

OAKLAND CUSD #5

INTRO TO AG
MAY 4 - 8, 2020

JEFF COON

Week of May 4-10, 2020

All of these assignments are on google classroom. You must pick one of the 3 listed and complete by next Monday May 16th for credit. If you would like to use google docs to complete the work that would be most efficient, just remember to start a new copy with your own work please. Paper copies can be returned to the school.

Class	Choice 1	Choice 2	Choice 3
Ag Science	CDE	DNA	Ag and Environment
Ag Business Mang	Investments	Life Insurance	Bus. Plan
BSAA	Seed Germination	Animal Diseases	Ag and Environment
Landscape Design	Soil Erosion	Annuals and perennials	Building walls and decks
Intro To Ag	FFA Meetings	FFA opportunities	Role of Agriculture
Ag Mech.	Concrete	Hydraulics	GSI

Checking Your Knowledge:

1. Explain several reasons why parliamentary procedure is valuable.
2. What are the differences between the three styles of meetings?
3. Identify common items to include in an order of business and their sequence.
4. Explain each office, the symbol they are stationed by, and their location in the meeting room.
5. What do the different number of taps of the gavel mean?

Conducting Effective Chapter Meetings

HAVE YOU EVER BEEN to a meeting that was out of control? Were too many items of business discussed? Did they fail to provide an opportunity for you to express your opinion? If you have been to a meeting similar to this, you more than likely walked away feeling as if little was accomplished. Meetings do not have to be this way. By knowing the basics of parliamentary procedure and having a well-planned agenda, you can run an effective meeting where many accomplishments will be made.



Objective:



Identify how to plan and conduct an effective meeting.

Key Terms:



agenda

chair

formal style

gavel

incidental motions

informal style

main motions

meeting

minutes

order of business

parliamentary procedure

privileged motions

quorum

second

secretary

simple style

subsidiary motions

unclassified motions

Understanding How to Conduct Effective Chapter Meetings

Parliamentary procedure is a set of rules for conduct at meetings that allows everyone to be heard and to make decisions without confusion. Parliamentary procedure is important for smooth functioning of business at meetings and public gatherings.

VALUE OF PARLIAMENTARY PROCEDURE

Parliamentary procedure is valuable for several reasons:

- ◆ Parliamentary procedure facilitates the transaction of business and promotes cooperation and harmony.
- ◆ All members at the meeting have equal rights, privileges, and obligations. The will of the majority is carried out, and the rights of the minority are preserved.
- ◆ A **quorum** (a number of members necessary to carry on business for the group to act) is present.
- ◆ Full and free discussion of every motion takes place. Only one question at a time is considered at any given time during the meeting.
- ◆ The **chair** (the officer who presides over the meeting) is strictly neutral, allowing members to “carry” the discussion.
- ◆ Parliamentary procedure allows order to be maintained and the meeting to end at an appropriate time.

STYLE

Parliamentary procedure may be followed exactly as the full procedures indicate or can be adapted to the group type. There are three styles of meetings, and each may use parliamentary procedure differently. The three styles are simple, informal, and formal.

- ◆ **Simple style** is a meeting style with no formal agenda, casual small group discussions, and no officers (e.g., a small group committee meeting to discuss FFA week activities).
- ◆ **Informal style** is a meeting style with a flexible meeting agenda, basic parliamentary procedure skills, and officers who are present to help control the discussion (e.g., an FFA officer meeting to plan for the months upcoming events).
- ◆ **Formal style** is a meeting style with a precise meeting agenda where standard parliamentary procedure is followed and elected officers control discussions and voting (e.g., a large formal FFA meeting with the entire chapter).

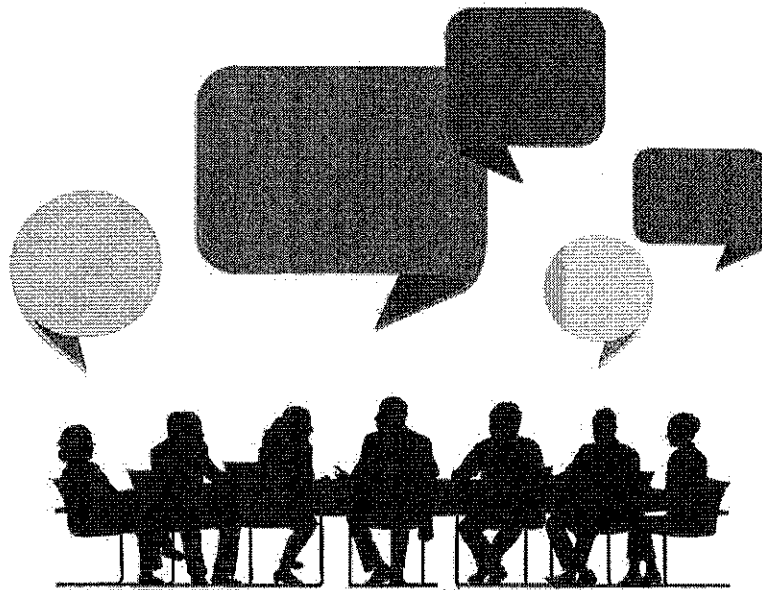


FIGURE 1. Parliamentary procedure is a set of rules for conduct at meetings that allows all voices to be heard.

