

# What Country is Upstream?

## Conflicts that can occur because of relative position on a river

The **source** of a river is the place where it starts - usually in hills or mountains.

People who live near a river source have some advantages and some disadvantages.

Circle the numbers of three advantages and put a checkmark next to a disadvantage:

1. People can take water out of the river, because the water is usually clean.
2. People can put stuff in the river, and the river carries it away (downstream).
3. Boats have to go a long way, often through other countries, to get to the ocean.
4. The river often has rapids and waterfalls that can be used for power.

The **mouth** of a river is the place where it empties into an ocean, lake, or larger river.

People who live near a river mouth also have some advantages and some disadvantages.

Circle the numbers of two advantages; put a checkmark next to two disadvantages:

1. The river is usually deep and slow, which is good for boat travel.
2. The river may have junk or pollution that came from people upstream.
3. If the river flows into the ocean, the mouth can be a good place for a port.
4. The amount of water might be reduced if upstream people take water out.

**Task.** Write an S by the name of a country if it has the source of the river.  
Write an M by the name of a country if it is near the mouth of the river.  
Leave the line blank if the country is between the source and the mouth.  
Circle three rivers where you think the situation is most likely to lead to conflict over water resources. Be ready to defend your choice.

1. Amazon River . . . . .  Bolivia  Brazil  Colombia  Peru
2. Brahmaputra River . . . . .  Bangladesh  China (Tibet)  India
3. Danube River . . . . .  Austria  Bulgaria  Germany  Hungary
4. Euphrates River . . . . .  Iraq  Syria  Turkey
5. Ganges River . . . . .  Bangladesh  India
6. Mekong River . . . .  Cambodia  China  Laos  Thailand  Vietnam
7. Niger River . . . . .  Guinea  Mali  Niger  Nigeria
8. Nile River . . . . .  Egypt  Ethiopia  Sudan
9. Rio Grande . . . . .  Mexico  United States

**Bonus:** Do the same for the next two rivers, in the "-stans" and the "Z countries,"

Amu Darya . . .  Afghanistan  Tajikistan  Turkmenistan  Uzbekistan

Zambezi . . .  Angola  Botswana  Mozambique  Zambia  Zimbabwe

**Double Bonus:** Here's a hard one: Amur River . . .  China  Mongolia  Russia

# Upstream and Downstream

## Conflicts that can occur because of relative position on a river

The **source** of a river is the place where it starts - usually in hills or mountains. People who live near a river source have some advantages and some disadvantages. Circle the numbers of three advantages and put a checkmark next to a disadvantage:

1. People can take water out of the river, because the water is usually clean.
2. People can put stuff in the river, and the river carries it away (downstream).
3. Boats have to go a long way through other countries to get to the ocean.
4. The river often has rapids and waterfalls that can be used for power.

The **mouth** of a river is the place where it empties into an ocean, lake, or larger river. People who live near a river mouth also have some advantages and some disadvantages. Circle the numbers of two advantages; put a checkmark next to three disadvantages:

1. The river is usually deep and slow, which is good for boat travel.
2. The river often floods during spring snowmelt or fall hurricanes.
3. The river may be polluted by things that people do upstream.
4. If the river flows into the ocean, the mouth can be a good place for a port.
5. The amount of water might be reduced if upstream people take water out.

**Task.** Choose a river from the list your teacher provides. Look at an atlas, wall map, or web site for information about its location and the areas around it.

1. What country or state controls the **mouth** of your river? \_\_\_\_\_

Complication 1: a river can serve as the border between two countries or states.

If so, name them both here: \_\_\_\_\_

2. What country or state controls the **source** of your river? \_\_\_\_\_

Complication 2: many rivers have several different sources, which may be under the control of different countries or states.

