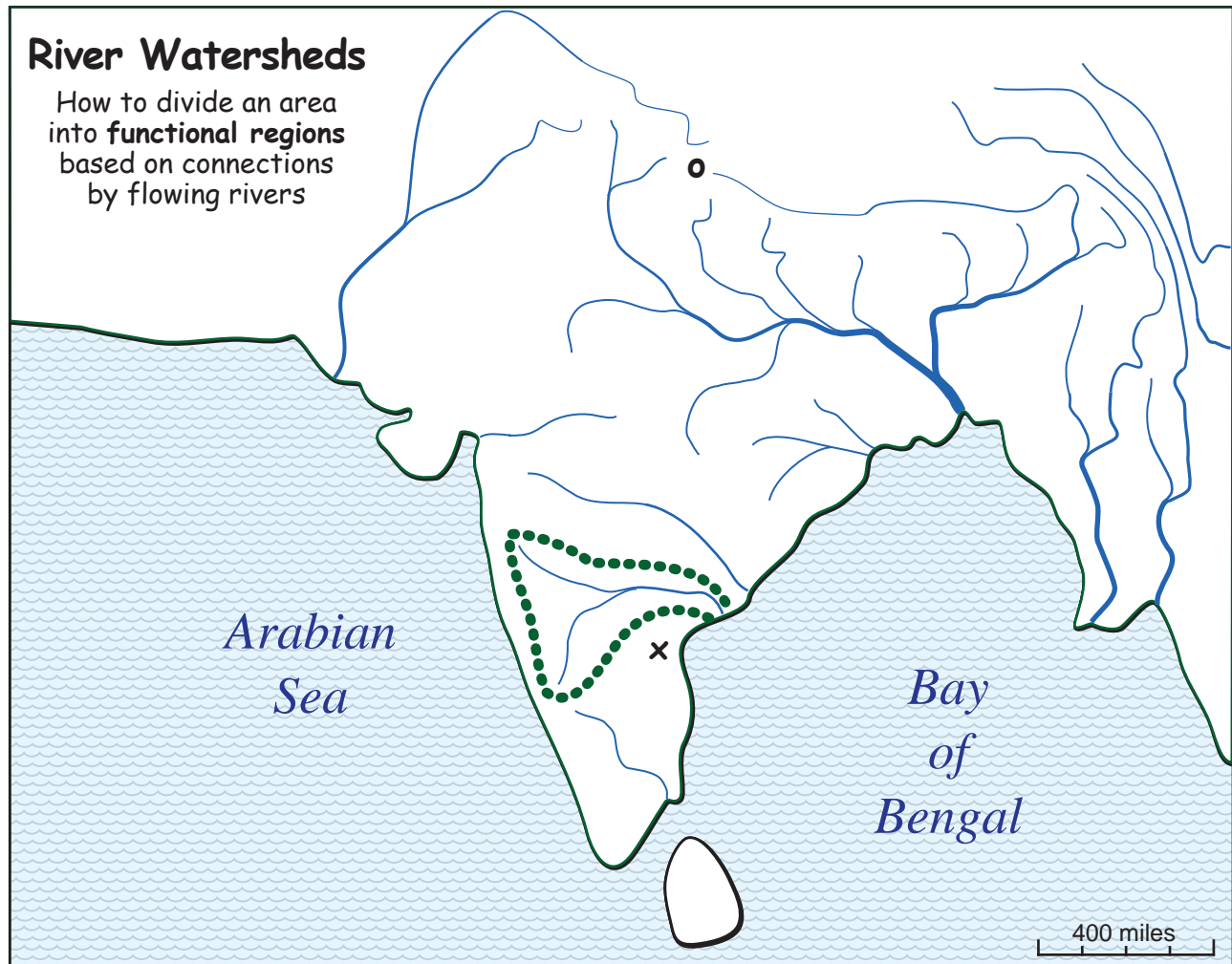


## River Watersheds

How to divide an area into **functional regions** based on connections by flowing rivers



You are on a committee to divide the British colony of India into several new countries. One suggestion is to draw the borders through the high land between river watersheds.

Definition: A watershed is the area drained by a river and all the smaller rivers that flow into it.

