

What You Will Learn...

Main Ideas

1. Key physical features of landlocked Central Asia include rugged mountains.
2. Central Asia has a harsh, dry climate that makes it difficult for vegetation to grow.
3. Key natural resources in Central Asia include water, oil and gas, and minerals.

The Big Idea

Central Asia, a dry, rugged, landlocked region, has oil and other valuable mineral resources.

Key Terms and Places

landlocked, p. 244

Pamirs, p. 244

Fergana Valley, p. 245

Kara-Kum, p. 246

Kyzyl Kum, p. 246

Aral Sea, p. 247

TAKING NOTES

As you read, use a chart like the one below to help you organize your notes on the physical geography of Central Asia.

Physical Features	
Climate and Vegetation	
Natural Resources	

Physical Geography

If YOU lived there...

You are flying in a plane low over the mountains of Central Asia. You look down and notice that the area below you looks as if a giant hand has crumpled the land into steep mountains and narrow valleys. Icy glaciers fill some of the valleys. A few silvery rivers flow out of the mountains and across a green plain. This plain is the only green spot you can see in this rugged landscape.

How would this landscape affect people?

BUILDING BACKGROUND The physical geography of Central Asia affects the lives of the people who live there. This region has been shaped throughout its history by its isolated location, high mountains, dry plains, and limited resources.

Physical Features

As the name suggests, Central Asia lies in the middle of Asia. All of the countries in this region are landlocked. **Landlocked means completely surrounded by land with no direct access to the ocean.** This isolated location is just one challenge presented by the physical features of the region.

Mountains

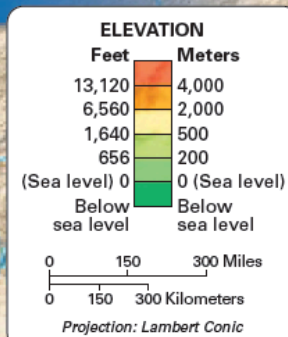
Much of Central Asia has a rugged landscape. In the south, many high mountain ranges, such as the Hindu Kush, stretch through Afghanistan. Tajikistan and Kyrgyzstan are also very mountainous. Large glaciers are common in high mountains such as the **Pamirs**.

Like its landlocked location, Central Asia's rugged terrain presents a challenge for the region. Throughout history, the mountains have made travel and communication difficult and have contributed to the region's isolation. In addition, tectonic activity causes frequent earthquakes there.

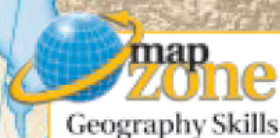


Interactive Map

Central Asia: Physical



1 The Hindu Kush mountain range rises around this valley in Afghanistan.



Location Central Asia is landlocked. No country in the region has direct access to the ocean.

- 1. Locate** Where are the mountains located?
- 2. Analyze** How do you think the region's location and physical features have affected it over the years?

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Plains and Plateaus

From the mountains in the east, the land gradually slopes toward the west. There, near the Caspian Sea, the land is as low as 95 feet (29 m) below sea level. The central part of the region, between the mountains and the Caspian Sea, is covered with plains and low plateaus.

The plains region is the site of the fertile **Fergana Valley**. This large valley has been a major center of farming in the region for thousands of years.

Rivers and Lakes

The Fergana Valley is fertile because of two rivers that flow through it—the Syr Darya (sir duhr-YAH) and the Amu Darya (uh-MOO duhr-YAH). These rivers flow from eastern mountains into the Aral Sea, which is really a large lake. Another important lake, Lake Balkhash, has freshwater at one end and salty water at the other end.

READING CHECK Generalizing What challenges do the mountains present to this region?