If so, name the most important here: \_\_\_\_\_

3. What pairs of countries or states have a border that runs along the river?

List important pairs for 2-3 major tributaries (branches) of the river:

Tributary \_\_\_\_\_, countries: \_\_\_\_\_

Tributary \_\_\_\_\_, countries: \_\_\_\_\_

Tributary \_\_\_\_\_, countries: \_\_\_\_\_

4. What countries or states does the river flow through on its way to the ocean? List them in order, from source to mouth, for 2-3 major tributaries of the river:

Tributary \_\_\_\_\_, countries: \_\_\_\_\_

Tributary \_\_\_\_\_, countries: \_\_\_\_\_

Tributary \_\_\_\_\_, countries: \_\_\_\_\_

# "Biography" (Life Story) of a River

1. What is the name of the river you are researching? \_\_\_\_\_  
Your river might have different names in different places. If so, tell about it here:
2. What ocean, lake, or other river does your river flow into? \_\_\_\_\_
3. In what country and mountain range does it start? \_\_\_\_\_  
Note: Your research might uncover several different places that might be the source of your river. If so, write a short explanation of what you discovered. Then, if you want to, try to decide which source is the best one for your story.
4. Approximately how long is your river? \_\_\_\_\_
5. What kind of land does your river flow through? (forest? farms? cities? something else?)  
at first:  
  
in the middle:  
  
near the end:
6. How do people use your river? (fishing? swimming? boating? electricity? something else?)  
Note: Your research might not uncover much about how people use the river. If this is the case, see what you can tell from a Google Earth satellite view.  
at first:  
  
in the middle:  
  
near the end:
7. Are there any problems with your river? (flooding? drying up? pollution? something else?)
8. Is there any other interesting fact about your river? If so, tell about them here:

# "Biography" (Life Story) of a River

(Your teacher will give you a list of rivers to choose from.)

1. What is the name of the river you studied? \_\_\_\_\_
2. What ocean does your river flow into? \_\_\_\_\_
3. What continent does your river help drain? \_\_\_\_\_
4. How long is your river? \_\_\_\_\_
5. What is the land like near the **source** (the beginning) of your river?
6. What is the land like near the **mouth** of your river?  
(The mouth of a river is where it flows into an ocean, big lake, or larger river.)

7. How do people use your river? Circle all of the uses you discovered.

near the source

in the middle

near the mouth

swimming

swimming

swimming

fishing

fishing

fishing

rafting

rafting

rafting

sailboating

sailboating

sailboating

big ships

big ships

big ships

electricity

electricity

electricity

drinking water

drinking water

drinking water

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

8. Does your river have a story? If so, tell a little bit about that story.

# Mystery Rivers

Write the letters of the correct descriptions next to the names of these 12 rivers. A hyphen name indicates a river that has two important branches or changes its name as it flows downhill toward the ocean.

- |                           |  |
|---------------------------|--|
| ___ 1. Amazon             | <b>A.</b> I start near the Black Sea and flow southeast through a desert. People built some of the first cities in the world near me, in the ancient empires of Sumer, Babylon, and Assyria. |
| ___ 2. Danube             | <b>B.</b> I start in the high Plateau of Tibet. I go north toward Mongolia, then south and east. Chinese people built a Great Wall near me.  |
| ___ 3. Ganges-Brahmaputra | <b>C.</b> I am the longest river in Europe. I flow next to or through eight different countries. I was the edge of the Roman Empire.   |
| ___ 4. Huang He           | <b>D.</b> I am unusual because I am entirely inside just one large country. I form the part of the borders for ten different states.   |
| ___ 5. Indus              | <b>E.</b> I start in the cold forests of northern Russia. Then I flow south into a drier area. I end in a salty inland sea, not an ocean.  |
| ___ 6. Mississippi        | <b>F.</b> I start in the Himalayas, the highest mountains in the world. The largest dam in the world is in my Three Gorges.  |
| ___ 7. Murray             | <b>G.</b> I start near the Equator and flow north across the dry Sahara. Egyptian people built Pyramids near me nearly 5000 years ago.   |
| ___ 8. Niger              | <b>H.</b> I start in the Himalayas and flow southwest. Ancient people built cities near me, but abandoned them when conditions changed.  |
| ___ 9. Nile               | <b>I.</b> I am the largest river in the world. I start in western mountains, then flow all the way across my continent to the Atlantic Ocean.  |
| ___ 10. Syr Darya         | <b>J.</b> My two branches start on opposite sides of the high Himalaya. I am considered a sacred river in the Hindu religion.  |
| ___ 11. Tigris-Euphrates  | <b>K.</b> I am the largest river on the smallest continent. I start in some mountains called the Great Dividing Range.   |
| ___ 12. Volga             | <b>L.</b> I start in some mountains close to the ocean. Then I go northeast into a desert, Then I turn and flow southeast, back to the ocean.  |
|                           | <b>M.</b> I am a short but historically important river. I flow northwest through a dry region and end in a salty lake, not an ocean. That lake is drying up as people take water out of me. |

