

CHAPTER
21

Southwest Asia and South Asia

Physical Geography and History

1

GEOGRAPHY

Physical Geography of Southwest Asia

2

GEOGRAPHY

Physical Geography of South Asia

3

HISTORY

River Valley Civilizations



ESSENTIAL QUESTION

How have physical geography and history interacted in Southwest and South Asia?

CONNECT Geography & History



Use the map and the time line to answer the following questions.

1. When did cities appear in the Indus River valley?
2. In ancient times, people of the Indus Valley traded with people on the Tigris and Euphrates rivers. What water route would they take between the regions?



3000 B.C.

Culture

◀ **c. 3000 B.C.** Cotton cloth is woven in South Asia (and is still being woven today, as the photo shows).

Culture

c. 2400 B.C. Sumerians use the cuneiform writing system. ▼



Geography

c. 2500 B.C. Cities develop in the Indus River valley of South Asia.



Present-Day Southwest Asia and South Asia

[Click here](#) to explore Southwest and South Asia @ [ClassZone.com](#)



Geography

c. 1900 B.C. The Sarasvati River of South Asia disappears, perhaps because of earthquakes.

History

▲ c. 2200 B.C. Ziggurats are first built in Sumerian cities.



1500 B.C.

Government

◀ c. 1750 B.C. Hammurabi of Babylon compiles a law code.

SECTION
1

Reading for Understanding

▶ Key Ideas

BEFORE, YOU LEARNED

Africa has variety in its physical geography, including savannas, mountains, and deserts.

NOW YOU WILL LEARN

Southwest Asia has vast deserts and extensive mountain ranges that are similar to those in certain parts of Africa.

▶ Vocabulary

TERMS & NAMES

Arabian Peninsula peninsula of Southwest Asia between the Red Sea and Persian Gulf

Anatolian peninsula in Southwest Asia between the Black Sea and Mediterranean

Plateau of Iran a high plateau in central and eastern Iran, surrounded by mountains

Tigris River a river of Southwest Asia that flows from a plateau on the Anatolian peninsula to the Persian Gulf

Euphrates (yoo•FRAY•teez) **River** a river of Southwest Asia that flows from a plateau on the Anatolian peninsula to the Persian Gulf

oasis fertile or green spot in desert created by underground water coming to the surface

REVIEW

plateau a high area of flat land



Visual Vocabulary Women carry water from an oasis near Khimsar, Rajasthan, India.

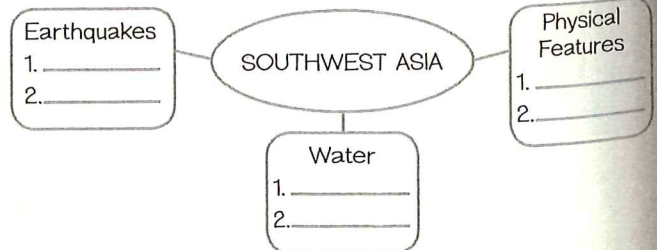
▶ Reading Strategy

Re-create the diagram shown at right. As you read and respond to the **KEY QUESTIONS**, use the outer ovals to note important details about the region's physical features, water shortage, and earthquake threats.



See Skillbuilder Handbook, page R4

FIND MAIN IDEAS





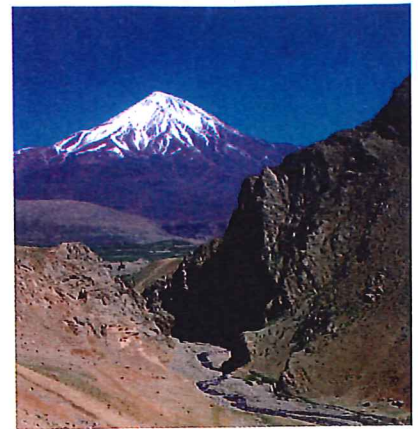
SECTION
1

GEOGRAPHY

Physical Geography of Southwest Asia

Connecting to Your World

Have you ever seen pictures of the moon's surface? Many of NASA's moon photographs show plains of powdery grey dust with mountains looming in the background. The moon is a very dry place with no water or plants. Although Earth has water, did you know that some regions on Earth look almost as desolate? Southwest Asia has harsh deserts and tall mountains. Yet Southwest Asia also has livable areas, small watered regions where millions of people live.



Mt. Damavand

Snow-capped Mount Damavand is located in Iran.

Physical Features

KEY QUESTION What are the three subregions of Southwest Asia?