Meeting

A **meeting** is a gathering of a group of people for a shared purpose. One of the keys to a good meeting, whether it is an FFA chapter meeting or a corporate business meeting, is planning. Planned meetings have value for all members.

Reasons for Meetings

Meetings are held for various reasons:

- ◆ Meetings provide educational programs, including guest speakers.
- ◆ They carry out the affairs of an organization.
- ◆ Members can be recognized for outstanding work.
- ◆ Future events may be announced.
- ◆ Meetings provide a forum during which members can be organized into work groups.
- ◆ Meetings give members a place to develop leadership skills.

PLANNING IS THE KEY

Planning increases the chances of making a meeting successful. Planning involves various considerations, such as:

- ◆ Determining the overall purpose of the meeting
- ◆ Identifying the business to be acted upon
- ◆ Organizing an educational program
- ◆ Setting a date and time for the meeting
- ◆ Selecting a convenient location
- ◆ Assigning responsibilities to different members
- ◆ Developing an order of business
 - An **order of business** is a plan that lists the events or items in a meeting. It is sometimes called an **agenda** or a program. An order of business lists meeting events in the sequence in which they occur.
 - Common items to include in an order of business and their sequence are call to order or opening ceremony; minutes; officer reports; report on program of activities; special features (e.g., speakers, awards, or presentations); old business; committee reports; new business; awarding of degrees or officer installations; closing ceremony or adjournment; and entertainment, recreation, and refreshments.
 - The percent of enrollment comprising a quorum is provided by the organization's constitution.
 - The chair presides over the meeting.

PLAN THE MEETING ROOM ARRANGEMENT

The FFA meeting room should be properly arranged. A proper arrangement of the meeting room sets the stage for conducting an organized FFA meeting. Each office has a symbol and location in the meeting room. The sentinel is responsible for setting up the arrangement.

The FFA meeting room should be arranged in the following way:

- ◆ The president is stationed in the front middle by the rising sun.
- ◆ The vice president is stationed in the rear middle by the plow.
- ◆ The secretary is stationed in the right front by the ear of corn.
- ◆ The treasurer is stationed in the left rear by the bust of Washington.
- ◆ The reporter is stationed in the left front by the U.S. flag.
- ◆ The sentinel is stationed at the door by the shield of friendship.
- ◆ The advisor is stationed in the right rear by the owl.

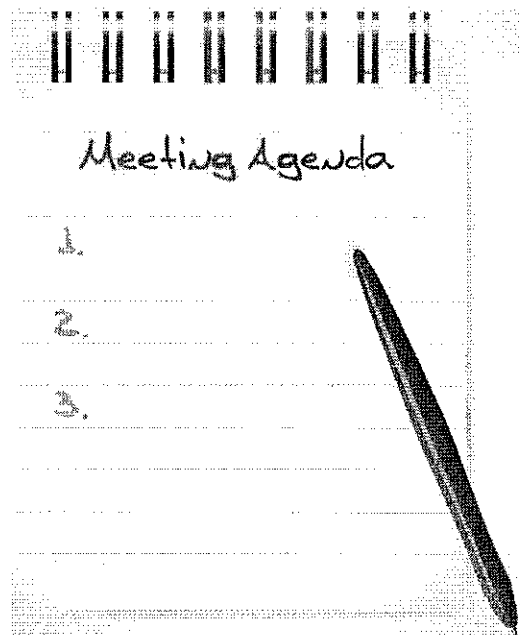


FIGURE 2. When planning a meeting, it is important to have an organized agenda so business is conducted efficiently.

Taps of the Gavel

A **gavel** is an instrument used to maintain order during a meeting. All officers and members should understand its use and meaning. A gavel symbolizes authority. If it is used correctly, the gavel keeps meetings orderly. The gavel is tapped a different number of times to signify an action and is used by the presiding officer.

The taps of the gavel are as follows:

- ◆ One tap of the gavel follows the announcement at the end of the meeting, the completion of a business item, or a message to the members to be seated.
- ◆ Two taps of the gavel calls the meeting to order.
- ◆ Three taps of the gavel is the signal for all members to stand in unison.
- ◆ A series of sharp taps is used to restore order at a meeting.



FIGURE 3. A gavel creates order at a meeting, if used correctly.

Intro to B 59 #1



DIGGING DEEPER...

UNCOVERING ADDITIONAL FACTS: Evaluate a Business Meeting

Attend a local community or civic organization meeting. Evaluate the way business is conducted. Ask yourself the following reflection questions and document your answers: What things were done well at the meeting and why? What parts of the meeting could be better? Who in the meeting would be responsible for making it better? What could the officer team or members running the meeting do to make the business meeting more efficient and timely? How do the members of the meeting contribute?

After reflecting on these questions, determine if the meeting observed used correct parliamentary procedure skills resulting in an efficient and effective meeting.

Taking the Minutes

An FFA chapter **secretary** is a person responsible for taking all minutes at the chapter meetings and presenting the minutes. **Minutes** are the record of business transacted at any meeting. When completed and approved, the minutes become official.

BASICS OF TAKING THE MINUTES

Minutes are a record of what is taking place at the meeting and not necessarily everything that is said. They may include motions, decisions made by the group, and highlights of reports given. Basic steps for taking accurate minutes are:

- ◆ Write down the date and place of the meeting. Write down if this is a regular meeting or a special event (e.g., end of the year FFA banquet).
- ◆ Take attendance, and write down the total number of members and guests present.
- ◆ Write down each motion, who makes the motion, who seconds it, and the resulting vote.
- ◆ Keep a summary of announcements made by committee chairs, advisors, and special guests.
- ◆ Give the names of those who volunteer for activities or committees.
- ◆ Record the time of adjournment, and include signatures of the chair and secretary.

