Prehistoric People
8000 B.C.–3000 B.C.

- Neolithic pottery
- Paleolithic carving

- 8000 B.C.: New Stone Age begins
- 6500 B.C.: Catal Hüyük established
- 4000 B.C.: World population reaches about 90 million
- 3000 B.C.: Writing is invented
Chapter Focus

Read to Discover

- How tools, language, clothing, and the discovery of fire helped early people advance.
- What Neanderthals and Cro-Magnons were like.
- How people changed from food gatherers to food producers.
- Why specialization, government, and religion were important in Neolithic societies.

Terms to Learn
- prehistory
- civilization
- migrate
- specialization

People to Know
- Lucy
- Neanderthals
- Cro-Magnons

Places to Locate
- Olduvai Gorge
- Jericho
- Catal Hüyük

Why It’s Important
Most archaeologists believe people have lived on the earth for millions of years. The period of time before the invention of writing is called prehistory. It lasted until about five thousand years ago, when people learned how to write. Through the use of artifacts, archaeologists have traced the milestones that paved the way from prehistory to the rise of civilization—a time when people progressed culturally and began to live in cities.

SECTION 1  The Paleolithic Age

Although there were no written records during prehistory, scientists have learned a great deal about prehistoric people. They have learned how early human beings lived and what important discoveries were made. Scientists also think they know why people moved out of Africa to other parts of the world.

Many scientists believe that until about 1.75 million years ago, people lived only on the grasslands of eastern and southern Africa. Then the earth’s climate changed—it became colder. Ocean water froze into huge glaciers that spread out from the North and South poles. As the ice sheets grew, the sea level fell and uncovered land that had been under water. Land bridges then connected Africa to both southern Europe and southwestern Asia.
People were able to migrate, or make their way, around the desert of northern Africa and across the land bridges. Between about 1.75 million and 700,000 years ago, people made their way into Europe and Asia. Much later, between about 40,000 and 15,000 years ago, they also migrated to the Americas.

Scientists call the first age in which people lived the Paleolithic (pə lē uh lith’ ik) Age, or Old Stone Age. It lasted from about 2.3 million years ago until 10,000 years ago. During this period, people obtained their food by hunting and gathering.

Obtaining Food  

Paleolithic people lived in small bands, or groups, of about 30 members. When the food supply was good, the bands grew to about 40 or 50 members. Most of the group members lived to be no more than 20 or 25 years old. More than half of the children died from illnesses or were killed by animals before their first birthdays.

The people within a group lived and worked together and shared their food. They fed and cared for people who became injured or sick.

GROUP LIFE  

Experts believe that most early people lived in groups made up of several families. Here, a group of hunters use stones to sharpen tools. Two men carry a large animal killed in a hunt, as a few women tend fires near their tents. How did Paleolithic people use fire?
Each band searched for food within an area known as its home territory. This usually covered about two square miles, or five square kilometers, for every band member. There were campsites at various places throughout the home territory. The band stayed at a campsite until the available food supply was used up and then moved.

Women and children gathered berries, nuts, fruit, and eggs out of bird and turtle nests. They poked sticks into bee nests to get honey and into the ground to dig roots.

Men of the group obtained meat. They caught fish using their bare hands and hunted small animals with sticks and stones. Occasionally, they were able to kill a large animal that was too young, too old, or too badly hurt to run away. A good kill meant that the group would have enough meat to last for several days.

Making Tools Life for hunters and gatherers became easier when they learned to make tools. At first the only tools people had were sticks and stones they found on the ground. Soon they learned to shape stones to make them more useful.

Reading Check What were some of the features of a band’s home territory?

Oldest Tools In 1995, archaeologists working in Ethiopia found stone spear points more than 2.6 million years old, making them the earliest tools found on Earth.
Among the earliest shaped stones are the Olduvan pebble tools, named after the Olduvai Gorge in eastern Africa where they were first discovered. Pebble tools were made from pebbles or stones about the size of a fist. The toolmaker hit one pebble with another, removing chips and creating a jagged cutting edge. This edge was sharp enough to cut the meat off of small animals’ bones, split animal bones, and chop up plants.

