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| **LESSON 1**  **Physical Geography of Southwest Asia**  **ESSENTIAL QUESTION** | |
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| *Southwest Asia is characterized by a complex physical geography that influences its people, history, and importance in the world today.*  **Southwest Asia’s Physical Features**  ***What are the main landforms and resources in Southwest Asia?***  Southwest Asia comprises 15 countries that lie in the area where Asia meets Europe and Africa. Similarities in physical geography help unite these countries into a single region. Mountains and plateaus formed by active plate tectonics can be seen throughout the region. Dry, desert climates are also widespread.  **Mountains and Plateaus**  Mountains and plateaus dominate the landscape of Southwest Asia. They have been created over the past 100 million years by collisions between four tectonic plates. This movement also caused earthquakes.  Southwest Asia’s loftiest mountains rise in the Hindu Kush range, which stretches across much of Afghanistan and along Afghanistan’s border with the South Asian country of Pakistan.  The Hindu Kush and neighboring ranges form natural barriers to travel and trade. As a result, mountain passes have been important in this area. One of the world’s most famous passes is the Khyber Pass. It links the cities of Kabul, Afghanistan, and Peshawar, Pakistan. The pass has served as a route for trade and invading armies for thousands of years. |  |

A vast plateau, covering much of Iran, is encircled by high mountain ranges. The mountains of western Iran merge with those of eastern Turkey. Close to the border rises Turkey’s highest peak, Ararat, a massive, snowcapped volcano that last erupted in 1840. An elevated area known as the Anatolian Plateau spreads across central and western Turkey.

The Arabian Peninsula consists of Saudi Arabia, Yemen, Oman, and several other countries. It is a single, vast plateau that slopes gently from the southwest to the northwest. Long mountain ranges that parallel the peninsula’s southwestern, northwestern, and southeastern coasts are actually the deeply eroded edges of the plateau.

**Bodies of Water**

The region of Southwest Asia has thousands of miles of coastline. Turkey has coasts on the Mediterranean and Black seas. Syria, Lebanon, Jordan, and Israel have coasts on the Mediterranean Sea. Jordan, Saudi Arabia, and Yemen border the long, narrow Red Sea. The Red Sea has been one of the world’s busiest waterways since Egypt’s Suez Canal, connecting the Red Sea and the Mediterranean, was completed in 1869. To the southeast of the Arabian Peninsula lies a part of the Indian Ocean called the Arabian Sea. Yemen and its neighbor Oman have coasts along this sea.

In the northeast, the Arabian Peninsula is shaped by the Persian Gulf, which is connected to the ocean by a strategic waterway called the Strait of Hormuz. The Persian Gulf has become tremendously important in world affairs since the middle of the 1900s.

Eight of Southwest Asia’s 15 countries border the Persian Gulf: Oman, the United Arab Emirates, Saudi Arabia, Qatar, Bahrain, Kuwait, Iraq, and Iran. In the north, Iran also borders the landlocked Caspian Sea.

The Dead Sea, which lies between Israel and Jordan, is also landlocked. It is far smaller than the region’s other seas. At 1,300 feet (396 m) below sea level, it ranks as the world’s lowest body of water, and its shore represents the lowest land elevation.

Southwest Asia’s two longest and most important rivers are the Tigris and the Euphrates, which are often considered parts of the same river system. The rivers begin within 50 miles (80 km) of each other in the mountains of eastern Turkey. In their lower courses, they flow parallel to one another across a broad **alluvial plain**, a plain created by sediment deposited during floods. The plain covers most of Iraq as well as eastern Syria and southeastern Turkey. This area has been known since ancient times as Mesopotamia, which is Greek for “land between the rivers.” Thousands of years ago, one of the world’s earliest civilizations took root in the fertile lands of Mesopotamia.

**Deserts**

Desert landscapes spread across most of Southwest Asia. The Arabian Desert, which covers nearly the entire Arabian Peninsula, is the largest in the region and one of the largest in the world. It is made up of rocky plateaus, gravel-covered plains, salt-crusted flats, flows of black lava, and sand seas, which are unbroken expanses of sand.

In the southern part of the peninsula lies the largest sand sea in the world: the Rub' al-Khali, or Empty Quarter. Winds have sculpted its reddish-orange sands into towering dunes and long, winding ridges. The climate is so dry and hot that this starkly beautiful wilderness cannot support permanent human settlements. In some areas, nomadic people known as the Bedouin keep herds of camels, horses, and sheep.

