specific objectives: 2.1.1 – 2.1.3. A teacher may want to base his/her test items/questions on objectives 2.1.2 and 2.1.3 and not use the other objective. In this way, the teacher would sample the objectives within units and within sections to be able to develop a test that accurately reflects the importance of the various skills taught in class.

You will note also that specific objectives have been stated in terms of the student i.e., *what the student will be able to do after instruction and learning in the unit*. Each specific objective hence starts with the following, “The student will be able to...” This in effect, means that you have to address the learning problems of each individual student. It means individualizing your instruction as much as possible such that the majority of students will be able to master the objectives of each unit of the syllabus.

Column 3 – Content: The “content” in the third column of the syllabus presents a selected body of information that you will need to use in teaching particular unit. In some cases, the content presented is quite exhaustive. In other cases, you could add more information to the content presented. In a few cases the content space has been left blank for you to develop.

Column 4 – Teaching and Learning Activities (T/LA): T/L activities that will ensure maximum student participation in the lessons are presented in column 4. Avoid rote learning and drill-oriented methods and rather emphasize participatory teaching and learning, and also emphasize the cognitive, affective and psychomotor domains of knowledge in your instructional system wherever appropriate. You are encouraged to re-order the suggested teaching and learning activities and also add to them where necessary in order to achieve optimum student learning. As we have implied already, the major purpose of teaching and learning is to make students able to apply their knowledge in dealing with issues both in and out of school.

A suggestion that will help your students acquire the habit of analytical thinking and the capacity for applying their knowledge to problems is to begin each lesson with a practical problem. Select a practical problem for each lesson. The selection must be made such that students can use knowledge gained in the previous lesson and other types of information not specifically taught in class. At the beginning of a lesson, state the problem, or write the problem on the board. Let students analyse the problem, suggest solutions, etc., criticize solutions offered, justify solutions and evaluate the worth of possible solutions.

Column 5 – Evaluation: Suggestions and exercises for evaluating the lessons of each unit are indicated in Column 5. Evaluation exercises can be in the form of oral questions, quizzes, class assignments, essays, structured questions, project work, etc. Ask questions and set tasks and assignments that will challenge your students to apply their knowledge to issues and problems as we have already said above and that will engage them in developing solutions and developing positive attitudes towards the subject as a result of having undergone instruction in this subject. The suggested evaluation tasks are not exhaustive. You are encouraged to develop other creative evaluation tasks to ensure that students have mastered the instruction and behaviour implied in the specific objectives of each unit.

Lastly, bear in mind that the syllabus cannot be taken as a substitute for lesson plans. It is therefore, necessary that you develop a scheme of work and lesson plans for teaching the units of this syllabus.

Profile Dimensions

A central aspect of this syllabus is the concept of profile dimensions that should be the basis for instruction and assessment. A 'dimension' is a psychological unit for describing a particular learning behaviour. More than one dimension constitutes a profile of dimensions. A specific objective such as, "The student will be able to describe..." etc., contains an action verb "describe", that indicates what the student will be able to do after teaching has taken place. Being able to "describe" something after the instruction has been completed means that the student has acquired "knowledge". Being able to explain, summarize, give examples, etc. means that the student has understood the lesson taught. Similarly, being able to develop, plan, construct, etc. means that the student has learnt to create, innovate or synthesize knowledge. You will note that each of the specific objectives in this syllabus contains an "action verb" that describes the behaviour the student will be able to demonstrate after the instruction. "Knowledge", "Application", etc. are dimensions that should be the prime focus of teaching and learning in schools. Instruction in most cases has tended to stress knowledge acquisition to the detriment of other higher level behaviours such as application, analysis, etc. The essence of learning is to enable students to be able to apply their knowledge, develop analytical thinking skill, synthesize information, and use their knowledge in a variety of ways to deal with learning problems and issues in their lives. We are interested most of all, to produce problem-solving persons and practically oriented persons through the educational system. Each action verb indicates the underlying profile dimension of each particular specific objective. Read each objective carefully to know the profile dimension toward which you have to teach.

In Food and Nutrition, the three profile dimensions that have been specified for teaching, learning and testing are:

Knowledge and Understanding	15%
Application of Knowledge	25%
Practical Skills	60%

Each of the dimensions has been given a percentage weight that should be reflected in teaching, learning and testing. The weights, indicated on the right of the dimensions, show the relative emphasis that the teacher should give in the teaching, learning and testing processes. The focus of this syllabus is to get students not only to acquire knowledge but also to understand what they have learnt and apply them practically.

The explanation and key words involved in each of the dimensions are as follows:

Knowledge and Understanding (KU)

knowledge	The ability to: remember, recall, identify, define, describe, list, name, match, state principles, facts and concepts. Knowledge is simply the ability to remember or recall material already learned and constitutes the lowest level of learning.
Understanding	The ability to: explain, summarize, translate, rewrite, paraphrase, give examples, generalize, estimate or predict consequences based upon a trend. Understanding is generally the ability to grasp the meaning of some material that may be verbal, pictorial, or symbolic.

Application of Knowledge (AK)

The ability to use knowledge or apply knowledge, as implied in this syllabus, has a number of learning/behaviour levels. These levels include application, analysis, creation, innovation or synthesis, and evaluation. These may be considered and taught separately, paying attention to reflect each of them equally in your teaching. The dimension "Application of Knowledge" is a summary dimension for all four learning levels. Details of each of the four sub-levels are as follows:

application	The ability to: apply rules, methods, principles, theories, etc. to concrete situations that are new and unfamiliar. It also involves the ability to produce, solve, operate, demonstrate, discover, etc.
analysis	The ability to: break down a piece of material into its component parts; to differentiate, compare, distinguish, outline, separate, identify significant points, etc., recognize unstated assumptions and logical fallacies, recognize inferences from facts, etc. Analytical ability underlies discriminant thinking.
innovation/creativity	The ability to put parts together to form a new whole. It involves the ability to synthesize, combine, compile, compose, devise, suggest a new idea or possible ways, plan, revise, design, organize, create, and generate new solutions. The ability to create or innovate is the highest form of learning. The world becomes more comfortable because some people, based on their learning, generate new ideas and solutions, design and create new things.
evaluation	The ability to appraise, compare features of different things and make comments or judgments, contrast, criticize, justify, support, discuss, conclude, make recommendations etc. Evaluation refers to the ability to judge the worth or value of some materials, ideas etc., based on some criteria. Evaluation is a constant decision making activity. We generally compare, appraise and select throughout the day. Every decision we make involves evaluation. Evaluation is a high level ability just as application, analysis and innovation or creativity since it goes beyond simple knowledge acquisition and understanding.

The action verbs provided under the various profile dimensions and in the specific objectives of the syllabus should help you to structure your teaching such as to achieve the effects needed. Select from the action verbs provided for your teaching, in evaluating learning before, during and after the instruction. Use the action verbs also in writing your test questions.

Practical Skills (PS)

Practical skills involve the use of tools /equipment, skills and knowledge acquired in practical situations which involve pre-imaging to solve practical problems and produce items. For example, knowledge acquired about nutrients in food should be applied when the student is planning meals for different people and for meal preparation in general.

Many of the equipment needed for teaching the practical skills component of the subject may not be available in schools. For this reason, the teacher is advised to improvise or request students to bring them along where possible. You are encouraged to engage your students in practical work to help build their skills. When students undertake practicals they also develop the confidence to exhibit what they learn in similar situations.

Skills required for effective practical work are the following:

1. Handling Tools/Equipment
2. Observation
3. Originality
4. Perception
5. Creativity
6. Communication.

FORM OF ASSESSMENT

In developing assessment procedures, select specific objectives in such a way that you will be able to assess a representative sample of the syllabus objectives. Each specific objective in the syllabus is considered a criterion to be achieved by the student. When you develop a test that consists of items or questions that are based on a representative sample of the specific objectives taught, the test is referred to as a “Criterion-Referenced Test”. In many cases, a teacher cannot test all the objectives taught in a term, in a year, etc. The assessment procedure you use i.e. class tests, home work, projects, etc. must be developed in such a way that it will consist of a sample of the important objectives taught over a period.

WAEC’s examination structure at the WASSCE consists of two papers, Paper 1 and Paper 2 and the SBA.

Paper 1 is a Practical Test and Paper 2 is a test of theory, consisting of two sections (A & B). Section A is composed of 60 objective questions and Section B, consists of 6 essay questions out of which students answer 4 questions. Further details of the examination structure are provided below.

Paper 1: This is the Practical Test and carries 100 marks. The Practical Preparation or Assignment Planning carries 40 marks of the total marks while the Finished Dishes carry the remaining 60 marks.

Paper 2: This is a test of theory consisting of two sections A and B. Section A is the objective section and is composed of 60 objective items carrying 60 marks. Section B consists of 4 essay questions each of which carries 25 marks, making a total of 100 marks. About half of the essay questions will test knowledge of practical skills while the rest will test knowledge and understanding and use of knowledge. The structure of the examination papers, the mark distribution and the profile weights are indicated in the table below.

DISTRIBUTION OF EXAMINATION PAPER WEIGHTS AND MARKS

Dimensions	Paper 1 (Practicals)	Paper 2		SBA	Total Marks	% Weight of Profile Dimensions
		Section A (Objective Questions)	Section B (Essay Questions)			
Knowledge and Understanding	-	30	25	-	55	15
Use of Knowledge	40	30	20	-	90	25
Practical Skills	60	-	55	110	225	60
Total	100	60	100	110	370	100
% Contribution of Exam Papers and SBA	27	16	27	30		

The numbers in the cells indicate the marks to be allocated to the items/questions that test each of the dimensions within the respective papers.

The last but one column shows the total marks allocated to each of the dimensions. The numbers in this column are additions of the numbers in the cells and they agree with the profile dimension weights indicated in the last column. The last row shows the weight of each of the papers and the SBA in the total marks of 370. Paper 1 has a weight of 27%, Section A of Paper 2 has a weight of 16%; Section B of Paper 2 has a weight of 27% and the SBA has a weight of 30%. The examination structure shows that the SBA should focus entirely on practical skills.

Item Bank: Obviously the structure of assessment recommended in this syllabus will need a lot of work on the part of the teacher. In preparation for setting examination papers, try to develop an item bank. The term “item bank” is a general term for a pool of objective items, a pool of essay questions or a pool of practical test questions. As you teach the subject, begin to write objective test items, essay questions, structured essay questions and practical test questions to fit selected specific objectives which you consider important to be tested. If you proceed diligently, you will realize you have written more than 100 objective test items, and more than 30 essay questions in a space of one year. Randomly select from the item bank to compose the test papers. Select with replacement. This means, as items/questions are selected for testing, new ones have to be written to replace those items/questions already used in examinations. Items and questions that have been used in examinations may also be modified and stored in the item bank.

An important issue in the preparation for a major examination such as the WASSCE, is the issue of “test wiseness”. To be “test wise” means that the student knows the mechanics for taking a test. These mechanics include writing the index number and other particulars accurately and quickly on the answer paper; reading all questions before selecting the best questions to answer; apportioning equal time to each question or spending more time on questions that carry more marks; making notes on each question attempted before writing the answer; leaving extra time to read over one’s work; finally checking to see that the personal particulars supplied on the answer sheet are accurate. Some good students sometimes fail to do well in major examinations because of weakness in the mechanics of test taking; because they are not test wise.

Take your final year students through these necessary mechanics so that their performance in major examinations may not be flawed by the slightest weakness in test taking.

GUIDELINES FOR SCHOOL-BASED ASSESSMENT (SBA)

A new School Based Assessment system (SBA) will be introduced into the school system in 2011. The new SBA system is designed to provide schools with an internal assessment system that will help schools to achieve the following purposes:

- Standardize the practice of internal school-based assessment in all Senior High Schools in the country
- Provide reduced assessment tasks for subjects studied at SHS
- Provide teachers with guidelines for constructing assessment items/questions and other assessment tasks
- Introduce standards of achievement in each subject and in each SHS class
- Provide guidance in marking and grading of test items/questions and other assessment tasks
- Introduce a system of moderation that will ensure accuracy and reliability of teachers’ marks
- Provide teachers with advice on how to conduct remedial instruction on difficult areas of the syllabus to improve class performance.

SBA may be conducted in schools using the following: Mid-term test, Group Exercise, End-of-Term Test and Project

1. **Project:** This will consist of a selected topic to be carried out by groups of students for a year. Segments of the project will be carried out each term toward the final project completion at the end of the year. The projects may include the following:
 - i) experiment

- ii) investigative study (including case study)\
- iii) practical work assignment

A report must be written for each project undertaken.

2. Mid-Term Test: The mid-term test following a prescribed SBA format
3. Group Exercise: This will consist of written assignments or practical work on a topic(s) considered important or complicated in the term's syllabus
4. End-of-Term Test: The end –of-term test is a summative assessment system and should consist of the knowledge and skills students have acquired in the term. The end-of-term test for Term 3 for example, should be composed of items/questions based on the specific objectives studied over the three terms, using a different weighting system such as to reflect the importance of the work done in each term in appropriate proportions. For example, a teacher may build an End-of-Term 3 test in such a way that it would consist of the 20% of the objectives studied in Term 1, 20% of objectives studied in Term 2 and 60% of the objectives studied in Term 3.