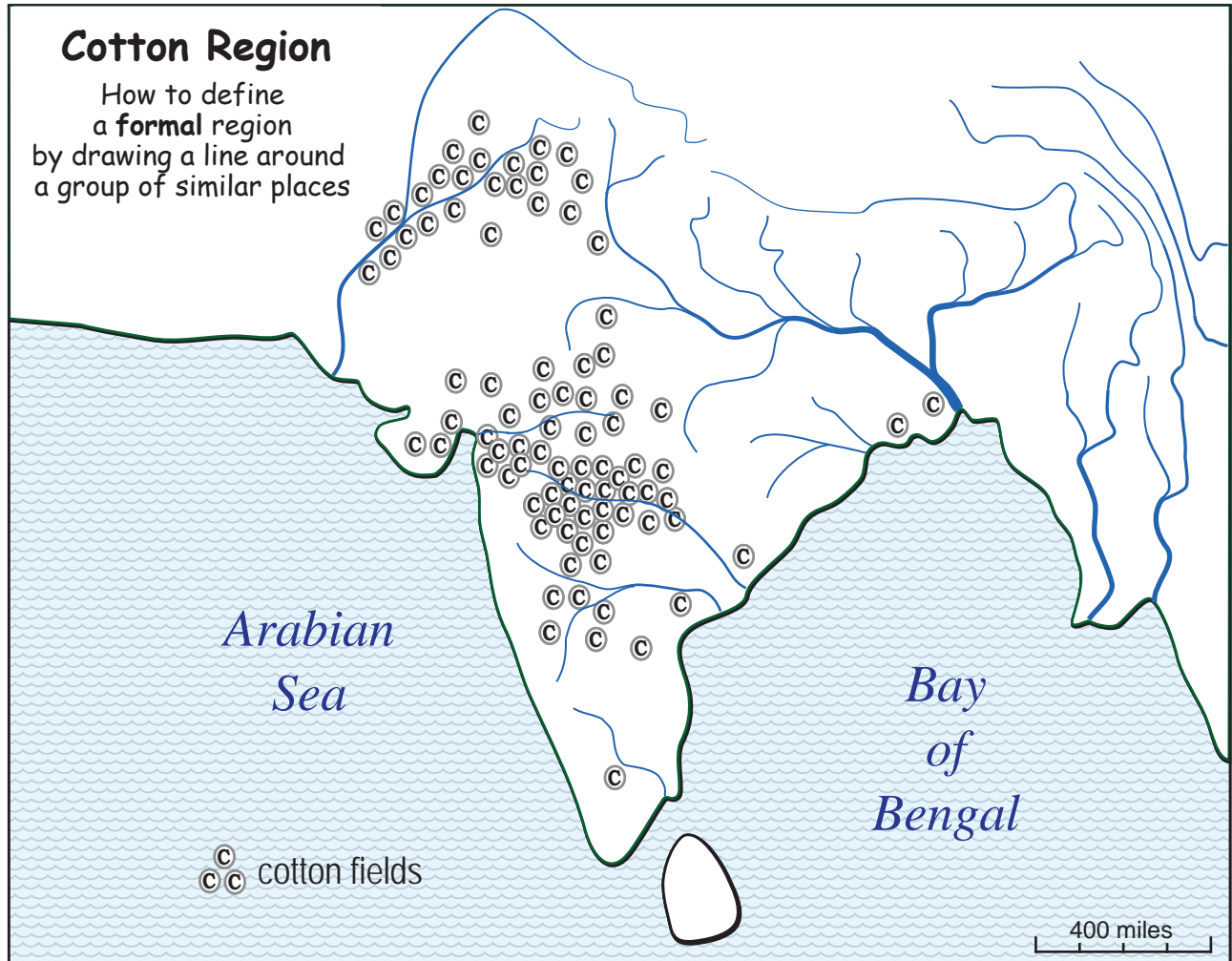
Here's the reason for this suggestion: it is easier to do irrigation and minimize pollution and flooding if you have control over the entire watershed of a river, from its **source** in the mountains to its **mouth** where it empties into an ocean, lake, or larger river.

We have already drawn a dotted line around the watershed of the Krishna River. Look at the three large rivers that start in the high Himalaya Mountains near place **O**.

