

1

The history of agriculture

Get ready!

1 Before you read the passage, talk about these questions.

- 1 When did farming first begin in your country?
- 2 What did farmers first grow in your country?



Chapter 1 The Development of Agriculture

Agriculture began in the area known as the Fertile Crescent. The area is a hot, dry desert. But it has two of the requirements for **farming**: good soil and a **water supply**.

Many early farmers used the Nile River as a water supply. The Nile River floods at the same time every year. Farmers **planted crops** before the floods. This helped their plants to survive in the desert. Later, farmers created **irrigation ditches**. They moved water from the Nile River to their fields. They could **cultivate** crops any time of the year and **harvest** extra food.

Producing extra food was important. Later, farmers fed animals with it. These **domesticated** animals became another important part of agriculture.

Reading

2 Read the textbook passage. Then, mark the following statements as true (T) or false (F).

- 1 Crops cannot grow in deserts.
- 2 The Nile River floods every year.
- 3 Farmers raised animals before plants.

Vocabulary

3 Match the words (1-6) with the definitions (A-F).

- | | |
|--|--|
| 1 <input type="checkbox"/> agriculture | 4 <input type="checkbox"/> produce |
| 2 <input type="checkbox"/> crop | 5 <input type="checkbox"/> domesticate |
| 3 <input type="checkbox"/> cultivate | 6 <input type="checkbox"/> plant |

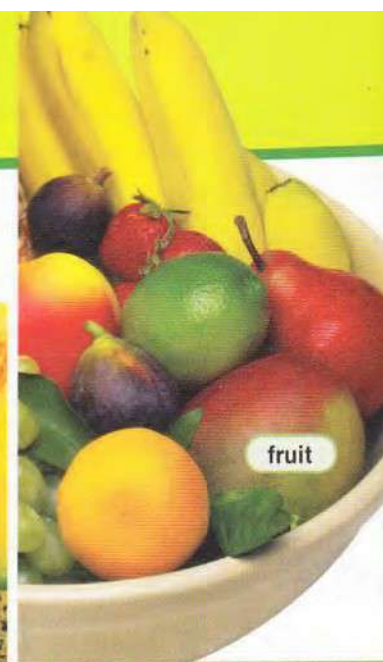
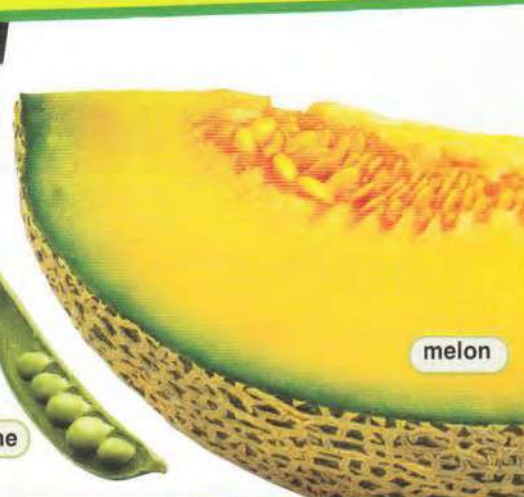
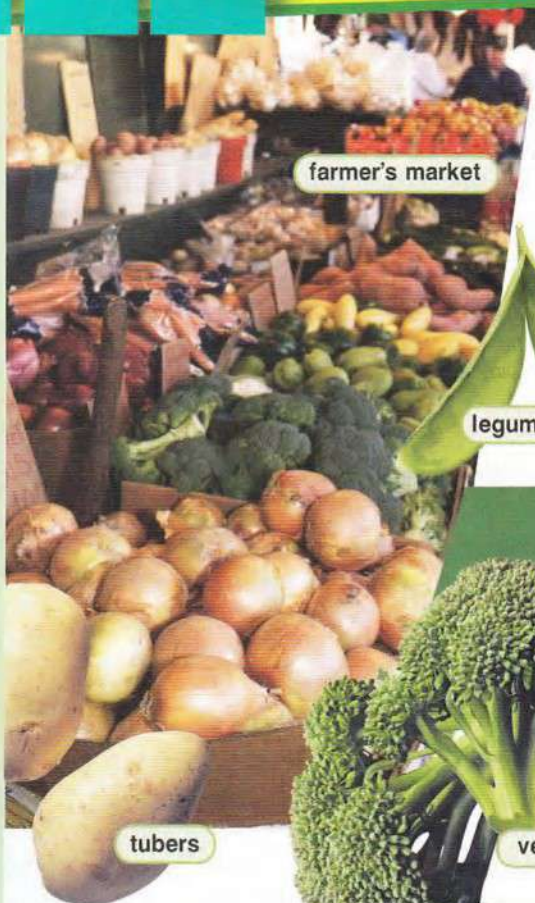
- A a large group of cultivated plants
 B to put seeds in soil
 C growing plants and raising animals
 D to make something
 E to raise a crop from seeding to harvest
 F to tame an animal

4 Read the sentence pair. Choose where the words best fit the blanks.

- 1 **water supply / irrigation**
 A The river is the farmer's _____.
 B _____ helps farmers grow crops in areas with little rainfall.
- 2 **harvesting / farming**
 A _____ includes raising animals and crops.
 B Farmers wait until crops are mature to start _____.

