

MINISTRY OF EDUCATION SCIENCE AND SPORTS



Republic of Ghana

TEACHING SYLLABUS FOR FOOD AND NUTRITION (SHS 2 - 4)

Enquiries and comments on this syllabus should be addressed to:

The Director
Curriculum Research and Development Division (CRDD)
P. O. Box 2739
Accra
Ghana

Tel: 021-683668
021-683651

September, 2008

TEACHING SYLLABUS FOR FOOD AND NUTRITION

RATIONALE

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

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

SHS 2	SHS 3	SHS 4
TERM 3	TERM 3	TERM 3
SECTION 5: FOOD COMMODITIES Unit 1: Fruits and Vegetables Unit 2: Legumes and Oily Seeds Unit 3: Food Additives	SECTION 5: BEVERAGES Unit 1: Types of Beverages Unit 2: Preparation of Beverages	WASSCE in Progress
SECTION 6: FOOD STORAGE AND PRESERVATION Unit 1: Food Spoilage Unit 2: Food Preservation Unit 3: Food Storage	SECTION 6: FESTIVE AND FESTIVAL DISHES Unit 1: Festive Dishes Unit 2: Festival Dishes	WASSCE in Progress

TIME ALLOCATION

A minimum of five (5) periods a week each of 40 minutes is recommended for teaching Food and Nutrition in SHS 2, a minimum of seven (7) for SHS 3 and a minimum of six (6) for SHS 4.

CLASS	NUMBER OF PERIODS		
	TOTAL	THEORY	PRACTICALS
SHS 2	5	2	3
SHS 3	7	3	4
SHS 4	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 are a summary of the specific objectives of the various units contained in that 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.

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 constitute 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 can “apply” the knowledge acquired in some new context. 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.

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. Try to 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.

DEFINITION OF PROFILE DIMENSIONS

As already stated, profile dimensions describe the underlying behaviours for teaching, learning and assessment. In Food and Nutrition, the three profile dimensions that have been specified for teaching, learning and testing are:

Knowledge and Understanding	30%
Application of Knowledge	30%
Practical Skills	40%

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, 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.
synthesis	The ability to: put parts together to form a new whole. It involves the ability to combine, compile, compose, devise, plan, revise, design, organize, create, and generate new ideas and solutions. Ability to synthesize underlies convergent thinking.
evaluation	The ability to: appraise, compare features of different things and make comments or judgement, contrast, criticize, justify, support, discuss, conclude, make recommendations, etc. Evaluation refers to the ability to judge the worth or value of some material based on some criteria.

You will note from the above that evaluation is generally the highest form of thinking and learning skill and is therefore the most important behaviour. This accounts for the poor performance of students and people generally on tasks that call for evaluative thinking. Give your students lots of chances to do evaluative thinking.

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

It must be emphasized that both instruction and assessment should be based on the profile dimensions of the subject. 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 is a Practical Test and Paper 2 is 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.

DISTRIBUTION OF MARKS

Paper 1 which is the practical test, carries 100 marks i.e. the practical work carries 40 marks and the finished dishes carries 60 marks. Paper 2, Section A which is the objective paper carries 60 marks. Each item is marked right or wrong. In Paper 2, Section B, each essay question carries 25 marks, making 100 marks for Section B.

Distribution of Examination Paper Weights and Marks

Dimensions	Paper 1 Practicals	Paper 2		Total
		Section A	Section B	
Knowledge and Understanding	10	40	60	110
Use of Knowledge	30	20	40	90
Practical Skills	60			60
Total	100	60	100	260

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. Of the total marks of 260, the 110 marks for Knowledge and Understanding is equivalent to 42.3%. The 90 marks for use of knowledge and 60 marks for practical skills.

Because of the large weight on Knowledge and Understanding, continuous assessment should be used to test this dimension. A further advice would be to undertake the practical skills component under continuous assessment. In this case, the assessment structure will consist of two test papers and Continuous Assessment.

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.

GRADING PROCEDURE

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

Grade A:	80 – 100%	-	Excellent
Grade B:	70 – 79%	-	Very Good
Grade C:	60 – 69%	-	Good
Grade D:	45 – 59%	-	Pass (Satisfactory)
Grade E:	35 – 44%	-	Weak
Grade F:	34% and below	-	Very Weak

In marking your class examination scripts, it is very important that you develop a marking scheme. A marking scheme, as you are aware, 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 point raised by the student, 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.

In assigning grades to students' test results; you may apply the above grade boundaries and the descriptors which indicate the meaning of each grade. The grade boundaries are also referred to as grade cut-off scores. For instance, the grade cut-off score for a B grade is 70% 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.

GUIDELINES FOR SCHOOL BASED ASSESSMENT

A new School Based Assessment system (SBA), formally referred to as Continuous Assessment, will be introduced into the school system from September 2009. SBA is a very effective system for teaching and learning if carried out properly. 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 schools in the country
- Provide reduced assessment tasks for each of the SHS school subjects
- Provide teachers with guidelines for constructing assessment items/questions and other assessment tasks
- Introduce standards of achievement in each subject and in each class of the school system
- 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 pupil performance

The new SBA system will consist of 12 assessments a year instead of the 33 assessments in the previous continuous assessment system. This will mean a reduction by 64% of the work load compared to the previous continuous assessment system. The 12 assessments are labeled as Task 1, Task 2, Task 3 and Task 4 etc. Task 1-4 will be administered in Term 1; Tasks 5-8 will be administered in Term 2, and Tasks 9-12 administered in Term 3. Task 1 will be administered as an individual test coming at the end of the first month of the term. The equivalent of Task 1 will be Task 5 and Task 9 to be administered in Term 2 and Term 3 respectively. Task 2 will be administered as a Group Exercise and will consist of two or three instructional objectives that the teacher considers difficult to teach and learn. The selected objectives could also be those objectives considered very important and which therefore need students to put in more practice. Task 2 will be administered at the end of the second month in the term. Task 3 will also be administered as individual test under the supervision of the class teacher at the end of the 11th or 12th week of the term. Task 4 (and also Task 8 and Task 12) will be a project to be undertaken throughout the term and submitted at the end of the term. Schools will be supplied with 9 project topics divided into three topics for each term. A student is expected to select one project topic for each term. Projects for the second term will be undertaken by teams of students as Group Projects. Projects are intended to encourage students to apply knowledge and skills acquired in the term to write an analytic or investigative paper, write a poem (as may be required in English and Ghanaian Languages), use science and mathematics to solve a problem or produce a physical three-dimensional product as may be required in General Knowledge in Arts, Natural Science and in Food and Nutrition.

Apart from the SBA, teachers are expected to use class exercises and home work as processes for continually evaluating students class performance, and as a means for encouraging improvements in learning performance.

The marks derived from projects, the end of month tests and home work specifically designed for the SBA should together constitute the School Based Assessment component marked out of 60 per cent. The emphasis is to improve students' learning by encouraging them to do more practice in the subject.