Components

The meeting minutes are broken down into the introductory statement, the body of the minutes, and the closing statement.

Introductory Statement

The introductory statement includes the kind of meeting being held, the name of the organization, the meeting time, the date and place, the record of those in attendance, whether or not the regular chair and secretary were present, whether the minutes of the previous meeting were read and approved, and any officer reports given.

Body

The bodies of the minutes include:

- ◆ All **main motions** or motions used to obtain group approval on a particular subject.
- ◆ All **subsidiary motions** are motions related to the main motion.
- ◆ All **incidental motions** are motions used to provide proper and fair treatment to all members.
- ◆ All **privileged motions** are motions unrelated to the main motion.
- ◆ All **unclassified motions** are motions that bring a question back before the assembly.
- ◆ A **second** is an indication that another person is interested in seeing the motion come before the meeting.
- ◆ All resulting votes during the meeting



FIGURE 4. It is important that quality minutes are taken at a meeting to provide a lasting record of actions and decisions that can later be referenced.

Closing Statement

The closing statement includes the hour of adjournment, the signature of the chair, and the signature of the secretary.

Summary:



Every member of a group organization should know the basic rules of parliamentary procedure. The use of parliamentary procedure at meetings will ensure the efficiency of the meeting, protect the group from leaders who do not let others have a voice, and protect the rights of each individual in the group. By knowing the basics of parliamentary procedure and having a well-planned agenda, you can run an effective meeting where accomplishments will be made.

Checking Your Knowledge:



1. Explain several reasons why parliamentary procedure is valuable.
2. What are the differences between the three styles of meetings?
3. Identify common items to include in an order of business and their sequence.
4. Explain each office, the symbol they are stationed by, and their location in the meeting room.
5. What do the different number of taps of the gavel mean?

Expanding Your Knowledge:



Interview the FFA officer team. Ask them to run a mock meeting using formal parliamentary procedure rules. Follow along with the meeting, and take a set of minutes over the meeting. After the meeting is adjourned, evaluate your minutes based on what quality minutes should contain.

Web Links:



Parli-Pro

http://oaktrust.library.tamu.edu/bitstream/handle/1969.1/86905/pdf_1219.pdf

Parliamentary Procedure

<http://parlpro.org/index.html>

The Comprehensive Meeting Guide

<http://www.meetings.org/meeting1.htm>

Meeting Agenda

<http://humanresources.about.com/od/meetingmanagement/g/meeting-agenda.htm>

Useful Meeting Minutes

<http://www.effectivemeetings.com/meetingbasics/minutes.asp>

Checking Your Knowledge:

1. Explain the difference between 212° conferences and 360° conferences.
2. What is the Washington Leadership Conference (WLC)?
3. What is the purpose of national and state conventions?
4. What scholarships are available to FFA members?
5. Describe the FFA Dashboard and its purpose.

Opportunities in FFA

IF ONE DOOR CLOSES, another will open. You have heard this phrase many times from teachers, your parents, and others. New opportunities are around every corner, especially in FFA. The organization has something to involve every member—Career Development Events; supervised agricultural experience (SAE) programs; chapter, state, and national conferences and events. All you have to do is grasp the opportunities.



Objective:



Recognize the various leadership conferences, conventions, and scholarships available to FFA members.

Key Terms:



212° conferences
 360° conferences
 FFA Dashboard
 FFA Leadership Camp

National FFA Convention
 National FFA
 Scholarship Program
 state FFA convention

Washington Leadership
 Conference (WLC)

Exploring FFA Opportunities

FFA LEADERSHIP CONFERENCES AND CAMP

As an FFA member, you have many leadership events that you can attend. The National FFA Organization holds leadership conferences in every state with the assistance of the state association FFA officer team.

212° Conferences

As a freshman or sophomore in high school, you have the opportunity to attend 212° conferences. **212° conferences** are state-level conferences that encourage students to push their leadership limits while focusing on the characteristics of growth and virtues. When leadership is at 211°, you aren't quite to your maximum potential. Just as with water, a little more heat is needed to get the leadership boiling, and at 212°, amazing things start to happen within the FFA chapter.

360° Conferences

Juniors and seniors are not left out when it comes to leadership conferences. **360° conferences** are state-level conferences that bring chapter leadership full circle by focusing on the characteristics of vision and influence. The older FFA members are the ones the new members look to for guidance. These conferences focus on shaping the older FFA members into good examples for the younger members to follow.

Washington Leadership Conference (WLC)

The **Washington Leadership Conference (WLC)** is a national-level conference designed for any FFA member who wishes to take leadership skills to the next level. As an attendee, you will travel to Washington, D.C., for a week, during which you will participate in many tours of the nation's capital while focusing on the leadership characteristics of self-awareness, diversity, advocacy, and service. The hands-on training you will receive at this conference will benefit you for a lifetime.

FFA Leadership Camp

FFA Leadership Camp is a weeklong camp held during the summer and hosted by the state FFA officer team. It is open to a limited number of FFA members from each chapter. At FFA Leadership Camp, you will advance your leadership skills through teamwork activities, games, and team competitions. Each day will be packed with activities that will enhance your core values and benefit the entire chapter upon your return.



