



LEVEL

2

GDP Per Capita

from the Esri GeoInquiries™ collection for World Geography

Target audience – World geography learners

Time required – 20 minutes

Activity

Explore the GDP per capita relative to the %GDP by sector.

Social studies Standards**C3:D2.Geo.11.6-8.** Explain how the relationship between the environmental characteristics of places and production of goods influences the spatial patterns of world trade.**C3:D2.Eco.13.6-8.** Explain why standards of living increase as productivity improves.**Learning Outcomes**

- Evaluate GDP per capita compared to %GDP by sector (agriculture, industry, services).
- Explore the terms “developed” and “developing” relative to countries of the world in 2005.

Level 2 GeoInquiry Requirements

- A free school ArcGIS Online organization account. Instructors or students must be signed in to the account to complete this activity.
- Approximately .5 credits will be used per person in the completion of this activity as scripted.

Map URL: <http://esriurl.com/WorldGeoInquiry12> **Ask**

How does GDP per capita data relate to developed or developing countries?

- Click the link above to launch the map.
- With the Details button underlined, click the button, Show Contents.
- GDP per capita is GDP (the “value of all final goods and services produced within a nation in a given year”) divided by population of that nation. It is thought that a minimum of \$12,000 GDP per capita is one measure of a developed country.
- In the Contents pane, check the GDP Per Capita layer box to turn on the layer.
- Pause your pointer over the layer name and click the Show Legend button.
- ? Which classifications in the legend would qualify for developing status? [*The two lowest classifications, which span 0–13,500*]

Acquire

How do countries with the lowest GDP per capita compare to %GDP agriculture?

- View the legend for the % GDP By Sector – Agriculture layer.
- Pause your pointer over the GDP Per Capita layer name and click the Filter button.
- Create the expression: **GDP Per Capita Is Between 0 And 1000.**
- Turn the newly filtered GDP Per Capita layer on and off to compare to GDP Agriculture.
- ? What can you say about GDP per capita compared to GDP agriculture? [*Answers will vary, but the countries with very low GDP are mostly in the mid to higher %GDP agriculture.*]

Explore

Which countries had at least 40% GDP in industry and services?

- See the Find Existing Locations ToolTip on the next page.
 - Click Analysis, expand Find Locations, and choose Find Existing Locations.
 - In the Find Existing Locations tool, set the following values in the corresponding numbered section:
 - 1 Click the down arrow and choose % GDP By Sector-Services.
 - 2 Click Add Expression, build the query: % **GDP By Sector-Services Where % GDP Services Is At Least 40**, then click Add.
 - 2 Click Add Expression again and add another query: % **GDP By Sector-Services Where % GDP Industry Is At Least 40.**
- (Continued on next page.)

more ►

Explore

Which countries had at least 40% GDP in industry and services? (continued)

- 3 Give your new layer a unique, descriptive name.
Leave the Use Current Map Extent box checked so that in this case, you will compute % GDP by sector for all countries of the world.
Always click Show Credits to ensure acceptable credit usage, and then click Run Analysis.
- ? How many countries had at least 40 percent of their GDP in Industry *and* services? [20]
- ? What pattern dominates these countries? [Two of the countries are in South America, two in Africa, two in Europe, and the balance in Asia]

Analyze

Which countries had the top 10 highest GDP per capita?

- Pause your pointer over the GDP Per Capita layer and click the Filter button.
- In the Filter dialog box, click Remove Filter.
- Make sure that the GDP Per Capita legend is showing.
- Turn the new layer that you created on and off.
- ? Where were most of the countries with 40% GDP in Services and Industry GDP per capita breaks located? [GDP between 5,200–13,500 except for Norway, which was in the highest classification, and Indonesia, which was in the lowest classification.]

Act

Which countries that had industry and services over 40% had GDP per capital under \$12,000?

- Make sure that the New Services And Industries layer that you created is turned on.
- Click the countries on the map that are represented by this new layer to answer the question.
- ? Which countries had GDP per capita under \$12,000? [Yemen, Lesotho, Indonesia, Venezuela, Azerbaijan, China, Iran, Thailand, Kazakhstan, and Botswana]

FIND EXISTING LOCATIONS

- This tool selects existing features in your study area that meet a series of criteria that you specify.
- These criteria can be based on attribute queries and spatial queries (for example, within 1 mile of a river).

SET FILTER PARAMETERS

- The filter is only available for certain map layers.
- In the Contents pane, pause your pointer over a layer and click the Filter button beneath the layer name.
- Set the Filter parameters.

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...

- Enrich the data in the map by gathering current %GDP per capita.
- Compare the new recent % GDP Per Capita layer to the Historical 2005 layer to evaluate growth.

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