The teacher should AVOID asking students to bring purchased items for assessment for the SBA. The teacher must also AVOID, criticizing or comparing one student's work with another's work in both the teaching and assessment processes. The SBA will consist of:

End-of-month tests

Home work assignments (specially designed for SBA)

Project

Combining SBA marks and End-of-Term Examination Marks

The SBA system is important for raising students' school performance. For this reason, the 60 marks for the SBA will be scaled to 50. The total marks for the end of term test will also be scaled to 50 before adding the SBA marks and end-of-term examination marks to determine students' end of term results. The SBA and the end-of-term test marks will hence be combined in equal proportions of 50:50. The equal proportions will affect only assessment in the school system. It will not affect the 30:70 proportional weighting at the WASSCE.

SENIOR HIGH SCHOOL - YEAR 2 - 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. recognize the relationship between food and health.
3. appreciate the importance of digestion, absorption and metabolism to life.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHNING 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>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 <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>Students brainstorm to explain nutrition. Use pictures/charts/drawings and other relevant materials to explain the terms.</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>Students to relate nutrition to health.</p>	<p>Students analyze a day's meal in groups and report in terms of the nutrient content</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 2 INTRODUCTION TO FOOD	The student will be able to:			
	1.2.1 explain the term Food.	FOOD Food is anything solid or liquid which when taken into the body, promotes growth, provides heat and energy and regulates body processes.	Brainstorm to come out with the meaning of food.	
	1.2.2 outline the importance of food.	IMPORTANCE OF FOOD <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 	Discuss the importance of food with students. Note: Stress the difference between hunger and appetite	
	1.2.3 classify food into groups.	FOOD GROUPS <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 	Students to list the food items in their localities. Display different food items for students to group into Ghana's six food groups. Students work in small groups to classify the food items and suggest headings for each group with reasons.	Assignment: Students to look for information on food groups of other countries from the internet, T.V books, journals etc.

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 Positive Effects <ul style="list-style-type: none"> good food habits promote good health 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> <ol style="list-style-type: none"> Students to find out from their peers factors that can change their eating habits. 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.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING 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>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>ORGANS OF ABSORPTION</p> <ul style="list-style-type: none"> • Small Intestine - functions of the villi • Liver - functions of the liver • Lacteals - functions of the lacteals 	<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.</p>	<p>Assignments:</p> <p>1. Students to draw and label the digestive tract.</p> <p>2. Students to trace the digestion of a meal through the digestive tract. Submit for class discussion.</p> <p>3. Students to find out from the internet and other sources, some causes of indigestion.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHNING AND LEARNING ACTIVITIES	EVALUATION
UNIT 5 METABOLISM	The student will be able to: 1.5.1 explain the terms Basal Metabolism and Basal Metabolic Rate.	METABOLISM: Is the sum total of the processes or chemical changes that take place in living cells. <ul style="list-style-type: none"> 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. 	Teacher explains the meaning of Basal Metabolism and Basal Metabolic Rate.	Assignment: Students to compare the BMR of various activities, such as cycling, swimming, pounding fufu, etc
	1.5.2 outline factors that affect Basal Metabolic Rate.	FACTORS THAT AFFECT BMR: <ul style="list-style-type: none"> Age Sex Size of the body Body composition Activity of the thyroid gland Body condition Climatic conditions 	Group students to outline and discuss the factors that affect BMR and present in class. Discuss the presentations and make inputs where necessary. NOTE: Teacher should collaborate with the science teacher.	

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHNING AND LEARNING ACTIVITIES	EVALUATION
UNIT 2 KITCHEN SAFETY AND SANITATION	The student will be able to:			
	2.2.1 suggest measures to be taken to ensure personal, food and kitchen hygiene.	HYGIENE <ul style="list-style-type: none"> • Personal • Food • Kitchen 	<p>Discuss ways of ensuring personal, food and kitchen hygiene. NOTE: Stress the need to use good sanitation practices to prevent food contamination.</p>	Assignment: Visit eating places - canteens, food vendors and chop bars. Observe both good and poor hygienic practices. Write reports for presentation.
	2.2.2 identify types of accidents in the kitchen.	TYPES OF ACCIDENTS: <ul style="list-style-type: none"> • Falls • Burns/scalds • Electrocution • Poisoning • Cuts 	<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>	Students to suggest ways to prevent food poisoning and contamination.
	2.2.3 explain the causes of kitchen accidents.	CAUSES: <ul style="list-style-type: none"> • Forgetfulness • Carelessness • Fatigue • Poor labelling • Poor lighting • Poor kitchen arrangement • Use of inappropriate equipment • Wrong use of equipment. 	<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>	
	2.2.4 suggest ways of preventing kitchen accidents.	WAYS OF PREVENTING KITCHEN ACCIDENTS: <ul style="list-style-type: none"> • Arrange items well in the kitchen • Use equipment correctly • Wipe water from the floor immediately it occurs etc 	<p>Students to discuss the different ways of preventing kitchen accidents. Demonstrate basic safety rules to avoid cuts, burns and electrical shocks.</p>	
	2.2.5. administer First Aid in case of accidents.	ADMINISTERING FIRST AID FOR THE FOLLOWING: <ul style="list-style-type: none"> • Burns and scalds • Cuts • Shocks • Fracture • Poisoning • Choking/suffocating • Bruises 	<p>Invite a resource person to give a demonstration of each of the First Aid techniques.</p> <p>Students to practice administering First Aid for some of the listed accidents.</p>	Assignment: Students to find out from their locality the various ways of treating scalds and burns and report in class.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 3				
KITCHEN EQUIPMENT	<p>The student will be able to:</p> <p>2.3.1 group kitchen equipment into the main classes.</p> <p>2.3.2 choose appropriate equipment for specific tasks.</p> <p>2.3.3 describe how to care for and store different equipment.</p>	<p>CLASSIFICATION OF KITCHEN EQUIPMENT Kitchen equipment may be classified based either on size or on their functions;</p> <p>Size</p> <ul style="list-style-type: none"> • Small equipment • Large equipment <p>Functions</p> <ul style="list-style-type: none"> • Cutting, Chopping, Slicing • Heating • Measuring • Weighing • Cooling equipment • Cooking & Heating etc <p>These equipment could be tools or appliances Tools: - equipment that are manually operated, usually small equipment</p> <p>Appliances: - equipment that are usually operated by external energy like electricity or gas</p> <p>SELECTION AND USE Factors:</p> <ul style="list-style-type: none"> • Need • Cost • Ease in cleaning • Family size • Efficiency • Durability • Versatility • Space available/Size of kitchen <p>CARE AND STORAGE Care:</p> <ul style="list-style-type: none"> • Proper handling • General procedures for cleaning • Use of appropriate cleaning agent. • Cleaning according to material used. 	<p>Students to list kitchen equipment they know Teacher adds to the list by displaying/showing pictures of other equipment not listed or mentioned.</p> <p>NOTE: Both large and small equipment could be labour saving e.g. egg slicer, cooker etc. Assist students to describe the difference between tools and appliances. Students to identify the materials used, and state the effect of heat on the materials and the reaction of the material with food.</p> <p>Discuss factors for the selection and use of equipment with students.</p> <p>Demonstrate the use of basic equipment. e.g. cook's knife in chopping.</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</p> <ul style="list-style-type: none"> - saucepans, - plastic ware, - bake ware, etc. 	<p>Home work: Students to look for various tools and appliances from the internet and other sources or visit a supermarket and look for various tools and appliances. List the various equipment and their uses.</p> <p>Assess the practical work:</p> <ul style="list-style-type: none"> - look out for appropriate use of cleaning agent - correct way of cleaning - end result.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHNING AND LEARNING ACTIVITIES	EVALUATION
UNIT 3 (CONT'D) KITCHEN EQUIPMENT	The student will be able to:	Storage: <ul style="list-style-type: none"> Facilities for storage – cupboard, baskets, boxes etc. airtight containers Appropriate conditions for storage <ul style="list-style-type: none"> good ventilation lighting etc. Appropriate ways of storing specific equipment e.g. glass ware, not to be stacked. etc 	Students to brainstorm on the appropriate facilities for storage or equipment. Discuss students' responses. Demonstrate to students how specific kitchen equipment could be stored correctly. Assist them to store the equipment they cleaned.	Assess the practical work.
	2.3.4 use standard and handy measures correctly.	MEASURING EQUIPMENT <ul style="list-style-type: none"> Standard <ul style="list-style-type: none"> scale, thermometer measuring cups, jugs, spoons. Handy <ul style="list-style-type: none"> empty tins, calabash, bowls, bottles, ladles etc. 	Brainstorm to bring out the different equipment used for measuring. Demonstrate the correct use of measuring equipment such as scale, measuring jug, tins. 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.	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.
UNIT 4 FUELS USED IN THE KITCHEN	2.4.1 identify different types of fuels used in the kitchen.	TYPES OF FUELS <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 	Discuss the various fuels used in the kitchen.	