Later people learned to knock long, sharp-edged chips, called flakes, from stones and use them as tools. Using flakes for knives, they could butcher, or cut up, animals as big as elephants quickly and efficiently. People also used flakes to scrape one end of a wooden branch into a sharp point for a digging stick or a meat skewer.

**Making Fire** People also learned to make fire during the Paleolithic Age. The first fires they knew about were made by nature, such as those started by lightning. Eventually, people discovered how to make fire themselves. They created sparks by rubbing two sticks or stones together, or rapidly turning a stick in a hole in a dry log.

People used fire to keep themselves warm and dry. They also used it as a weapon, throwing burning sticks of wood at animals to drive them away. Sometimes they used fire to drive big animals into mudholes. The heavy animals would sink in the mud and people could then kill them.

People also used fire to clear out brush and undergrowth. Finally, people used fire to cook food. Cooked food was much easier to chew and digest than raw food. As a result, people spent less time eating and more time doing other things.

**Seeking Shelter** Early people usually camped out in the open. They protected themselves from the wind by digging pits in the ground or by crouching in dry river beds. They also took shelter under an overhanging rock or piled up brush.

At first, early people used caves only for such emergencies as escaping from a sudden storm or a large animal. By about 100,000 years ago, however, people in China, western Europe, and southwestern Asia were living in caves most of the time.

**Making Clothing** After hunters began killing large animals, they found that the animal skins could be used for protection and warmth. They scraped the skins clean and then laid them out in the sun to dry. Later, people discovered that pounding fat into the skin while it was drying would make it softer.

At first people wrapped the skins around themselves. Later, they learned how to fasten the skins together. Clothing made a big difference in where people lived. Before they had clothing, most people stayed in areas that were warm and dry. Once they

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**People in History**

**Lucy** c. 3,200,000 B.C.

**Hominid Skeleton**

Lucy made headlines in 1974 when two scientists—Donald C. Johanson and Tom Gray—discovered her skeleton in the deserts of Ethiopia. They named her after a popular Beatles song, "Lucy in the Sky with Diamonds." Although Lucy walked the earth 3.2 million years ago, her skeleton was nearly complete. She gave the world its first look at an early prehuman.
had clothing to protect them from the weather, they were able to move into areas that were cooler and wetter.

**Developing Language** In addition to learning to make tools, fire, and clothing, early people developed language. Before they learned to talk, early people simply made sounds or pointed to objects to express meaning. Hand signals were probably used for common things such as water, food, animals, and weapons. Gradually, because of new social needs, sounds and hand signals were no longer enough. The development of language was a great human achievement. It made it possible for people to work together, share ideas, and pass on their beliefs and stories. The younger generations could learn more easily from older generations, and greater progress was made in all areas of civilization.

**The Neanderthals** The first people on Earth are known as *Homo habilis* (hō’ mō huh’ bil’ uhs), or “skillful man.” Next came *Homo erectus* (hō’ mō ē rek’ uhs), or “man who walks upright.” Then, between about 300,000 and 200,000 years ago, came *Homo sapiens* (hō’ mō sā’ pī ē uhnz), or “man who thinks.”

**Languages** There may be 2,000 to 10,000 languages in the world today. Dialects, or variations within a language, range from about 20,000 to more than 50,000. The largest native language in the world is Chinese, but among the many dialects are Mandarin, Cantonese, Wu, Min, Xiang, Kan, and Hakka.
There are two kinds of *Homo sapiens*. The first is the Neanderthal (né an’ der tahl), named after the Neander River in Germany, where their remains were first discovered in 1856. Since then, other Neanderthal remains have been found throughout Europe and in parts of Asia and Africa. Scientists estimate that about 1 million Neanderthals were living at any one time.

Neanderthal people were good hunters. They used traps to catch birds and small animals. They used *pitfalls* to catch large animals like the rhinoceros and the elephant. A pitfall was a large hole that was covered with branches, leaves, and earth. As an animal ran across this hole, it crashed through the covering and fell into the pit. The hunters would then kill the animal with spears.

Neanderthals were also builders. In northern areas, for example, they made houses by covering a framework of mammoth bones with animal skins. More bones piled on the bottoms of the skins prevented them from being blown away. As many as 30 people lived in such a house during the cold months of the year. They improved cave dwellings by digging drainage ditches in caves and designing rock protection for entrances.