1. Draw a solid line around the watershed of the **Indus River**. This river flows generally southward to the Arabian Sea. It was the core of the ancient Indus Valley civilization.
2. Draw a dashed line around the watershed of the **Ganges River**. Many people think this is a sacred river. It gathers water from a large area in northern India. As a result, it ranks third in the world by volume, even though it is not one of the 20 longest rivers.
3. Draw a dotted line around the watershed of the **Brahmaputra River**. This river starts near place **O** and flows a long way east across the cold and dry Tibetan Plateau. Then it makes a big curve and goes southwest to flow into the Ganges River.
4. Draw thin lines around the watersheds of the other rivers on the map. (Water from a place like **X** might go to the ocean in a creek that is too small to show on this map.)
5. Use a pencil to sketch borders to divide the area into three or four countries based on watersheds. You will compare other maps before making your final border decisions.

## Cotton Region

How to define  
a **formal** region  
by drawing a line around  
a group of similar places



You are on a committee to divide the British colony of India into several new countries. Since cotton was an important source of income during the colonial era, the planners want to make sure that each country will have the basis for a successful economy. Your task is to identify and draw lines around the cotton-growing regions in South Asia.

Definition: A **formal region** is a group of places that have something in common and are located close to each other. For example, the Corn Belt is a group of places where people grow corn.

Here is your big question - how close together and how similar should places be in order to be included in a region? The real world seldom has neat dividing lines between regions.

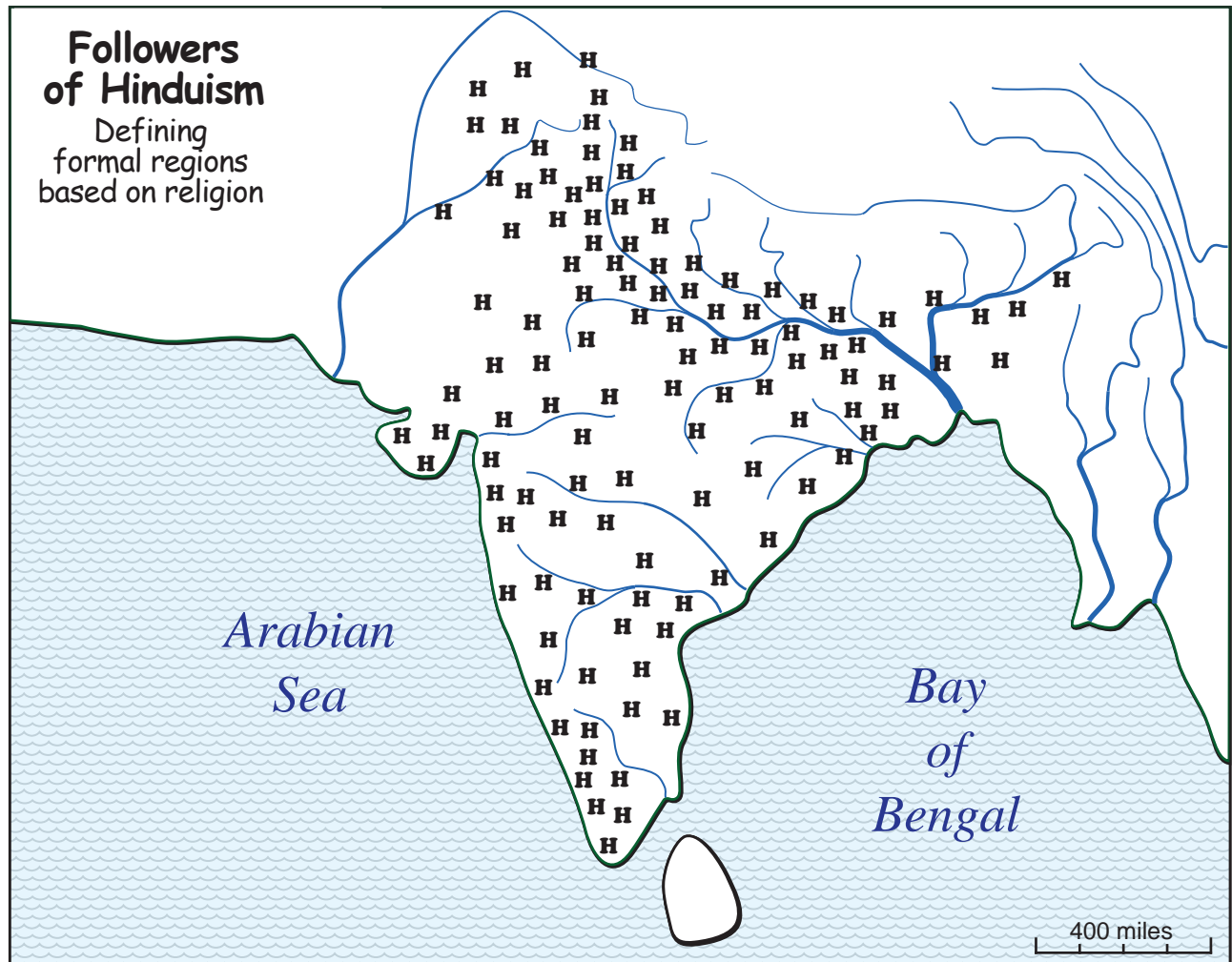
As a result, most regions have **inliers** (dissimilar places inside the region) and **outliers** (places that are like the region but are too far away to be included in the region). Some people outside the Corn Belt grow corn, and some inside the Corn Belt do not!