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 4 (CONT'D) FUEL USED IN THE KITCHEN	The student will be able to: 2.4.2 compare the various types of fuels used in the kitchen.	COMPARISON OF DIFFERENT FUELS UNDER : <ul style="list-style-type: none"> • Cost • Efficiency • Availability • Cleanliness 	Students to work in groups. Each group compares one fuel to the others based on criteria given. NOTE: Stress the implications of the use of fuels such as charcoal and firewood on the environment. <ul style="list-style-type: none"> - the need for the use of alternatives e.g. wood lots. 	Assignment: Students to collate different fuels used in their homes/ households to determine the popular ones.
	2.4.3 conserve fuel in the home.	CONSERVATION OF FUEL: <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. 	Students to brainstorm on how to conserve fuel. Follow up with a discussion. Values: Stress the value of conservation of fuel and consider other users.	Group work: Students to find out the importance of fuel conservation to; <ul style="list-style-type: none"> a) family b) national economy and discuss in class their findings.

SENIOR HIGH SCHOOL - YEAR 2 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:	<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 		Class exercise:- Students to classify the cooking methods under the following: <ul style="list-style-type: none"> - moist - dry - frying Give examples of foods cooked by these methods.
	3.3.2 prepare suitable dishes using the different methods of cooking.	PREPARATION OF DISHES <ul style="list-style-type: none"> • Moist methods • Dry methods • Frying 	Assist students to do practical work on the different methods. Let each group prepare a dish based on a particular method of cooking. Students should set out their dishes for appraisal. They should exchange notes and write out the method of preparing each dish.	Assess the dishes cooked under-appearance, taste, texture.
UNIT 4 COOKING TERMS	3.4.1 explain some basic cooking terms.	BASIC TERMS <ul style="list-style-type: none"> • Chop • Shred • Blend • Beat • Whisk • Glaze • Baste • Dredge • Sift • Strain • Blanch • Drain 	Brainstorm and discuss the outlined basic terms with students. Explain and demonstrate the terms with relevant equipment wherever possible. Allow students to practise after demonstration.	Assignment:- Students to find out from the internet and other sources the equipment used to perform the activities listed in the content.

SENIOR HIGH SCHOOL - YEAR 2

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	TEACHNING 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 • 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:</p> <p>Students to find ways in which one can differentiate pork, beef and mutton in the market.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHNING 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- khebab, 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: appearance taste mode of serving/creativity in presentation.</p>																		
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><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• Dry	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>IMPORTANCE</p> <ul style="list-style-type: none"> • Versatility • Thickening agent • Cheap source of energy • Contains nutrients, vitamins, minerals etc. • Good source of roughage 	<p>Group students to discuss the importance of cereals in the diet. Follow up with class discussion on students presentations.</p>	<p>Assess the dishes based on appearance, texture/consistency and mode of service. Look out for the application of the elements and principles of design.</p>
	<p>4.2.5 prepare and serve cereal/grains dishes.</p>	<p>PREPARATION OF CEREAL DISHES USING:</p> <ul style="list-style-type: none"> • Corn • Rice • Millet • Sorghum • Wheat products eg. pasta, semolina etc. 	<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>	

SENIOR HIGH SCHOOL - YEAR 2

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	<p>The student will be able to:</p> <p>5.1.1 classify fruits.</p>	<p>CLASSIFICATION OF FRUITS</p> <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 	<p>Display fruits from the different groups. Students examine and group them appropriately.</p> <p>Discuss the characteristics of each group under the following:</p> <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	The student will be able to: 5.1.2 classify vegetables.	CLASSIFICATION OF VEGETABLES: ❖ Above ground <ul style="list-style-type: none"> Fruits and Seeds <ul style="list-style-type: none"> cucumber okro French beans tomatoes, etc Flowers <ul style="list-style-type: none"> cauliflower broccoli, etc Leaves <ul style="list-style-type: none"> cabbage kontomire spinach bitter leaf 'alefo', etc Stem <ul style="list-style-type: none"> asparagus celery, etc ❖ Below ground <ul style="list-style-type: none"> Tubers <ul style="list-style-type: none"> yams potatoes, etc Bulbs <ul style="list-style-type: none"> onions shallots leeks spring onions, etc Roots <ul style="list-style-type: none"> carrots raddish beetroot, etc. 	Assist students to classify vegetables into their various groups NOTE: Display different vegetables for classification.	Assignment: Students to identify and list other local fruits and vegetables under the different classes for further class discussion.
	5.1.3 describe the structure, nutritive value and storages of some fruits and vegetables.	STORAGE OF SOME FRUITS AND VEGETABLES <ul style="list-style-type: none"> Structure Nutritive value Selection/choice Storage Preparation and serving 	Discuss fruits and vegetables with students.	