FURTHER EXPLORATION...

ONLINE CONNECTION: Explore Your State Association

Each state association holds its own conferences and conventions. Some states may host conferences that other states don't. Talk to your chapter or state officers to discuss the events that you are eligible to attend. Use the following link to find your state association website, and explore what your state has to offer.

<https://www.ffa.org/about/who-we-are/state-associations>

Intro to 13 5/4 #2?

FFA LEADERSHIP CONVENTIONS

Every year, state and national conventions are held to conduct business, provide recognition for award winners, and demonstrate opportunities for leadership growth.

State FFA Convention

Each state hosts its own state FFA convention. A **state FFA convention** is a conference with the purpose of recognizing the accomplishments of the state's members and chapters throughout the year while also conducting its annual business meetings. The state FFA officer team is elected during the state convention and travels throughout the year visiting chapters and presenting leadership workshops.

Musically talented individuals can participate in the state FFA band and chorus. The top individuals from these entities are nominated to audition for the national FFA band and chorus at the following National FFA Convention.

National FFA Convention

The **National FFA Convention** is the largest youth organization conference in the nation. Recent attendance has been more than 60,000 members. The convention offers motivational speeches, educational tours, leadership conferences, and the National FFA Agricultural Career Show. It also hosts the national FFA Career Development Events.

The National FFA Officer Team is elected each year during the National FFA Convention and will spend about 300 days traveling across the United States and abroad, representing FFA. Also, members from across the nation perform and provide much of the entertainment through the national FFA band, chorus, and talent programs.

SCHOLARSHIPS

Many scholarships are available to FFA members throughout their years in the organization. These scholarships are not just for seniors going to college but also for younger members attending various FFA conferences.

National FFA Scholarships

The **National FFA Scholarship Program** is FFA's vehicle for providing more than \$2 mil-



FIGURE 1. Students may achieve recognition and scholarships for the work they have completed. (Courtesy, National FFA Organization)

lion in scholarships each year. The scholarships are available to chapter members planning to further their education. Scholarships are sponsored by businesses and individuals through the National FFA Foundation and are awarded for a wide variety of experiences, career goals, and higher education plans. The scholarship applications are available through the FFA Dashboard beginning in January of each year. The **FFA Dashboard** is a database and application center specifically for FFA members through the National FFA Organization.

FFA Alumni Scholarships

Some state FFA alumni associations may also provide scholarships for members to attend various leadership conferences. In Illinois, for example, the Illinois FFA Alumni provides scholarships for students to attend 212° conferences, the Washington Leadership Conference, and FFA Leadership Camp. A student can attend each conference only once and must attend in the year that the scholarship was received.

Summary:



Opportunities are everywhere. You will never regret taking advantage of those that FFA offers you. Through conferences and conventions, you will gain valuable leadership, communication, and teamwork skills that will benefit you for years to come.

As a high school FFA member, you may attend 212° conferences and 360° conferences. Both of these leadership conferences are focused on developing your skills and values as a person. The knowledge you bring back to your local FFA chapter from these conferences will benefit the entire membership.

State and national conventions are held each year to recognize those members who have worked hard and accomplished much through FFA. Also, many workshops, educational tours, and Career Development Events take place during these functions. You may also have the opportunity to show off your musical capabilities through the FFA band, chorus, and talent competitions.

Scholarships are available to help with the cost of these events through FFA alumni associations. Ask your advisor about these opportunities. Seniors should fill out the National FFA Scholarship application in January. FFA provides more than \$2 million in scholarships each year to its graduating members.

Checking Your Knowledge:



1. Explain the difference between 212° conferences and 360° conferences.
2. What is the Washington Leadership Conference (WLC)?
3. What is the purpose of national and state conventions?

4. What scholarships are available to FFA members?
5. Describe the FFA Dashboard and its purpose.

Expanding Your Knowledge:



Explore the National FFA Organization's website, <https://www.ffa.org>, to learn more about the various conferences and conventions that are available to you. Also, take time to look at your state FFA association's website to see if any other leadership conference opportunities are available in your state. Put upcoming dates on your calendar to be sure you don't miss a chance to explore FFA!

Web Links:



National FFA Organization

<https://www.ffa.org/>

FFA Conferences

<https://www.ffa.org/participate/conferences>

FFA Scholarships

<https://www.ffa.org/participate/grants-and-scholarships>

Checking Your Knowledge:

1. What are the major sectors of the agriculture industry?
2. How do food, fiber, and shelter contribute to quality of life?
3. What is a nutrient, and what are the major nutrients needed by humans?
4. What is MyPlate, and how is it useful?
5. How does agriculture provide benefits?

Nature and Importance of the Agriculture, Food, and Natural Resources Industry

AGRICULTURE in the United States provides jobs and other benefits. Most important, however, agriculture provides food, clothing, and shelter. Without a productive agriculture, the nation and its people would not enjoy a high quality of life.



Objective:



Define agriculture and relate it to nutrition and quality of life.