1. Decide what kind of inliers and outliers you think are appropriate for your map.
2. Draw a dotted line around the small region of cotton production in the northern part of the area. This area is mostly on the floodplain of the Indus River.
3. Draw a dashed line around the larger cotton-growing region on the peninsula. This area is mostly on rich soils formed from fairly recent volcanoes.

If you did this for several crops, you could put them together on one map of crop regions. All by itself, information about crops is not very important. The committee, however, will compare maps that show other kinds of regions - population, language, water, religion, etc.

## Followers of Hinduism

Defining formal regions based on religion

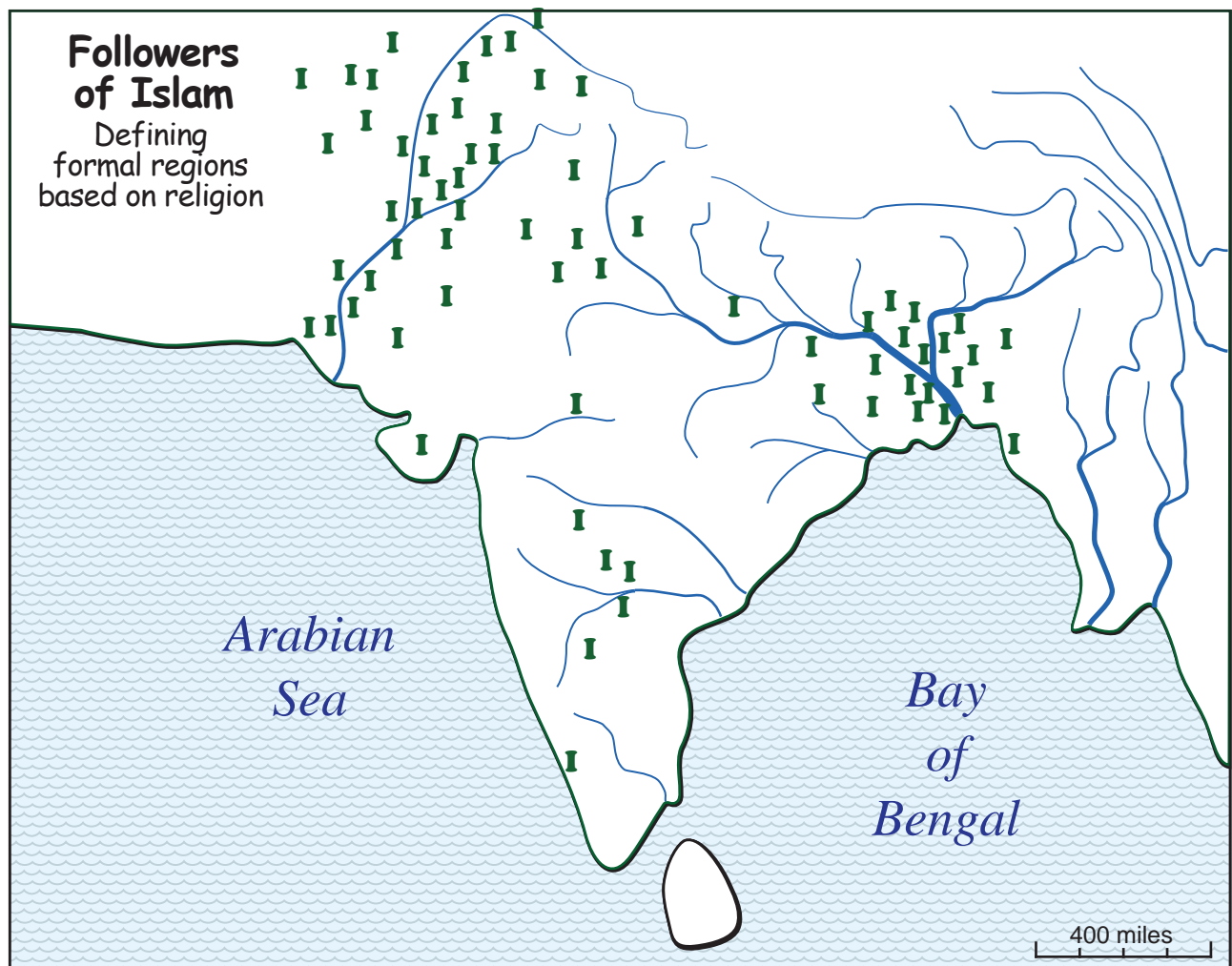


You are on a committee to divide the British colony of India into several new countries. One proposal is to divide the area into **regions** according to the religion of the people.

Definition: A **region** is a group of places that have something in common and are close to each other.

In South Asia, **Hinduism** is the religion that has the most followers - more than 200 million in 1945, when your committee began its work. Each "H" on this map represents 2 million Hindus in that general area.

- 1. Draw lines** around one, two, or three regions of Hindu population. You will have to decide how close together the symbols on a map should be in order to be included in one of your regions.  
(You may wish to practice with the page about defining the region of cotton farming. That map is much simpler than this one, but it still clearly illustrates issues about inliers and outliers on regional maps.)
- 2. Compare your map** of Hindu regions with the maps that show the followers of the other major religions of South Asia: Buddhism, Islam, Jainism, and Sikhism.
- 3. Adjust the boundaries** of the regions on any or all of these maps. The goal is to reduce future conflicts about religion by dividing the area into two, three, or four countries where the majority of people in each country follow a specific religion.
- 4.** You may wish to refine your boundaries by considering other factors, such as language, land use, economy, transportation, river flow, or previous history.