According to experts, Neanderthals were also the first people to bury their dead. Archaeologists have found graves of people from this time in which they discovered the remains of flowers, tools, and food.

**The Aborigines**  
Archaeologists have found spearheads and cave paintings showing that hunters traveled to Australia more than 40,000 years ago. Their descendants call themselves the Aborigines (ab uh rij’ uh nēz) and live much as their ancestors did (far right). **Why does the study of traditional cultures provide valuable information about the past?**
The second kind of *Homo sapiens* is the Cro-Magnon (krō mag’ nahn), named after a rock shelter in France where their remains were first discovered in 1868. Cro-Magnons appeared in North Africa, Asia, and Europe about 100,000 years ago. Archaeologists consider them the first modern human beings.

Cro-Magnons were very skillful toolmakers. They invented the *burin*, which resembles a chisel. By using the burin, people could make other tools and objects from antler, bone, ivory, and shell, as well as stone and wood.

Using new tools made Cro-Magnons better hunters, thus increasing their food supply. Points of antler or bone fastened to the end of wooden sticks could penetrate the hides of larger animals. People fashioned antler and bone into *spear throwers*, or devices that made spears fly through the air faster and farther. This allowed hunters to stay a greater distance from animals, making hunting less dangerous.
Another important tool that Cro-Magnons invented was the axe, which they used to cut down trees and hollow out the logs to make canoes. In southeastern Asia, they cut down stalks of bamboo and tied them together with vines to make rafts. Winds or ocean currents then carried the rafts to other lands. It is likely that this is how people reached Australia about 40,000 years ago.

Cro-Magnons also fashioned bone, ivory, and shell into body ornaments, such as necklaces and rings. They decorated their clothing with bone or ivory beads. They played music on flutes carved from long, hollow bones.

Cro-Magnons were artists as well as toolmakers. They carved statues out of ivory and bone or molded them out of clay. They covered the walls of some caves in western Europe, Africa, and South America with pictures painted brightly with paints made from minerals. The pictures show mostly animals, such as horses, bulls, and deer, but also show outlines and patterns of lines, dots, and curves.

Many anthropologists think cave paintings may have had religious significance. Cro-Magnons believed that animals had spirits. They thought that painting an animal’s picture gave people power over its spirit and would help them find and kill the animal. Anthropologists think the cave paintings may have been a kind of textbook about Cro-Magnon ceremonies, traditions, or history.

Cro-Magnon bands cooperated, often hunting large animals together. This required them to jointly agree on rules and the first true leaders. Every year or so, they held social gatherings where they exchanged information about the movement of animal herds. They also traded materials such as amber and shells.

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Fun Facts

The Flute  The first musical instrument invented by early humans was the flute. Carved bone flutes date back more than 30,000 years.

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Section 1 Assessment

1. Define: prehistory, civilization, migrate, bands, home territory.
2. Why did early people begin to move out of Africa and into other parts of the world about 1 million years ago?
3. How did tools change in the Paleolithic Age?

Critical Thinking

4. Analyzing Information  What do you think was the most important advancement made by early people? Explain.

Graphic Organizer Activity

5. Draw a diagram like this one, and use it to compare ways of life followed by the Neanderthals and Cro-Magnons. Be sure to include the accomplishments of each.
In the Neolithic (nē uh lith’ ik), or New Stone Age, about 8000 B.C., people changed from food gatherers to food producers. Over several thousand years they began to obtain most of their food from farming. This brought about such great changes in the way they lived that experts call the beginning of farming the Neolithic Revolution.

Farmers and Herders  Two important discoveries brought on the Neolithic Revolution. One was learning to grow food. The other was learning to herd animals.

Experts believe that people discovered that seed from wild grains, such as wheat and barley, could be planted and harvested. This probably came about when they noticed that new shoots had grown from spilled grain. Scientists believe agriculture developed independently in different parts of the world. In southwestern Asia, early people grew wheat and barley, and in...
Eastern Asia, they grew millet, rice, and soy beans. In Mexico, they grew corn, squash, and potatoes, and they grew peanuts and a grain called sorghum in Africa.