The Arabian Desert is a harsh environment, but plants thrive in oases. An **oasis** is an area in a desert where underground water allows plants to grow throughout the year.

***Analyzing*** How has tectonic activity—that is, movement of Earth’s crustal plates—helped shape landforms in Southwest Asia?

**Southwest Asia’s Climates**

***What are some ways that mountains, seas, and other physical features affect climate in Southwest Asia?***

A single type of climate dominates most of Southwest Asia. The only parts of the region with greater climatic variety lie in the northwest and northeast.

**An Arid Region**

Although this region is surrounded by seas and gulfs, water is a scarce resource here. Most of the region falls within an arid, or very dry, climate zone. Deserts—areas that receive less than 10 inches (25 cm) of annual rainfall—cover nearly the entire Arabian Peninsula as well as large parts of Iran. These deserts are part of a broad band of arid lands that stretch from western North Africa to East Asia. Southwest Asia’s arid lands can be brutally hot in the summer. Temperatures in the Arabian Desert can soar as high as 129°F (54°C).

Although rain is scarce in this region, rainfall can quickly transform the desert landscapes. Torrents of water race through **wadis** (WAH-deez), or streambeds that are dry. Buried seeds sprout within hours, carpeting barren gravel plains in green.

At the margins of Southwest Asia’s dry zones lie areas that are considered**semiarid** (seh-mee-AIR-id), or somewhat dry. These areas are found in the highlands and mountain ranges of the region.

A Mediterranean climate prevails along Southwest Asia’s Mediterranean and Aegean coasts and across much of western Turkey. Winds blowing off the seas bring mild temperatures and moderate amounts of rainfall during the winter months. The summer months are warm and dry.

Mountainous areas of eastern Turkey, western Iran, and central Afghanistan have continental climates in which temperatures **vary** greatly between summer and winter. The mountains of the Hindu Kush range in far eastern Afghanistan fall within a highland climate zone, and glaciers are found among the soaring peaks.

***Identifying*** In what parts of Southwest Asia could farmers grow crops without irrigation?

**Natural Resources**

***How do natural resources influence the lives of people in Southwest Asia?***

Scarcity of water has shaped this region’s human history and settlement patterns. Other natural resources, however, are found in abundance. The most important resources are two fossil fuels for which the world has a seemingly unquenchable thirst: oil and natural gas.

The gaseous form of petroleum is called natural gas, and the liquid form is called crude oil, or simply oil. Crude oil is refined to produce energy sources such as gasoline, diesel fuel, heating oil, and industrial fuel oil. Petroleum is also the basic raw material used to make many other products, such as plastics, bicycle tires, and cloth fibers.

The world’s largest known deposits of petroleum are in Southwest Asia. Most are concentrated around and under the Persian Gulf. Together, five countries that border the gulf—Saudi Arabia, Iran, Iraq, Kuwait, and United Arab Emirates—hold more than half the oil that has been discovered in the world.

Most of the petroleum produced by these countries is exported to industrialized countries. Petroleum revenues have brought tremendous wealth to a few people in the exporting countries. But only in a relatively few areas has the wealth been used to improve the lives of the people or bring about modernization.

Southwest Asia also has a great variety of mineral resources. Large coal deposits are found in Turkey and Iran. Phosphates, used to make fertilizers, are mined in Iraq, Israel, and Syria. Between 2006 and 2010, American geologists conducting a survey of Afghanistan discovered enormous deposits of iron, copper, gold, cobalt, lithium, and other minerals such as rare earth elements used to make electronic devices.

***Identifying*** Five countries that border the Persian Gulf hold more than half the oil that has been discovered in the world. Name three of the countries.

**LESSON 1 REVIEW**

**Reviewing Vocabulary**

1. Describe the difference between a *wadi* and an *oasis*.

**Answering the Guiding Questions**

1. ***Identifying*** What makes the Dead Sea distinct?
2. ***Describing*** What are the major physical geography features of the Arabian Peninsula?
3. ***Describing*** If you were to travel across the Arabian Desert, what are two types of landscapes or landforms you might see?
4. ***Citing Text Evidence*** The United Nations ranks Afghanistan as one of the world’s poorest countries. How might recent discoveries change that situation?

**6.*Narrative Writing*** Imagine that you are spending a few days exploring the area of the Arabian Desert called the Rub’ al-Khali. Write a one-paragraph journal entry describing the experience.