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>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>Discuss the importance of fruits and vegetables in the diet with students.</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>5.1.5 prepare and serve some fruits and vegetable dishes.</p>	<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>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>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	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 2 LEGUMES AND OILY SEEDS	<p>The students will be able to:</p> <p>5.2.1 classify kinds of 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"> 'Koose' Groundnut brittles 'Tubani'

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 3	The student will be able to:			
FOOD ADDITIVES	5.3.1 explain the term Food Additives.	FOOD ADDITIVES Food additives are natural or artificially produced substances added to food in small quantities to enhance flavour, colour, nutritive value, etc.	Brainstorm to bring out the meaning of food additives	
	5.3.2 outline the types of food additives with examples.	TYPES OF FOOD ADDITIVES <ul style="list-style-type: none"> • Preservatives -sugar, salt • Antioxidants- vitamin E • Emulsifiers –lecithin • Stabilizers - • Colouring - saffron • Flavouring - essence, spices,herbs - • Nutrients- Vit A,D, iron 	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.	Assignment: Students to look for natural and artificial examples of food additives.
	5.3.3 state the functions of food additives.	FUNCTIONS OF FOOD ADDITIVES: <ul style="list-style-type: none"> • Enhance nutrient content • Preserve food • Improve colour and appearance • Improve flavour and taste • Improve keeping quality or prevent spoilage • Bind oil and water together 	Discussion with students, the functions of available food additives. Discussion should include both negative and positive effects of additives on health. 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 cola nuts and pear seeds	Assignment: Students find out different ways in which foods are adulterated and the harm they can cause. They should write reports for class discussion.

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</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 2

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	<p>The student will be able to:</p> <p>6.1.1 explain Food Spoilage.</p> <p>6.1.2 explain the causes of food spoilage.</p>	<p>FOOD SPOILAGE Food spoilage is the deterioration and decay of food.</p> <p>CAUSES</p> <ul style="list-style-type: none"> • Enzyme action • Oxidation • Action of micro-organisms - bacteria, yeast, fungi • Pests damage • Bruises, cuts etc. 	<p>Brainstorm and discuss the meaning of food spoilage with students.</p> <p>Students work in groups to discuss the causes of food spoilage, the mechanisms involved in each case and the impact on foods concerned.</p> <p>Students to present reports for further discussion.</p> <p>Values: Stress the value of love and truthfulness. Be responsible and not use rotten food items to prepare food for sale.</p> <p>NOTE: Teacher to draw students' attention to physical spoilage, such as physical food that is burnt during cooking eg rice.</p>	<p>Experiment:- Students to make the ff experiment:</p> <ol style="list-style-type: none"> i. enzyme action on food e.g kontomire turning yellow etc. ii. oxidation – cut banana, gardens eggs, yam etc 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	The student will be able to:			
	6.2.1 explain Preservation.	Preservation is the process of protecting food from spoilage.	Brainstorm and discuss the meaning of preservation.	
	6.2.2 explain the importance of preservation.	IMPORTANCE OF PRESERVATION <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>Discuss the importance of food preservation.</p> <p>NOTE: Teacher should link food spoilage to food security and conservations of food in the home.</p>	
	6.2.3 explain the main principles under-lying food preservation.	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.	Brainstorm and discuss the principles underlying food preservation with reference to the experiments performed previously.	
	6.2.4 describe various methods of food preservation.	METHODS OF FOOD PRESERVATION: <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>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 2 (CONT'D) FOOD PRESERVATION	<p>The student will be able to:</p> <p>6.2.5 identify various types of preserves.</p>	<p>TYPES OF PRESERVES:</p> <ul style="list-style-type: none"> • Jam • Marmalade • “Shito” • Pickles • “Kokonte” • “Dawadawa” • Okro • “Kuka” • Pepper 	<p>Ask students to mention the various types of preserves they know.</p> <p>Discuss some of those listed under content.</p>	<p>Assess the finished products on:</p> <ul style="list-style-type: none"> - appearance - taste - packaging - price and cost <p>Assess their reports.</p>
	<p>6.2.6 prepare some preserves.</p>	<p>PREPARATION OF PRESERVES</p> <ul style="list-style-type: none"> • Jam • “Shito” • Pickled onions 	<p>Demonstrate the preparation of Jam, “Shito” and Pickles. Follow up with class practical work.</p> <p>Students to work in groups.</p> <p>Take a field trip with students to places where different foodstuffs are preserved to see what goes on. Students to look out for</p> <ul style="list-style-type: none"> - types of food preserved - methods used for preservation - types of packaging - quality control measures in place - condition of environment <p>Let them write reports on the field trip.</p>	

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

SENIOR HIGH SCHOOL - YEAR 3 - TERM 1

SECTION 1

FLOUR COOKERY AND CONFECTIONERY

General Objectives: The student will:

1. understand the principles underlying flour cookery.
2. be come aware of the various raising agents and their uses in different flour mixtures.
3. develop skills in the preparation and serving of flour products.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 RAISING AGENTS	<p>The student will be able to:</p> <p>1.1.1 explain Raising Agent.</p> <p>1.1.2 identify the types and sources of raising agents.</p>	<p>RAISING AGENTS:</p> <p>Raising agents are substances introduced into foods to make them light, porous, and increase in volume.</p> <p>TYPES:-</p> <ul style="list-style-type: none"> • Steam - Physical • Carbon dioxide - Chemical • Air – Mechanical, through <p>SOURCES:</p> <ul style="list-style-type: none"> • Steam – boiling liquid • Carbon dioxide – baking powder, bicarbonate of soda, yeast or palm wine • Air – through whisking, beating, sifting, rubbing-in, creaming, folding etc. 	<p>Brainstorm and explain the term raising agent.</p> <p>Put students into groups to discuss the types and sources of raising agents.</p> <p>NOTE: Explain the use of palm wine as a source of raising agent.</p> <p>Students to perform these experiments to illustrate how air and carbon dioxide aerate mixtures.</p> <ul style="list-style-type: none"> • Air trapped by whisking egg white. • Use litmus paper to test the presence of carbon dioxide using bi-carbonate of soda. • Prepare two flour doughs with yeast in one and the other without. Students to compare the two doughs after an hour or two and draw conclusions for further discussions. 	<p>Assignment: Students to find from the internet and other sources e.g. market, the different brands of baking powder and yeast and report in class for discussion.</p> <p>Experiment: The production of carbon dioxide by yeast. Ferment yeast in a test tube. Tie the opened end of a balloon around the mouth of the test tube. Leave in a warm place for 15 mins. Write down your observation.</p> <p>Repeat the experiment using fermented palm wine or pito.</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:</p> <p>Flour - forms structure of the product</p> <p>Fat – adds flavour, colour and makes dish tender etc.</p> <p>Sugar – sweetens, preserves etc.</p> <p>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 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:</p> <p>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 muslim 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 3 BATTERS AND DOUGHS	<p>The student will be able to:</p> <p>1.3.1 explain batters and doughs.</p> <p>1.3.2 describe the types of batters and doughs.</p> <p>1.3.3 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.</p> <p>Thick/panada/fritter batter – for binding and coating fruits.</p> <p>Coating – used to coat groundnuts, fish and meat.</p> <p>USES OF DOUGH: Soft – used for bread, biscuits, scones etc. Hard – used for pastries.</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 3 (CONT'D) BATTERS AND DOUGHS	The student will be able to: 1.3.3 prepare dishes using batters and doughs.	DISHES USING BATTERS <ul style="list-style-type: none"> • 'Tubani' • 'Koose/Akla' • 'Aboloo' • Pancakes • Biscuits • Doughnuts • 'Ofam' DISHES USING DOUGHS: <ul style="list-style-type: none"> • Bread, scones • Biscuits, pastries • Doughnuts, 'epitsi' 	Demonstrate the preparation of the dishes and follow up with class practical work using the different types of batters and doughs NOTE: Success in batter making depends on beating well to incorporate sufficient air. Teacher should encourage the use of local flours to make dishes	Assess practical work based on <ul style="list-style-type: none"> - texture - taste - colour - creativity in the use of seasonings and flavouring - originality
UNIT 4 CAKES AND BISCUITS	1.4.1 classify cakes and biscuits.	CLASSIFICATION: Cakes <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. Biscuits <ul style="list-style-type: none"> - rolled - piped - dropped - bar - moulded 	Assist students to classify cakes. NOTE: biscuits can also be classified according to the method used.	Assignment: Students to find other types of cakes and biscuits from internet and other sources.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 4 (CONT'D) CAKES AND BISCUITS	<p>The student will be able to:</p> <p>1.4.2 describe methods of making cakes and biscuits.</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>Discuss with students the different proportion of ingredients for the different methods used in the preparation of cakes and biscuits</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.
	<p>1.4.3 prepare cakes and biscuits using the different methods.</p>	<p>CAKES:</p> <p>Rubbing-in - rock cakes Creamed - queen cakes Whisked - swiss roll Melted - ginger bread</p> <p>BISCUITS:</p> <p>Rubbed-in - short bread fingers. Creamed - shrewsbury Whisked - sponge fingers Melted - ginger snaps/nuts.</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 for success in cake making.</p>	

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 5 PASTRIES	The student will be able to:			
	1.5.1 state the different types of pastries.	TYPES OF PASTRIES: <ul style="list-style-type: none"> • Short crust • Suet • Flaky • Rough puff • Choux 	<p>Discuss the different types and characteristics of pastry mixtures under content.</p> <p>Discussion should include proportion of ingredients and methods used in the preparation of each.</p>	
	1.5.2 explain the principles underlying pastry making.	PRINCIPLES: <ul style="list-style-type: none"> • Handle as little as possible • Keep ingredients cold • Use correct temperature in baking etc. 	<p>Discuss the principles underlying pastry making.</p> <p>Assist students to find explanations for principles.</p>	
	1.5.3 prepare different pastry dishes.	PASTRY DISHES: <ul style="list-style-type: none"> • Turnovers • Jam tartlets • Cornish pasties etc. 	<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.</p> <p>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 6 YEAST MIXTURES	1.6.1 explain what yeast mixtures are and identify the different ways of preparing yeast mixtures.	YEAST MIXTURES Yeast mixtures are mixtures prepared using yeast as the source of raising agents. DIFFERENT WAYS OF PREPARING YEAST MIXTURES: <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 6 (CONT'D)				
YEAST MIXTURES	<p>The student will be able to:</p> <p>1.6.2 outline the important points to bear in mind when preparing yeast mixtures.</p> <p>1.6.3 prepare dishes using yeast mixtures.</p> <p>1.6.4 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>ut 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 6 (CONT'D) YEAST MIXTURES	<p>The student will be able to:</p> <p>1.6.5 prepare and serve different kinds of sandwiches.</p>	<p>STEPS IN PREPARING SANDWICHES:</p> <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. 	<p>Demonstrate and follow with class practical work on the preparation of sandwiches.</p> <p>NOTE: Stress the following:</p> <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. 	<p>Assess products based on</p> <ul style="list-style-type: none"> - shape - sizes - taste - appearance - and creativity in the application of the elements and principles of design

SENIOR HIGH SCHOOL - YEAR 3 - TERM 2

SECTION 2

SUGAR CONFECTIONERY

General Objectives: The student will:

1. be aware of the different types of sugar and their uses in food preparation.
2. develop skills in decorating cakes.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 SUGARS	The student will be able to: 2.1.1 identify the various types of sugar.	TYPES <ul style="list-style-type: none"> • Granulated - castor - brown (demerara) - icings - glucose • Cube 	Brainstorm and discuss the various types of sugar.	
	2.1.2 explain the general uses of sugar.	GENERAL USES OF SUGAR <ul style="list-style-type: none"> • Sweeteners • Syrup • Caramel • Treacle • Decoration • Preserving agent • A source of energy in the body. 	Group discussion on the general uses of sugar in meal preparation and service. Value: Stress the values of honesty, love, truthfulness by not using saccharin instead of sugar in making bread.	

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1	The student will be able to:			
SUGARS CONT'D	2.1.3 describe the effect of heat on sugar.	EFFECT OF HEAT ON SUGARS: Moist heat → syrup → golden syrup → caramel → treacle Dry heat → caramel → treacle USES: <ul style="list-style-type: none"> For candies - toffees <ul style="list-style-type: none"> brittles e.g. (groundnut, coconut) fudges (alewa) For colouring eg. caramel & treacle. As base for puddings/custards eg. caramel custard. 	Experiment to find out the effect of moist and dry heat on sugar. Use caramel to prepare candies and toffees.	Assess the finished products. Look out for: <ul style="list-style-type: none"> texture colour taste packaging presentation creativity originality
UNIT 2 ICINGS	2.2.1 identify various types and uses of icings.	TYPES OF ICINGS: <ul style="list-style-type: none"> Butter Glacé Sugar Paste Royal USES: <ul style="list-style-type: none"> Decorating Filling <div style="display: inline-block; vertical-align: middle; margin-left: 10px;"> { Cakes Biscuits Pastries </div>	Discuss the various types of icings and their uses in food decoration.	Students to visit a cake decoration school where possible. Observe procedures and present written reports on. <ul style="list-style-type: none"> equipment used types of decoration marketing etc.
	2.2.2 prepare royal and butter icings.	PREPARATION OF ICINGS <ul style="list-style-type: none"> Royal Butter 	Demonstrate and prepare royal and butter icings with students and store icings properly to be used much later. Invite a resource person to demonstrate cake decoration with butter and royal icings.	Assess the finished products based on <ul style="list-style-type: none"> appearance taste texture originality creativity in the application of the elements and principles of design
UNIT 3 CAKE DECORATION	2.3.1 decorate cakes.	CAKE DECORATION Using royal and butter icings	Demonstrate how to decorate cake and let students practice cake decoration.	Assess the finished products based on <ul style="list-style-type: none"> appearance cost and price of the products creativity originality