GRADING PROCEDURE

To improve assessment and grading and also introduce uniformity in schools, it is recommended that schools adopt the following WASSCE grade structure for assigning grades on students' test results. The WASSCE structure is as follows:

Grade A1:	80 - 100%	-	Excellent
Grade B2:	70 - 79%	-	Very Good
Grade B3:	60 - 69%	-	Good
Grade C4:	55 - 59%	-	Credit
Grade C5:	50 - 54%	-	Credit
Grade C6:	45 - 49%	-	Credit
Grade D7:	40 - 44%	-	Pass
Grade D8:	35 - 39%	-	Pass
Grade F9:	34% and below	-	Fail

In assigning grades to students' test results, you are encouraged to apply the above grade boundaries and the descriptors which indicate the meaning of each grade. The grade boundaries i.e., 60-69%, 50-54% etc., are the grade cut-off scores. For instance, the grade cut-off score for B2 grade is 70-79% in the example. When you adopt a fixed cut-off score grading system as in this example, you are using the criterion-referenced grading system. By this system a student must make a specified score to be awarded the requisite grade. This system of grading challenges students to study harder to earn better grades. It is hence a very useful system for grading achievement tests.

Always remember to develop and use a marking scheme for marking your class examination scripts. A marking scheme consists of the points for the best answer you expect for each question, and the marks allocated for each point raised by the student as well as the total marks for the question. For instance, if a question carries 20 marks and you expect 6 points in the best answer, you could allocate 3 marks or part of it (depending upon the quality of the points raised by the student) to each point, hence totaling 18 marks, and then give the remaining 2 marks or part of it for organization of answer. For objective test papers you may develop an answer key to speed up the marking.

SENIOR HIGH SCHOOL - YEAR 1 - TERM 1

SECTION 1

NUTRITION AND HEALTH

General Objectives: The student will:

1. become aware of available food items and their importance to individuals and society.
2. recognise the relationship between food, nutrition and health.
3. appreciate the importance of digestion, absorption and metabolism to life.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 INTRODUCTION TO NUTRITION	<p>The student will be able to:</p> <p>1.1.1 explain nutrition and its related terms.</p> <p>1.1.2 identify the nutrients found in foods.</p> <p>1.13 explain the importance of Water in the body.</p>	<p>NUTRITION Nutrition: is the study of food and how food intake affects the body.</p> <p>TERMS</p> <ul style="list-style-type: none"> • Malnutrition. • Dietetics • Metabolism • Balanced-diet • Regenerative Diet <p>NUTRIENTS IN FOOD</p> <ul style="list-style-type: none"> • Proteins • Carbohydrates <ul style="list-style-type: none"> - Sugars - Starches - Dietary fiber • Vitamins • Fats • Minerals • Water <p>IMPORTANCE OF WATER IN THE BODY</p> <ul style="list-style-type: none"> • Cleanses the body • Transports nutrients • Removes waste, etc. 	<p>Students brainstorm to explain nutrition. Use pictures/charts/drawings and other relevant materials to explain the terms.</p> <p>Regenerative Diet – promotes an eating habit based on adequate consumption of plant foods and reduction/elimination of animal products, salt, fat and sugar.</p> <p>Discuss each nutrient under the following headings</p> <ul style="list-style-type: none"> • sources • functions • deficiency • individual and special group needs. <p>Assist students to relate nutrition to health.</p> <p>Discuss the importance, recommended daily intake of water and ways to promote its drinking, symptoms of dehydration and rehydration formula.</p>	<p>Students analyse a day's meal in groups and report in terms of the nutrient content</p> <p>Home work Find out from other sources how ORS is prepared and prepare some in class.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 2 INTRODUCTION TO FOOD	<p>The student will be able to:</p> <p>1.2.1 explain the term food.</p> <p>1.2..2 outline the importance of food.</p> <p>1.2.3 classify food into groups.</p>	<p>FOOD Food is anything solid or liquid which when taken into the body, promotes growth, provides heat and energy and regulates body processes.</p> <p>IMPORTANCE OF FOOD</p> <ul style="list-style-type: none"> • Biological Importance <ul style="list-style-type: none"> - growth - energy - repair • Social Importance <ul style="list-style-type: none"> - build relationships - foster bonds - express appreciation • Psychological/Emotional Importance <ul style="list-style-type: none"> - love and affection, - stress, worries etc <p>FOOD GROUPS</p> <ul style="list-style-type: none"> • The six food groups: <ul style="list-style-type: none"> - animals and animal products - legumes and oily seeds - fruits and vegetables - cereals/grains - fats and oils - starchy roots and plantain 	<p>Brainstorm to come out with the meaning of food.</p> <p>Discuss the importance of food with students.</p> <p>NOTE: Stress the difference between hunger and appetite</p> <p>Students to list the food items in their localities.</p> <p>Display different food items for students to group into Ghana's six food groups.</p> <p>Students work in small groups to classify the food items and suggest headings for each group with reasons.</p>	<p>Assignment: Students to look for information on food groups of other countries from the internet, T.V books, journals etc.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
<p>UNIT 2 (CONT'D)</p> <p>INTRODUCTION TO FOOD</p> <p>UNIT 3</p> <p>FOOD HABITS</p>	<p>The student will be able to:</p> <p>1.2.4 re-group food items into the three functional groups.</p> <p>1.3.1 explain the term food habits.</p> <p>1.3.2 explain factors which influence the formation of food habits.</p> <p>1.3.3 identify types of food habits.</p>	<p>THE THREE FUNCTIONAL GROUPS</p> <ul style="list-style-type: none"> • Body-Building foods • Energy-Giving foods • Protective foods <p>FOOD HABITS The way in which a group of people select, prepare and serve food as well as the number of times meals are eaten in the day.</p> <p>FACTORS</p> <ul style="list-style-type: none"> • Family traditions/ customs • Geographical location • Religious beliefs • Superstitions • Economy/money available • Technological advancement • Foreign influence • Education etc <p>NEGATIVE FOOD HABITS</p> <ul style="list-style-type: none"> • Snacking/eating between meals • Skipping meals • Drinking alcohol • Dieting • Eating too much fats, sugars, salt, red meat and processed food • Eating late in the night <p>POSITIVE FOOD HABITS</p> <ul style="list-style-type: none"> • Eating a variety of fruits and vegetables • Eating all foods in moderation • Drink about eight glasses of water daily. • Cut down sugar and salt, fats and oils 	<p>Students to re-organize food items into the three functional groups. NOTE: Stress the need to combine foods from the different groups during meal planning to obtain a balance diet.</p> <p>Point out that other countries have different groupings based on their food culture.</p> <p>Students to describe their eating patterns and brainstorm to explain food habits.</p> <p>Discuss the factors that influence the formation of food habits.</p> <p>Students in groups discuss and present in class, the types of food habits. NOTE: Point out that there are good and bad eating habits. Stress on good eating habits.</p>	<p>Class Exercise: Students to make charts of the two food groupings in their notebooks.</p> <p>Class Exercise: Identify two ways to judge whether an eating pattern is nutritionally sound.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHNING AND LEARNING ACTIVITIES	EVALUATION
UNIT 3 (CONT'D) FOOD HABITS	<p>The student will be able to:</p> <p>1.3.4 describe the effects of food habits on nutritional status of individuals.</p>	<p>EFFECTS OF FOOD HABITS ON NUTRITIONAL STATUS</p> <ul style="list-style-type: none"> • Negative Effects <ul style="list-style-type: none"> - meals may lack variety - nutritional excesses may occur - nutrient deficiencies may occur - obesity and heart related diseases may occur. • Positive Effects <ul style="list-style-type: none"> - good food habits promote good health and prevents diseases - good food habits help save money - helps to prevent waste - improves family togetherness. 	<p>Discuss with students the negative and positive effects of food habits on the individual and the family.</p>	<p>Assignment:</p> <p>1. Students to find out from their peers factors that can change their eating habits.</p> <p>2. Using the internet and library sources, research the eating patterns in two other cultures. Discuss why eating patterns vary from one culture to another. Present your findings to the class.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHNING AND LEARNING ACTIVITIES	EVALUATION
UNIT 4 DIGESTION OF FOOD AND ABSORPTION OF NUTRIENTS	<p>The student will be able to:</p> <p>1.4.1 explain the term digestion.</p> <p>1.4.2 describe how digestion turns food into usable nutrients in the digestive tract.</p> <p>1.4.3 explain absorption.</p> <p>1.4.4 describe the functions of the organs involved with the absorption of nutrients.</p> <p>1.4.5 explain internal cleansing and its importance.</p>	<p>DIGESTION: Digestion is the process that breaks down the food we eat into the nutrients our body can use.</p> <p>DIGESTION IN THE DIGESTIVE TRACT Components:</p> <ul style="list-style-type: none"> • Mouth – starch is converted into sucrose • Oesophagus – helps to push the food down, etc. • Stomach - • Small Intestine • Large Intestine <p>ABSORPTION: Is the process by which the usable nutrients from digestion are delivered to the blood stream.</p> <p>FUNCTIONS OF ORGANS OF ABSORPTION</p> <ul style="list-style-type: none"> • Small Intestine <ul style="list-style-type: none"> - functions of the villi • Liver <ul style="list-style-type: none"> - functions of the liver • Lacteals <ul style="list-style-type: none"> - functions of the lacteals <p>INTERNAL CLEANSING The processes of detoxification whereby the body flushes out internal waste/poison through the alimentary canal.</p> <p>TYPES OF INTERNAL CLEANSING</p> <ul style="list-style-type: none"> • Herbal formula taken by mouth to move bowels. • Enemas: colon irrigation • Fasting <p>IMPORTANCE Remove the highly putrefactive mucus plaque from the alimentary canal and the blood is purified to heal and regenerate the body.</p>	<p>Brainstorm for students to come up with the meaning of digestion.</p> <p>Using a diagram/chart of the digestive tract, discuss with students how food is digested in the components of the tract.</p> <p>NOTE: Stress the use of the enzymes in digestive juices.</p> <p>Brainstorm for the meaning of the term. Follow up with a discussion on how absorption takes place.</p> <p>Using charts, diagrams and models, assist students to discuss the organs of absorption and their functions.</p> <p>Discuss the process of internal cleansing, bringing out the types and importance.</p> <p>NOTE: Discourage the use of all kinds of concoction for enema.</p>	<p>Assignments:</p> <ol style="list-style-type: none"> 1. Students to draw and label the digestive tract. 2. Students to trace the digestion of a meal through the digestive tract. Submit for class discussion. 3. Students to find out from the internet and other sources, some causes of indigestion. <p>Home Work Students to find out from their communities the different ways in which they do internal cleansing and the different preparations used.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHNING AND LEARNING ACTIVITIES	EVALUATION
UNIT 5 METABOLISM	<p>The student will be able to:</p> <p>1.5.1 explain the terms basal metabolism and basal metabolic rate.</p> <p>1.5.2 outline factors that affect basal metabolic rate.</p> <p>1.5.3 analyse the effect of weight on health.</p>	<p>METABOLISM: Is the sum total of the processes or chemical changes that take place in living cells. Basal metabolism (BM) – Is the amount of energy a person needs for necessary life processes. Basal metabolic rate (BMR) Is the term used to describe the rate at which energy is used to maintain Basal Metabolism.</p> <p>FACTORS THAT AFFECT BMR: Age Sex Size of the body Body composition Activity of the thyroid gland Body condition Climatic conditions</p> <p>EFFECT OF BODY WEIGHT ON HEALTH <u>Overweight/Obesity</u> diabetes hypertension heart disease stroke heart failure menstrual disorders infertility</p> <p><u>Underweight</u> reduced stamina mental depletion deficiency diseases impaired immunity poor body temperature regulation</p>	<p>Teacher explains the meaning of Basal Metabolism and Basal Metabolic Rate.</p> <p>Group students to outline and discuss the factors that affect BMR and present in class. Discuss the presentations and make inputs where necessary.</p> <p>NOTE: Teacher should collaborate with the science teacher.</p> <p>Students in groups to discuss and present in class the effect of body weight on health. Follow up with a class discussion.</p> <p>Assist students to take their weight and height measurements and calculate their body mass index (BMI) using the following: $\frac{\text{Weight (kg)}}{\text{Height}^2 \text{ (metre)}}$</p>	<p>Assignment: Students to compare the BMR for various activities, such as cycling, swimming, pounding fufu, etc</p> <p><u>Group Project Work</u> Students to take their weight and height measurement and determine their Body Mass Index (BMI).</p> <p>Use the data to classify the class under:</p> <ul style="list-style-type: none"> • obese • overweight • normal weight • underweight <p>Suggest possible advice for the various groups to maintain or control their weight. Make a power point presentation of your findings.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHNING AND LEARNING ACTIVITIES	EVALUATION
UNIT 5 (CONT'D) METABOLISM	The student will be able to:	<p><u>BMI Categories</u></p> <p>Underweight</p> <ul style="list-style-type: none"> • Under 20kg per meter <p>Normal weight</p> <ul style="list-style-type: none"> • 21 – 25 kg per meter <p>Overweight</p> <ul style="list-style-type: none"> • 26 – 29kg per meter <p>Obese</p> <ul style="list-style-type: none"> • 30kg per meter and above 		

SENIOR HIGH SCHOOL - YEAR 1

SECTION 2

FOOD LABORATORY AND EQUIPMENT

General Objectives: The student will:

1. become aware of the role kitchens play in food preparation, and food service and the need for planning kitchens.
2. recognize the safe and efficient use of equipment and fuel in the kitchen.
3. develop skills in maintaining general cleanliness in the food laboratory.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 THE KITCHEN	<p>The student will be able to:</p> <p>2.1.1 describe the different activities that take place in the kitchen.</p> <p>2.1.2 differentiate between the two main types of kitchen.</p> <p>2.1.3 explain factors that affect kitchen planning.</p>	<p>ACTIVITIES IN THE KITCHEN:</p> <ul style="list-style-type: none"> • Meal preparation • Meal service • Storage of food items and equipment • Washing up utensils • Holding family discussions • Entertaining visitors, etc. <p>TYPES OF KITCHEN</p> <ul style="list-style-type: none"> • Traditional • Modern, etc. <p>PLANNING OF KITCHENS Factors:</p> <ul style="list-style-type: none"> • Size and shape • Equipment • Position of doors and windows, etc. 	<p>Discuss with students the activities that take place in the kitchen.</p> <p>Using questions, discuss types of kitchen, bringing out their differences.</p> <p>Brainstorm and discuss with students the factors that influence kitchen planning.</p> <p>NOTE: Stress the importance of arranging the major equipment such that time and energy are conserved. Emphasize Work Centres and the Work Triangle</p>	<p>Assignment:</p> <p>1. Students to pre-image and design their dream kitchen.</p> <p>Group Assignment:</p> <p>2. Students to suggest ways of improving a traditional kitchen and present in class for discussion.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHNING AND LEARNING ACTIVITIES	EVALUATION
UNIT 2 (CONT'D) KITCHEN EQUIPMENT	<p>The student will be able to:</p> <p>2.2.3 describe how to care for and store different equipment.</p> <p>2.2.4 use standard and handy measures correctly.</p>	<p>CARE AND STORAGE</p> <p>Care: Proper handling General procedures for cleaning Use of appropriate cleaning agent. Cleaning according to material used.</p> <p>Storage: Facilities for storage – cupboard, baskets, boxes etc. airtight containers Appropriate conditions for storage good ventilation lighting etc. Appropriate ways of storing specific equipment e.g. glass ware, not to be stacked, etc</p> <p>MEASURING EQUIPMENT Standard - scale, thermometer - measuring cups, jugs, spoons. Handy - empty tins, calabash, bowls, bottles, ladles etc.</p>	<p>Group students to discuss how to care for various equipment.</p> <p>Demonstrate how to clean selected basic equipment.</p> <p>Class practical work on cleaning of equipment saucepans, plastic ware, bake ware, etc.</p> <p>Students to brainstorm on the appropriate facilities for storage of equipment. Discuss students' responses.</p> <p>Demonstrate to students how specific kitchen equipment could be stored correctly.</p> <p>Assist them to store the equipment they cleaned.</p> <p>Brainstorm to bring out the different equipment used for measuring.</p> <p>Demonstrate the correct use of measuring equipment such as scale, measuring jug, tins.</p> <p>Values: Draw students' attention to the values of honesty and the love for fellow human to measure food accurately and not to cheat when selling food.</p>	<p>Assess the practical work: look out for appropriate use of cleaning agent correct way of cleaning end result.</p> <p>Assess the practical work.</p> <p>Group assignment: Students to standardize handy measures in class by putting different food items into the handy measure and weighing the items and record the weights.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 3 FUELS USED IN THE KITCHEN	<p>The student will be able to</p> <p>2.3.1 identify different types of fuels used in the kitchen.</p> <p>2.3.2 compare the various types of fuels used in the kitchen.</p> <p>2.3.3 conserve fuel in the home.</p>	<p>TYPES OF FUEL</p> <ul style="list-style-type: none"> • Solid <ul style="list-style-type: none"> - firewood - charcoal • Liquid <ul style="list-style-type: none"> - LPG - kerosene • Electricity <p>COMPARISON OF DIFFERENT FUELS</p> <p>UNDER :</p> <ul style="list-style-type: none"> • Cost • Efficiency • Availability • Cleanliness <p>CONSERVATION OF FUEL:</p> <ul style="list-style-type: none"> • Electricity <ul style="list-style-type: none"> - turn off lights and appliances when not in use - cook food in the oven instead of on top of the range - select the size of the burner or plate to match with the base of saucepans - do not overload refrigerators and freezers, etc • Charcoal <ul style="list-style-type: none"> - use the exact quantity that is enough for cooking, etc • Gas <ul style="list-style-type: none"> - check leakages, boil enough water for use, etc. 	<p>Discuss the various fuels used in the kitchen.</p> <p>Students to work in groups. Each group compares one fuel to the others based on criteria given.</p> <p>NOTE: Stress the implications of the use of fuels such as charcoal and firewood on the environment.</p> <ul style="list-style-type: none"> - the need for the use of alternatives e.g. wood lots. <p>Students to brainstorm on how to conserve fuel. Follow up with a discussion.</p> <p>Values: Stress the value of conservation of fuel and consider other users.</p>	<p>Assignment: Students to collate different fuels used in their homes/ households to determine the popular ones.</p> <p>Group work: Students to find out the importance of fuel conservation to;</p> <ol style="list-style-type: none"> a) family b) national economy <p>and discuss their findings in class.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHNING AND LEARNING ACTIVITIES	EVALUATION
UNIT 4 KITCHEN SAFETY AND SANITATION	<p>The student will be able to:</p> <p>2.4.1 suggest measures to be taken to ensure personal, food and kitchen hygiene.</p> <p>2.4.2 identify types of accident in the kitchen.</p> <p>2.4.3 explain the causes of kitchen accidents.</p> <p>2.4.4 suggest ways of preventing kitchen accidents.</p> <p>2.4.5. administer First Aid in case of accidents.</p>	<p>HYGIENIC MEASURES TO BE TAKEN FOR: Personal Food Kitchen</p> <p>TYPES OF KITCHEN ACCIDENTS: Falls Burns/scalds Electrocution Poisoning Cuts, etc.</p> <p>CAUSES: Forgetfulness Carelessness Fatigue Poor labelling Poor lighting Poor kitchen arrangement Use of inappropriate equipment Wrong use of equipment, etc.</p> <p>WAYS OF PREVENTING KITCHEN ACCIDENTS: Arrange items well in the kitchen Use equipment correctly Wipe water from the floor immediately it occurs etc.</p> <p>ADMINISTERING FIRST AID FOR THE FOLLOWING: Burns and scalds Cuts Shocks Fracture Poisoning Choking/suffocating Bruises</p>	<p>Discuss ways of ensuring personal, food and kitchen hygiene. NOTE: Stress the need to use good sanitation practices to prevent food contamination.</p> <p>Students role-play different scenarios to depict types of accidents in the kitchen. NOTE: Films, video, etc may be used to show accidents in the kitchen.</p> <p>Discuss the role play bringing out the types of accidents</p> <p>Put students in groups to discuss and present in class the causes and prevention of kitchen accidents.</p> <p>Students to discuss the different ways of preventing kitchen accidents. Demonstrate basic safety rules to avoid cuts, burns and electrical shocks.</p> <p>Invite a resource person to give a demonstration of each of the First Aid techniques.</p> <p>Students to practise administering First Aid for some of the listed accidents.</p>	<p>Assignment: Visit eating places - canteens, food vendors and chop bars. Observe both good and poor hygienic practices. Write reports for presentation.</p> <p>Students to suggest ways to prevent food poisoning and contamination.</p> <p>Project: Students to undertake a project where food sellers are educated on selling in dirty surroundings such as open gutters, rubbish heaps, and also the use of unhealthy packaging materials such as polythene bags etc.</p> <p>Assignment: Students to find out from their locality the various ways of treating scalds and burns and report in class.</p>

SENIOR HIGH SCHOOL - YEAR 1 TERM 2

SECTION 3

COOKING FOOD

General Objectives: The student will:

1. be aware of the principles for cooking food.
2. understand the various ways of heat transfer and apply them in cooking food.
3. understand basic cooking terms and use them appropriately.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 PRINCIPLES UNDERLYING COOKING	The student will be able to: 3.1.1 explain the term cooking and give reasons for cooking food.	COOKING Cooking is the preparation of food by the application of heat: REASONS FOR COOKING FOOD <ul style="list-style-type: none"> • Make it safe. • Make it soft and digestible • Improve appearance and taste etc. 	Discuss cooking and give reasons for cooking food. Experiments to compare texture, taste and edibility of cooked and uncooked foods.	
UNIT 2 TRANSFER OF HEAT	3.2.1. explain the principles underlying the three main ways of heat transfer.	WAYS OF HEAT TRANSFER <ul style="list-style-type: none"> • Conduction – solids (metals) • Convection - liquids • Radiation - space 	Assist students to demonstrate and explain the three major ways of transferring heat. NOTE: A combination of the different ways of heat transfer is used in the cooking of food.	
UNIT 3 METHODS OF COOKING	3.3.1 describe the different methods of cooking.	METHODS OF COOKING <ul style="list-style-type: none"> • Moist heat methods <ul style="list-style-type: none"> - boiling - steaming - stewing - braising - poaching - pressure cooking 	Students mention the meals they ate the previous day. Discuss how those meals were prepared to come out with the different methods of cooking. Assist students to describe each of the methods.	

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 3 (CON'T'D) METHODS OF COOKING	The student will be able to: 3.3.2 prepare suitable dishes using the different methods of cooking.	<ul style="list-style-type: none"> • Dry heat methods: <ul style="list-style-type: none"> - baking - grilling - roasting - microwave • Frying <ul style="list-style-type: none"> - deep - shallow - dry - sauté - stir fry <p>PREPARATION OF DISHES</p> <ul style="list-style-type: none"> • Moist methods • Dry methods • Frying 	<p>Assist students to do practical work on the different methods.</p> <p>Let each group prepare a dish based on a particular method of cooking.</p> <p>Students should set out their dishes for appraisal.</p> <p>They should exchange notes and write out the method of preparing each dish.</p>	<p>Class Exercise:- Students to classify the cooking methods under the following:</p> <ul style="list-style-type: none"> - moist - dry - frying <p>Give examples of foods cooked by these methods.</p> <p>Assess the dishes cooked under:</p> <ul style="list-style-type: none"> - appearance - taste, - texture.
UNIT 4 COOKING TERMS	3.4.1 explain some basic cooking terms.	<p>BASIC TERMS</p> <ul style="list-style-type: none"> • Chop • Shred • Blend • Beat • Whisk • Glaze • Baste • Dredge • Sift/Sieve • Strain • Blanch • Drain etc 	<p>Brainstorm and discuss the outlined basic terms with students.</p> <p>Explain and demonstrate the terms with relevant equipment wherever possible.</p> <p>Allow students to practise after demonstration.</p>	<p>Assignment:- Students to find out from the internet and other sources the equipment used to perform the activities listed in the content.</p>

SENIOR HIGH SCHOOL - YEAR 1

SECTION 4

FOOD COMMODITIES

General Objectives: The student will:

1. recognise the different food commodities, their choice, nutritive value, preparation and service.
2. appreciate the availability of food commodities in influencing eating patterns.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 ANIMALS AND ANIMAL PRODUCTS	<p>The student will be able to:</p> <p>4.1.1 identify the different kinds of animals and animal products and select them appropriately .</p> <p>4.1.2 describe the effect of heat on animals and animal products.</p>	<p><u>KINDS:</u></p> <ul style="list-style-type: none"> • Meat - beef, mutton, pork, game, etc. • Poultry • Fish • Eggs • Milk etc. <p>EFFECT OF HEAT ON PROTEIN FOODS</p> <ul style="list-style-type: none"> • They coagulate with heat. • Flavours are enhanced. • They shrink • They denature 	<p>Discuss the kinds under the following headings:</p> <ul style="list-style-type: none"> • Structure • Nutritive Value • Selection/Choice • Storage • Preparation and Serving <p>Assist students to perform in groups experiments in which they apply heat to pieces of animal food eg. meat, fish</p> <p>Students observe and discuss under the following: coagulation, shrinkage, flavour, colour change and texture.</p>	<p>Assessment: Students to find ways in which one can differentiate pork, beef and mutton in the market.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION																		
UNIT 1 (CONT'D) ANIMALS AND ANIMAL PRODUCTS	<p>The student will be able to:</p> <p>4.1.3 prepare and serve protein dishes.</p>	<p>PREPARATION OF PROTEIN DISHES</p> <ul style="list-style-type: none"> • Meat <ul style="list-style-type: none"> - meat ball - kebab, etc • Fish <ul style="list-style-type: none"> - stuffed fish - fish cakes, etc • Eggs <ul style="list-style-type: none"> - scotch Eggs - stuffed Eggs - omelet, etc • Milk <ul style="list-style-type: none"> - milk Shake - baked Egg Custard, etc • Cheese <ul style="list-style-type: none"> - cheese straws - macroni cheese etc. 	<p>Demonstrate the preparation of dishes outlined and organize class practicals. Practical should be done in groups.</p> <p>NOTE: Stress the need to manage resources efficiently throughout practicals.</p> <p>Groups to set out their dishes for class assessment.</p>	<p>Assess the dishes based on overall presentation:</p> <ul style="list-style-type: none"> • appearance • Taste • mode of serving/creativity in presentation. 																		
UNIT 2 CEREALS/ GRAINS	<p>4.2.1 identify the different kinds and forms of cereals/grains and select them appropriately.</p> <p>4.2.3 describe the effect of heat on cereals/ grains.</p>	<p>KINDS AND FORMS OF CEREALS</p> <table border="0"> <tr> <td>Kinds</td> <td>Forms</td> </tr> <tr> <td>Rice</td> <td>Grit</td> </tr> <tr> <td>Maize/com</td> <td>Powder/flour</td> </tr> <tr> <td>Millet</td> <td>Whole</td> </tr> <tr> <td>sorghum</td> <td>Roasted/raw</td> </tr> <tr> <td>(Guinea corn)</td> <td>Pasta etc.</td> </tr> <tr> <td>Wheat</td> <td></td> </tr> <tr> <td>Oats</td> <td></td> </tr> <tr> <td>Barley etc.</td> <td></td> </tr> </table> <p>EFFECT OF HEAT ON CEREALS/GRAINS</p> <ul style="list-style-type: none"> • Moist Heat • Dry Heat 	Kinds	Forms	Rice	Grit	Maize/com	Powder/flour	Millet	Whole	sorghum	Roasted/raw	(Guinea corn)	Pasta etc.	Wheat		Oats		Barley etc.		<p>Discuss the kinds under the following:</p> <ul style="list-style-type: none"> • Structure • Nutritive value • Selection/choice • Storage • Preparation and serving <p>Experiments: Apply moist and dry heat to the different kinds of cereals/grains. Students observe and discuss results. Stress gelatinization, dextrinization and syneresis.</p> <p>NOTE: Cereals contain starch so principles of starch cookery should be explained.</p>	<p>Students to find out the types of cereals/ grains grown in the vegetation zones of the country and discuss in class.</p>
Kinds	Forms																					
Rice	Grit																					
Maize/com	Powder/flour																					
Millet	Whole																					
sorghum	Roasted/raw																					
(Guinea corn)	Pasta etc.																					
Wheat																						
Oats																						
Barley etc.																						