Key Terms:



- | | | |
|--------------------------|------------------------|-------------------------|
| agribusiness | food | nutrients |
| agricultural chemistry | food science | olericulture |
| agricultural engineering | forestry | organic farming |
| agriculture | horticulture | ornamental horticulture |
| agriculture industry | imports | pomology |
| aquaculture | inputs | proteins |
| carbohydrates | intensive farming | quality of life |
| enrich | international trade | shelter |
| exports | landscape horticulture | soil conservation |
| farming | minerals | stewardship |
| fats | MyPlate | subsistence farming |
| fiber | natural resources | vitamins |
| floriculture | nutrient management | |

Agriculture, Food, and Natural Resources

Agriculture is the science of growing crops and raising animals to meet the food, fiber, fuel, and other needs of humans. It includes many areas, such as soil conservation, pest management, and mechanics.

AGRICULTURE SECTORS

The **agriculture industry** is the combination of all the activities needed to provide people with food, clothing, and shelter. It includes farm and nonfarm operations. Agriculture has changed over the years. The industry that once focused mainly on the production of food for humans and feed for animals has grown to be very complex. The agriculture field has many areas of specialization.

Farming

Farming is the use of land and other resources to grow crops and raise animals. Methods of farming are diverse. **Subsistence farming**, common in many parts of the world, is farming on a small area of land, producing enough for the needs of the family. In contrast, **intensive farming**, or industrial agriculture, is farming on a commercial scale, involving large areas and/or large numbers of animals. Intensive farming requires large quantities of farm inputs, such as pesticides and fertilizers, and a high level of mechanization. An intensive farming operation generally aims to maximize financial gain from grain, produce, or livestock through the sheer size of the business.



FIGURE 1. Intensive farming requires large quantities of farm inputs, such as pesticides and fertilizers, and a high level of mechanization.

Agribusiness

Agribusiness is all the nonfarm work in the agriculture industry. Roughly 10 times as many people are employed in agribusiness as work in farming. The two main areas of agribusiness are supplies and services and marketing and processing. The supplies and services area includes **inputs**, which are items used in growing crops or raising animals. Fertilizers and feed are inputs. The marketing and processing area involves the activities that transform agricultural products into forms people want.

Agricultural Chemistry

Chemicals have revolutionized agriculture. **Agricultural chemistry** is an area of agriculture that includes chemical fertilizers, chemical pesticides, soil analysis, analysis of agricultural products, and determination of the nutritional needs of plants and animals.

Agricultural Engineering

Agricultural engineering and mechanics have greatly increased farm efficiency and productivity. **Agricultural engineering** is the design of agricultural machinery, equipment, and structures. Tractors and other farm equipment; equipment used in processing, handling, and storage of agricultural products; and instruments such as GPS equipment have advanced agricultural practices.

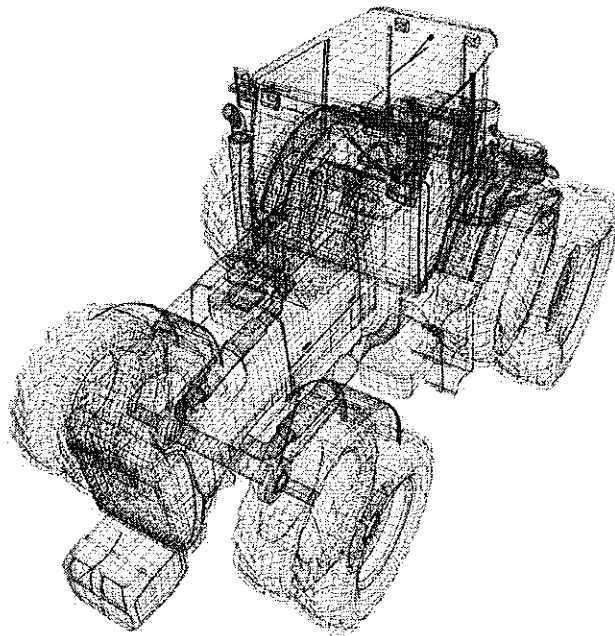


FIGURE 2. Agricultural engineering is the design of agricultural machinery, equipment, and structures.

Aquaculture

Aquaculture is the cultivation of fish and other aquatic organisms. It includes the production of plants, such as watercress and water chestnuts.

Food Science

Food science is a discipline within agriculture that deals with technical aspects of food from harvest to consumption. Some areas of food science are food chemistry, food engineering, food microbiology, food packaging, food preservation, and food processing. The packing, processing, and marketing of agricultural products have become more advanced. Food preservation methods, including quick-freezing and dehydration, have increased the markets for farm products.

Forestry

Forestry is the art, science, and practice of studying and managing forests. Some aspects of forestry are producing timber as a raw material for wood products and using forests as wildlife habitat, for recreation, and to maintain the quality of natural water.

Horticulture

Horticulture is the cultivation of garden plants. Three main areas of horticulture are ornamental horticulture, olericulture, and pomology. **Ornamental horticulture** is the art and

science of growing plants for their beauty. Ornamental horticulture consists of two main areas, floriculture and landscape horticulture. **Floriculture** is the production, transportation, and use of cut flowers and foliage and of greenhouse crops. **Landscape horticulture** is the production and use of plants to make the outdoor environment more appealing. **Olericulture** is the growing, harvesting, storing, processing, and marketing of vegetables. **Pomology** is the growing, harvesting, storing, processing, and marketing of fruits and nuts.



FIGURE 3. Horticulture is the cultivation of garden plants.

Organic Farming

Organic farming is a production system that avoids the use of synthetically compounded fertilizers, pesticides, growth regulators, and livestock feed additives. Organic farming is on the rise to meet consumer demands.