SENIOR HIGH SCHOOL - YEAR 3

SECTION 3

FAMILY MEAL MANAGEMENT

General Objectives: The student will:

1. acquire skills in planning meals to meet individual and family needs.
2. develop skills in using left-over and convenience foods in food preparation.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 MEAL PLANNING	The student will be able to:			
	3.1.1. explain basic terms associated with meal planning.	MEAL PLANNING TERMS: <ul style="list-style-type: none"> • Dish • Course • Meal • Balanced meal • Menu • Main dish • Main meal • Accompaniment 	Brainstorm and discuss basic terms associated with meal planning.	
	3.1.2. state reasons for planning meals.	REASONS FOR PLANNING MEALS: <ul style="list-style-type: none"> • Efficient use of resources • To bring about variety • To cater for nutrient needs of family members etc. 	Brainstorm to come out with reasons for planning meals. Discuss how each impact on the meals of individuals and families.	
	3.1.3. explain factors to consider in meal planning.	FACTORS IN PLANNING MEALS: <ul style="list-style-type: none"> • Nutrient needs of members. 	Students discuss in groups factors that affect the planning of meals for the family. Teacher supplements where necessary.	

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

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION												
UNIT 2 (CONT'D) MEALS FOR SPECIAL GROUPS	The student will be able to:	<u>Section B</u>	Discuss a model question. Fill information into format. NOTE: Reasons for choice of dishes should reflect the demands of the questions	Class Assignment: Give a model question for students to write out the plans. Assess the assignments with students.												
		<table><tr><td colspan="6">Total quantities of all ingredients.</td></tr><tr><td>Fresh Cost Stores</td><td>Total Quantities</td><td>Cost</td><td>Dry Stores</td><td>Total Quantities</td><td></td></tr></table> <u>Section C</u> Time Plan <table><tr><td>Time</td><td>Activity</td></tr><tr><td></td><td></td></tr></table>			Total quantities of all ingredients.						Fresh Cost Stores	Total Quantities	Cost	Dry Stores	Total Quantities	
Total quantities of all ingredients.																
Fresh Cost Stores	Total Quantities	Cost	Dry Stores	Total Quantities												
Time	Activity															
UNIT 3 RECHAUFFÉ/ LEFT OVER FOODS	3.3.1. explain the phrase Rechauffé Dishes.	RECHAUFFÉ DISHES: They are left over foods to which other ingredients have been added to create new dishes altogether or improve on the existing dish.	Find out from students what they do at home with left over foods. Let them come out with the explanation of the phrase rechauffé, dishes. NOTE: Emphasize the conservation of food resources.													
	3.3.2 explain the importance of rechauffé dishes in food preparation.	IMPORTANCE: <ul style="list-style-type: none">• Create variety• Prevent waste• Stretch the food budget etc.	Discuss the importance of rechauffé dishes in food preparation.													

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 4 (CONT'D) CONVENIENCE FOODS	The student will be able to:	<ul style="list-style-type: none"> 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. 		
	3.4.3 outline the advantages and disadvantages of convenience foods.	ADVANTAGES:- <ul style="list-style-type: none"> Saves time and energy in food preparation. Provides variety etc DISADVANTAGES: <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 	Students in groups to discuss the advantages and disadvantages of using convenience foods and present for discussion	
	3.4.4 prepare different dishes using convenience foods.	DISHES: <ul style="list-style-type: none"> "Gari fɔɔ" Sardine sandwiches Fruits in yogurt 	Demonstrate and follow up with class practical work on dishes using convenience foods and other ingredients.	Assess students practical work under <ul style="list-style-type: none"> appearance taste preparation time cost originality creativity

SENIOR HIGH SCHOOL - YEAR 3 - 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. <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, and 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>USES: Serve as base or foundation for :</p> <ul style="list-style-type: none"> • Sauces • Soups • Gravies 	<p>Discuss the uses of stocks in the diet.</p>	
	<p>4.1.5 prepare the different types of stocks.</p>	<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>Demonstrate and prepare some of the types of stock with students.</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 state 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</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>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>	<p>Students to look for different brands of packaged soups on the market. Find out how they are used and report in class.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 2 (CONT'D) SOUPS	The student will be able to:	<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 		Assignment: Students to look for different brands of packaged soups and find out how they are used and report in class.
	4.2.4 explain the uses of soups in the diet.	USES: <ul style="list-style-type: none"> Appetizers (first courses) Main dish As an invalid food. 	Discuss the uses of soups in the diet. NOTE: In Ghana soups are used mainly as main dishes and not as first course.	
	4.2.5 prepare and serve different types of soups.	PREPARATION OF SOUPS: Points to note: <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. 	Demonstrate and prepare some of the types of soups. Students to work in groups to prepare different soups. They should dish out the soups for assessment.	Assess the finished products based on <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	<p>The student will be able to:</p> <p>4.3.1 explain the term sauce</p> <p>4.3.2 classify sauces</p>	<p>SAUCE: Sauce: is a well flavoured liquid containing a thickening agent.</p> <p>CLASSIFICATION OF SAUCES:</p> <ul style="list-style-type: none"> • Those made with a roux. <ul style="list-style-type: none"> - household sauces - white - brown • Cooked egg sauces: <ul style="list-style-type: none"> - custards - hollandaise - German egg sauce • Cold Sauces: <ul style="list-style-type: none"> - mayonnaise - chaudfroid - mint sauce - simple salad dressing. 	<p>Brainstorm and come out with the meaning of a sauce.</p> <p>Discuss the classification of sauces.</p>	<p>Assignment: 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	<p>The student will be able to:</p> <p>4.3.3 identify the nutritive value of sauces.</p> <p>4.3.4. outline the uses of sauces in the diet.</p> <p>4.3.5. prepare different types of sauces.</p>	<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 the 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 	<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 in their localities to get local foods that can be used for sauces, and prepare 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 3

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
UNIT 1	The student will be able to:			
TYPES OF BEVERAGES	5.1.1 explain beverages and distinguish between the two main types.	<p>BEVERAGES: Beverages are flavoured drinks that are refreshing, nourishing or stimulating. They 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, besap. - nourishing drinks <p>cereal drinks e.g. "Zonkon" (millet drink) milk drinks, cocoa.</p>	<p>Students brainstorm to come out with the different beverages found on the market.</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.</p>	