People probably learned they could herd animals when a hunting band built fences to enclose a herd of wild animals they had chased into a ravine. The hunters killed one animal at a time, saving the rest for later. Soon captured animals began to lose their fear of people and became domesticated, or tamed, and the hunters became herders. In time, Neolithic people were breeding animals to improve the animals’ qualities. People also began using certain animals such as donkeys, camels, and llamas as pack animals.

The Neolithic Revolution greatly increased people’s food supplies. With more food available, the population, or number of people, began to grow. Experts think there were about 5 million people in the world in 8000 B.C. Within 4,000 years the population grew to about 90 million. People were also living longer.

**Early Villages** Once people began to produce food, they were able to settle in one place. They built permanent shelters and formed villages of about 150 to 200 people in areas with a good soil and water supply.

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**POTTERY MAKING** Neolithic people learned the art of baking clay pottery. Baked clay, unlike sun-dried clay, will not disintegrate in water. In this picture, men are covering the oven so that the pots inside will bake. How did Neolithic people use pottery?
The earliest known villages in the world have been found in southwestern Asia. One of the oldest is Jericho (jer´ uh kō) in the West Bank between Israel and Jordan. It dates back to about 8000 B.C. Another is Abu Hureyra (ah bu hu rá´ rah) in Syria, which was founded about 500 years later. A third early village is Catal Hüyük (kat´ uhl hū´ yük) located in Turkey. People lived there from about 6500 to 5700 B.C.

Archaeologists know a great deal about Catal Hüyük because it was struck by a fire that blackened rather than destroyed wooden and cloth objects. The blackening helped preserve the objects. Evidence shows the houses in Catal Hüyük were made of sun-dried mud brick. They had flat roofs made of reeds plastered over with mud. The walls and roofs were supported by a post-and-lintel, or a horizontal length of wood or stone placed across two upright poles. The post-and-lintel was an important contribution to architecture because it enabled buildings to support weight above an open space.

As protection against attack, the houses in this village had two or three rooms and no doors. People went in and out of the houses through a hole in the roof by using a ladder. The houses were crowded together on the side of a hill. The floors were covered with rushes, or grasslike plants, and sleeping platforms were covered with mats.

**Fun Facts**

**First Farmers** Many archaeologists believe that women invented the practice of agriculture. In societies of hunter-gatherers, women collected fruits, nuts, and seeds. As they did so, they probably noticed that plants sprouted where seeds fell. Only with the invention of the plow did men take over the job of farming.
Most maps show direction, or the line or course along which something is pointing or facing. Understanding direction makes locating places, whether on a map or in a town, much easier.

All directions heading toward the North Pole are north (abbreviated N), and all directions heading toward the South Pole are south (S). When facing the North Pole, the direction to the right is east (E) and to the left is west (W). These four main directions are called **cardinal directions**.

There are also four other directions, which are known as intermediate directions. This is because they are located between the cardinal directions. The direction between north and east is northeast (NE) and between north and west is northwest (NW). The direction between south and east is southeast (SE) and between south and west is southwest (SW).

### Map Practice

1. What sites are located southwest of Neanderthal?
2. Which site is south of Broken Hill?
3. In which direction is Ngandong from Teshik-Tash?

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**Sites of Early People**

[Map of early human sites with labels for various locations such as Neanderthal, Broken Hill, Teshik-Tash, etc.]
Among the houses stood open courtyards with large ovens for baking bread. Beyond the houses were vegetable gardens, apple orchards, fields of grain, and pastures where sheep and cattle grazed.

Specialization A result of increased food supplies was specialization, or the development of occupations. Fewer people were needed to produce food so they began to do jobs that had nothing to do with food. They became potters, weavers, and metal workers. They exchanged the things they made for grain, fruit, and meat.

Specialization was aided by a number of developments. One was that people learned to make pottery by baking clay. They used pottery for carrying, cooking, and storing food. This enabled them to add such things as soups and stews to their diet.

In addition, people learned to weave cloth. People took wool from sheep, spun it into thread, and wove the thread into cloth on a loom, which was invented during the Neolithic Age. They dyed the cloth bright colors and used it for clothing.

Neolithic people also learned to work metals. They picked up lumps of copper, lead, gold, and silver that they found lying on the ground and hammered these metals into beads and jewelry. Soon they learned how to shape the metal into weapons. Because metals found on the ground were scarce, however, people continued to work mostly in stone, bone, and wood.

