

Using Geography to Teach Mosque/Masjid Architecture

OVERVIEW & OBJECTIVES	GRADES
<p>Students will learn about mosque/masjid architecture from a geographic perspective. They will use clue cards to identify locations and then, using pictures, identify the mosque/masjid using evidence such as climate, architectural style, cultural influences, and available resources. Students will be able to answer the Essential Question: How has geography affected mosque/masjid construction around the world? This lesson refers to terms in both English and Arabic, to be used at the teacher’s discretion. This lesson may be adapted to locate and identify the architecture of churches around the world or compare various religious buildings around the world.</p> <p><i>Students will be able to:</i></p> <ul style="list-style-type: none"> • Identify the location of several sites given their latitude and longitude. • Describe similarities and differences among mosques/masjids including the climate, culture influences, and resource characteristics in which they are located. • Describe various religious beliefs and practices. 	8 th - 9 th
	TIME
	1-2 days
	REQUIRED MATERIALS
	<ul style="list-style-type: none"> ✓ Handouts: “Activity Answers”; “Clue Cards”; “Matching Activity”; pictures of mosques/masjids ✓ Atlases

MINNESOTA SOCIAL STUDIES STANDARDS & BENCHMARKS

(8th Grade)

Standard 3. Places have physical characteristics (such as climate, topography and vegetation) and human characteristics (such as culture, population, political and economic systems).

8.3.2.3.1 Use appropriate geographic tools to analyze and explain the distribution of physical and human characteristics of places.

Standard 14. Globalization, the spread of capitalism and the end of the Cold War have shaped a contemporary world still characterized by rapid technological change, dramatic increases in global population and economic growth coupled with persistent economic and social disparities and cultural conflict. (The New Global Era: 1989 to Present)

8.4.3.14.3 Describe varieties of religious beliefs and practices in the contemporary world including

Shamanism/Animism, Hinduism, Buddhism, Judaism, Christianity and Islam. (The New Global Era: 1989 to Present)

(9th Grade)

Standard 9. The environment influences human actions; and humans both adapt to and change, the environment.

9.3.4.9.1 Analyze the interconnectedness of the environment and human activities (including the use of technology), and the impact of one upon the other.

SUGGESTED PROCEDURE

1. Students will be provided pictures of mosques/masjids, cards of information, and atlases to determine where ten mosques/masjids are located throughout the world. The teacher will begin by dividing the class into ten small groups. Each small group will be given one “clue” card with geographic coordinates and prayer times. You may need to review the names and times of prayers:

- Fajr: from dawn to sunrise
- Zuhr: from moments after the zenith (sun’s highest point during the day) to mid-afternoon
- ‘Asr: from mid-afternoon to before sunset
- Maghrib: from sunset to the end of twilight
- ‘Isha: from end of twilight to midnight

The teacher may have one class set of pictures for each small group to explore a single picture thoroughly, or multiple copies of the pictures would be needed if the small groups explore all ten pictures.

2. Post pictures of the mosques/masjids on the board or have copies of them available for each small group. Once the students have identified and located the city based on the clue card using the handout, “Matching Activity”, they should use geographic information from an atlas to determine which mosque/masjid photo is from their city. Encourage students to use clues such as climate, architectural style, cultural influences, and available resources used to build the mosque/masjid to identify the correct match. (Alternatively, give each small group all the cards and have them try to match all the cities with the photos.)

3. Conduct a class discussion in which students explain their reasoning for the matches. Highlight aspects of climate that would affect mosque/masjid architecture.

Possible discussion points:

- Have students look at the different prayer times. Discuss with them how the location of a city closer to the equator or one farther north or south would affect prayer time (due to the sun).
- How does climate affect the actual mosque/masjid? Does it have a steep roof for an area that rains or snows? Why would that be important?
- Examine the construction material used in the different mosques/masjids. What does that tell you about local resources?
- What types of clues in the picture helped determine in what region the mosque/masjid was located? For example, palm trees would be somewhere tropical, snow in the picture would be somewhere farther from the equator, land that had been submerged in water after a tsunami would be a coastal region or an island—possibly tropical.

- What cultural clues were present in the picture that helped determine the location of the mosque/masjid?
- Since the early years of Islam, mosques/masjids had the compass rose/qibla (to face the direction of Mecca). Why would the compass rose/qibla directions be different throughout the world? What skills would Muslims rely on to achieve this as the mosques/masjids were built farther from the city?
- The Great Mosque in Xi'an is at a major stopping point along the Silk Trade Route. Why do you think the mosque/masjid was built there?

EXTENSIONS

1. Compare the architecture of churches around the world using clue cards with geographic coordinates. Match the location with a picture of the church using evidence such as climate, architectural style, cultural influences, and available resources. The teacher may, instead, compare the architecture of religious buildings around the world to investigate religions from a geographic perspective.

2. Students brainstorm architectural elements they think are required for a mosque/masjid. (You may choose to focus on purpose-built mosques/masjids or include mosques/masjids that were originally built for other purposes, as is the case for most U.S. mosques/masjids.)