Perhaps you have heard the name *Middle East* on the news. That term is often used for the region of Southwest Asia. If you look at the map in this section, you will see that Southwest Asia is located where three continents—Africa, Asia, and Europe—meet. As a result, it has historically been a crossroads, a place where roads meet and a place through which many travelers journey.

Rub al-Khali

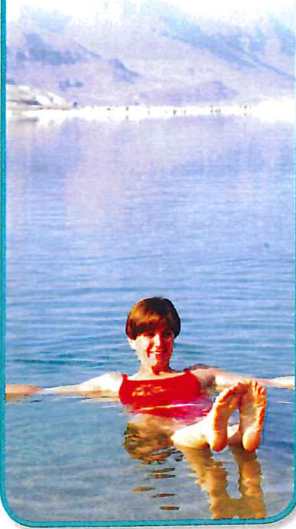
Deserts such as the Rub al-Khali cover most of the Arabian Peninsula.



Fun Facts!

THE DEAD SEA

The Dead Sea is a land-locked salt lake, so salty that almost nothing can live in the water. It is so salty that you cannot sink. Salt concentration in the Dead Sea is around 31.5 percent, about nine times higher than in the world's oceans. The evaporation rate of the water is more than 55 inches per year. This keeps the water very salty.



Peninsulas and Plateaus Southwest Asia can be divided into three subregions, which are listed below. (See map on opposite page.)

1. The **Arabian Peninsula A** is bordered by the Red Sea, Arabian Sea, and Persian Gulf. A peninsula is a piece of land linked to a larger landmass but nearly surrounded by water. Deserts cover most of the Arabian Peninsula. The Rub al-Khali is the largest.
2. The **Anatolian peninsula B**, or Anatolia (also called Asia Minor), is home to most of Turkey. This peninsula is bounded by the Black Sea to the north and the Mediterranean to the south.
3. Extending east from Anatolia is the **Plateau of Iran C**. A **plateau** is a high area of uplifted, then eroded land. The Persian Gulf lies to the southwest and the Caspian Sea to the north.

Deserts, Mountains, and Rivers Southwest Asia is an arid region with many deserts. The dry climate is partially caused by the terrain. For example, mountains lining the Mediterranean and Black Sea coasts of Anatolia prevent rain from reaching inland areas.

Mountains also affect the climate of the Plateau of Iran. The Elburz Mountains stop moist winds blowing from the Caspian Sea, and the Zagros Mountains block winds from the Persian Gulf.

Rivers are the major freshwater sources in the region. The **Tigris River** and the **Euphrates River** both flow from the Anatolian peninsula to the Persian Gulf. The land between these rivers is a farming region. To the southwest, the Jordan River borders parts of Syria, Jordan, the West Bank, and Israel. The river flows into a lake that is called the Dead Sea because it is so salty that almost nothing can live in it.

SUMMARIZE Identify the three subregions of Southwest Asia.

