



The Arabian Peninsula

from the Esri GeoInquiries™ collection for World Geography

Target audience – World geography learners

Time required – 15 minutes

Activity	Explore the physiographic and cultural attributes of the Arabian Peninsula.
Social studies standards	C3:D2.Geo.3.6-8. Use paper-based & electronic mapping & graphing techniques to represent & analyze spatial patterns of different environmental & cultural characteristics. C3:D2.Geo.2.6-8. Use maps, satellite images, photographs, and other representations to explain relationships between the locations of places and regions and changes in their environmental characteristics.
Learning Outcomes	<ul style="list-style-type: none">• Describe the physical characteristics of the Arabian Peninsula.• Understand the physiographic factors that affect the countries located on the Arabian Peninsula.

Map URL: <http://esriurl.com/worldGeoInquiry10>

? Ask

Where is the Arabian Peninsula located?

- Click the link above to launch the map.
- With the Details button underlined, click the button, Show Contents.
- ? Which continents surround and include the Arabian Peninsula? [*Africa to the south and Europe to the northeast; the Arabian Peninsula is part of the continent of Asia*]
- Uncheck the box to the left of the layer name, Continents.

! Acquire

What are the physical characteristics of the Arabian Peninsula?

- Zoom in and click several different colors of the peninsula.
- ? Where on the Arabian Peninsula are there mountains (1 meter x 3.3 = number of feet)? [*Along the west coast and the northeast coast*]
- Turn on the layer, Water Bodies. Click the layer name.
- Click the Water Bodies sub-layer name, and then click the Show Legend button.
- Pan and zoom the map to view the waterbodies on the Arabian Peninsula.
- ? What types of waterbodies are on the Arabian Peninsula? [*Permanent and intermittent (dry during certain times of the year)*]
- Zoom in until the Springs and Streams layer names are not grayed out, and then turn on the layers.
- ? Where on the Arabian Peninsula is there no water at all? [*The south-central part of the peninsula*]
- ? Is there any relationship between landforms and the availability of water? [*Mountains and areas of higher elevation have more surface water.*]

🔍 Explore

What type of land makes up the Arabian Peninsula?

- Turn off the layers, Water Bodies, Springs, and Streams.
- Turn on the layer, Annual Rainfall. View its legend.
- The rain in millimeters and 1 inch is equivalent to 25.4 mm. A desert is defined as a place that gets fewer than 10 inches of rain per year.
- ? How many millimeters is equal to 10 inches? [*254 mm*]
- ? Approximately what percentage of the Arabian Peninsula is desert? [*70% to 90%*]

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Analyze

What are the temperature ranges on the Arabian Peninsula?

- Turn off the layer, Annual Precipitation.
- Turn on the layer, Temp: Sept - Nov. View its legend.
- ? What is the approximate range of temperatures across the Arabian Peninsula from September to November? [14°C to 30°C or 57°F to 86°F]
- Turn the temperature layers on and off one at a time to see the change of temperatures on the Arabian Peninsula through the four seasons. (Remember, click each layer name and view its legend.)
- ? What is the approximate range of temperatures across the Arabian Peninsula during the hottest season? [June to August: 18°C to 40°C or 66°F to 104°F]

Act

Where would the most habitable land on the Arabian Peninsula be?

- Turn on the layer, Ecozones.
- ? What is the relationship between the Arabian Peninsula's ecozones and its patterns of landforms, precipitation, and temperature? [The limited zones of temperate grassland on the Arabian Peninsula are found in the mountains, where there is more precipitation and milder temperatures.]
- ? Which of the region's physical characteristics would be considered most desirable for habitation? [Grassland ecosystems, areas with greater than 500 mm/20 inches of annual precipitation, and areas with access to permanent bodies of water or springs]

ZOOM TO A BOOKMARK

- Click Bookmarks.
- Click a bookmark name to zoom to a map location and scale.

TURN A MAP LAYER ON AND OFF

- Make sure that the Details pane is selected, and then click Contents.
- To show individual map layers, select the check boxes next to the layer names.
- Hint: If a map layer name is light gray, zoom in or out on the map until the layer name is black. The layer can now be turned on.

Next Steps

DID YOU KNOW? ArcGIS Online is a mapping platform freely available to public, private, and home schools. A school subscription provides additional security, privacy, and content features. Learn more about ArcGIS Online and how to get a school subscription at <http://www.esri.com/schools>. THEN TRY THIS...

- Click the Elevation Tinted Hillshade layer, and then click the More Options button (three dots) and choose Transparency.
- Adjust transparency until you can see the country boundaries.
- Evaluate which countries have mountains and where they are in relation to country borders.

TEXT REFERENCES

This GIS map has been cross-referenced to material in sections of chapters from these middle school texts.

- *World Cultures and Geography* by McDougal Littell
- *My World Geography* by Pearson