Highlight or review key vocabulary related to mosque/masjid architecture including:

- Minaret (tower) and adhan (call to prayer)
- Qibla (compass rose) and mihrab (niche where compass rose is located)
- Minbar (pulpit) and khutba (sermon)
- Mahaslah (scripture) and wudu (ablution)

You can use the virtual tour of the Suleymaniye Mosque as a visual for these terms at

<http://www.saudiaramcoworld.com/issue/200605/suleymaniye/tour.htm>. Have students draw a basic diagram of the inside of a mosque/masjid and label the parts using the vocabulary.

3. Students may compare adhans or the calls to prayer from each country by using YouTube.

4. Discuss elements of classical mosque/masjid architecture such as the representation of heavenly, angelic, and earthly realms. You may also discuss the common physical separation of men and women by balconies, separate rooms, or curtains, and other religions that also separate men and women (especially Judaism).

5. Students will either develop a design (demonstrated through a model, drawing, architect's plans, or written description) of the type of mosque/masjid that would be feasible for either their hometown or a location of their choice. They must include the required elements of a mosque/masjid and consider cultural influences, climate, resources, and/or local artisans in their designs.

ASSESSMENTS

"Matching Activity" handout

Class discussion

RESOURCES

Pictures of multiple mosques/masjids:

“Mosque” from Wikipedia

<http://en.wikipedia.org/wiki/Mosque>

“Mosques around the world” from Pakistan Defence

<http://defence.pk/threads/mosques-around-the-world.68865/>

“Archive for the Most Beautiful Mosques Around the World & the Most Magnificent Mosques in Indonesia Category” from Mannaimaya: Adventure Guide

<http://mannaimayaadventure.com/category/the-most-beautiful-mosques-around-the-world-the-most-magnificent-mosques-in-indonesia/>

Pictures of mosques/masjids (The selected pictures should show the exterior of the mosque.):
Cordoba, Spain

http://en.wikipedia.org/wiki/Mosque-Cathedral_of_Córdoba

<http://www.spain-holiday.com/blog/cordobas-great-mosque.php>

Istanbul, Turkey

http://commons.wikimedia.org/wiki/File:Blue_Mosque.jpg

<http://turkey-trip.com/about-istanbul.php>

Sofia, Bulgaria

http://commons.wikimedia.org/wiki/File:Banya_Bashi_Mosque_Sofia.jpg

Jakarta, Indonesia

<http://s946.photobucket.com/albums/ad308/get-wallpaper/2leep/indomosque5.jpg> OKAY

<http://www.theage.com.au/news/asia-tsunami/jakarta-opts-for-early-warning-tsunami-sensors/2005/10/07/1128562999690.html>

Delhi, India

http://en.wikipedia.org/wiki/Jama_Masjid,_Delhi

<http://www.walkthroughindia.com/festivals/religion/top-5-largest-mosques-in-india/>

Makkah, Saudi Arabia

http://en.wikipedia.org/wiki/Mecca#mediaviewer/File:The_Holy_Mosque_in_Mecca.jpg

<http://www.theguardian.com/commentisfree/belief/2008/dec/18/architecture-islam>

Timbuktu, Mali

<http://kids.britannica.com/elementary/art-128786/The-Great-Mosque-at-Timbuktu-Mali-has-been-rebuilt-many>

<http://www.beautifulmosque.com/sankore-mosque-in-timbuktu-mali/>

Washington, DC, U.S.

<http://www.beautifulmosque.com/islamic-centre-in-washington-united-states/>

http://en.wikipedia.org/wiki/Islamic_Center_of_Washington

Xian, China

http://commons.wikimedia.org/wiki/File:1_great_mosque_xian_2011.JPG

Minneapolis, U.S.

<http://www.minnpost.com/politics-policy/2009/03/sudden-notoriety-mosque-minneapolis-draws-scrutiny-us-senate-fbi-and-interna>

<http://www.alhudacenter.org/gallery/MosqueTour/Al-Ihsan%20098.html>

Activity Answers

The following list provides the answers with links to the attached pictures. The selected pictures should show the exterior of the mosques/masjids.

1. G - Cordoba, Spain
<http://imagenes.foro-ciudad.com/fotos/1058-cordoba-mezquita.jpg>
2. C - Istanbul, Turkey
<http://students.ou.edu/C/Hannah.E.Clay-1/blue-mosque.jpg>
3. A - Sofia, Bulgaria
[http://www.blogandgo.co.uk/A55A21/BlogAndGo.nsf/A1B0861EF79A7D688025736200027428/\\$file/mSofia1.jpg](http://www.blogandgo.co.uk/A55A21/BlogAndGo.nsf/A1B0861EF79A7D688025736200027428/$file/mSofia1.jpg)
4. F - Jakarta, Indonesia
<http://s946.photobucket.com/albums/ad308/get-wallpaper/2leep/indomosque5.jpg>
5. J - Delhi, India
<http://www.photoarchive.saudiaramcoworld.com>
6. B - Makkah, Saudi Arabia
<http://www.sacred-destinations.com/saudi-arabia/mecca-haram-pictures/mosque-night2-c-sacredsites.jpg>
7. D - Timbuktu, Mali
http://photos.igougo.com/images/p26228-Timbuktu_Mali-The_Mosque.jpg
8. I - Washington, DC, U.S.
<http://www.sacred-destinations.com/usa/washington-dc-islamic-center>
9. E - Xian, China
http://www.tour-beijing.com/xian_attractions/greatmosque1.jpg
10. H - Minneapolis, USA
<http://www.alhudacenter.org/gallery/MosqueTour/Al-Ihsan%20098.html>