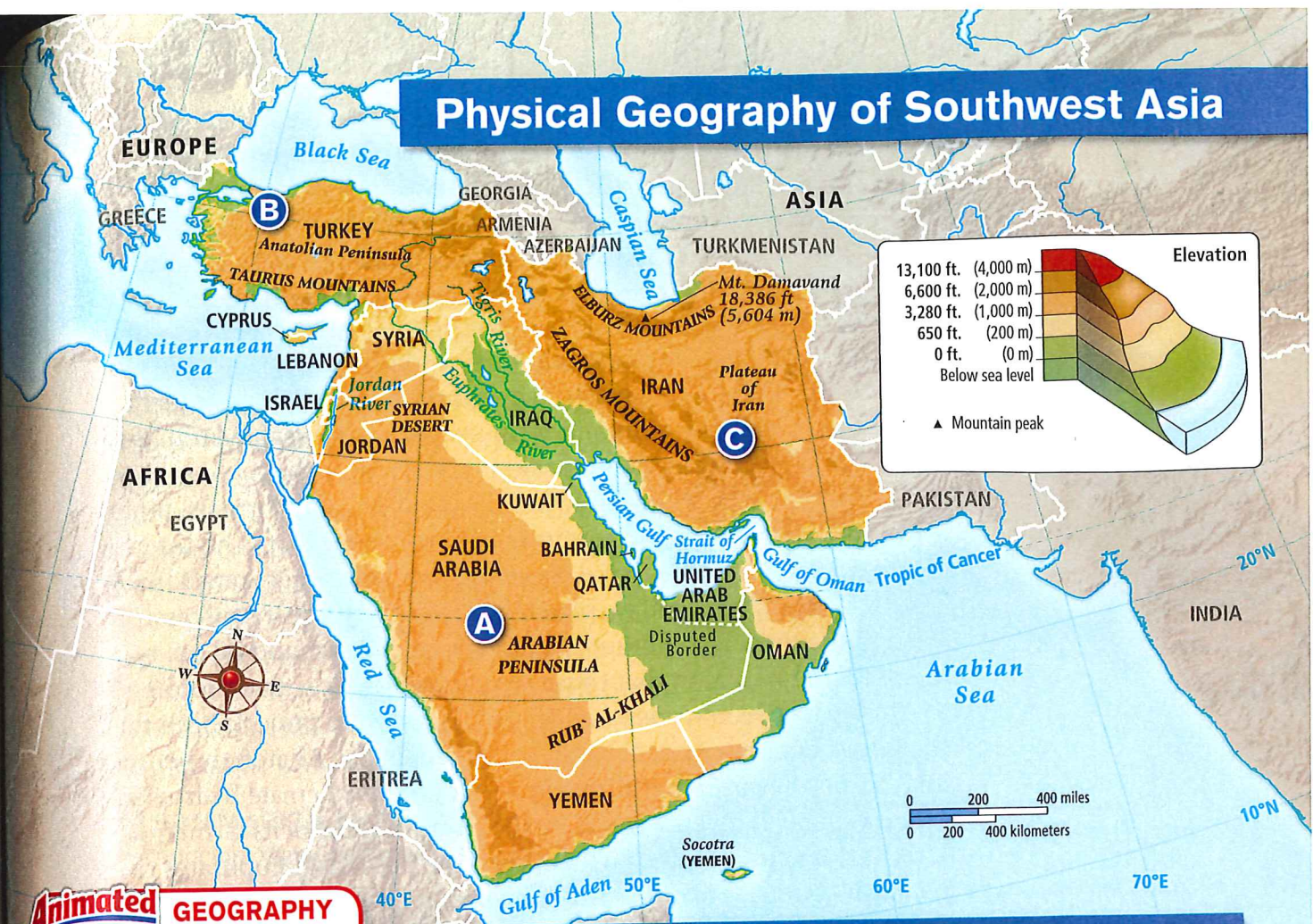
Providing Water

KEY QUESTION What methods have people used to provide water to arid Southwest Asia?

Living in an arid region can be challenging because people need water for drinking, bathing, and farming. Most people in Southwest Asia are crowded into coastal areas that receive rain or places with sources of water, such as river valleys and oases. An **oasis** is a fertile or green spot in the desert where underground water comes to the surface.

Ancient Techniques Residents of Southwest Asia have found ways to get the water they need to live in dryer areas. About 2,500 years ago, the people living in what is now Iran developed a technology called the qanat (KA•naht). A qanat **D**, a type of underground water supply system, is illustrated on the next page.

Physical Geography of Southwest Asia



Animated GEOGRAPHY

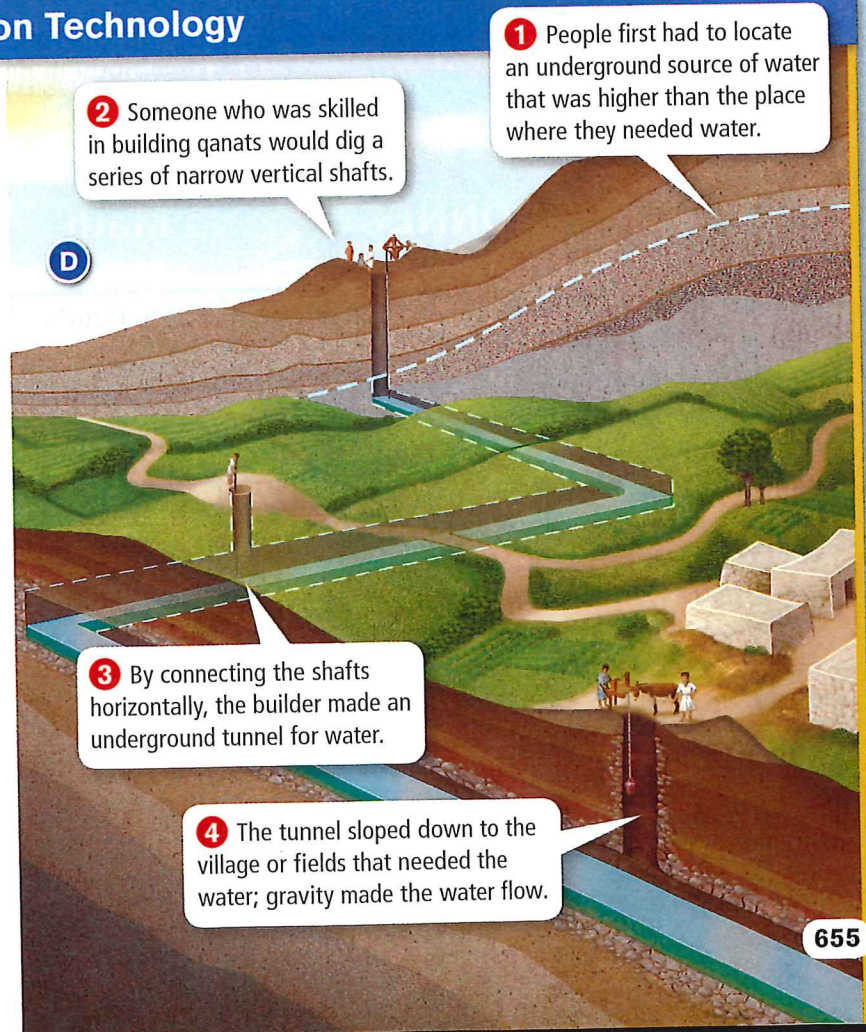
Qanats: An Ancient Irrigation Technology