## TEACHER NOTES – RIVER INVESTIGATIONS

These activities can gather data for a discussion of current events or policy. Incidentally, they also help students practice the skill of finding places in an atlas or online source. They also refine mental maps of the world by introducing another way to organize information about countries – position in a watershed.

### Upstream and Downstream - Biography of a River

These are examples of general data-collection forms. A form like this could be the basis for a gallery project, with students making posters or short presentations and then discussing a question, like “Which rivers might be interesting for a boat trip?” or “Which river is most likely to be subject for international conflict?” You can set a variety of scenarios – like choosing a trip destination, advising a candidate, writing a news story, recommending equipment for a peacekeeping mission, etc. It is also valuable to have a discussion where students decide what criteria they will use to guide research and presentation. Set a general goal with a sentence like this: “Yesterday, we looked at a place where a dispute about a river led to armed conflict. Today, we are going to try to figure out which rivers in the world are most likely to be part of the reason for conflicts like we see in Syria. Each group will investigate one river and report their findings. What things should we all be looking for, so that we can compare these situations fairly?”

An internet search using a river name and “conflict” or “dispute” as keywords will usually find several good sites – one good map-based website is at <http://gis.nacse.org/tfdd/index.php>. See also <http://www.transboundarywaters.orst.edu/database/index.html>

### Mystery Rivers

This is a critical reading activity (Common Core). It can be a formative evaluation of their research skills (assisted by a good basemap, atlas, or globe). It can also be an individual or group investigate-and-report activity, or a summative evaluation. You can customize it for varying levels of background by providing some of the answers, either as a list or in a briefing that models how to look for answers.

1I, 2C, 3J, 4B, 5H, 6D, 7K, 8L, 9G, 10M, 11A, 12E

### What country is upstream?

Set up with a question about water resources or a description of a conflict over water resources. You could do this as a matching activity OR ask students to write a declarative sentence to describe the geographic relationships among countries that share a river (Common Core):

1. Tributaries of the Amazon start in Bolivia, Peru, and Colombia; Brazil controls its mouth.
2. The Brahmaputra flows from Tibet (China) thru India and into Bangladesh; floods are common.
3. The Danube goes from Germany past Austria, Hungary, etc. and then to the Black Sea in Bulgaria.
4. The Euphrates starts in Turkey, goes through Syria and into Iraq; Turkish dams are a real problem.
5. The Ganges drains the south slope of the high Himalaya in India and then flows into Bangladesh.
6. The Mekong starts in China and flows through or past Thailand, Laos, Cambodia, and finally Vietnam.
7. The Niger starts near the ocean in Guinea and goes north through Mali etc. and back through Nigeria.
8. The Nile starts in the highlands of Ethiopia, flows through the Sudans and then through Egypt.
9. Tributaries of the Rio Grande start in Colorado, New Mexico, and Mexico; it's the Mexico-US border.

Amu Darya starts in Af-stan and Ta-stan, then flows between Tu-stan and Uz-stan to the Aral Sea.  
Zambezi starts in Angola and Zambia, flows past Zimbabwe and through Mozambique to the ocean.

Amur starts in Mongolia, China, and Russia; forms a long border between China and Russia; but its mouth is in Russia; it is navigable for a long way, but flows through cold and sparsely populated land

All major rivers are topics for dispute; the most serious conflicts probably involve the Euphrates, Mekong, Niger, and Amu Darya, though a reasonable explanation of any conflict potential should get credit.