Central Asia: Land Use and Resources



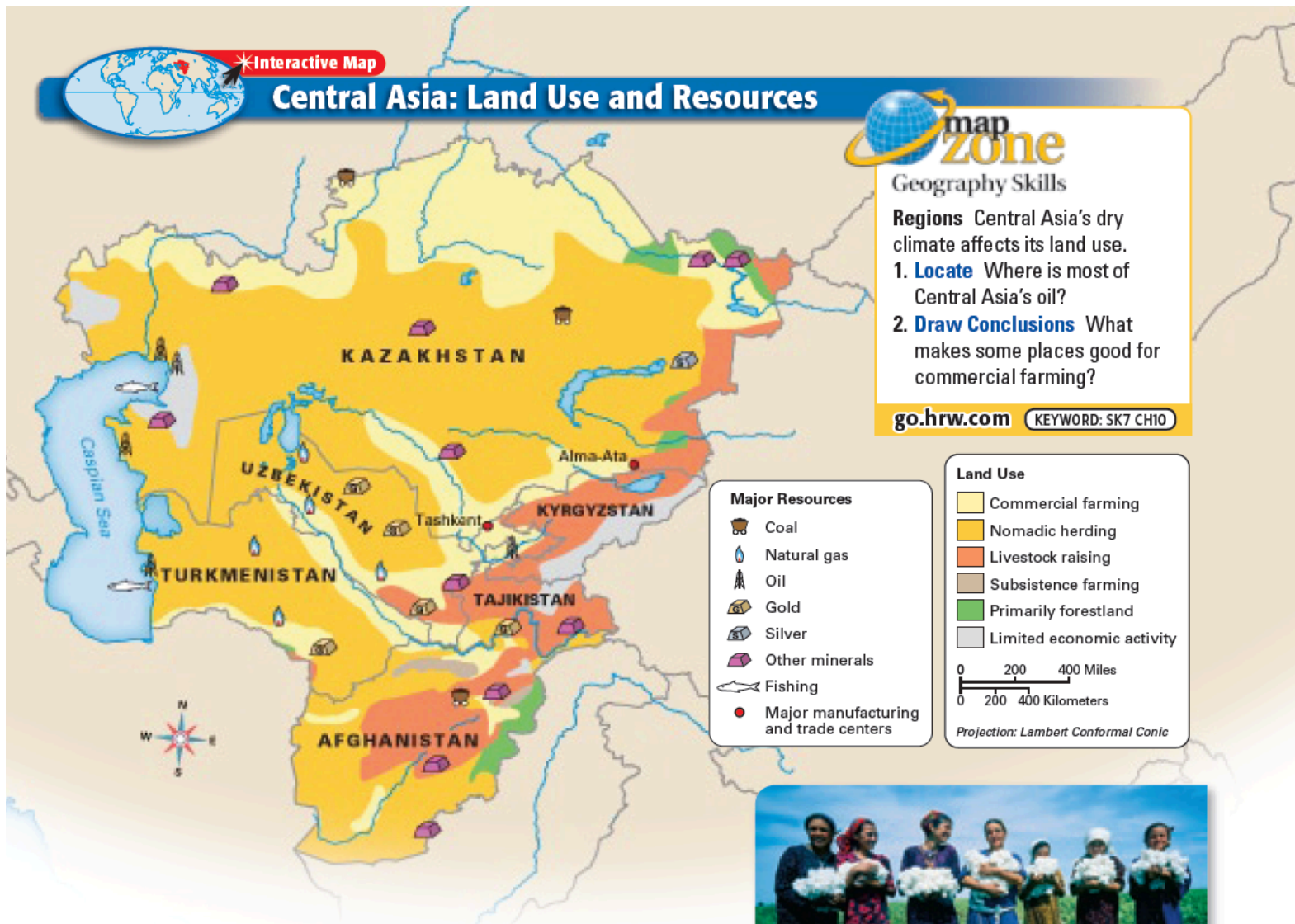
Geography Skills

Regions Central Asia's dry climate affects its land use.

1. **Locate** Where is most of Central Asia's oil?
2. **Draw Conclusions** What makes some places good for commercial farming?