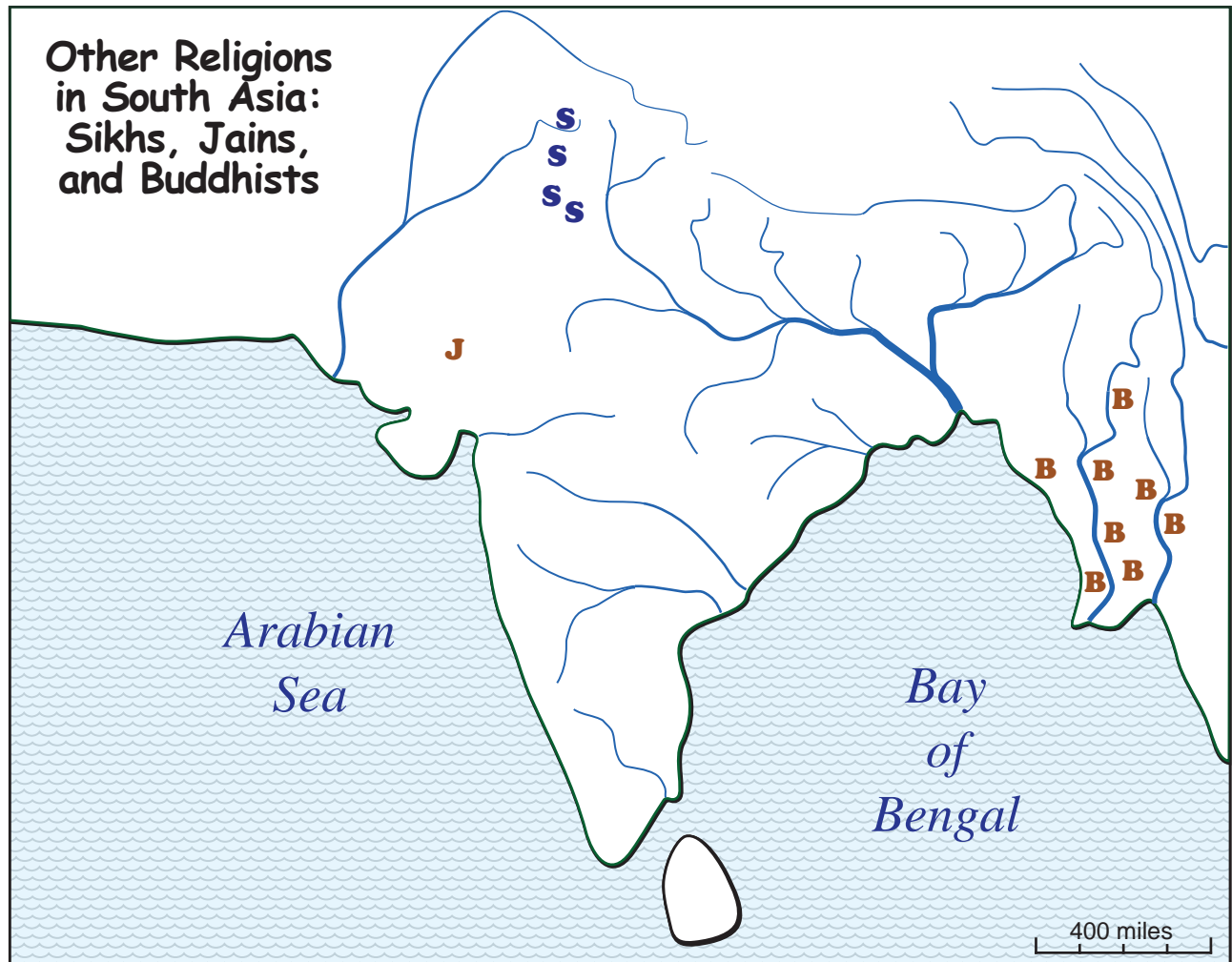
You are on a committee to divide the British colony of India into several new countries. One proposal is to divide the area into **regions** according to the religion of the people.

Definition: A **region** is a group of places that have something in common and are close to each other.

In South Asia, **Islam** is the religion with the second largest number of followers - more than 90 million in 1945, when your committee began its work. Each "I" on this map represents 2 million Muslims in that general area.

1. **Draw lines** around one, two, three, or four regions of people who follow Islam. You will have to decide how close together the symbols on a map should be in order to be included in your region.  
(You may wish to practice with the page about defining the region of cotton farming. That map is much simpler than this one, but it still clearly illustrates issues about inliers and outliers on regional maps.)
2. **Compare your map** of Muslim regions with the maps that show the followers of the other major religions of South Asia: Buddhism, Hinduism, Jainism, and Sikhism.
3. **Adjust the boundaries** of the regions on any or all of these maps. The goal is to reduce future conflicts about religion by dividing the area into two, three, or four countries where the majority of people in each country follow a specific religion.
4. You may wish to refine your boundaries by considering other factors, such as language, land use, economy, transportation, terrain, river flow, or previous history.

## Other Religions in South Asia: Sikhs, Jains, and Buddhists



You are on a committee to divide the British colony of India into several new countries. One proposal is to divide the area into **regions** according to the religion of the people.