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 2 (CONT'D) CEREALS/ GRAINS	<p>The student will be able to:</p> <p>4.2.4 explain the importance of cereals/grains in the diet.</p> <p>4.2.5 prepare and serve cereal/grains dishes.</p>	<p>IMPORTANCE</p> <ul style="list-style-type: none"> • Versatility • Thickening agent • Cheap source of energy • Contains nutrients, vitamins, minerals. • Good source of roughage <p>PREPARATION OF CEREAL DISHES USING:</p> <ul style="list-style-type: none"> • Corn • Rice • Millet • Sorghum • Wheat products eg. pasta, semolina etc. 	<p>Group students to discuss the importance of cereals in the diet. Follow up with class discussion on students presentations.</p> <p>Teacher demonstrates to students how to prepare kenkey, “tuo zaafi”, “akple” etc.</p> <p>Students prepare in groups, cereal dishes from different localities.</p> <p>Students to display their dishes for assessment.</p>	<p>Assess the dishes based on:</p> <ul style="list-style-type: none"> - appearance, - texture/consistency and mode of service. - Look out for the application of the elements and principles of design.

SENIOR HIGH SCHOOL - YEAR 1

SECTION 5

FOOD COMMODITIES

General Objectives: The student will:

1. recognize the different food commodities, their choice, nutritive value, preparation and service.
2. appreciate the availability of food commodities in influencing eating patterns.
3. appreciate the significance of food additive in food preparation.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 FRUITS AND VEGETABLES	The student will be able to: 5.1.1 classify fruits.	CLASSIFICATION OF FRUITS <ul style="list-style-type: none"> • Citrus <ul style="list-style-type: none"> - oranges - tangerine - grape fruit - lemon, etc • Berries <ul style="list-style-type: none"> - black berries - straw berries - sweet berry ('asaba') - grapes, etc • Fleshy <ul style="list-style-type: none"> - water melon - pawpaw - bananas - pineapples - 'alasa', etc. • Stone <ul style="list-style-type: none"> - avocado - mango - dates, etc 	Display fruits from the different groups. Students examine and group them appropriately. Discuss the characteristics of each group under the following: <ul style="list-style-type: none"> • Structure • Nutritive value • Selection/choice • Storage • Preparation and serving 	

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1(CONT'D) FRUITS AND VEGETABLES	<p>The student will be able to:</p> <p>5.1.4 explain the importance of fruits and vegetables in the diet.</p> <p>5.1.5 prepare and serve some fruits and vegetable dishes.</p>	<p>IMPORTANCE OF FRUITS AND VEGETABLES IN THE DIET:</p> <ul style="list-style-type: none"> • Rich in vitamins (vitamins C & B), minerals and water. • Contribute colour, flavour and texture • Good for desserts and snacks • Contribute dietary fibre • Some contribute calcium and iron in small amounts. <p>Importance to industry.</p> <ul style="list-style-type: none"> • For wines • Dry fruits for confectionery • Concentrates. <p>PREPARATION OF FRUITS AND VEGETABLE DISHES</p> <ul style="list-style-type: none"> • Fruit in sauce • Fruit salad • Vegetable salad • Palava sauce etc. 	<p>Discuss the importance of fruits and vegetables in the diet with students.</p> <p>Demonstrate and follow with class practical work, the preparation of some of the dishes.</p> <p>Stress proper handling, preparation and serving of dishes.</p> <p>Students to display their dishes for assessment.</p>	<p>Assignment: Students to look for fruits and vegetables used in other countries from the internet and other sources and show how they can be incorporated in their own diets.</p> <p>Students to identify and list other local fruits and vegetables under the different classes for further class discussion.</p> <p>Assess practical work based on:</p> <ul style="list-style-type: none"> - appearance - taste - mode of serving <p>Look out for the application of the elements and principles of design</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHNING AND LEARNING ACTIVITIES	EVALUATION
<p>UNIT 2</p> <p>LEGUMES AND OILY SEEDS</p>	<p>The student will be able to:</p> <p>5.2.1 classify legumes and oily seeds.</p> <p>5.2.2 explain the importance of legumes in the diet.</p> <p>5.2.3 prepare and serve dishes from legumes.</p>	<p>LEGUMES AND OILY SEEDS Legumes are plants whose seeds grow in pods.</p> <p>CLASSIFICATION</p> <ul style="list-style-type: none"> • Beans <ul style="list-style-type: none"> - cowpea - bambara bean - soya bean <p>OILY SEEDS Most of them are sources of proteins, but they all yield oil.</p> <ul style="list-style-type: none"> • Nuts <ul style="list-style-type: none"> - groundnuts • Seeds <ul style="list-style-type: none"> - 'neri' } These are melon seeds - 'agushie' } <p>IMPORTANCE OF LEGUMES IN THE DIET</p> <ul style="list-style-type: none"> • Important sources of incomplete protein • Contribute dietary fibre etc. <p>PREPARATION OF DISHES</p> <ul style="list-style-type: none"> • 'Akla' '(koose)' • 'Tubani' • 'Moimoi' • Groundnut soup/stew/brittle/cake • Agushie soup/stew etc. 	<p>Display legumes in pods for students to identify their features. Assist students to define legumes and oily seeds.</p> <p>Students to list and classify the legumes and oily seeds they know.</p> <p>Discuss legumes and oily seeds under these headings:</p> <ul style="list-style-type: none"> • Nutritive value • Selection/choice • Storage • Preparation and serving <p>Group students to discuss the importance/role of legumes in the diet.</p> <p>Demonstrate the preparation of dishes and follow with class practical work on selected dishes.</p> <p>Set out dishes for class appraisal.</p>	<p>Assess dishes based on appearance, taste, texture.</p> <p>Project: Students to prepare the ff dishes, cost and sell them:</p> <ol style="list-style-type: none"> i. 'Koose' ii. Groundnut brittles iii. 'Tubani'

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHNING AND LEARNING ACTIVITIES	EVALUATION
<p>UNIT 3</p> <p>FATS AND OILS</p>	<p>The students will be able to:</p> <p>5.3.1 identify and classify fats and oils.</p> <p>5.3.2 describe effects of heat on fats and oils</p> <p>5.3.3 explain uses of fats and oils in the diet and in the body.</p>	<p>KINDS AND CLASSIFICATION</p> <p><u>Vegetable Fats and Oils</u></p> <ul style="list-style-type: none"> • Corn oil • Palm oil • Coconut oil • Groundnut oil • Soya bean oil • Margarine • Shea butter, etc <p><u>Animal Fats and Oils</u></p> <ul style="list-style-type: none"> • Butter (milk fat) • Lard (pig fat) • Tallow (goat fat) • Fish oils (cod liver) <p><u>EFFECTS OF HEAT ON FATS AND OILS</u></p> <ul style="list-style-type: none"> - Fat melts into oil - A sizzling sound is produced - Develops blue haze or smoke - Further heating decomposes oil leading to the production of acrolein (a compound that irritates the throat, causing coughing) - Further heating breaks down fats completely to carbon, hydrogen and oxygen. <p><u>USES IN DIET</u></p> <ul style="list-style-type: none"> • Provides flavour • Moistens food • Shortens food • Provides fat-soluble vitamins • Satiety values, etc. <p><u>USES IN THE BODY</u></p> <ul style="list-style-type: none"> • Provides heat and energy • Cushions body organs • Regulates body temperature, etc. 	<p>Teacher displays different fats and oils for identification and classification.</p> <p>Discuss the difference between fats and oils.</p> <p>Students to perform an experiment on the effect of heat on fats and oils.</p> <p>Discuss the results bringing out the effects.</p> <p>NOTE: When oils reach acrolein stage it should not be used for cooking because it is harmful to the body.</p> <p>Discuss the uses of fats and oils in the diet and in the body.</p>	<p>Students to visit the internet to find the sources and differences between the various fats and oils and report.</p> <p>Students to write a report on the experiment and present in class.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
<p>UNIT 3 (CONT'D)</p> <p>FATS AND OILS</p>	<p>The student will be able to:</p> <p>5.3.4 identify the health implications of fats and oils.</p>	<p>Health Implications of Fats and Oils Eating too much fat leads to Obesity Heart-related diseases Diabetes Hypertension, etc.</p>	<p>Discuss the health implication of eating too much fats and oils.</p> <p>NOTE: Caution students about the consequences of eating too much fat, especially animal fat.</p>	
<p>UNIT 4</p> <p>STARCHY ROOTS AND PLANTAIN</p>	<p>5.4.1 identify the types of starchy roots and plantain.</p> <p>5.4.2 identify the types of dishes that can be prepared using starchy roots and plantain.</p>	<p>TYPES OF STARCHY ROOTS Yam Cocoyam Cassava Sweet potatoes Taro Water yam, etc.</p> <p>TYPES OF PLANTAIN 'Apem' 'Apentu' 'Oniamba' etc</p> <p>TYPES OF DISHES 'Ampesi' 'Mpotompoto' Yam chips Fufu Konkonte TZ 'Aglekakro' 'Yekeyeke' 'Wasawasa' 'Ofam' 'Akyeke' 'Tatale', etc.</p>	<p>Display types of starchy roots and plantain for identification and discussion.</p> <p>Students in groups to prepare dishes from any of the starchy roots or plantain.</p> <p>Creativity, originality and innovation are important.</p>	<p>Home Work Compile the indigenous dishes from their regions made from starchy roots and plantain and present in class.</p> <p>Evaluate dishes under the following: Texture Taste Appearance Creativity and originality</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
<p>UNIT 4</p> <p>FOOD ADDITIVES</p>	<p>The student will be able to:</p> <p>5.3.1 explain the term food additives.</p> <p>5.3.2 outline the types of food additives with examples.</p> <p>5.3.3 state the functions of food additives.</p>	<p>FOOD ADDITIVES Food additives are natural or artificially produced substances added to food in small quantities to enhance flavour, colour, nutritive value, etc.</p> <p>TYPES OF FOOD ADDITIVES</p> <p>Preservatives -sugar, salt Antioxidants- vitamin E Emulsifiers - lecithin Stabilizers - Gelatin Colouring - saffron Flavouring - essence, Seasonings e.g. spices, herbs Nutrients- Vit A,D, iron</p> <p>FUNCTIONS OF FOOD ADDITIVES: Enhance nutrient content Preserve food Improve colour and appearance Improve flavour and taste Improve keeping quality or prevent spoilage Bind oil and water together Prevent oxidation of substances in food</p>	<p>Brainstorm to bring out the meaning of food additives</p> <p>Discuss the types with examples. Comment on the dangers of adulteration of food. NOTE: Avoid the use of colours meant for dyeing fabrics for food.</p> <p>Discuss with students, the functions of available food additives. Discussion should include both negative and positive effects of additives on health.</p> <p>Values: Discuss the value of love, honesty, truthfulness in the use of additives. Do not use dyes for colouring food and also adulterating groundnut paste with “konkonte” or “tombrown”, or powdered pepper with ground colanuts and pear seeds, etc.</p>	<p>Assignment: Students to look for natural and artificial examples of food additives.</p> <p>Assignment: Students find out different ways in which foods are adulterated and the harm they can cause. They should write reports for class discussion.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 3 (CONT'D) FOOD ADDITIVES	The student will be able to: 5.3.4 select and use herbs, spices, colours and condiments appropriately.	<p>SELECTION AND USE: Herbs: bayleaf, mint, parsley, rosemary, sage, thyme Spices: cloves, cinnamon, garlic, ginger, nutmeg, cayenne pepper, pepper corn, spiced tree fruit ("whentsia")</p> <p>Colours: tumeric, saffron, cochineal, treacle.</p> <p>Condiments: salt, pepper, mustard, vinegar, 'dawadawa', monosodium glutamate</p> <p>USES: Herbs Mint used to flavour lamb, vegetables, in marinades, for kebabs, fruitcups and salad dressing</p> <p>Spices: Ginger used in curries, sauces, cakes, biscuits, jams, drinks, pickles etc.</p> <p>Colour: Saffron: gives yellow colour to food eg. rice.</p> <p>Condiments: Salt gives flavour to food and preserves food. Monosodium glutamate (MSG) used to enhance the flavour of food.</p>	<p>Students to brainstorm to come out with herbs and spices used at home.</p> <p>Follow up with a discussion on other types as in content. Discussion should include local names of the herbs and spices in content.</p> <p>Students in groups to experiment on various combinations of herbs and spices in meal preparation. Report on resulting flavours.</p> <p>NOTE: The use of too much salt and adding salt at table should be discouraged, for health reasons.</p> <p>Excessive intake of monosodium glutamate has been associated with ailments whose symptoms are headache, palpitation, pains in the chest and neck. Therefore considering the health of others, it should be used in moderation.</p>	<p>Assignment: Students to find out other local spices, colours, herbs and condiments and their uses. Create a class booklet on the spices colours, herbs and condiments.</p>