Location #1**Latitude:** N 37deg 52.98min **Longitude:** W 4deg 46min

Qibla: 100:18:10 E (From N)

Friday July 16, 2010 (4 Sha'ban 1431)

Fajr (Dawn)	Shorook (Sunrise)	Zuhr (Noon)	Asr (Afternoon)	Maghrib (Sunset)	Isha (Night)
5:19	7:09	2:25	6:18	9:40	11:30

Location #2**Latitude:** N 41deg 1.1min **Longitude:** E 28deg 57.87min

Qibla: 151:36:22 E (From N)

Friday July 16, 2010 (4 Sha'ban 1431)

Fajr (Dawn)	Shorook (Sunrise)	Zuhr (Noon)	Asr (Afternoon)	Maghrib (Sunset)	Isha (Night)
3:45	5:45	1:10	5:09	8:35	10:35

Location #3**Latitude:** N 42deg 40.98min **Longitude:** E 23deg 19min

Qibla: 141:50:20 E (From N)

Friday July 16, 2010 (4 Sha'ban 1431)

Fajr (Dawn)	Shorook (Sunrise)	Zuhr (Noon)	Asr (Afternoon)	Maghrib (Sunset)	Isha (Night)
3:55	6:03	1:33	5:35	9:02	11:09

Location #4**Latitude:** S 6deg 10.45min **Longitude:** E 106deg 49.75min

Qibla: 64:51:17 W (From N)

Saturday July 17, 2010 (5 Sha'ban 1431)

Fajr (Dawn)	Shorook (Sunrise)	Zuhr (Noon)	Asr (Afternoon)	Maghrib (Sunset)	Isha (Night)
4:51	6:05	11:59	3:21	5:53	7:07

Location #5**Latitude:** N 28deg 40min **Longitude:** E 77deg 13min

Qibla: 93:28:22 W (From N)

Saturday July 17, 2010 (5 Sha'ban 1431)

Fajr (Dawn)	Shorook (Sunrise)	Zuhr (Noon)	Asr (Afternoon)	Maghrib (Sunset)	Isha (Night)
4:02	5:33	12:27	4:00	7:21	8:52

Location #6**Latitude:** N 21deg 25.6min **Longitude:** E 39deg 49.55min

Qibla: 145:4:33 W (From N)

Saturday July 17, 2010 (5 Sha'ban 1431)

Fajr (Dawn)	Shorook (Sunrise)	Zuhr (Noon)	Asr (Afternoon)	Maghrib (Sunset)	Isha (Night)
4:24	5:47	12:27	3:41	7:06	8:29

Location #7**Latitude:** N 16deg 46min **Longitude:** W 3deg 1min

Qibla: 76:25:37 E (From N)

Friday July 16, 2010 (4 Sha'ban 1431)

Fajr (Dawn)	Shorook (Sunrise)	Zuhr (Noon)	Asr (Afternoon)	Maghrib (Sunset)	Isha (Night)
4:27	5:47	12:18	3:38	6:49	8:09

Location #8**Latitude:** N 38deg 53.7min **Longitude:** W 77deg 2.2min

Qibla: 56:33:47 E (From N)

Friday July 16, 2010 (4 Sha'ban 1431)

Fajr (Dawn)	Shorook (Sunrise)	Zuhr (Noon)	Asr (Afternoon)	Maghrib (Sunset)	Isha (Night)
4:03	5:56	1:14	5:09	8:32	10:25

Location #9

Latitude: N 39deg 55.73min **Longitude:** E 116deg 23.28min

Qibla: 81:7:55 W (From N)

Saturday July 17, 2010 (5 Sha'ban 1431)

Fajr (Dawn)	Shorook (Sunrise)	Zuhr (Noon)	Asr (Afternoon)	Maghrib (Sunset)	Isha (Night)
3:02	4:59	12:20	4:17	7:42	9:38

Location #10

Latitude: N 44deg 58.8min **Longitude:** W 93deg 15.8min

Qibla: 43:50:39 E (From N)

Friday, July 16, 2010 (4 Sha'ban 1431)

Fajr (Dawn)	Shorook (Sunrise)	Zuhr (Noon)	Asr (Afternoon)	Maghrib (Sunset)	Isha (Night)
3:22	5:42	1:19	5:25	8:56	11:15

Matching Activity

Directions: Use the clue cards to identify where each building is located and record its location. Next, examine the pictures and identify which picture matches each building. Cite specific evidence for each match, which may include characteristics of climate, architectural style, cultural influences, and available resources.

	Location	Letter	Evidence
#1			
#2			
#3			
#4			
#5			
#6			
#7			
#8			
#9			
#10			

G



C



A



F



J



B



D.



I



E



H

