**Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_**

**Chapter 9 - Food and Agriculture Study Guide**

**Key Issue 1: Where Did Agriculture Originate?**

*Agriculture*

**Introducing Food and Agriculture**

**Invention of Agriculture**

*Agricultural revolution-*

Environmental factors-

Cultural factors-

**Agricultural Hearths**

Southwest Asia –

East Asia-

Central and South Asia-

Sub-Saharan Africa-

Latin America-

.

**Subsistence and Commercial Agriculture**

*Subsistence agriculture-*

*Commercial agriculture-*

**Percentage of Farmers**

**Role of Machinery, Science, and Technology**

**Farm Size**

**Key Issue 2: Why Do People Consume Different Foods?**

**Diet and Nutrition**

Level of development-

Physical conditions-

Cultural preferences-

**Total Consumption of Food**

*Dietary energy consumption*-

Wheat –

Rice-

Corn (maize)-

Other Crops-

**Dietary Energy Needs**

**Source of Nutrients**

**Protein**

**Key Issue 3: Where Is Agriculture Distributed?**

Geographer Derwent Whittlesey-

**Agricultural Regions and Climate**

**Subsistence Agriculture in Dry Regions**

Five of these regions are important forms of agriculture in developing countries-

Six are forms of commercial agriculture important in developed countries-

**Hunters and Gatherers**

**Pastoral Nomadism**

*Pastoral nomadism*

Camel-

Goats-

Sheep-

Pastoral nomads do not wander-

*Transhumance-*

**Subsistence Agriculture in Tropical Regions**

*Shifting Cultivation*–

*Plantation* farming-

**Shifting Cultivation**

Two key features are indicative of shifting cultivation:

*Swidden-*

**Crops of Shifting Cultivation**

**Ownership and Use of Land in Shifting Cultivation**

**Future of Shifting Cultivation**

**Plantation Farming**

**Subsistence Agriculture in Population Concentrations**

*Intensive subsistence agriculture-*

**Characteristics of Intensive Subsistence Farming**

*Double cropping-*

**Wet-Rice Dominant**

*Wet rice –*

Fours Steps to growing rice

1.

2. Sawah –

Paddy-

3.

4.

**Wet Rice Not Dominant**

*Crop rotation*-

**Fishing**

*Fishing-*

*Aquaculture, or aquafarming*-

**Fish Production**

**Fish Consumption**

**Overfishing**

**Commercial Agriculture: Crop Based**

*Agribusiness*

**Grain Farming**

Winter wheat belt-

Spring Wheat belt-

**Mediterranean Agriculture**.

*Horticulture*-

**Commercial Gardening and Fruit Farming**

*Truck farming*-

**Commercial Agriculture:** **Mixed Crop and Livestock Farming**

*mixed crop and livestock farming*-

In the United States, corn (maize) is-

**Importance of Access to Markets**

Geographers employ the von Thünen model to

The crops grown around cities can be identified using a concentric circle conceptualization, in the form of four rings:

* First ring-
* Second ring-
* Third ring-
* Fourth ring-

This model assumes

**Commercial Agriculture: Animal-based**

**Dairy Farming**

A *dairy farm*

*Milkshed-*

Dairy farmers, like other commercial farmers, usually

Economic difficulties

**Livestock Ranching**

*Ranching-*

The United States-

**Key Issue 4: Why Do Farmers Face Sustainability Challenges?**

Seven challenges confront agriculture in providing more food for a growing and hungry world, while preserving and protecting Earth’s agricultural resources for the future:

* Losing
* Improving
* Conserving
* Identifying
* Balancing
* Meeting
* Making

**Losing Agricultural Land**

**Loss of Farmland to Urbanization**

*Prime agricultural land*-

**Desertification**

*Desertification*-

The Earth Policy -

**Improving Agricultural Productivity**

Ester Boserup-

5 Basic Stages-

**The Green Revolution**

*Green revolution-*

Scientists began intensive experiments during 1950s –

Miracle Seeds-

Nitrogen-

**Increased Productivity: Commercial Farmers**

**Conserving Agricultural Resources**: **Agriculture and Water in California**

California’s limited water supply comes from two main sources:

Recent persistent drought has

**Sustainable Land Management**

*No tillage*

*Ridge tillage*-

**Applying Biotechnology to Agriculture**

**Genetically Modified Organisms**

A *genetically modified organism* (GMO)

The United States has urged

Health problems

Export problems

Increased dependence on the United States

**Global Food Trade**

**Global Trade Patterns**

In developing countries-

**Drug Crops**

Cocaine-

Heroin-

Marijuana-

**Global Agriculture and Undernourishment**

**Global Scale: Supply and Demand**

The U.N. credits the record high prices through 2014 to four factors:

* Poor
* Higher
* Smaller
* Use of crops

Sub-Saharan Africa is

**Undernourishment**

*Undernourishment* is

**Sustainable Agriculture**

**Organic Farming**

**How Clean Is Our Produce?**

**Government Policies**

The U.S. government tries to encourage farmers to:

Avoid producing -

The government will pay farmers when certain -

The government will buy -