SENIOR HIGH SCHOOL - YEAR 1

SECTION 6

FOOD STORAGE AND PRESERVATION

General Objectives: The student will:

1. be aware of the causes of food spoilage and the need to improve the shelf life of fresh foods.
2. apply the principles underlying food storage and preservation.
3. develop skills in the preparation of preserves.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 FOOD SPOILAGE	The student will be able to: 6.1.1 explain food spoilage. 6.1.2 explain the causes of food spoilage.	FOOD SPOILAGE Food spoilage is the deterioration and decay of food. CAUSES <ul style="list-style-type: none"> • Enzyme action • Oxidation • Action of micro-organisms - bacteria, yeast, fungi • Pest damage • Bruises, cuts etc. 	Brainstorm and discuss the meaning of food spoilage with students. Students work in groups to discuss the causes of food spoilage, the mechanisms involved in each case and the impact on foods concerned. Students to present reports for further discussion. Values: Stress the value of love and truthfulness. Be responsible and not use rotten food items to prepare food for sale. NOTE: Teacher to draw students' attention to physical spoilage, such as physical food that is burnt during cooking eg rice.	Experiment:- Students to make the ff experiment: <ol style="list-style-type: none"> i. enzyme action on food e.g kontomire turning yellow etc. ii. oxidation – cut banana, gardens eggs, yam e.g. turning brown iii. micro – organisms <ul style="list-style-type: none"> - fish – bacteria - bread/kenkey (Fungi) - pineapple (yeast)

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 2 FOOD PRESERVATION	<p>The student will be able to:</p> <p>6.2.1 explain preservation.</p> <p>6.2.2 explain the importance of preservation.</p> <p>6.2.3 explain the main principles underlying food preservation.</p> <p>6.2.4 describe various methods of food preservation.</p>	<p>PRESERVATION: Preservation is the process of protecting food from spoilage.</p> <p>IMPORTANCE OF PRESERVATION</p> <ul style="list-style-type: none"> • Cut down food cost. • Make food available throughout the year. • Prolong shelf life of foods • Ensure food security etc <p>GENERAL PRINCIPLES: To slow down or prevent the action of all agents which causes food spoilage without damaging the food or adding harmful substances to it.</p> <p>METHODS OF FOOD PRESERVATION:</p> <ul style="list-style-type: none"> • Drying and Dehydration <ul style="list-style-type: none"> - sun drying - solar drying - freeze drying • Addition of chemicals <ul style="list-style-type: none"> - salt - sugar - acids – vinegar • Freezing (Low temperature) • Heat (High temperature) <ul style="list-style-type: none"> - canning - bottling 	<p>Brainstorm and discuss the meaning of preservation.</p> <p>Discuss the importance of food preservation.</p> <p>NOTE: Teacher should link food spoilage to food security and conservation of food in the home.</p> <p>Brainstorm and discuss the principles underlying food preservation with reference to the experiments performed previously.</p> <p>Students to describe some of the various methods of preserving foods they know.</p> <p>Students in small groups, discuss what happens in each of the processes of preservation and present reports for class discussion.</p>	

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 3 FOOD STORAGE	<p>The student will be able to:</p> <p>4.3.1 explain food storage.</p> <p>4.3.2 explain the importance of storing foods.</p> <p>4.3.3 store both perishable and non perishable foods appropriately.</p> <p>4.3.4 describe the equipment for storing different food items.</p>	<p>FOOD STORAGE: Keeping food at appropriate temperatures or conditions and places to prolong shelf life.</p> <p>IMPORTANCE OF FOOD STORAGE:</p> <ul style="list-style-type: none"> • To cut down food cost. • Prevent spoilage • For orderly arrangement, etc. <p>STORAGE OF PERISHABLE AND NON-PERISHABLE FOODS</p> <ul style="list-style-type: none"> • Perishable foods: <ul style="list-style-type: none"> - are stored well packaged in refrigerators /freezers or in baskets and meat safes. • Non-Perishable: <ul style="list-style-type: none"> - must be stored on shelves, cupboards and in dry, well-lit and ventilated areas, etc. <p>STORAGE EQUIPMENT</p> <ul style="list-style-type: none"> • Refrigerators • Deep freezers • Shelves • Food baskets • Food larder/meat safes etc. 	<p>Students brainstorm to come up with the meaning of the term.</p> <p>Discuss the importance of appropriate storage of food.</p> <p>Students to brainstorm to bring out various ways in which food commodities are stored in their respective localities.</p> <p>NOTE: Food should not be stored on the floor because they absorb moisture.</p> <p>Students to list equipment for storing food.</p> <p>Discuss how each operates and the correct procedures for storing items.</p>	<p>Experiment Students to observe the life span of a chosen food under different conditions over a period of two weeks</p> <ul style="list-style-type: none"> - on shelve - in the fridge - in the freezer - on the floor - in a cupboard <p>Record findings and report in class.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 2 BASIC INGREDIENTS IN FLOUR COOKERY	<p>The student will be able to:</p> <p>1.2.1 identify the basic ingredients in flour cookery.</p> <p>1.2.2 explain the importance of each ingredient to the success of the dish.</p>	<p>BASIC INGREDIENTS IN FLOUR COOKERY:</p> <ul style="list-style-type: none"> • Flour • Fat • Sugar • Eggs <p>IMPORTANCE: Flour - forms structure of the product, etc. Fat – adds flavour, colour and makes dish tender etc. Sugar – sweetens, preserves etc. Eggs – adds nutritive value, tenderizes, colour and introduces raising agent – air etc.</p>	<p>Brainstorm and discuss the basic ingredients in flour cookery.</p> <p>Display real ingredients for identification and discussion. Allow students to feel some of the ingredients for texture.</p> <p>Assist students to experiment to determine the gluten content of different types of wheat flours.</p> <p>Discuss the functions of each ingredient in flour cookery.</p> <p>Discussion should include types of flour, fat and sugar.</p> <p>Principle: Right proportion of ingredients, right mixing method and correct cooking temperatures. Are essential for successful result in flour mixtures.</p>	<p>Experiment: Find out the presence of gluten in various types of flour.</p> <ol style="list-style-type: none"> 1. make dough from the different types of flour - wheat, corn and cassava, etc. 2. Tie doughs in muslin 3. Wash each dough under water until the water is clear. 4. Record your findings. <p>Evaluate the experiment under the following:</p> <ul style="list-style-type: none"> - the presence or absence of gluten - quantity of gluten - strength of gluten

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 4 BATTERS AND DOUGHS	<p>The student will be able to:</p> <p>1.4.1 explain batters and doughs.</p> <p>1.4.2 describe the types of batters and doughs.</p> <p>1.4.3 explain the uses of batters and doughs in food preparation.</p>	<p>BATTERS Batters are a mixture of flour, liquid and egg. Doughs have the same ingredients as batters, but they are thicker and can be moulded by hand.</p> <p>TYPES OF BATTERS</p> <ul style="list-style-type: none"> • Thin • Thick /panada/fritter batter • Coating <p>USE OF BATTERS Thin- used for pancakes, Yorkshire puddings, etc.</p> <p>Thick/panada/fritter batter – for binding and coating fruits, etc.</p> <p>Coating – used to coat groundnuts, fish and meat, etc.</p> <p>USES OF DOUGH: Soft – used for bread, biscuits, scones etc. Hard – used for pastries, etc.</p>	<p>Brainstorm and discuss the meaning of batters and doughs</p> <p>Discuss the main types of batter and their uses in meal preparation and service.</p> <p>Discuss the main types of doughs and their uses.</p>	<p>Assignment:- Find out from the internet and other sources more about batters and doughs ie the dishes made from them and their variations.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 4 (CONT'D) BATTERS AND DOUGHS	<p>The student will be able to:</p> <p>1.4.4 prepare dishes using batters and doughs.</p>	<p>DISHES USING BATTERS</p> <ul style="list-style-type: none"> • 'Tubani' • 'Koose/Akla' • 'Aboloo' • Pancakes • Biscuits • Doughnuts • 'Ofam' etc <p>DISHES USING DOUGHS:</p> <ul style="list-style-type: none"> • Bread, scones • Biscuits, pastries • Doughnuts, 'epitsi' etc 	<p>Demonstrate the preparation of the dishes and follow up with class practical work using the different types of batters and doughs</p> <p>NOTE: Success in batter making depends on beating well to incorporate sufficient air. Teacher should encourage the use of local flours to make dishes.</p>	<p>Assess practical work based on</p> <ul style="list-style-type: none"> - texture - taste - colour - creativity in the use of seasonings and flavouring - originality
UNIT 5 CAKES AND BISCUITS	<p>1.5.1 classify cakes and biscuits.</p>	<p>CLASSIFICATION:</p> <p>Cakes</p> <ul style="list-style-type: none"> - rubbed-in cake eg. rock buns - creamed cakes eg. queen cakes - whisked cakes eg. sponge cakes - melted fat cakes eg. ginger bread. <p>Biscuits</p> <ul style="list-style-type: none"> - rolled - piped - dropped - bar - moulded etc. 	<p>Assist students to classify cakes.</p> <p>NOTE: Biscuits can also be classified according to the method used.</p>	<p>Assignment: Students to find other types of cakes and biscuits from internet and other sources.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 5 (CONT'D) CAKES AND BISCUITS	<p>The student will be able to:</p> <p>1.5.2 describe methods of making cakes and biscuits.</p> <p>1.5.3 prepare cakes and biscuits using the different methods.</p>	<p>CAKES AND BISCUITS</p> <p>Methods:</p> <ul style="list-style-type: none"> - rubbing-in - creaming - whisking - melting. <p>Biscuits are also made by the same methods as cakes.</p> <p>CAKES:</p> <p>Rubbing-in - rock cakes, etc Creamed - queen cakes, etc Whisked - swiss roll, etc Melted - ginger bread, etc</p> <p>BISCUITS:</p> <p>Rubbed-in - short bread fingers, etc Creamed - shrewsbury, etc Whisked - sponge fingers, etc Melted - ginger snaps/nuts, etc</p>	<p>Discuss with students the different proportion of ingredients for the different methods used in the preparation of cakes and biscuits</p> <p>Demonstrate and follow with class practical work on the preparation of cakes and biscuits to illustrate the different types of cakes and biscuits</p> <p>Emphasize the importance of accurate measurements, proper mixing, correct oven temperature and timing for success in cake making.</p>	<p>Assess dishes under the following:</p> <ul style="list-style-type: none"> - appearance - texture - taste - cost. - originality - and creativity in the application of the elements and principles of design.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 6 PASTRIES	<p>The student will be able to:</p> <p>1.6.1 state the different types of pastries.</p> <p>1.6.2 explain the principles underlying pastry making.</p> <p>1.6.3 prepare different pastry dishes.</p>	<p>TYPES OF PASTRIES:</p> <ul style="list-style-type: none"> • Short crust • Suet • Flaky • Rough puff • Choux <p>PRINCIPLES:</p> <ul style="list-style-type: none"> • Handle as little as possible • Keep ingredients cold • Use correct temperature in baking etc. <p>PASTRY DISHES:</p> <ul style="list-style-type: none"> • Turnovers • Jam tartlets • Cornish pasties etc. 	<p>Discuss the different types and characteristics of pastry mixtures under content. Discussion should include proportion of ingredients and methods used in the preparation of each.</p> <p>Discuss the principles underlying pastry making. Assist students to find explanations for principles.</p> <p>Demonstrate and follow up with class practical work on pastries using both baking and frying methods of cooking.</p> <p>Teacher to stress the difference between pies and turnovers. Value – Be honest by using the correct filling for pastries.</p>	<p>Assess finished products under the following headings:</p> <ul style="list-style-type: none"> - appearance - texture - taste - cost - originality - and creativity in the application of the elements and principles of design
UNIT 7 YEAST MIXTURES	<p>1.7.1 explain what yeast mixtures are and identify the different ways of preparing yeast mixtures.</p>	<p>YEAST MIXTURES Yeast mixtures are mixtures prepared using yeast as the source of raising agents.</p> <p>DIFFERENT WAYS OF PREPARING YEAST MIXTURES:</p> <ul style="list-style-type: none"> • Convectional method:- dissolve yeast in warm water and add to the flour. • Sponge method:- ferment part of the flour mixture before adding to remaining flour. 	<p>Brainstorm on what yeast mixtures are with examples.</p> <p>Discuss the different ways of preparing yeast mixtures.</p>	