5 Listen and read the text book passage again. Then, say three things you have learnt from the text.





Support your local farmers!

Come to the **farmer's market** this Saturday, 8AM-3PM on Main Street.

JUNE 10

This year's harvest is the best yet!

FRESH FOOD

Buy fresh **fruit** and **vegetables** for a good price!

Fruit: Delicious **melons**, strawberries, and blueberries.

Vegetables:

Fresh broccoli, peas, and lettuce.

We sell **tubers** and **legumes** too!

*This week we have Thompson's Granola. Thompson **cereal** crops are grown on a nearby farm.

CLOTHING

We offer some **industrial** crop products, such as **hemp** shoes, shirts, and hats.

WE HOPE TO SEE YOU ON SATURDAY!

Get ready!

1 Before you read the passage, talk about these questions.

- 1 What are your favorite fruits and vegetables?
- 2 What non-food products come from plants?

Reading

2 Read the advertisement. Then, fill in the blanks with the correct items.

1 Available fruits:

2 Available vegetables:

3 Cereal products:

4 Industrial crop products:

Vocabulary

3 Match the words (1-6) with the definitions (A-F).

- | | |
|---------------|-----------------------|
| 1 ___ harvest | 4 ___ tuber |
| 2 ___ legume | 5 ___ cereal |
| 3 ___ melon | 6 ___ farmer's market |

A a crop that grows underground

B a crop that produces grain

C a crop that has pods

D crops that have been gathered

E a type of large, sweet fruit

F a group of farmers selling crops

Get ready!

1 Before you read the passage, talk about these questions.

- 1 What types of meat come from animals?
- 2 What other products come from animals?



More than a Meal

We rely on animals for a number of products. Some are more obvious than others. Animals' **milk** and **meat** provide us with **protein**. We make clothing and furniture with wool and leather. In addition, there is a long list of animal **by-products**. We use them every day. But we don't always know it. We **render fat**, or **tallow**, into tires, soaps, and candles. Marshmallows, buttons, and tape include **bones** and **hooves**. Wool is often used in carpet. Even baseballs use animal products.

Animal by-products are found in unexpected places. Thanks to rendering, very little goes to waste. Meat is just one of many products that we take from animals.

Reading

2 Read the magazine article. Then, choose the correct answers.

- 1 What is the article mainly about?
 - A Animals that only produce meat
 - B The most popular types of meat
 - C Products made from animals
 - D Waste products of rendering
- 2 Which of the following is NOT a by-product?

A fat	C hooves
B bone	D protein
- 3 What is true of rendering?
 - A It limits waste.
 - B It is a by-product.
 - C It provides protein.
 - D It is in marshmallows.

Vocabulary

3 Read the sentence pair. Choose where the words best fit the blanks.

1 **wool / milk**

- A _____ is an important food source.
 B Many clothes are made of _____.

2 **protein / leather**

- A _____ is often used to cover furniture.
 B Plant products and meat contain _____.

3 **meat / by-products**

- A Humans have always used animals for _____.
 B _____ are used in many common products.

CultiAdvice

Dear Green Thumb:

My tomatoes are dying. They get plenty of sun and water. What am I doing wrong? – Tom G.

Dear Tom:

Check the **soil**. Tomato roots need the right amount of water and air. They don't do well in **sand** or **clay**. Both have the wrong **soil structure**. Sand particles are too loose to hold enough water. **Dense** clay prevents **aeration**. You need a **soil texture** in between those extremes. **Loam** with high **silt** is usually good.

The other issue is nutrients. A soil's **parent material** determines what nutrients are in it. You can improve the nutrients by adding **humus**.



Get ready!

1 Before you read the passage, talk about these questions.

- 1 What kind of soil is there in your country?
- 2 Why is good soil important?

Reading

2 Read the newspaper advice column. Then, mark the following statements as true (T) or false (F).

- 1 Tomatoes grow well in clay.
- 2 Aeration does not occur in clay.
- 3 Humus adds nutrients to soil.

Vocabulary

3 Fill in the blanks with the correct words and phrases from the word bank.

Word BANK

aeration clay loam humus soil structures

- 1 Some _____ hold more water than others.
- 2 Crops don't grow well in pure _____ soil.
- 3 Use _____ to add nutrients to soil.
- 4 _____ provides roots with air.
- 5 _____ is a mix of three soil types.

4 Match the words (1-6) with the definitions (A-F).

- 1 soil
- 2 sand
- 3 silt
- 4 soil texture
- 5 parent material
- 6 dense

- A a material made of small pieces of rock and mineral
- B a material that is deposited by water
- C rock and minerals that eventually form soil
- D a layer of material that plants grow in
- E the size of particles in a soil
- F having a lot of material in a small space