

## Reading a Map in Any Language

Kathy Sundstedt and Dawn Brown – School not available

Grade Level (Req.): 7th-12th grade	Content Area (Req.): Geography	Unit (Opt.):
Connections to Other Disciplines (Opt.):		
<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> </ul>		
Time Frame (Req.): 1 class period	Goal (Req.): Students will be able to accurately read a map.	
	Objective (Req.): The students will cooperatively use map-reading skills to discover the physical and political geography of Bangladesh.	
Materials Needed (Req.):		New Vocabulary (Opt.):
<ul style="list-style-type: none"> <li>• Color copies of Bangladesh map, written in Bengali, one copy for each group of students</li> <li>• Student worksheets, one copy for each group of students</li> <li>• Optional – Classroom map of Bangladesh, written in Bengali, for projection onto wall</li> <li>• Optional – Classroom map of Bangladesh, written in English, for projection onto wall</li> <li>• Optional - PowerPoint</li> <li>•</li> <li>•</li> </ul>		<ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul>
Anticipatory Set/Introduction [Inquiry Question is required] (Req.): How much can one learn about a country using basic map “reading” skills, even if the map cannot be “read” in English?		
Instructional Sequence/Procedure (Req.):		
<ol style="list-style-type: none"> <li>1. Distribute one copy of Bangladesh map, written in Bengali, to each student group.</li> <li>2. Optional – project the same map on the wall from transparency, overhead projector, or computer (see resource below for direct download of computer files of maps).</li> <li>3. Together, as a class, review T.O.A.D.S. – an acronym for typical map contents: Is there a Title on the map (where?)? [Yes, at the top of the page.] What is the Orientation of the map? [Participants can accurately assume north is toward the top of the page.] Who is the Author of the map? [Publisher is GIS section, BANGLAPEDIA, Asiatic Society of Bangladesh.] What is the Date of publication of the map? [Published date is unknown. Accessed date is 8/28/2007.] Discuss the Symbols [in the lower right hand of the page] and Scale [under the title in the upper right hand of the page].</li> <li>4. Distribute one worksheet to each group of students.</li> <li>5. As a class, discuss answers to questions 1-10; extend information.</li> <li>6. Exchanging of original questions (#11).</li> <li>7. Enrichment Possibilities: Using Internet resources, or the GAI website, students can create photo essays of each of the districts or specific cities or areas (Rangamati’s Kaptai Lake area, the Sundarbans, Chittagong, etc.).</li> <li>8.</li> </ol>		

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Formative Evaluation (Req.): Class discussion.

Assessment (Req.): After completing the map exercise and further discussing the geography of Bangladesh, students can make an acrostic as a summary, using the word Bangladesh. (See sample.)

Iowa Core Curriculum Standards Used (Req.):

- Geography, grade 9-12: Understand the use of geographic tools to locate and analyze information about people, places, and environments.
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Common Core Curriculum Standards Used (Opt.):

- Writing, grade 6-12: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
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NGS Standards Used (Req.):

- How to use maps and other geographic representations, tools, and technologies to acquire, process, and report information from a spatial perspective
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<p>Five Themes of Geography Used (Req.):</p> <ul style="list-style-type: none"> <li>• Location</li> <li>• Place</li> <li>• Region</li> <li>•</li> <li>•</li> </ul>	<p>School District Standards and Benchmarks (Opt.):</p> <ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> </ul>
<p>21<sup>st</sup> Century Universal Constructs (Opt.): Complex Communication, Productivity and Accountability</p>	
<p>Other Disciplinary Standards (Opt.):</p> <ul style="list-style-type: none"> <li>•</li> <li>•</li> <li>•</li> <li>•</li> <li>•</li> </ul>	
<p>Other Essential Information (Opt.): NOTE: Printing original maps off websites below will offer better reproduction than copies of maps attached to this lesson.</p>	
<p>Other Resources (Opt.):</p> <ul style="list-style-type: none"> <li>• ENGLISH VERSION map source: <a href="http://banglapedia.org/Atlas/bangladesh.htm">http://banglapedia.org/Atlas/bangladesh.htm</a></li> <li>• BANGLA VERSION map source: <a href="http://banglapedia.org/AtlasB/bangladesh.htm">http://banglapedia.org/AtlasB/bangladesh.htm</a></li> <li>• <a href="http://en.wikipedia.org/wiki/Divisions_of_Bangladesh">http://en.wikipedia.org/wiki/Divisions_of_Bangladesh</a></li> <li>• <a href="http://upload.wikimedia.org/wikipedia/commons/2/28/BD_Map_admin.svg">http://upload.wikimedia.org/wikipedia/commons/2/28/BD_Map_admin.svg</a></li> </ul>	