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 7 (CONT'D) YEAST MIXTURES	<p>The student will be able to:</p> <p>1.7.2 outline the important points to bear in mind when preparing yeast mixtures.</p> <p>1.7.3 prepare dishes using yeast mixtures.</p> <p>1.7.4 explain sandwiches and identify the different kinds.</p>	<p>IMPORTANT POINTS IN PREPARING YEAST MIXTURES:</p> <ul style="list-style-type: none"> • Flour must be strong • Use correct proportion of yeast to flour • Mixing and kneading must be thorough • Proving must be complete • Use of correct temperature to prove and bake mixture. <p>YEAST DISHES</p> <ul style="list-style-type: none"> • Bread loaves • Bread rolls • Doughnuts <ul style="list-style-type: none"> - ring - puff loaves • “Aboloo” etc. <p>SANDWICH: Any filling on top of or between any outer covering of bread, roll, muffins, pastry and biscuits.</p> <p>KINDS:</p> <ul style="list-style-type: none"> • Hearty/Lunch box/picnic sandwiches. • Finger Sandwich/small dainty/canapé’s • Flat or rolled • Pinwheel sandwich, check board sandwich. • Hot sandwiches e.g. Hamburgers, sandwich toasts 	<p>Discuss the important points in preparing yeast mixtures.</p> <p>Discuss the proportions of yeast to flour and the ingredients involved in preparing yeast mixtures.</p> <p>Demonstrate the preparation of dishes and follow up with class practical work in the preparation of yeast mixtures using frying and baking methods.</p> <p>Visit a commercial bakery and observe the processes for large- scale bread production. Write a report.</p> <p>Students to brainstorm for the meaning of the term Sandwich. Follow up with a discussion of their nature and ingredients used.</p> <p>Discuss the different kinds of sandwiches. Show pictures or real examples of each where possible.</p> <p>Discussion should include the occasions when the sandwich is used e.g. for cocktails, picnics, and main meals</p>	<p>Assess dishes under the following headings:-</p> <ul style="list-style-type: none"> - appearance - texture - taste - cost. - and creativity <p>It for:</p> <ul style="list-style-type: none"> - ingredients used - method used - types of equipment used - packaging - marketing strategy <p>Students to classify the kinds of sandwich under closed and open sandwich.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 7 (CONT'D) YEAST MIXTURES	The student will be able to: 1.7.5 prepare and serve different kinds of sandwiches.	STEPS IN PREPARING SANDWICHES: <ul style="list-style-type: none"> • Prepare filling. • Place 2 slices side by side on flat surface. • Spread with fat. • Spread filling on one of the slices. • Cover with other half and press down slightly. 	Demonstrate and follow with class practical work on the preparation of sandwiches. NOTE: Stress the following: <ul style="list-style-type: none"> • Use old bread but should not be more than three days old. • Slices should be about ½cm – 1cm thick. • Spread should be at room temperature for easy spreading. • Filling should be dry to prevent bread from being soggy. • Keep in sandwich bag/film/foil/grease-proof paper/polythene bag/clean tea towel to prevent dryness and contamination, especially if not to be eaten immediately. 	Assess products based on <ul style="list-style-type: none"> - shape - sizes - taste - appearance - and creativity in the application of the elements and principles of design

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION			
UNIT 2 MEALS FOR SPECIAL GROUPS	<p>The student will be able to:</p> <p>3.2.1 explain the nutrient needs and precautions to take when planning meals for special groups of people.</p> <p>3.2.2 prepare and serve meals for people with special needs.</p> <p>3.2.3 plan meals using the format for practical test.</p>	<p>SPECIAL GROUPS AND THEIR NEEDS:</p> <ul style="list-style-type: none"> • Weaning babies • Toddlers • School children • Adolescents • Pregnant women • Lactating mothers • Working people • Manual • Sedentary • The aged • Vegetarians <p>INVALIDS AND CONVALESCENTS Look at people suffering from:</p> <ul style="list-style-type: none"> - malaria - anaemia - jaundice etc. • Special health conditions - obesity - diabetics, etc <p>PREPARATION OF MEALS FOR SPECIAL GROUPS</p> <ul style="list-style-type: none"> • Weaning babies - Weanimix, etc. • Vegetarian – Mixed vegetable stew, etc • Adolescents, etc. <p>FORMAT FOR PRACTICAL TEST Section A</p> <table border="1" data-bbox="657 1317 1119 1468"> <tr> <td data-bbox="657 1317 772 1468">Dishes chosen</td> <td data-bbox="772 1317 968 1468">Interpretations/ Reasons for choice</td> <td data-bbox="968 1317 1119 1468">Chief Ingredients and quantities</td> </tr> </table>	Dishes chosen	Interpretations/ Reasons for choice	Chief Ingredients and quantities	<p>Assist students to discuss each group under the following:</p> <ul style="list-style-type: none"> - nutrient needs - points to note - serving considerations e.g. small portions at a time for toddlers. <p>Group students to plan meals for the different groups and report in class for discussion.</p> <p>Demonstrate the preparation of meals for special groups. Follow with a class practical work.</p> <p>NOTE: Stress the correct use of equipment, appropriate cooking methods, the need for kitchen safety and sanitation.</p> <p>Discuss the format based on the requirements of each section.</p> <p>Students to plan meals using the WASSCE format.</p>	<p>Class assessment of plans.</p> <p>Assess dishes under the following:</p> <ul style="list-style-type: none"> - taste - appearance - nutrient requirement - overall presentations of meals. - creativity in presentation.
Dishes chosen	Interpretations/ Reasons for choice	Chief Ingredients and quantities					

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 4 (CONT'D) CONVENIENCE FOODS	<p>The student will be able to:</p> <p>3.4.2 classify convenience foods based on the extent of preparation</p> <p>3.4.3 outline the advantages and disadvantages of convenience foods.</p> <p>3.4.4 prepare different dishes using convenience foods.</p>	<p>TYPES</p> <ul style="list-style-type: none"> • Ready to use foods: are those that require some amount of preparation e.g. <ul style="list-style-type: none"> - dressed poultry - cake mixes - custard powder - 'kokonte' flour - 'gari' - roasted corn flour • Ready to serve: are those which have been completely processed e.g. <ul style="list-style-type: none"> - ice cream - canned fish/meat - corn flakes. - 'gari' - bread etc. <p>ADVANTAGES:-</p> <ul style="list-style-type: none"> • Saves time and energy in food preparation. • Provides variety etc <p>DISADVANTAGES:</p> <ul style="list-style-type: none"> • Comparatively expensive than home made • Most cereal based ones are prepared from refined cereals and lack dietary fibre etc • May contain excess salt or sugar • <p>DISHES:</p> <ul style="list-style-type: none"> • "Gari fɔtɔ" • Sardine sandwiches • Fruits in yogurt 	<p>Students list some of the convenience foods including local ones they use or know of and group them according to the two types.</p> <p>NOTE: Stressed that when canned food are opened, they should not be left in the can.</p> <p>Students in groups to discuss the advantages and disadvantages of using convenience foods and present for discussion.</p> <p>Demonstrate and follow up with class practical work on dishes using convenience foods and other ingredients.</p>	<p>Assignment: Students to watch T.V. over a week and record the types of convenience foods advertised and report in class.</p> <p>Assess students practical work under</p> <ul style="list-style-type: none"> - appearance - taste - preparation time - cost - originality - creativity

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 5 FAST FOODS	<p>The student will be able to:</p> <p>3.5.1 explain the term Fast Food.</p> <p>3.5.2 outline the advantages and disadvantages of Fast Foods.</p>	<p><u>Fast Food</u> Food that can be prepared and served very quickly. Usually food that can be taken away.</p> <p><u>ADVANTAGES AND DISADVANTAGES</u></p> <p><u>Advantages</u></p> <ul style="list-style-type: none"> • Saves time and effort of cooking a meal at home. • It makes it easy for a working individual to get a meal. • It is cheaper for an individual <p><u>Disadvantages</u></p> <ul style="list-style-type: none"> • Has high amounts of fat, sugar and salt • Contributes to obesity • Cardiovascular diseases and other related heart diseases • Disease of the joints • Makes families spend less and less time together • High risk of suffering from stroke • Expensive when large quantities are purchased 	<p>Brainstorm and come out with the meaning of Fast Foods.</p> <p>Discuss students' responses.</p> <p>Students in groups to discuss the advantages and disadvantages of fast foods and present for discussion.</p> <p><u>NOTE:</u> Stress that students should not make it a habit of eating fast foods.</p>	<p>Students to visit the internet where possible and find out all about Fast Foods – types, advantages and disadvantage, etc.</p>

SENIOR HIGH SCHOOL - YEAR 2 - TERM 3

SECTION 4

STOCKS, SOUPS AND SAUCES

General Objectives: The student will:

1. appreciate the significance of stocks, soups and sauces in food preparation.
2. develop skills in preparing stocks, soups and sauces.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 STOCKS	<p>The student will be able to:</p> <p>4.1.1 explain the term Stock.</p> <p>4.1.2 mention various types of stocks.</p> <p>4.1.3 state the nutritive value of stocks.</p>	<p>STOCK: Is a liquid in which meat, beans or vegetables have been simmered gently for a number of hours.</p> <p>TYPES:</p> <ul style="list-style-type: none"> • Best /First class - made from the best cuts of meat, fish and vegetables. • Household/ emergency. - made from scraps of fish, bones and vegetables, etc <p>NUTRITIVE VALUE:</p> <ul style="list-style-type: none"> • Small amount of proteins, carbohydrates and fats. • Traces of mineral elements and vitamins. • Water <p>The value of stock is from the extractives, which stimulate the digestive juices.</p>	<p>Discuss with students to bring out the meaning of stock.</p> <p>Discuss the types with examples. -Brown stock, white stock, game stock, fish stock, vegetable stock, etc</p> <p>Discuss the nutritive value of stocks.</p>	<p>Market Survey: Students to find out from the market the different stock cubes and powders and the dishes they are used for. Record findings and discuss in class.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 (CONT'D) STOCKS	<p>The student will be able to:</p> <p>4.1.4 list the uses of stocks in the diet.</p> <p>4.1.5 prepare the different types of stocks.</p>	<p>USES: Serve as base or foundation for :</p> <ul style="list-style-type: none"> • Sauces • Soups • Gravies <p>PREPARATION Points to note:</p> <ul style="list-style-type: none"> • Cleanliness and freshness of all ingredients. • Use of small divisions of meat • Removal of fat. • A balance proportion of ingredients. • Careful addition of herbs and spices. • Cooking of meat for a longer period than vegetables. • Removal of white scum and fat from the surface. • A strong pan with a well-fitting lid should be used. • Never leave stock in the pan overnight 	<p>Discuss the uses of stocks in the diet.</p> <p>Demonstrate and prepare some of the types of stock with students.</p> <p>Help students with practical work on stocks.</p>	<p>Assess the finished products based on</p> <ul style="list-style-type: none"> - consistency - taste - appearance - flavour

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 2 SOUPS	<p>The students will be able to:</p> <p>4.2.1 explain the term soup.</p> <p>4.2.2 mention various types of soup.</p> <p>4.2.3 outline the functions of soups in the diet.</p>	<p>SOUPS Soup is a clear or thick liquid food made from meat, fish, vegetables and stock. - it can be hot or cold, light or heavy, creamy or clear. - it can be an appetizer or main dish.</p> <p>TYPES OF SOUPS Foreign:</p> <ul style="list-style-type: none"> • Thin <ul style="list-style-type: none"> - clear soups - broth • Thick <ul style="list-style-type: none"> - purées - proper - bond • Thickened <ul style="list-style-type: none"> - brown - white - bisques (fish) <p>Local:</p> <ul style="list-style-type: none"> • Light soup e.g. goat/fish soup • Thick/thickened soup e.g. palmtree/groundnut/agushie • Vegetable soup e.g. okro, alefo, kontomire, etc. <p>FUNCTIONS OF SOUPS</p> <ul style="list-style-type: none"> • It stimulates the digestive juices with its flavour. • It is a hot start to a meal in cold weather. 	<p>Assignment: Discuss the term soup and the various types.</p> <p>Put students into groups to discuss and present the various soups prepared in their homes.</p> <p>Assist students to group the soups under the various types</p> <p>Discuss the functions of soups in the diet.</p>	

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 2 (CONT'D) SOUPS	<p>The student will be able to:</p> <p>4.2.4 explain the uses of soups in the diet.</p> <p>4.2.5 prepare and serve different types of soups.</p>	<ul style="list-style-type: none"> • It is used in invalid cookery to stimulate the appetite. • Improves the nutritive value of meals. • Adds liquid to the diet <p>USES:</p> <ul style="list-style-type: none"> • Appetizers (first courses) • Main dish • As an invalid food etc. <p>PREPARATION OF SOUPS: Points to note:</p> <ul style="list-style-type: none"> • Rich flavour depends on the ingredients used. • Use sufficient seasoning . • Skim off excess fat. • Must have a good colour. • Use correct proportion of ingredients etc. 	<p>Discuss the uses of soups in the diet. NOTE: In Ghana soups are used mainly as main dishes and not as first course.</p> <p>Demonstrate and prepare some of the types of soups.</p> <p>Students to work in groups to prepare different soups, using different methods.</p> <p>They should dish out the soups for assessment.</p>	<p>Assignment: Students to look for different brands of packaged soups and find out how they are used and report in class.</p> <p>Assess the finished products based on</p> <ul style="list-style-type: none"> - appearance - consistency - flavour (taste and aroma) - creativity - balance in terms of seasoning & flavour