Natural Resources

Natural resources are all the things found in nature, including living organisms, minerals, soil, water, and air. Natural resources are closely tied to the environment. Natural resources may be subdivided into eight groups. They are wildlife, atmosphere, soil, water, minerals, fossil fuels, sunlight, and people.

Soil Conservation and Nutrient Management

Soil conservation and nutrient management techniques have expanded, resulting in less damage to the environment. **Soil conservation** is the use of management practices that protect the soil. **Nutrient management** is regulation of the amount, form, placement, and timing of applications of nutrients for plants. Both these practices are associated with stewardship. **Stewardship** is the responsibility to manage natural resources in ways that ensure their sustainability for current and future generations.

BASIC NEEDS OF HUMANS

The basic human needs provided through agriculture are food, fiber, and shelter. The meeting of basic needs supports human life. It provides the nutrition that helps the body grow,

repair itself, and reproduce. It also provides protection from the weather, dangerous animals, and other hazards of life. Most food and fiber are carefully produced to meet human needs.

Food

Food is the solid and liquid material humans consume that provides essential nutrients.

Nutrients are substances necessary for an organism to live and grow. Humans receive nutrients from food in the form of carbohydrates, proteins, fats, vitamins, minerals, and water.

Carbohydrates are macromolecules containing carbon, hydrogen, and oxygen. They provide short-term energy storage and mid-term energy reserves. Starches and sugars are carbohydrates.

Proteins are macromolecules consisting of amino acids held together by peptide bonds. They carry out most of a cell's activities and are important in growth and repair.

Fats are oily compounds consisting of carbon, hydrogen, and oxygen. They are insoluble in water and provide energy for the body.

Vitamins are organic compounds used by the body to carry out specific functions. They are needed for good health.

Minerals are inorganic elements. They are needed for the body to function properly. Water is needed to transport food substances in the body.

Fiber

Fiber is a long, threadlike structure used to make clothing and shelter. Fibers may be natural or synthetic. Natural fibers are produced by plants and animals. For example, trees have abundant fibers in their wood and bark. Synthetic fibers are made in mills from various products, such as petroleum.

Shelter

Shelter is housing for humans. Many products used in providing shelter are produced through forestry.

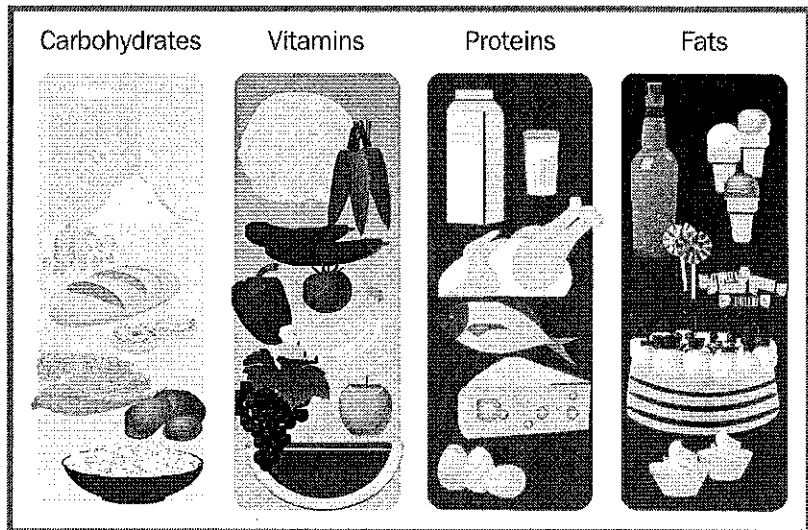


FIGURE 4. Nutrients are substances necessary for an organism to live and grow.

BASIC HUMAN NUTRITION

Advancements in fertilizers, crops, and technology have resulted in the production of more food. Today, one American farmer produces enough food to feed more than 130 people. American consumers have a wide selection of agricultural products available year-round at the local grocery store.

MyPlate is a tool people can use to help them make healthy eating choices. The Food Guide Pyramid was the model for healthy eating in the United States before MyPlate. The pyramid had six vertical stripes to represent the five food groups plus oils. The plate features four sections (vegetables, fruits, grains, and protein) plus a side order of dairy in blue. It was developed by the U.S. Department of Agriculture and the U.S. Department of Health and Human Services.

Fruits and vegetables take up half the plate, with the vegetable portion being a little bigger than the fruit section. The plate has been divided so that the grain section is bigger than the protein section. This is because nutrition experts recommend eating more vegetables than fruit and more grains than protein foods.