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 (CONT'D)	The student will be able to:			
TYPES OF BEVERAGES	5.1.2 explain the importance of beverages in the diet.	IMPORTANCE: <ul style="list-style-type: none"> • Contribute water to the diet. • Some are stimulants • Some provide nutrients • Some provide refreshment. 	<p>In small groups, students discuss and present in class, the importance of beverages.</p> <p>Teacher supplements where necessary.</p> <p>NOTE: Stress that alcohol is a drug and even small quantities impair judgement.</p>	
UNIT 2				
PRINCIPLES UNDERLYING THE PREPARATION OF BEVERAGES	5.2.1. describe the methods used in the preparation of beverages.	METHODS <ul style="list-style-type: none"> • Infusion • Filtration • Percolation • Extraction 	<p>Discuss the methods and how they are used in the preparation of beverages.</p> <p>NOTE: Discussion should include the meaning of the methods.</p>	
	5.2.2. explain the principles underlying the preparation of beverages.	PRINCIPLES <ul style="list-style-type: none"> • Tea: <ul style="list-style-type: none"> - to develop flavour and to extract as little tannin as possible, in order to avoid strong bitter taste. Etc. • Fruit drink <ul style="list-style-type: none"> - fruits must be fresh - do not over handle juice etc. 	<p>Discuss the principles underlying the preparation of tea, coffee, cocoa and fruit drinks.</p>	<p>Project work. Students work in groups to find out indigenous raw materials used for drinks and experiment in class.</p>

SENIOR HIGH SCHOOL - YEAR 3

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.	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.	Students to brainstorm for the meaning of festive dishes. Students to discuss different Ghanaian festive dishes with teacher's assistance	
	6.1.2 identify occasions during which festive dishes are prepared.	OCCASIONS FOR FESTIVE DISHES: <ul style="list-style-type: none"> • Christmas • Easter • Weddings • Birthdays • Funerals • Graduation etc. 	Students to discuss and come out with the different festive occasions.	

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 (CONT'D) FESTIVE DISHES	The student will be able to: 6.1.3 identify the different festive dishes.	FESTIVE DISHES <ul style="list-style-type: none"> • “כאכ” with eggs • Jollof rice with chicken • Cakes and biscuits • Fried rice • Groundnut soup and rice balls • Groundnut soup with chicken and “fufu”. • “Tuo Zaafi” with leafy soup, etc. 	Discuss the different festive dishes.	
	6.1.4 prepare and serve festive dishes.	FESTIVE DISHES <ul style="list-style-type: none"> • “כאכ” with eggs • Jollof rice with chicken • Cakes and biscuits • Groundnut soup with chicken and “fufu”. • Fried rice • Groundnut soup and rice balls, etc. 	Demonstrate the preparation of some festive dishes and let students do practical work.	Assess dishes under the following: <ul style="list-style-type: none"> - appearance - preparation time - cost etc.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION						
UNIT 2 FESTIVAL DISHES	The student will be able to:									
	6.2.1 explain festival dishes.	FESTIVAL DISHES Festival dishes are dishes prepared during festivals of ethnic groups. Sometimes special ingredients and utensils are used.	Students to discuss festivals in their localities and the sort of dishes associated with the festivals.							
	6.2.2 explain the history of festival dishes.	History of Festival Dishes. 'Homowo' 'Damba' 'Aboakyere' 'Bakatue' Yam 'Bugum' 'Hogbetstso' etc.	Students to share history behind festival dishes prepared in their ethnic groups. Resource persons from the community can be invited to demonstrate the preparation of some festival dishes.	Project: 1. Explore histories of festivals of other ethnic groups and report in class 2. Find out about the historical background of some festival dishes.						
	6.2.3 identify dishes prepared during festivals.	<table><tr><th>Dish</th><th>Festival</th><th>Ethnic Group</th></tr><tr><td>Kpopkoi and palm soup</td><td>Homowo</td><td>Ga</td></tr></table>	Dish	Festival	Ethnic Group	Kpopkoi and palm soup	Homowo	Ga	Students in groups, to discuss and come out with dishes of festivals of different ethnic groups, by completing the table in content.	Identify positive and negative preparation practices. Make suggestions for improvement where necessary. Write reports for presentation.
Dish	Festival	Ethnic Group								
Kpopkoi and palm soup	Homowo	Ga								

SENIOR HIGH SCHOOL - YEAR 4 - 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	<p>The student will be able to:</p> <p>1.1.1 explain the concept of entertaining.</p> <p>1.1.2 identify the types of entertainment.</p> <p>1.1.3 outline types of parties.</p> <p>1.1.4 identify occasions during which parties are held.</p>	<p>ENTERTAINMENT:</p> <p>Entertaining is a way of expressing hospitality to people, making them feel welcome and special.</p> <p>TYPES OF ENTERTAINMENT</p> <ul style="list-style-type: none"> • Parties • Film shows • Concerts • Dance • Playing cards • Rock shows etc. <p>TYPES OF PARTIES.</p> <ul style="list-style-type: none"> • Dinners • Luncheons • Cocktails • Buffets • Tea parties • Children's parties etc. <p>OCCASIONS</p> <ul style="list-style-type: none"> • Festivals • Birthdays • Marriages • Christenings • Graduations etc. 	<p>Students to brainstorm and discuss the meaning of entertainment.</p> <p>Students to mention the different forms of entertainment.</p> <p>Discuss the entertainment forms that involve food of some sort.</p> <p>Students in groups to list different types of parties and discuss what goes into organizing each of them.</p> <p>Discuss with students occasions during which parties are held.</p> <p>NOTE: Teacher should assist students to differentiate between formal and informal parties.</p>	<p>Assignment:</p> <p>Interview one successful person in the food entertainment industry. Find out how he/she started and why he/she became successful.</p>

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 (CONT'D) TYPES OF ENTER-TAINMENT	<p>The student will be able to:</p> <p>1.1.5 explain points to consider when selecting the types of party.</p>	<p>POINTS TO CONSIDER WHEN SELECTING TYPES 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>Discuss the points to consider when selecting type of party.</p>	
	<p>1.1.6 explain factors that contribute to the success of parties.</p>	<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 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>	
UNIT 2 TABLE SETTING AND ETIQUETTE	<p>1.2.1 describe the procedure to follow in setting tables and trays for different meals and occasions.</p>	<p>SETTING TABLES</p> <p>Cover - is the `arrangement of a place setting for one person.</p> <p>- 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. 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>Asses students practical work</p> <p>Look for :</p> <ul style="list-style-type: none"> -appropriate placement of table appointments - cleanliness/appearance of table.