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 3 SAUCES	The student will be able to: 4.3.1 explain the term sauce 4.3.2 classify sauces	<p>SAUCE:</p> <p>Sauce is a well flavoured liquid containing a thickening agent.</p> <p>CLASSIFICATION OF SAUCES:</p> <p>Foreign:</p> <ul style="list-style-type: none"> • Those made with a roux. <ul style="list-style-type: none"> - household sauces - white sauce - brown sauce • Cooked egg sauces: <ul style="list-style-type: none"> - custards - hollandaise - German egg sauce • Cold Sauces: <ul style="list-style-type: none"> - mayonnaise - chaufroid - mint sauce - simple salad dressing. <p>Local:</p> <ul style="list-style-type: none"> • Palava sauce • Pepper sauce (fresh for kenkey and banku) • Shito • Gravy sauce 	<p>Brainstorm and come out with the meaning of a sauce.</p> <p>Discuss the classification of sauces.</p>	<p>Assignment:</p> <p>Students to look out for the types of sauces from the internet and other sources and state their use. Report for class discussion.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 3 (CONT'D) SAUCES	The student will be able to: 4.3.3 identify the nutritive value of sauces. 4.3.4. outline the uses of sauces in the diet. 4.3.5. prepare different types of sauces.	<p>NUTRITIVE VALUE: Sauces add to the nutritive value of meals especially the egg and milk based types.</p> <p>USES OF SAUCES:</p> <ul style="list-style-type: none"> • Impart new flavours to a dish. • Add to the nutritive value of a dish • Improve the texture and appearance of certain dishes. • Bind food together. • Add colour to a dish. • Improve the richness of certain dishes etc. <p>PREPARATION OF SAUCES:</p> <ul style="list-style-type: none"> • Roux method • Mayonnaise • French dressing • Shito • Egg Custard 	<p>Discuss the nutritive value of sauces.</p> <p>Put students in groups to discuss the general uses of sauces in the diet.</p> <p>Let them present their points for class discussion.</p> <p>Demonstrate the preparation of sauces and let students do practical work</p>	<p>Project: Students to explore their localities for local foods that can be used to prepare sauces. Let them prepare detected sauces in class.</p> <p>Assessment: Look for</p> <ul style="list-style-type: none"> - originality - creativity - Texture - Flavour <p>Assess products based on</p> <ul style="list-style-type: none"> - smoothness - taste - appearance - flavour

SENIOR HIGH SCHOOL - YEAR 2

SECTION 5

BEVERAGES

General Objectives: The student will:

1. appreciate the importance of beverages in the diet.
2. develop skills in the preparation and serving of non-alcoholic beverages.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
<p>UNIT 1</p> <p>TYPES OF BEVERAGES</p>	<p>The student will be able to:</p> <p>5.1.1 explain the term beverage and distinguish between the two main types.</p>	<p>BEVERAGE: Beverage is flavoured drink that is either refreshing, nourishing or stimulating. It can be sweetened or unsweetened.</p> <p>TYPES:</p> <ul style="list-style-type: none"> • Alcoholic beverages - contain some amount of alcohol <ul style="list-style-type: none"> - hard liquor e.g. Gin, whisky brandy, - soft liquor e.g. beer, wine, pito • Non-alcoholic - contain no alcohol <ul style="list-style-type: none"> - stimulants e.g. tea, coffee, ginger drink. - refreshing e.g. carbonated drink, concentrates, fruit juices, fruit flavoured drinks, 'Ahei', punches, vegetable drink, eg carrots and besap. - nourishing drinks cereal drinks e.g. "Zonkon" (millet drink) milk drinks, cocoa. 	<p>Students brainstorm to come out with the meaning of beverage.</p> <p>Group students to discuss and classify the different beverages found in the market and present in class for discussion.</p> <p>NOTE: Stress the differences among fruit juices, fruit drinks and fruit concentrates and fruits cordials.</p> <p>Teacher to explain the importance of the following social drinks to health:</p> <ul style="list-style-type: none"> - millet/guinea corn drink - bisap (sobolo) - ginger drink - corn drink <p>Stress the use of natural brown sugar or honey to sweeten non-alcoholic drinks.</p>	

SENIOR HIGH SCHOOL - YEAR 2

SECTION 6

FESTIVE AND FESTIVAL DISHES

General Objective: The Student will:

1. plan and prepare meals for specific festivals and festive occasions.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 FESTIVE DISHES	The student will be able to: 6.1.1 explain festive dishes. 6.1.2 identify occasions during which festive dishes are prepared.	FESTIVE DISHES: Festive dishes are dishes prepared to celebrate happy occasions which call for feasting to befit the importance of the celebration e.g. birthday cake, jollof rice with chicken. OCCASIONS FOR FESTIVE DISHES: <ul style="list-style-type: none"> • Christmas • Easter • Weddings • Birthdays • Funerals • Graduation etc. 	Students to brainstorm for the meaning of festive dishes. Students to discuss different Ghanaian festive dishes with teacher's assistance Students to discuss and come out with the different festive occasions.	

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION						
UNIT 2 FESTIVAL DISHES	<p>The student will be able to:</p> <p>6.2.1 explain festival dishes.</p> <p>6.2.2 explain the history of festival dishes.</p> <p>6.2.3 identify dishes prepared during festivals.</p>	<p>FESTIVAL DISHES Festival dishes are dishes prepared during festivals of ethnic groups. Sometimes special ingredients and utensils are used.</p> <p>History of Festival Dishes. ‘Homowo’ ‘Damba’ ‘Aboakyere’ ‘Bakatue’ Yam ‘Bugum’ ‘Hogbetstso’ etc.</p> <table border="1" data-bbox="684 776 1121 951"> <thead> <tr> <th>Dish</th> <th>Festival</th> <th>Ethnic Group</th> </tr> </thead> <tbody> <tr> <td>Kpopkoi and palm soup</td> <td>Homowo</td> <td>Ga</td> </tr> </tbody> </table>	Dish	Festival	Ethnic Group	Kpopkoi and palm soup	Homowo	Ga	<p>Students to discuss festivals in their localities and the sort of dishes associated with the festivals.</p> <p>Students to share history behind festival dishes prepared in their ethnic groups. NOTE: Stress the significance of the festivals and dishes. Resource persons from the community can be invited to demonstrate the preparation of some festival dishes.</p> <p>Students in groups, to discuss and come out with dishes of festivals of different ethnic groups, by completing the table in content.</p>	<p>Project:</p> <ol style="list-style-type: none"> 1. Explore histories of festivals of other ethnic groups and report in class 2. Find out about the historical background of some festival dishes. <p>Identify positive and negative preparation practices. Make suggestions for improvement where necessary. Write reports for presentation.</p>
Dish	Festival	Ethnic Group								
Kpopkoi and palm soup	Homowo	Ga								

SENIOR HIGH SCHOOL - YEAR 3 - TERM 1

SECTION 1

THE ART OF ENTERTAINING

General Objectives: The student will:

1. appreciate the value of entertainment in social life.
2. be aware of different forms of food service styles.
3. recognize the importance of creativity and artistic abilities in food presentation.
4. practise basic table etiquette at mealtimes.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 TYPES OF ENTERTAINMENT	The student will be able to: 1.1.1 explain the concept of entertaining. 1.1.2 identify the types of entertainment. 1.1.3 outline types of parties. 1.1.4 identify occasions during which parties are held.	ENTERTAINING: Entertaining is a way of expressing hospitality to people, making them feel welcome and special. TYPES OF ENTERTAINMENT <ul style="list-style-type: none"> • Parties • Film shows • Concerts • Dance • Playing cards • Rock shows etc. TYPES OF PARTIES. <ul style="list-style-type: none"> • Dinners • Luncheons • Cocktails • Buffets • Tea parties • Children's parties etc. OCCASIONS <ul style="list-style-type: none"> • Festivals • Birthdays • Marriages • Christenings • Graduations etc. 	Students to brainstorm and discuss the meaning of entertainment. Students to mention the different forms of entertainment. Discuss the entertainment forms that involve food of some sort. Students in groups to list different types of parties and discuss what goes into organizing each of them. Discuss with students occasions during which parties are held. NOTE: Teacher should assist students to differentiate between formal and informal parties.	Assignment: Interview one successful person in the food entertainment industry. Find out how he/she started and why he/she became successful.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
<p>UNIT 1 (CONT'D)</p> <p>TYPES OF ENTERTAINMENT</p>	<p>The student will be able to:</p> <p>1.1.5 explain points to consider when selecting a type of party.</p> <p>1.1.6 explain factors that contribute to the success of parties.</p>	<p>POINTS TO CONSIDER WHEN SELECTING A TYPE OF PARTY:</p> <ul style="list-style-type: none"> • Cost/money • Occasion • Space available • People involved (age) • Equipment available • Skill of organizer • Whether formal or informal etc. <p>FACTORS</p> <ul style="list-style-type: none"> • Good planning • Effective ordering of activities • Well prepared food • Proper utilization of space • Appropriate music • Sending invitation ahead of time • Efficiency of host/hostess • Presence and comportment of guests. etc 	<p>Discuss the points to consider when selecting a type of party.</p> <p>Discuss with students the requirements for a successful party.</p> <p>Plan how to write formal/informal invitations with students.</p> <p>Students plan and write invitation letters to their friends and Headmistress/master.</p> <p>NOTE: Stress the need to wear the proper attire when entertaining.</p>	<p>Group Assignment Choose an occasion for entertainment and plan a party:</p> <ul style="list-style-type: none"> - State type of party - Number of people - Dishes to be served - Write the invitations to be sent to your guests
<p>UNIT 2</p> <p>TABLE SETTING AND TABLE ETIQUETTE</p>	<p>1.2.1 describe the procedure to follow in setting tables and trays for different meals and occasions.</p>	<p>SETTING TABLES Cover - is the arrangement of a place setting for one person. - consists of all the dinner ware, glassware and cutlery used by one person at the table.</p> <p>Table Appointment (all items needed for setting a table)</p> <ul style="list-style-type: none"> • Flatware • Glassware • Dinnerware • Centrepiece • Table coverings/linen <ul style="list-style-type: none"> - table cloth - placemats - napkins - table runners 	<p>Demonstrate the proper way of setting a table and tray for different meals and occasions.</p> <p>Show pictures of different tableware such as table coverings, silverware, dinner ware and centre piece or real ones where possible.</p> <p>Discuss features of each group of table appointment under the following:</p> <ul style="list-style-type: none"> - Type - Care - Use <p>Class practical work on table and tray setting.</p> <p>Encourage students to work in small groups and individually as much as possible.</p> <p>Stress the need for absolute cleanliness when setting a table or tray.</p>	<p>Assess students practical work Look for :</p> <ul style="list-style-type: none"> -appropriate placement of table appointments - cleanliness/appearance of table.

SENIOR HIGH SCHOOL - YEAR 3

SECTION 2

EXPERIMENTAL COOKERY

General Objective: The student will:

1. acquire knowledge and skills in developing recipes.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 RESEARCH INTO LOCAL DISHES AND DRINKS	<p>The student will be able to:</p> <p>2.1.1 explain the importance of research in Food and Nutrition.</p> <p>2.1.2 collect/gather information on recipes of local dishes and drinks.</p>	<p>IMPORTANCE OF RESEARCH IN FOOD AND NUTRITION:</p> <ul style="list-style-type: none"> • Leads to the development of new recipes. • Leads to improvement of existing recipes. • Helps to solve problems associated with food. • Help solve problems associated with nutrient deficiencies etc. <p>COLLECTION OF INFORMATION (DATA):</p> <ul style="list-style-type: none"> • Use interview and observation to collect information on local dishes and drinks. • Sources of data: observation, interview. 	<p>Discuss the need for research in Food and Nutrition and how to collect data for improving recipes.</p> <p>NOTE: Stress that to improve recipes you have to go out for information.</p> <p>Teacher should not wait to teach this topic at this time. It can be taught at anytime of the term.</p> <p>Assist students to develop simple interview guides and check list for observation.</p> <p>Students to collect information on local dishes and drinks from their locality and write report for presentation.</p>	

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 2 IMPROVEMENT OF NEW RECIPES	<p>The student will be able to:</p> <p>2.2.1 improve upon existing/dying out recipes.</p> <p>2.2.2 undertake experiments with lesser known foods.</p>	<p>IMPROVING DISHES BASED ON:</p> <ul style="list-style-type: none"> • Methods of preparation. • Nutritional value • Time and energy use. • Serving/ presentation of food. <p>EXPERIMENTS: Using:</p> <ul style="list-style-type: none"> • Wild fruits • Other types of flour e.g. <ul style="list-style-type: none"> - root flour, - cereal flour - legume flour. 	<p>Students to identify dishes from various communities which need to be improved.</p> <p>Students perform experiment to improve:</p> <ul style="list-style-type: none"> • nutritive value • appearance • taste • texture • preparation time. • presentation of dishes <p>Teacher to guide students to perform experiments and write out the new recipes.</p> <p>Students to compare products of experiments with existing products/recipes.</p> <p>Students to develop new recipes from flour by combining different types of flour.</p>	<p>Compare experimented dishes with existing ones under:</p> <ul style="list-style-type: none"> - appearance - taste - texture - preparation time - cost - presentation etc. <p>Project: Students to build a class recipe booklet with standardized recipes.</p> <p>Assess outcome based on</p> <ul style="list-style-type: none"> - appearance - texture - taste - cost. - originality - creativity

