What's Up With The Yangtze River? Part 1

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Photo by Glenda Sullivan

Oklahoma Academic Standards for the Social Studies

Grade 7 World Geography: Eastern Hemisphere

OAS 2012	OAS 2019
Content Standard 1 The student will analyze data from a geographic perspective using the skills and tools of geography.	**7.1** The student will analyze data from a geographic perspective using the skills and tools of geography.
1.2 Integrate visual information, draw conclusions, and make predictions from geographic data and analyze spatial distribution and patterns by interpreting that data as displayed on globes, graphs, charts, satellite and other forms of visual imagery including data from bar and line graphs, pie charts, thematic maps, population pyramids, climagraphs, cartagrams, contour/relief maps, GIS systems & diagrams.	**7.1.5** Integrate visual information, draw conclusions and make predictions from geographic data and analyze spatial distribution and patterns by interpreting that data as displayed on geographic tools.
6.1.3 Describe basic types of map projections and compare how they display information including Mercator, Peterson, and Robinson, and apply the concepts of scale, distance, direction, relative location, absolute location, and latitude and longitude.	**6.1.2** Describe how various map projections distort the surface of the earth and apply the concepts of scale, distance, direction, relative location, absolute location, and latitude and longitude.
Content Standard 5 The student will analyze the interactions of humans and their environment in the Eastern Hemisphere.	**7.4** The student will analyze the interactions of humans and their environment in the Eastern Hemisphere.
5.3 Integrate visual information to analyze regional problems and policies having spatial dimensions in the Eastern Hemisphere.	**2.B.6-8.1** Draw upon gathered information to analyze how a specific problem can manifest itself in local, regional, and global levels over time, evaluating options for individual and collective solutions.

Oklahoma Academic Standards for the Social Studies

Process and Literacy Standards

OAS 2012	OAS 2019
Process and Literacy Skills Standard 1 The student will develop and demonstrate Common Core Social Studies reading literacy skills.	**Read Critically and Interpret Informational Sources:** Students will engage in critical, active reading of grade-level appropriate primary and secondary sources related to key social studies concepts, including frequent analysis and interpretation of informational sources.
7.1.C.7 Integrate visual information (e.g., in charts, graphs, photographs, videos, or maps) with other information in print and digital texts.	**4.A.6-8.2** Integrate the use of visual information (e.g. maps, charts, photographs, videos, political cartoons) with textual information from primary and secondary sources.
Process and Literacy Skills Standard 2 The student will develop and demonstrate Common Core Social Studies writing literacy skills.	**Engage in Evidence-Based Writing** Students will apply effective communication skills by developing a variety of evidence-based written products designed for multiple purposes and tasks, in order to demonstrate their understandings of social studies concepts, ideas, and content.
B.7 Conduct short research projects to answer a question (including a self- generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.	**5.B.6-8.1** Refine and formulate viable research questions related to social studies investigations, using well-developed theses or claims.

Photo by Glenda Sullivan

http://www.travelchinaguide.com/map/

The source of the Yangtze River is an ancient glacier located in the Tibetan Plateau. The mouth empties into the East China Sea near Shanghai before flowing into the Pacific Ocean.

Find the latitude/ longitude for the Yangtze River at its source. 33ºN 91ºE

Find the latitude/ longitude for the Yangtze River at its mouth. 31ºN 121ºE

http://www.tourschina.com/yangtze-river/three-gorges.htm

The Yangtze is the 3rd longest river in the world and the longest in China, stretching more than 3,900 miles as it winds its way from the Tibetan Plateau to the East China Sea near Shanghai. It cuts through the Wu Mountain Range, forming the scenic Three Gorges: Qutang Gorge, Wu Gorge, and Xiling Gorge.

http://pekingikacsa.blog.hu/2013/06/03/arviz_a_jangcen

The Yangtze River has a history of devastating floods. The worst flood in 130 years occurred on the Yangtze in 1998 when 4,000 people were killed, 14 million were left homeless, and 5 million homes were destroyed. The Chinese people have long dreamed of a way to control flooding on "The Great Dragon."

November 7, 2006

April 17, 1987

http://earthobservatory.nasa.gov/IOTD/view.php?id=7769

Yangtze River after completion of the Three Gorges Dam

What differences are seen in the two satellite photos?

Yangtze River several years before before construction on the dam began

Three Gorges Dam

The dam was mainly built to control deadly floods downstream.

It is the largest hydroelectric power station in the world producing clean electricity. The dam produces enough electricity to supply 3% of China's energy goals to reduce air pollution by replacing coal-produced energy with hydroelectric power.

Photo by Don Sullivan

China Racing Ahead With Hydro

Hydropower capacity worldwide (in gigawatts)

1 gigawatt = 1000 megawatts
1 gigawatt = 1 billion watts

statista The Statistics Portal @StatistaCharts

Source: International Hydropower Association

https://d28wbuch0jlv7v.cloudfront.net/images/infografik/normal/ChartOfTheDay_1471_China_Racing_Ahead_With_Hydro_n.jpg

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