Government Another development of Neolithic times was village government. It was more complex than government in earlier times due to land ownership. People’s lives depended on the use of a given piece of land. As a result, people began to protect what they had. They set boundaries and passed their land on to their children.

Even so, disputes often arose over land ownership. To keep order in Neolithic villages, a single chief was chosen. Besides settling disputes, the chief, with the help of a small group of people, directed village activities.

Religion Experts believe that the chiefs of most Neolithic villages were also priests. They handled religious duties for the village which included offering prayers for things people needed, such as rich soil, healthy animals, and water for crops.

At first, Neolithic people prayed to the forces of nature that they saw around them. After a time, they created gods and goddesses to represent these forces. The most important was the Earth Mother, the goddess of fertility. Many of the houses in Catal Hüyük, for example, had altars for this goddess.
Archaeologists believe that more elaborate religious customs and ceremonies appeared at this time. Neolithic people began to build separate altars and other places of worship for their many gods and goddesses.

**Section 2 Assessment**

1. **Define:** domesticated, population, specialization.
2. What two important discoveries changed people from food gatherers to food producers?
3. What were two results of the increased food supply during the Neolithic Age?
4. What two roles did village chiefs play?

**Critical Thinking**

5. **Understanding Cause and Effect**
   How did learning to produce food lead early civilizations to develop villages?

**Graphic Organizer Activity**

6. Draw a diagram like this one, and use it to show the cause and effects of the development of farming.

**Chapter Summary & Study Guide**

1. Prehistoric time can be divided into the Paleolithic and Neolithic Ages.
2. During the Paleolithic Age, people lived in small hunting-and-food-gathering bands.
3. Over time, Paleolithic people learned to make tools and clothes, developed language, and discovered how to make fire.
4. Early *Homo sapiens* included the Neanderthal and the Cro-Magnon.
5. The shift from food gathering to food producing brought so many changes that it has been called the Neolithic Revolution.
6. Food production made it possible for people to settle in one place.
7. Increased food supplies in the Neolithic Age resulted in increased population and specialization.
8. Neolithic villagers learned to make pottery, weave on looms, and work with metals.
9. Neolithic village government was led by a chief who settled disputes and directed village activities.

**Self-Check Quiz**

Visit the Human Heritage Web site at [humanheritage.glencoe.com](http://humanheritage.glencoe.com) and click on Chapter 2—Self-Check Quiz to assess your understanding of this chapter.
Using Key Terms

Write a short description of a day in the life of a person who lived during the Paleolithic or Neolithic ages. Use the following words in your description.

prehistory, civilization, migrate, bands, home territory, domesticated, population, specialization

Understanding Main Ideas

1. What is the main difference between the Paleolithic and Neolithic ages?
2. Why did Paleolithic people move from place to place?
3. How did early men and women share the work of getting food?
4. How did the discovery of fire affect people’s lives?
5. What difference did clothing make in the way people lived?
6. Why did the Cro-Magnons produce cave paintings?
7. How did increased food supplies cause increased population?
8. Why did people in the Neolithic Age begin to take up different occupations?
9. How did people in the Neolithic Age change their form of government?

Critical Thinking

1. Do you think the development of farming should be called a revolution? Explain.
2. What would you have liked about living in Catal Hüyük? What would you have disliked?
3. How would you have organized work activities if you had been a village chief?

Graphic Organizer Activity

Economics

Draw a diagram like this one, and use it to show the steps leading up to the rise of villages in the Neolithic Age. (Add steps as necessary.)

Geography in History

Environment and Society

When early people began to build shelters, they used some geographic features to decide where they would build their homes. What features affected their choice of building sites? How might geography affect their choice of building materials?

Using Your Journal

Review any details you may have noted about what early people went through as civilization developed. Pay special attention to new ideas and skills. Write an essay explaining how one of their discoveries or inventions set the stage for cultures to develop.
During the prehistoric era, the Sahara—the world’s largest desert—looked nothing like it does today. Vast grasslands stretched across a broad open plain. Rivers and shallow lakes shimmered in the sun. The land was wet and green enough to support bands of hunters and some of the earth’s earliest communities of herders. Between 10,000 and 4,000 years ago, the area’s climate changed. The rains stopped falling and the temperatures rose. The grasslands, rivers, and lakes disappeared. So did the prehistoric peoples who once lived there. However, they left behind a rich legacy of rock art that has kept their stories alive.