SENIOR HIGH SCHOOL - YEAR 4

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>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>Sources of data: observation, interview.</p>	<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>2.1.2 collect/gather information on recipes of local dishes and drinks.</p>	<p>COLLECTION OF INFORMATION (DATA):</p> <ul style="list-style-type: none"> Use interview and observation to collect information on local dishes and drinks. 	<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 FORMULATION OF NEW RECIPES	<p>The student will be able to:</p> <p>2.2.1 improve upon existing/dying out recipes.</p>	<p>IMPROVING DISHES BASED ON:</p> <ul style="list-style-type: none"> • Methods of preparation. • Nutritional value • Time and energy use. • Serving of food/food presentation. 	<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>Compare experimented dishes with existing ones under:</p> <ul style="list-style-type: none"> - appearance - taste - texture - preparation time - cost - presentation etc.
	<p>2.2.2 undertake experiments with lesser known foods.</p>	<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>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 fruits and by combing types of flours.</p>	<p>Project: Students to build up 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 4 - 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.

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 appreciably. • 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 facts that affect costing and pricing of food products. Group students and guide them to plan for the preparation and sale of food products (dishes).	Assign students to adapt selected recipes for discussion in class.

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 (CONT'D) CATERING ON A LARGE SCALE	<p>The student will be able to:</p> <p>3.1.3 cost and price food products.</p>	<p>PRICING OF FOOD PRODUCTS:</p> <p>Pricing: is the value assigned to products based on total cost and profit.</p> <p>DETERMINING THE PRICE OF FOOD PRODUCTS</p> <ul style="list-style-type: none"> • Introductory pricing (pricing below the actual market price) • Using the 'going price' system (i.e. adding a percentage to total cost as profit) • Using price differentiation (what the market can bear) etc. 	<p>Put students into small groups to prepare different dishes, cost and price them.</p> <p>Discuss with students the prices of the dishes prepared based on the factors and on going market prices.</p>	<p>Students to find out about the bye-laws in their communities about the sale of cooked food. Write them out and make presentations in class.</p>
	<p>3.1.4 explain rules and regulations governing the preparation and sale of cooked food.</p>	<p>RULES AND REGULATIONS GOVERNING THE SALE OF COOKED FOOD</p> <ul style="list-style-type: none"> • Food must be of good quality • Food must perform in the way that the seller has told the consumer it will. • Food must fit the description given of it. • Food should have a label with instructions • Price of food should be displayed. • Food must be sold in a hygienic environment etc. 	<p>Discuss agencies that make and enforce rules and regulations on food.</p> <p>Invite a resource person to give a talk (preferably from Food and Drugs Board) on the rules and laws governing the sale of cooked food.</p>	

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>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>Discuss and build up guidelines for effective shopping.</p> <p>Students to role-play different shopping scenes to depict wise shopping practices.</p>	<p>Create a poster on helpful tips for buying food that would aid teenage shoppers.</p>
	<p>3.2.2 explain factors that affect the food budget.</p>	<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>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>Assignment: 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>3.2.3 explain guidelines for bulk purchasing of food.</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>Group students to discuss and present in class the guidelines for bulk purchasing of food.</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>
	<p>3.2.4 explain the need to buy food in bulk.</p>	<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. • To have food when it is needed, etc. 	<p>Brainstorm with students to bring out the reasons for bulk purchasing of food and discuss in class.</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 <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>Student 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:</p> <p>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 4 (CONT'D) PACKAGING	The student will be able to: 3.4.4 identify packaging materials.	PACKAGING MATERIALS: <ul style="list-style-type: none"> • Sheet wrapping material <ul style="list-style-type: none"> - aluminum foil - polythene sheeting - freezer paper • Bags <ul style="list-style-type: none"> - cellophane - paper - polythene • Rigid containers <ul style="list-style-type: none"> - plastic or polythene boxes - waxed cartons - glass, aluminum or ceramics containers 	Students to list the packaging materials they of know and categorize them. NOTE: Stress the need for labeling in packaging. Emphasize the importance of a neat and alterative finishing to food products.	Investigation: Students to investigate the effect of the various packaging materials on environment and show how the pollution they cause can be minimized. Assignment: Students to look for more work ethics from internet and other sources and report in class for discussion.
	3.5.1 explain work ethics.	WORK ETHICS: It is the standard of conduct for successful job performance. Ethics show morality or a sense of right and wrong.	Through questions and answers elicit from students the meaning of work ethics.	
	3.5.2 explain qualities that promote good work ethics.	GOOD WORK ETHICS: <ul style="list-style-type: none"> • Punctuality to work • Honesty • Ability to set targets and attain them. • Being trustworthy • Being reliable • Being responsible. 	Brainstorm and discuss qualities which promote good work ethics. Students to role-play to depict some work ethics at a food processing factory. Discuss the role-play with students. Stress the need for maintaining standards in view of health implications.	
UNIT 5 WORK ETHICS				

SENIOR HIGH SCHOOL - YEAR 4

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	The student will be able to:			
	4.1.1 explain the term exhibition.	EXHIBITION: Exhibition is a public display of products. It brings to the notice of consumers what products are available for sale.	Brainstorm with students to explain Exhibition.	
	4.1.2 identify the types of exhibition.	TYPES OF EXHIBITION: <ul style="list-style-type: none"> • General – open to all types of products • Specialized – on specific products. 	Follow-up with a discussion on the two main types and the purpose of the exhibition.	
	4.1.3 plan an exhibition.	PLANNING A FOOD FAIR/BAZAAR: Consider: <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 	Discuss with students factors to be considered when planning a general exhibition such as a Food Bazaar/Fair. Let students work in small groups to say how each factor will affect the planning process.	

UNIT	SPECIFIC OBJECTIVES	CONTENT	TEACHING AND LEARNING ACTIVITIES	EVALUATION
UNIT 1 PLANNING AND MOUNTING EXHIBITIONS CONT'D	<p>The student will be able to:</p> <p>4.1.4 mount an exhibition.</p>	<p>MOUNTING THE EXHIBITION FACTORS TO CONSIDER:</p> <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 to be sold. 	<p>Class discussion of the factors that promote a successful exhibition.</p> <p>Students to discuss in groups how best to mount the exhibits.</p> <p>Assist them to organize a mock food bazaar/fair in their class.</p> <p>Guide students to plan for and mount a school exhibition during the school's speech and prize-giving day.</p> <p>NOTE: Arrange food products with creativity.</p> <p>Students could choose co-ordinators for their activities.</p>	<p>Assess the mock exhibition based on the factors outlined in the content column.</p> <p>Students should comment verbally and in writing about the school exhibition.</p> <p>Let them suggest alternatives to faults they identify.</p>

REFERENCES

1. Adow, P. A. et al (1994) Food and Nutrition for Senior Secondary Schools, Ministry of Education, London
2. Ceserini V. et al (2000) Practical Cookery, Hodder and Stoughton, London.
3. Helen McGinley (1980) People, Caring, Deciding, Growing, Ginn & Co. Massachusetts.
4. Helen Kowtalok (1982) Discovering Food, Glencoe Publishing Co. California
5. Tull, A. (1996) Food and Nutrition, Oxford University Press, Oxford.