[Click here](#) to see how a qanat works @ [ClassZone.com](#)

The ancient Iranians dug 30- to 100-foot shafts at the foot of mountains to tap into the water table. They built underground tunnels that followed the slope of the land. These qanats collect water that seeps into the ground from melting snow and rivers and streams. They can carry water to villages as much as 50 miles away for drinking and irrigating fields. They can supply most of a village's water.

CRITICAL THINKING

- 1. Make Inferences** What basic fact about the physical geography of the region has created a need for qanats?
- 2. Draw Conclusions** What advantages do qanats have over canals that are located on the surface?




In ancient times, the knowledge of how to make qanats spread from Iran to many other places. People living along rivers such as the Tigris and the Euphrates relied on surface water to grow their crops. They irrigated by building large canals to carry water from the river to their villages. Smaller canals carried water to the fields. In some arid regions such as Iran and Afghanistan, people still use qanats.

Modern Techniques Many nations in Southwest Asia have taken on huge projects to bring water to dry areas. Such water projects can make it possible to live on and farm previously unusable land. But sometimes the projects cause tension and even conflict.

In the 1950s, Israel began to build a giant system of canals, pipelines, and tunnels. Its purpose was to carry water from the Jordan River and Sea of Galilee to the Negev Desert. The project caused tensions with Syria and Jordan, who share those two water sources and worried that Israel would use too much water. Water and oil are two resources in the region that cause competition over scarce supplies.

Turkey has been working on its own large water project. Both the Tigris and Euphrates rivers begin in Turkey on the Anatolian peninsula. Turkey has been building a system of dams to create hydroelectric power and to divert water from the rivers to some of its farmlands. Syria and Iraq are located farther down the Tigris and Euphrates rivers. Both countries fear that if Turkey uses too much water for irrigation, they won't receive enough to meet their needs.

 **FIND MAIN IDEAS** Describe the methods people have used to provide water in Southwest Asia.

CONNECT to Math

One definition of a desert is a region that receives less than 10 inches of precipitation a year. By that definition, many cities of Southwest Asia are built in deserts. One such city is Damascus, Syria, which receives approximately seven inches of rain a year (see chart). One way to learn more details about the climate of a place is to create a graph in which the bars show average monthly rainfall.

Average Monthly Rainfall
(Damascus, Syria)

| Month | Rainfall (inches) |
|-----------|-------------------|
| January | 1.5 |
| February | 1.3 |
| March | 0.9 |
| April | 0.5 |
| May | 0.2 |
| June | 0.0 |
| July | 0.0 |
| August | 0.0 |
| September | 0.0 |
| October | 0.4 |
| November | 1.0 |
| December | 1.7 |