SENIOR HIGH SCHOOL - YEAR 3 - TERM 2

SECTION 3

THE FOOD INDUSTRY

General Objectives: The student will:

1. appreciate the need to adapt recipes for large scale cooking.
2. be aware of career opportunities in the food industry.
3. recognize the importance of laws governing the preparation and sale of food.
4. develop skills in costing and pricing of food products.
5. develop appropriate work ethics for the food industry.
6. acquire knowledge and skills in food purchasing.
7. acquire knowledge and skills in entrepreneurship.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 CATERING ON A LARGE SCALE	The student will be able to: 3.1.1 adapt recipes for large scale cooking. 3.1.2 outline the factors which affect costing and pricing of food products.	ADAPTATION OF RECIPES: <ul style="list-style-type: none"> • Multiply ingredients based on the people being catered for. • Increase raising agents and seasonings appropriately. • Substitute certain ingredients to cut down on cost without compromising quality. • Know portion per-head etc. FACTORS AFFECTING THE COSTING AND PRICING OF FOOD PRODUCTS. <ul style="list-style-type: none"> • The type of catering establishment. • Purchase price of food items used. • Type of packaging. • Labour and time spent • Number of people being catered for • Direct cost (production materials) • Indirect cost (over head and salaries) • Profit margin etc. 	Facilitate discussions on the various ways by which existing recipes can be adapted. Students to visit school kitchens or other Institutional kitchens to familiarize themselves with large scale catering. Group discussion of factors that affect costing and pricing of food products. Group students and guide them to plan for the preparation and sale of food products (dishes).	ASSIGNMENT Assign students to adapt selected recipes for large scale cooking and present for class discussion.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 2 FOOD PURCHASING	<p>The student will be able to:</p> <p>3.2.1 outline guidelines for shopping that leads to wise food purchases.</p> <p>3.2.2 explain factors that affect the food budget.</p> <p>3.2.3 explain the need to buy food in bulk.</p> <p>3.2.4 explain guidelines for bulk purchasing of food.</p>	<p>GUIDELINES FOR SHOPPING FOR FOOD:</p> <ul style="list-style-type: none"> • Prepare a shopping list and follow accordingly. • Window shop to compare prices. • Consider different shopping outlets. • Use bargaining skills. • Buy foods in season. • Take advantage of sales. • Buy in bulk when storage is available, etc. <p>FOOD BUDGETING: Food budget is dependent on:</p> <ul style="list-style-type: none"> • Overall income. • Food needs of those being catered for. • Whether foods are in season or not (seasonal foods tend to be cheaper). • Ability to use alternative cheaper sources (must be equally nutritious) e.g. Yam instead of potatoes. • Ability to take advantage of sale items. • Availability of storage space. • Family size and composition • Bargaining skills, etc. <p>REASONS FOR BUYING FOOD IN BULK:</p> <ul style="list-style-type: none"> • To cut down cost • To reduce the number of trips to the market or shop • To save time and energy. <p>To have food when it is needed, etc.</p> <p>GUIDELINES FOR BULK PURCHASING:</p> <ul style="list-style-type: none"> • Compare wholesale, retail, and farm gate prices. • Ensure that measuring cups/tins are not adjusted by sellers. • Ensure that there is adequate storage space. • Ensure that there is enough money, etc. 	<p>Discuss and develop guidelines for effective shopping.</p> <p>Students to role-play different shopping scenes to depict wise shopping practices.</p> <p>Class discussion of the important considerations for successful food budgeting.</p> <p>NOTE: Emphasize the need to plan meals that fit into the family food budget.</p> <p>Brainstorm with students to bring out the reasons for bulk purchasing of food and discuss in class.</p> <p>Group students to discuss and present in class the guidelines for bulk purchasing of food.</p>	<p>Assignment: Create a poster on helpful tips for buying food that would aid teenage shoppers.</p> <p>1. Students to find out from their parents how much they spend on food in a month and suggest ways of cutting down the food budget.</p> <p>2. When food prices go up the average family's food budget is affected:</p> <p>- What can people do to keep food costs down while ensuring that their family members eat nutritious meals?.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 3 CAREER OPPORTUNITIES IN FOODS AND NUTRITION	<p>The student will be able to:</p> <p>3.3.1 identify and describe careers in Foods and Nutrition.</p> <p>3.3.2 explain the factors that influence career choices.</p>	<p>CAREERS IN FOODS AND NUTRITION:</p> <ul style="list-style-type: none"> • Food Demonstrator • Self Employment • Food Service Worker, etc. <p>The following careers need higher or further training:</p> <ul style="list-style-type: none"> • Teaching • Dietetics • Institutional management • Food Biochemist • Food Scientist • Nutritionist etc. <p>FACTORS THAT INFLUENCE CAREER CHOICES:</p> <ul style="list-style-type: none"> • Interests • Aptitudes/skills • Abilities/ (your powers to perform) • Lifestyle • Potential income • Working conditions 	<p>Brainstorm and discuss the various careers available for Foods and Nutrition with students.</p> <p>Discuss job descriptions of the various employees of the various careers.</p> <p>NOTE: Point out that, for students to find themselves in these careers, they need further or higher training.</p> <p>Students break into groups to look at each of the factors separately. Follow up with a class discussion on the factors that influence career choices.</p>	<p>Assignment: Students to find other careers in foods in their locality, internet and other sources and report in class.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 3 (CONT'D) CAREER OPPORTUNITIES IN FOODS AND NUTRITION	<p>The student will be able to:</p> <p>3.3.3 identify the characteristics required for careers in food and nutrition.</p>	<p>CHARACTERISTICS REQUIRED IN FOOD CAREERS:</p> <ul style="list-style-type: none"> • Ability to pay close attention to details - Ability to measure ingredients correctly - Ability to take orders accurately • Ability to remain calm under pressure • Ability to exhibit creativity - Ability to devise new menus to satisfy tastes and attract customers. • Ability to work well and get along with others. • Being a pleasant and friendly personality. • Have interest in the career. • Have the skills. 	<p>Students to role-play situations to exhibit some of the interests, skills and characteristics required for careers in foods and nutrition.</p> <p>NOTE: Emphasize that customers appreciate efficient and courteous service.</p> <p>Discuss with students the local institutions that offer training or courses geared towards careers in foods and nutrition.</p> <p>Invite a professional in Foods and Nutrition. Find out the most interesting part of his/her job, the training and experience needed, the major responsibilities, the least interesting aspects and future opportunities for new entrants.</p>	<p>List four interests and skills useful for a career in foods and nutrition.</p> <p>Students to find out jobs in food processing and in Food service locally. Report in class.</p>
UNIT 4 SETTING UP AND MANAGING A CATERING ENTERPRISE	<p>3.4.1 explain the term entrepreneur, entrepreneurship and enterprise.</p> <p>3.4.2 identify the characteristics of an entrepreneur</p>	<p>Entrepreneur</p> <ul style="list-style-type: none"> - A person who sets up and manages a business. <p>Entrepreneurship</p> <ul style="list-style-type: none"> - A process of establishing and managing a business. - Applying innovative ideas to develop products/services to solve problems in order to satisfy the needs of a defined market. <p>Enterprise</p> <ul style="list-style-type: none"> - A business set up in a specific area of work which is run privately or by the state. <p>CHARACTERISTICS</p> <ul style="list-style-type: none"> - Hardworking - Seeks information - Possesses high level of confidence - Independent minded - Risk taker - Seeks opportunities, etc 	<p>Brainstorm to bring out the meaning of Entrepreneur, Entrepreneurship and Enterprise. Discuss students' responses to make explanation of terms clearer.</p> <p>Discuss the characteristics of an entrepreneur.</p>	<p>Home work</p> <p>Students to interview a successful entrepreneur and report in class on what lead to his/her success.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 4 (CONT'D)	<p>The student will be able to:</p> <p>3.4.3 identify the advantages and disadvantages of an entrepreneur</p> <p>3.4.4 set up and manage a catering enterprise.</p> <p>3.4.5 describe factors that promote the success of a catering enterprise.</p> <p>3.4.6 identify some catering enterprise.</p>	<p><u>Advantages</u></p> <ul style="list-style-type: none"> - You are your boss - You make your own decisions, rules and business policies - You have flexible time use - Potential to earn more than when working for someone - applying innovative ideas to develop new products and services to solve problems or satisfying the needs of a defined market etc. <p><u>Disadvantages</u></p> <ul style="list-style-type: none"> - You assume all rights and responsibilities - You bear the blame for poor management decisions etc. <p><u>Setting up a catering enterprise</u></p> <ul style="list-style-type: none"> - Choose the right business idea - Research the market - Develop a business plan - Explore your financial resources - Contact Institutions that assist prospective entrepreneurs e.g. NBSSI, EMPRETEC, BAC, etc. <p><u>Factors contributing to success of an enterprise.</u></p> <ul style="list-style-type: none"> - Hard work and commitments - Start-up capital - Equipment and space - Costing/pricing - Marketability of product - Appropriate work ethics - Quality of product - Honesty and reliability <p><u>Some catering enterprise</u></p> <ul style="list-style-type: none"> - Restaurants - Chopbars - Food Joints, etc. 	<p>Group students to identify the advantages and disadvantages of an entrepreneur.</p> <p>Discuss the setting up and management of a catering enterprise.</p> <p>Discussion should include sources of finance such as:</p> <ul style="list-style-type: none"> - borrowing from banks - personal savings - NGOs - Credit Purchases - Inheritance, etc <p>Students to brainstorm and come out with factors that contribute to the success of a catering enterprise.</p> <p>Discuss students' responses bringing out the factors.</p> <p>Teacher to point out that the opposite of the factors in content will lead to failure of an enterprise.</p> <p>Assist students to discuss a catering enterprise.</p>	<p>Let students visit a catering enterprise and find out from the owner how he/she started, the problem encountered and how he/she dealt with the problems.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 5 FOOD PACKAGING	<p>The student will be able to:</p> <p>3.5.1 explain the term Food Packaging.</p> <p>3.5.2 give reasons why food products should be packaged.</p> <p>3.5.3 outline the qualities of food packaging materials</p>	<p>FOOD PACKAGING: Putting a product into a container either for storage, advertisement or for sale.</p> <p>REASONS WHY FOOD IS PACKAGED:</p> <ul style="list-style-type: none"> • To prevent dehydration and oxidation • To prevent contamination • To prevent transfer of flavours • Prevent food from becoming flat eg. biscuits • To make food attractive • As a form of advertisement to attract customers etc. <p>QUALITIES OF A FOOD PACKAGING MATERIAL:</p> <ul style="list-style-type: none"> • Vapour-proof • Greaseproof • Water proof • Odourless • Strong and durable • Easy to use • Easy to dispose off etc. 	<p>Students to brainstorm and come up with an explanation for packaging.</p> <p>Assist students to provide reasons for packaging food products. Discuss the reasons with the students.</p> <p>Assist students to discuss the qualities of food packaging materials.</p>	<p>Class Exercise: Students to list four food items that can be stored in the refrigerator and write the type of packaging they would use for each of them with reasons.</p>

SENIOR HIGH SCHOOL - YEAR 3

SECTION 4

EXHIBITION

General Objective: The student will:

1. utilize appropriate strategies to boost the marketing of food products.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 PLANNING AND MOUNTING EXHIBITIONS	<p>The student will be able to:</p> <p>4.1.1 explain the term exhibition.</p> <p>4.1.2 identify the types of exhibition.</p> <p>4.1.3 plan an exhibition.</p>	<p>EXHIBITION: Exhibition is a public display of products. It brings to the notice of consumers what products are available for sale.</p> <p>TYPES OF EXHIBITION:</p> <ul style="list-style-type: none"> • General – open to all types of products • Specialized – on specific products. <p>PLANNING A FOOD FAIR/BAZAAR: Consider:</p> <ul style="list-style-type: none"> • What products to exhibit • Where to exhibit • Cost involved • Publicity • Expected number of guests/visitors duration/time of opening and closing. • Mounting of exhibits • Security • General layout • Visitors book • Labelling of exhibits 	<p>Brainstorm with students to explain Exhibition.</p> <p>Follow-up with a discussion on the two main types and the purpose of the exhibition.</p> <p>Discuss with students factors to be considered when planning a general exhibition such as a Food Bazaar/Fair.</p> <p>Let students work in small groups to explain how each factor will affect the planning process.</p>	

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 PLANNING AND MOUNTING EXHIBITIONS CONT'D	The student will be able to: 4.1.4 mount an exhibition.	MOUNTING AN EXHIBITION FACTORS TO CONSIDER: <ul style="list-style-type: none"> • Colour scheme and balance. • Effective lighting and ventilation • Easy access to view products. • Effective decoration of room. • Background music. • Price tags if products should be sold. 	Class to discuss the factors that promote a successful exhibition. Students to discuss in groups how best to mount the exhibits. Assist them to organize a mock food bazaar/fair in their class. Guide students to plan for and mount a school exhibition during the school's speech and prize-giving day. NOTE: Arrange food products with creativity. Students could choose co-ordinators for their activities.	Assess the mock exhibition based on the factors outlined in the content column. Students should comment verbally and in writing about the school exhibition. Let them suggest alternatives to faults they identify.

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