Africa has more prehistoric rock art sites than any other continent.

In the dry desert of modern Libya, a life-size crocodile stretches across a rock. The engraving, carved about 9,000 years ago, captures a time when these giant reptiles soaked up the sun on the banks of ancient rivers.
The camel arrived on the Sahara from Asia about 2,200 years ago. By then the grasslands of the past had nearly vanished. Today the Sahara is a vast sea of sand and rock, covering more than 3.5 million square miles.

Carved more than 7,000 years ago, this pair of giraffes grazed on the tall grasses that once covered the Sahara. Prehistoric people may have tried to domesticate, or tame, these animals.

Starting about 7,500 years ago, herding and farming emerged on the grassy northern plains of Africa. Paintings and carvings show the kinds of cattle raised by prehistoric peoples in this region.

Taking Another Look
1. In what parts of Africa is ancient rock art found?
2. What types of animals did prehistoric peoples of the region herd?

Hands-On Activity
Creating Art  Design a postage stamp that one of the modern nations in the Sahara might create to celebrate its rock art.
1. The ways that people build their homes can cause which of the following surface changes to the earth?

A. Earthquakes  
B. Volcanic eruptions  
C. Erosion  
D. Advancement of glaciers

**Test-Taking Tip:** Always read the question and all of the answer choices carefully. Avoid answers that seem extreme. For example, it is very unlikely that the way people build their homes could cause the advancement of glaciers. Therefore, you can eliminate answer D.

2. Some resources are nonrenewable, while others are renewable. Which of the following is an example of a renewable resource?

F. Coal  
G. Minerals  
H. Plastic  
J. Timber

**Test-Taking Tip:** Think of familiar examples to double-check your understanding of the question. Remember, sometimes more than one answer seems correct. For instance, though the telling of legends certainly helped children learn a tribe’s language, that was not the primary reason they were created. Always choose the best answer.

3. Many early legends were created as ways to

A. explain the creation of Earth  
B. explain where archaeological remains came from  
C. compare different societies  
D. introduce children to a tribe’s language

**Test-Taking Tip:** Think about the meaning of these terms. Resources, often referred to as “natural resources,” are materials found in nature. Renewable resources can be replaced as they are used. Nonrenewable resources CANNOT be replaced. It is a good idea to keep a vocabulary list of new words as you read each new chapter. The glossary of your textbook can help you define these unfamiliar words.

4. The discovery of the Rosetta Stone allowed scientists to

F. understand the fall of the Roman Empire  
G. understand the ancient Egyptian language  
H. understand how Pompeii was destroyed  
J. translate the ancient Greek language into English

**Test-Taking Tip:** This question asks you to remember a fact about the Rosetta Stone. The Rosetta Stone served as a language dictionary. Only two answer choices discuss languages, so you can easily eliminate the others.
5. Which of the following CANNOT be shown on the map on the top?

A True direction  
B Latitude and longitude  
C Bodies of water  
D The exact size of all continents  

**Test-Taking Tip:** The map on the top is called a **Mercator projection**. Remember, a map projection is a way of representing a round earth on a flat piece of paper. What becomes distorted in a Mercator projection?

6. Which of the following is NOT considered an artifact?

F A spearhead from ancient Egypt  
G A fossil of an extinct fish from the Paleolithic era  
H A clay water pitcher from the Shang dynasty  
J A silver bracelet from Pompeii  

**Test-Taking Tip:** Another important term to remember is **artifact**. Artifacts are things made by people. Be careful when a question uses the words NOT or EXCEPT—overlooking these words is a common error. Look for the answer choice that does NOT fit.

7. During the Paleolithic Age, people lived in groups of 20 to 30 people. Increases in population within these bands were usually caused by

A low average birth weight  
B discovery of safe migration routes  
C a stable food supply  
D frequent natural disasters  

**Test-Taking Tip:** Eliminate answers that do not make sense. For example, answers A and D probably would probably cause a drop in population rather than an increase.