Source: www.worldclimate.com

Activity

Make a Rainfall Graph

Materials

- graph paper
- pencil
- ruler
- colored pencils

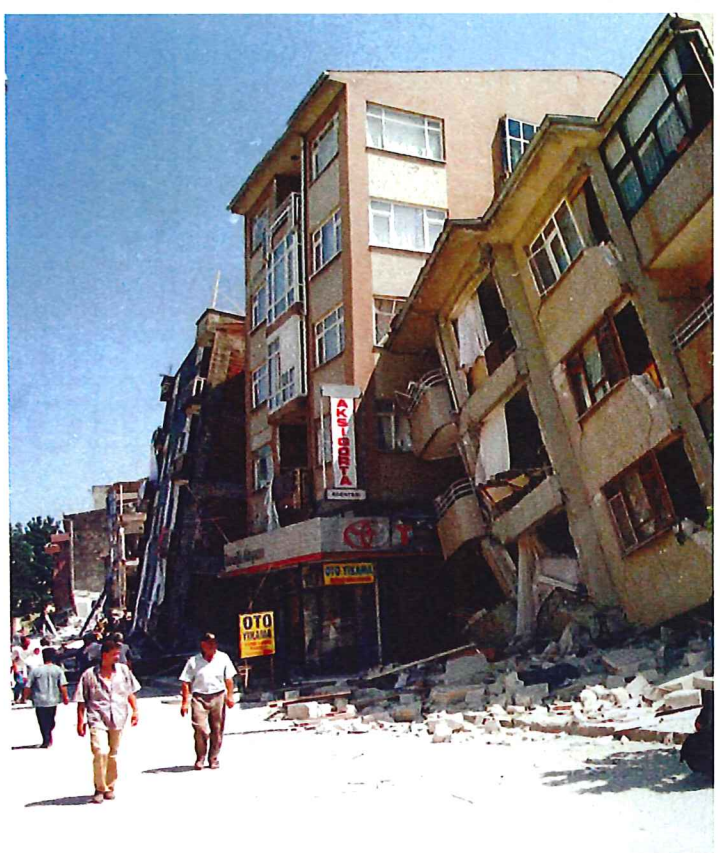
1. On a piece of paper, draw the horizontal axis and the vertical axis. On the vertical axis, place 20 marks, evenly spaced. Mark them 0.1, 0.2, 0.3, 0.4, etc., on up to 2.0.
2. Below the horizontal axis, write the names of all 12 months. You may abbreviate them. Space them evenly.
3. For each month, draw a bar whose height indicates the average amount of rainfall. Color all of the bars the same color.



The Threat of Earthquakes

KEY QUESTION Why does Southwest Asia have many earthquakes?

Southwest Asia has long been a crossroads where people meet, but it is also a place where several of the great plates that make up Earth's crust meet in a kind of continental collision zone. As a result, Southwest Asia is prone to deadly earthquakes. In August 1999, a major earthquake hit Izmit, Turkey. More than 17,000 people were killed, many of them crushed when buildings collapsed on them. Thousands more lost their homes. In December 2003, the city of Bam, Iran, experienced an earthquake that killed about 26,000 people. Sometimes, faulty building construction, rather than the strength of the earthquakes, causes many of these deaths.



Earthquake Damage People walk past rubble from collapsed buildings in western Turkey after the 1999 earthquake.

SUMMARIZE Explain why Southwest Asia has many earthquakes.

ONLINE QUIZ
For test practice, go to
Interactive Review
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Section 1 Assessment

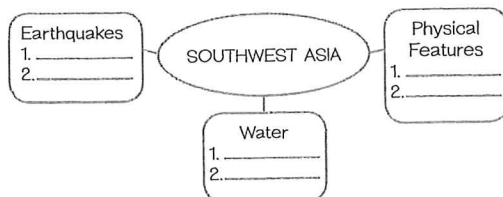
TERMS & NAMES

1. Explain the importance of

- Arabian Peninsula
- Plateau of Iran
- Euphrates River
- oasis

USE YOUR READING NOTES

- 2. Find Main Ideas** Use your completed chart to answer the following question:
What are some possible solutions to the problems caused by living in such an arid region?



KEY IDEAS

3. How do the mountains of Southwest Asia affect its climate?
4. How did people in ancient times move water from the Tigris and Euphrates rivers to their crops?
5. What might be done to limit earthquake damage in the region?

CRITICAL THINKING

6. **Make Inferences** When two countries rely on the same river, what issues might arise?
7. **Compare and Contrast** How is a qanat different from a surface irrigation system?
8. **CONNECT to Today** What might be some problems with building dams in a region prone to earthquakes?
9. **SCIENCE Create an Informative Poster** Working with a partner, research in the library or on the Internet to learn about the Richter scale, which is used to measure earthquakes. Then create a poster listing how much damage happens at each level on the scale.