*Sample Acrostic*

**B**ay of Bengal is in the south

**A**rea includes three main rivers

**N**ot a very large country

**G**oing to have trouble with rivers flooding

**L**ots of small braided rivers

**A** lot of roadless areas in far south

**D**oes not have any snow-capped mountains

**E**veryone depends on river transportation

**S**ea-going ships can come far inland

**H**ot, tropical climate

## Student Response Sheet: Reading a Map in any Language

1. Identify, using cardinal (N, S, E, W) and intermediate directions (NW, SW, SE, NE) the number and location of countries that border Bangladesh. **The gold line around the country may help you**
2. For political administration, nations are often divided into states, provinces, or divisions. Count the number of divisions. **The green line and colored divisions will help you.**
3. Just as you might give the name of your state and county, each division in Bangladesh is further divided into districts. Count the number of districts. **The broken gray line will help you. What other clue is there?**
4. **Reservoirs** are human-made lakes created by damming rivers. Water flowing out of reservoirs can be a source of hydroelectric power. Using intermediate directions, describe the location of the division containing a large reservoir.
5. Trace the paths of the **three major rivers** of Bangladesh. In which cardinal direction do they flow?
6. Take a look at the **symbols used for cities**. Using those symbols, locate the capital of Bangladesh, Dhaka. Describe the location of the capital.
7. Does there seem to be a connection between the confluence (joining) of those rivers and the location of the capital? Explain.
8. Does every division have an airport? Explain

9. In addition to roads, airports, and railroads, what other transportation system is important in Bangladesh? Why would that be an important transportation system?
  
10. Geographers examine connections. Does one division seem more remote (less connected) than the others? Explain your reasoning.
  
11. After further map study, develop two original questions to use for class discussion or further research.

## Teacher's Background: Reading a Map in any Language

1. Identify, using cardinal (N, S, E, W) and intermediate directions (NW, SW, SE, NE) the number and location of countries that border Bangladesh.

**Two countries border Bangladesh. One (India) is to the west, north and east. A second country (Myanmar/Burma) borders Bangladesh on the southeast.**

2. For political administration, nations are often divided into states, provinces, or divisions. Count the number of divisions.

**Each division is colored pink, yellow, purple, green, etc.  
There are six divisions:**

**Barisal (*Borishal*) South  
Chittagong (*Chôṭṭogram*) Southeast  
Dhaka (*Dhaka*) North or Central  
Khulna (*Khulna*) Southwest  
Rajshahi (*Rajshahi*) Northwest  
Sylhet (*Sileṭ*) Northeast**

3. Just as you might give the name of your state and county, each division in Bangladesh is further divided into districts. Count the number of districts.

**There are 64 districts. Divisions are divided by a broken gray line and districts are identified by name.**

**Barisal (*Borishal*) South, 6 districts  
Chittagong (*Chôṭṭogram*) Southeast, 11 districts  
Dhaka (*Dhaka*) North or Central, 17 districts  
Khulna (*Khulna*) Southwest, 10 districts  
Rajshahi (*Rajshahi*) Northwest, 16 districts  
Sylhet (*Sileṭ*) Northeast, 4 districts**

4. **Reservoirs** are human-made lakes created by damming rivers. Water flowing out of reservoirs can be a source of hydroelectric power. Using intermediate directions, describe the location of the division containing a large reservoir.

**Kaptai Lake is a reservoir located in the southeast, in Rangamati district, Chittagong division.**

5. Trace the paths of the **three major rivers** of Bangladesh. In which cardinal direction do they flow?

**The three rivers flow in a southerly direction, to the ocean. The river systems include:**

- a. from the west, the Padma (called the Ganges inside India);
- b. from the north, the Jamuna;
- c. from the north/east, the Brahmaputra/Meghna system.

**NOTE: From these rivers, annual alluvial deposits are responsible for the fertile soil of Bangladesh. The alluvium deposited from these rivers also creates the many inhabited river islands (called chars "*chores*"). Most of the rivers in Bangladesh flow from other countries, creating a need for international cooperation.**

6. Take a look at the **symbols used for cities**. Using those symbols, locate the capital of Bangladesh, Dhaka. Describe the location of the capital.

**The capital, Dhaka, is located in central Bangladesh.**

7. Does there seem to be a connection between the confluence (joining) of those rivers and the location of the capital?

**The capital is located north of the confluence, on slightly higher ground. Most of Bangladesh is located within 30 meters of sea level.**

8. Does every division have an airport?

**Yes. Do some have two?**

9. In addition to roads, airports, and railroads, what other transportation system is important in Bangladesh? Why would that be an important transportation system?