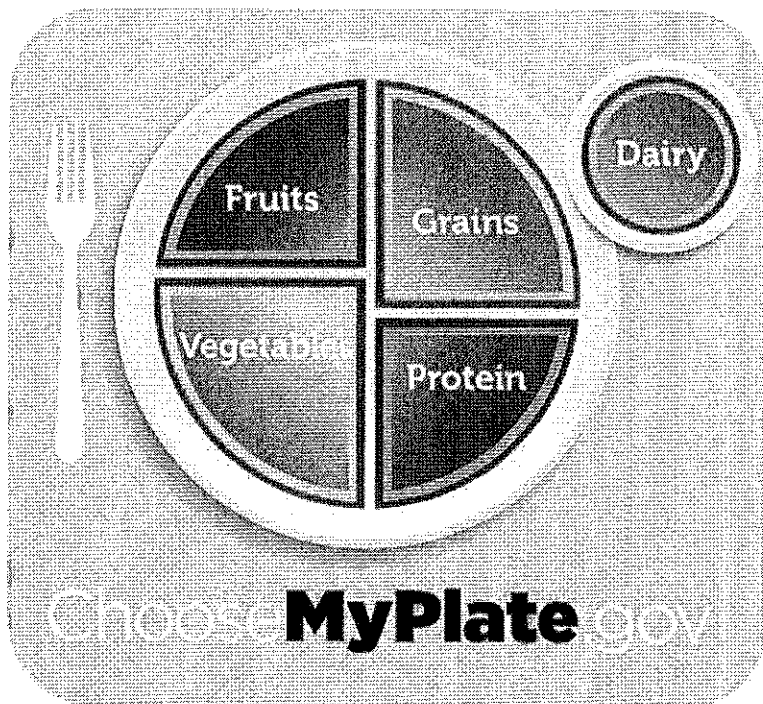


FIGURE 5. MyPlate is a tool people can use to help them make healthy eating choices. (Courtesy, USDA)



FURTHER EXPLORATION...

ONLINE CONNECTION: MyPlate

You have specific needs for nutrients. How do you know what and how much to eat? You can plan your own individual food guide using the MyPlate Plan. The U.S. Department of Agriculture developed this guide after receiving considerable input from human nutritionists and others. The foods to eat that will provide you with the needed nutrients are based on your age, gender, and amount of physical activity. Take the steps to a healthier you. Prepare a short report on your findings.

<http://www.choosemyplate.gov/myplate/index.aspx>

Nutritional Groups

The nutritional groups include grains, vegetables, fruits, milk, meat and beans, and oils.

A grain product is any food made from wheat, rice, oats, cornmeal, barley, or another cereal grain. Examples of grain products are bread, pasta, oatmeal, breakfast cereals, tortillas, and grits. Grains are divided into two subgroups, whole grains and refined grains.

A whole grain contains the entire grain kernel, including the bran, germ, and endosperm. Examples of whole grains are whole-wheat flour, cracked wheat, oatmeal, whole cornmeal, and brown rice.

A refined grain has been milled. In the milling process, the bran and germ are removed. The process gives the grain a finer texture and improves shelf life. On the other hand, it removes dietary fiber, iron, and many B vitamins. Some examples of refined-grain products are white flour, degermed cornmeal, white bread, and white rice. Most refined grains are enriched. To **enrich** is to add certain B vitamins (thiamin, riboflavin, niacin, folic acid) and iron back into a grain after processing. Fiber is not added back to enriched grains.

The vegetable group includes any vegetable or 100 percent vegetable juice. Vegetables may be raw or cooked; fresh, frozen, canned, or dried/dehydrated; or whole, cut up, or mashed. Vegetables are organized into five subgroups, based on their nutrient content. The subgroups are dark-green vegetables, orange vegetables, dry beans and peas, starchy vegetables, and other vegetables.

The fruit group includes any fruit or 100 percent fruit juice. Fruits may be fresh, canned, frozen, or dried and may be whole, cut up, or pureed.

The milk food group consists of all fluid milk products and many foods made from milk. Foods made from milk that retain their calcium content are part of the group, while foods made from milk that have little to no calcium content, such as cream cheese, cream, and butter, are not. Most milk group choices should be fat free or low fat. Milk, yogurt, and cheese are some of the most commonly eaten choices from this group.

The meat and beans group includes all foods made from meat, poultry, fish, dry beans or peas, eggs, nuts, and seeds. Dry beans and peas are part of both this group and the vegetable group. Most meat and poultry choices should be lean or low fat. Fish, nuts, and seeds contain healthy oils, so these foods should be chosen frequently instead of meat or poultry.

Oils are fats that are liquid at room temperature. Oils come from many different plants and from fish. Some common oils are canola oil, corn oil, cottonseed oil, olive oil, safflower oil, soybean oil, and sunflower oil. Some oils are used mainly as flavorings, such as walnut oil and sesame oil. A number of foods are naturally high in oils, such as nuts, olives, some fish, and avocados. Most oils are high in monounsaturated or polyunsaturated fats and thus low in saturated fats. Oils from plant sources do not contain any cholesterol. A few plant oils, however, including coconut oil and palm kernel oil, are high in saturated fats and for nutritional purposes should be considered solid fats. Solid fats are fats that are solid at room temperature. Solid fats are from animals and from vegetable oils that have gone through a process called hydrogenation. Some common solid fats are butter, beef fat, chicken fat, pork fat (lard), stick margarine, and shortening.

Dr. B to Ag 5-9 #3

Nutritional fact labels must be present on all food products except raw single-ingredient products. Nutritional fact labels were created by our government to help consumers follow a well-balanced diet.

THE BENEFITS OF AGRICULTURE

The agriculture industry provides many benefits to the citizens of the United States.

Quality of Life

Agriculture is important in the quality of life people enjoy. **Quality of life** is a person's well-being dependent upon adequate food, clothing, and shelter. The United States produces an abundance of nutritional food, an ample supply of fiber for clothing, and material for the construction of homes. When basic human needs for food, clothing, and shelter are met, people are happier and feel better about their country and themselves.

Americans spend less than 10 percent of their total income for food. That allows Americans to spend more than 90 percent of their income for clothing, housing, automobiles, recreation, and other purposes.