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Climate and Vegetation

Most places in Central Asia have harsh, dry climates. Extreme temperature ranges and limited rainfall make it difficult for plants to grow there.

One area with harsh climates in the region is the mountain area in the east. The high peaks in this area are too cold, dry, and windy for vegetation.

West of the mountains and east of the Caspian Sea is another harsh region. Two deserts—the **Kara-Kum** (kahr-uh-KOOM) in Turkmenistan and the **Kyzyl Kum** (ki-ZIL KOOM) in Uzbekistan and Kazakhstan—have extremely high temperatures in the summer. Rainfall is limited, though both deserts contain several settlements. Rivers crossing this dry region make settlements



Cotton is the main crop in Central Asia. Students often have to take time off from school to help harvest the cotton.

possible, because they provide water for irrigation. Irrigation is a way of supplying water to an area of land.

The only part of Central Asia with a milder climate is the far north. There, temperature ranges are not so extreme and rainfall is heavy enough for grasses and trees to grow.

READING CHECK Generalizing Why is it hard for plants to grow in much of Central Asia?

Natural Resources

In this dry region, water is one of the most valuable resources. Although water is scarce, or limited, the countries of Central Asia do have oil and other resources.

Water

The main water sources in southern Central Asia are the Syr Darya and Amu Darya rivers. Since water is so scarce there, different ideas over how to use the water from these rivers have led to conflict between Uzbekistan and Turkmenistan.

Today farmers use river water mostly to irrigate cotton fields. Cotton grows well in Central Asia's sunny climate, but it requires a lot of water. Irrigation has taken so much water from the rivers that almost no water actually reaches the **Aral Sea** today. The effect of this irrigation has been devastating to the Aral Sea. It has lost more than 75 percent of its water since 1960. Large areas of seafloor are now exposed.

In addition to water for irrigation, Central Asia's rivers supply power. Some countries have built large dams on the rivers to generate hydroelectricity.

Oil and Other Resources

The resources that present the best economic opportunities for Central Asia are oil and gas. Uzbekistan, Kazakhstan, and Turkmenistan all have huge reserves of oil and natural gas.

However, these oil and gas reserves cannot benefit the countries of Central Asia unless they can be exported. Since no country in the region has an ocean port, the only way to transport the oil and gas efficiently is through pipelines. But the rugged mountains, along with economic and political turmoil in some surrounding countries, make building and maintaining pipelines difficult.

In addition to oil and gas, some parts of Central Asia are rich in other minerals. They have deposits of gold, silver, copper, zinc, uranium, and lead. Kazakhstan, in particular, has many mines with these minerals. It also has large amounts of coal.

FOCUS ON READING

What context clues give you a restatement of the term *scarce*?

READING CHECK **Categorizing** What are three types of natural resources in Central Asia?

SUMMARY AND PREVIEW In this section you learned about Central Asia's rugged terrain, dry climate, and limited resources. In the next section you will learn about the history and culture of Central Asia.

Section 1 Assessment

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Online Quiz

KEYWORD: SK7 HP10

Reviewing Ideas, Terms, and Places

- a. Identify** What fertile area has been a center of farming in Central Asia for many years?
b. Make Inferences How does Central Asia's terrain affect life there?
- a. Describe** Where do people find water in the deserts?
b. Make Generalizations What is the climate like in most of Central Asia?
- a. Recall** What mineral resources does Central Asia have?
b. Explain How have human activities affected the **Aral Sea**?
c. Elaborate What kinds of situations would make it easier for countries of Central Asia to export oil and gas?

Critical Thinking

4. Finding Main Ideas

Look at your notes on this section. Then, using a chart like the one here, write a main idea statement about each topic.

	Main Idea
Physical Features	
Climate and Vegetation	
Natural Resources	

FOCUS ON VIEWING

- Describing Physical Geography** Note information about physical features, climates, and resources of this region. Highlight information to include in your presentation.