**Ships (and ferries). There are many, many rivers (see #10, too).**

10. Geographers examine connections. Does one division seem more remote (less connected) than the others?

**Answers will vary.**



11. After further map study, develop two original questions to use for class discussion or further research.

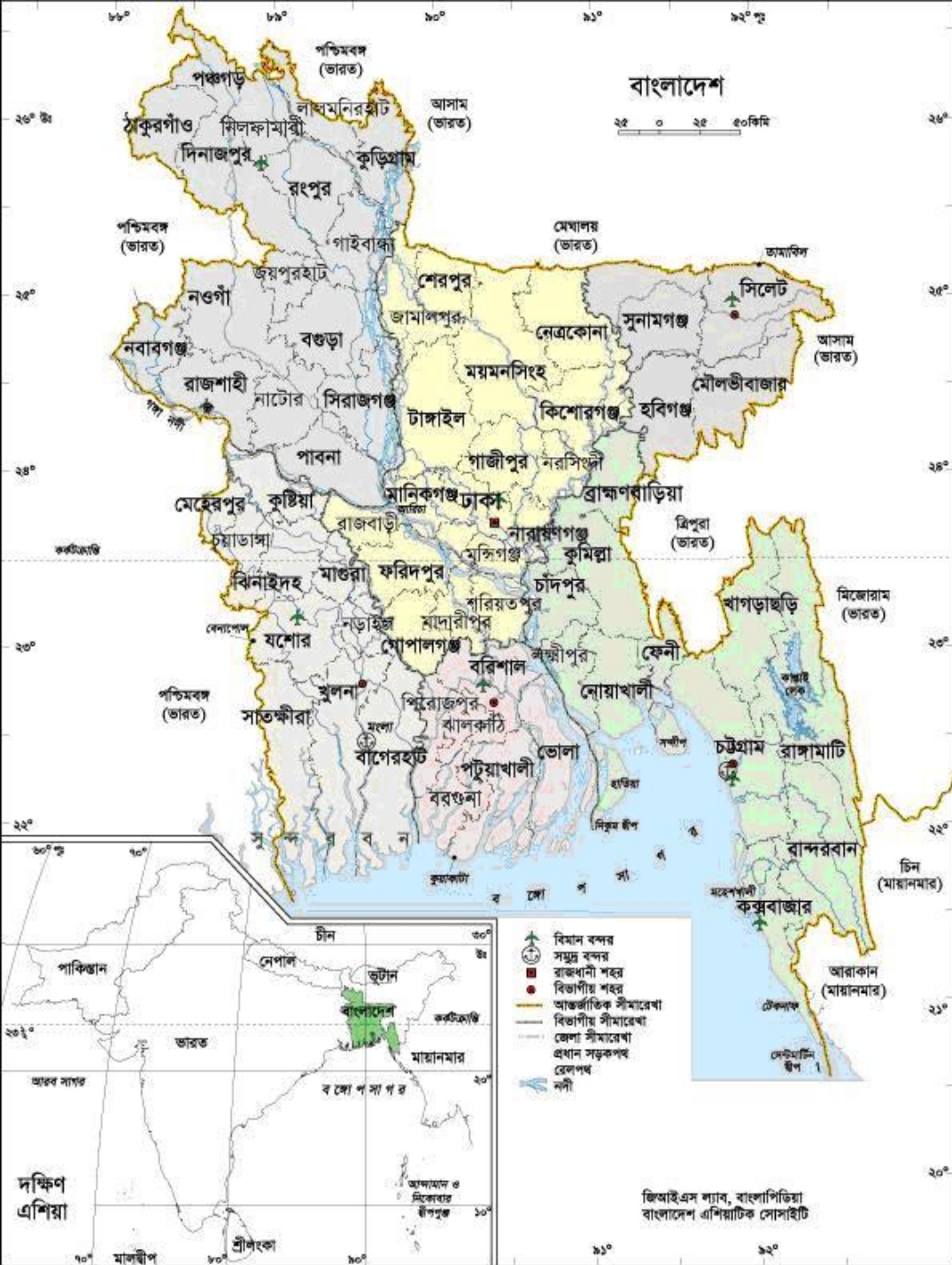
**Answers will vary.**





# **READING A MAP IN ANY LANGUAGE**

Kathy Sundstedt and  
Dawn Brown



# “T.O.A.D.S.”

- Title
- Orientation
- Author
- Date
- Symbols