International Trade

Agriculture helps meet our needs and the needs of millions of people in other countries. **International trade** is the buying and selling of commodities by two or more nations. Goods sold to or in another country are **exports**. Examples of agricultural exports are corn, rice, soybeans, wheat, poultry, and cotton. **Imports** are products bought from another nation. Imports include bananas, cocoa, vanilla, shrimp, and coffee.

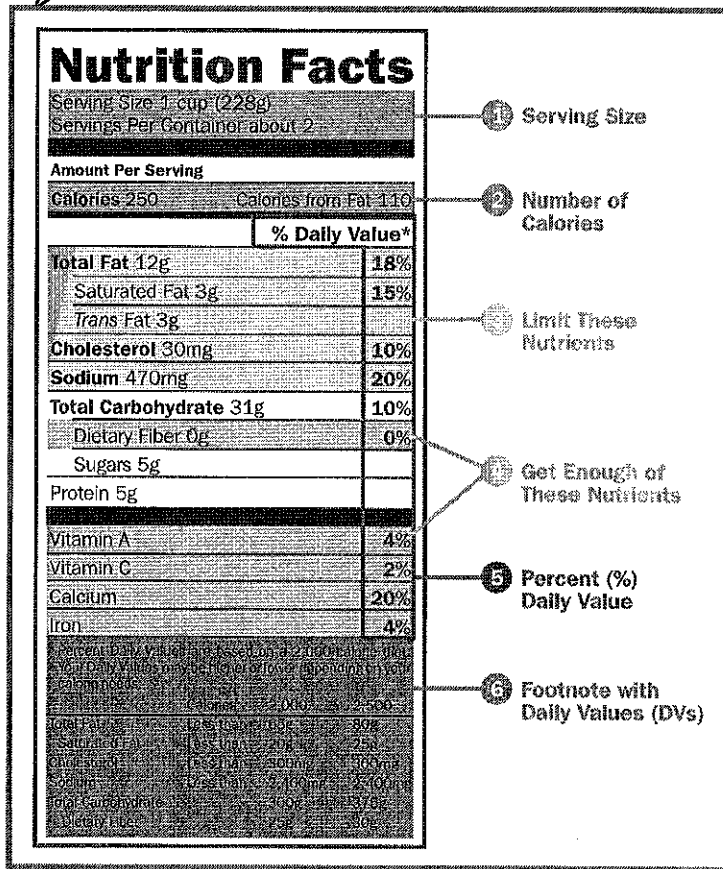


FIGURE 6. Nutritional fact labels were created to help consumers follow a well-balanced diet. (Courtesy, FDA)



FIGURE 7. Agriculture helps meet our needs and the needs of millions of people in other countries.

Jobs

Agriculture provides jobs for more people than any other industry in the United States. According to the American Farm Bureau Federation, there are 2.2 million farms in the United States. About 97 percent of U.S. farms are operated by individuals, family partnerships, and family corporations. Farm and ranch families make up approximately 2 percent of the U.S. population. More than 21 million American workers (about 15 percent of the total U.S. workforce) are employed in the agriculture industry.

Agriculture remains a major industry in most nations. According to the Food and Agriculture Organization (FAO) of the United Nations, 42 percent of the world's laborers are employed in agriculture. Of all industries, agriculture is by far the largest employer. In developing countries 70 to 75 percent of the poor and hungry live in rural areas and depend, directly or indirectly, on agriculture for their livelihood. Ironically, the developing countries with the highest occurrence of hunger are also the most dependent on agriculture for their livelihood.

Summary:



Agriculture is the science of growing crops and raising animals to meet the food, fiber, fuel, and other needs of humans. Some major sectors of the agriculture industry are farming, agribusiness, agricultural chemistry, agricultural engineering, aquaculture, food science, forestry, horticulture, organic farming, natural resources, and soil conservation and nutrient management.

The basic human needs provided through agriculture are food, fiber, and shelter. Food is the solid and liquid material humans consume that provides essential nutrients. Humans receive nutrients from food in the form of carbohydrates, proteins, fats, vitamins, minerals, and water. Fiber is a long, threadlike structure used to make clothing and shelter. Shelter is housing for humans.

MyPlate is a tool people can use to help them make healthy eating choices. The nutritional groups include grains, vegetables, fruits, milk, meat and beans, and oils.

The agriculture industry provides many benefits to the citizens of the United States. Agriculture is important in the quality of life people enjoy. Agriculture helps meet our needs and the needs of millions of people in other countries. Agriculture provides jobs for more people than any other industry in the United States.

Checking Your Knowledge:



1. What are the major sectors of the agriculture industry?
2. How do food, fiber, and shelter contribute to quality of life?
3. What is a nutrient, and what are the major nutrients needed by humans?

4. What is MyPlate, and how is it useful?
5. How does agriculture provide benefits?

Expanding Your Knowledge:



Use print media and/or the Internet to read and learn more about the major uses of animal and plant products in meeting human needs.

Web Links:



Agriculture

http://education.nationalgeographic.com/education/encyclopedia/agriculture/?ar_a=1

<http://www.eoearth.org/view/article/149911/>

General Facts About Agriculture

<http://www.cals.ncsu.edu/CollegeRelations/AGRICU.htm>

Agricultural Career Profiles

<http://www.mycart.com/career-profiles>