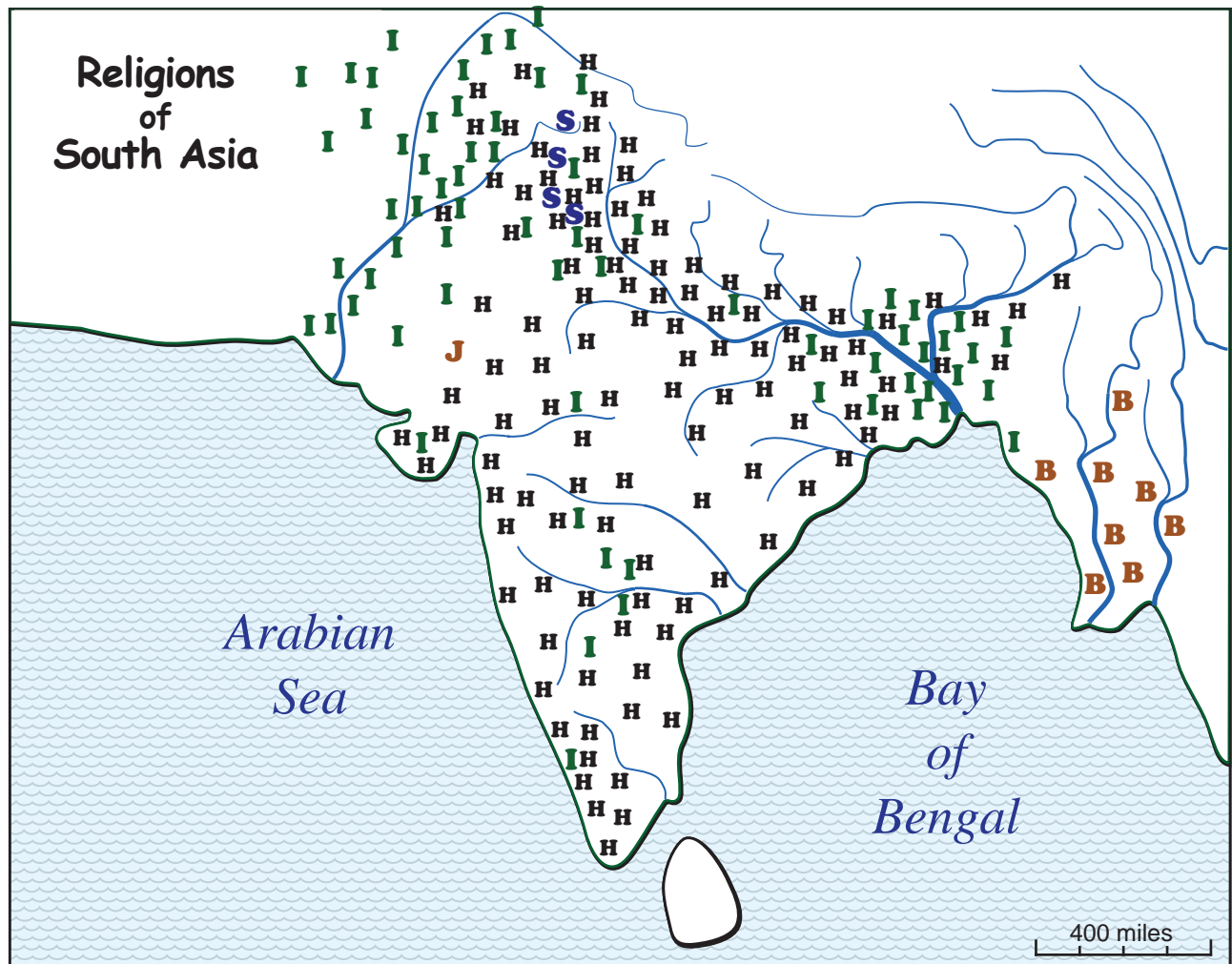
Definition: A **region** is a group of places that have something in common and are close to each other.

In South Asia, **Hinduism and Islam** had by far the largest number of followers, nearly 300 million people in 1945, when your committee began its work.

Three other religions, however, were in the majority in different local areas. Each letter on this map represents 2 million Buddhists (B), Jains (J), or Sikhs (S).

1. **Draw lines** around the major region (or regions) of each of these religions.
2. **Compare your map** of minor religious regions with the maps that show the followers of the major religions of South Asia: Hinduism and Islam.
3. **Adjust the boundaries** of the regions on any or all of these maps. The goal is to reduce future conflicts about religion by dividing the area into two, three, or four countries where the majority of people in each country follow a specific religion. In so doing, an important goal is to avoid splitting the followers of these smaller religions into different countries that have Hindu or Muslim majorities.
4. In making your final decision, you may wish to refine your boundaries by considering other factors, such as language, land use, terrain, river flow, or transportation.





You are on a committee to divide the British colony of India into several new countries. One proposal is to divide the area into **regions** according to the religion of the people.

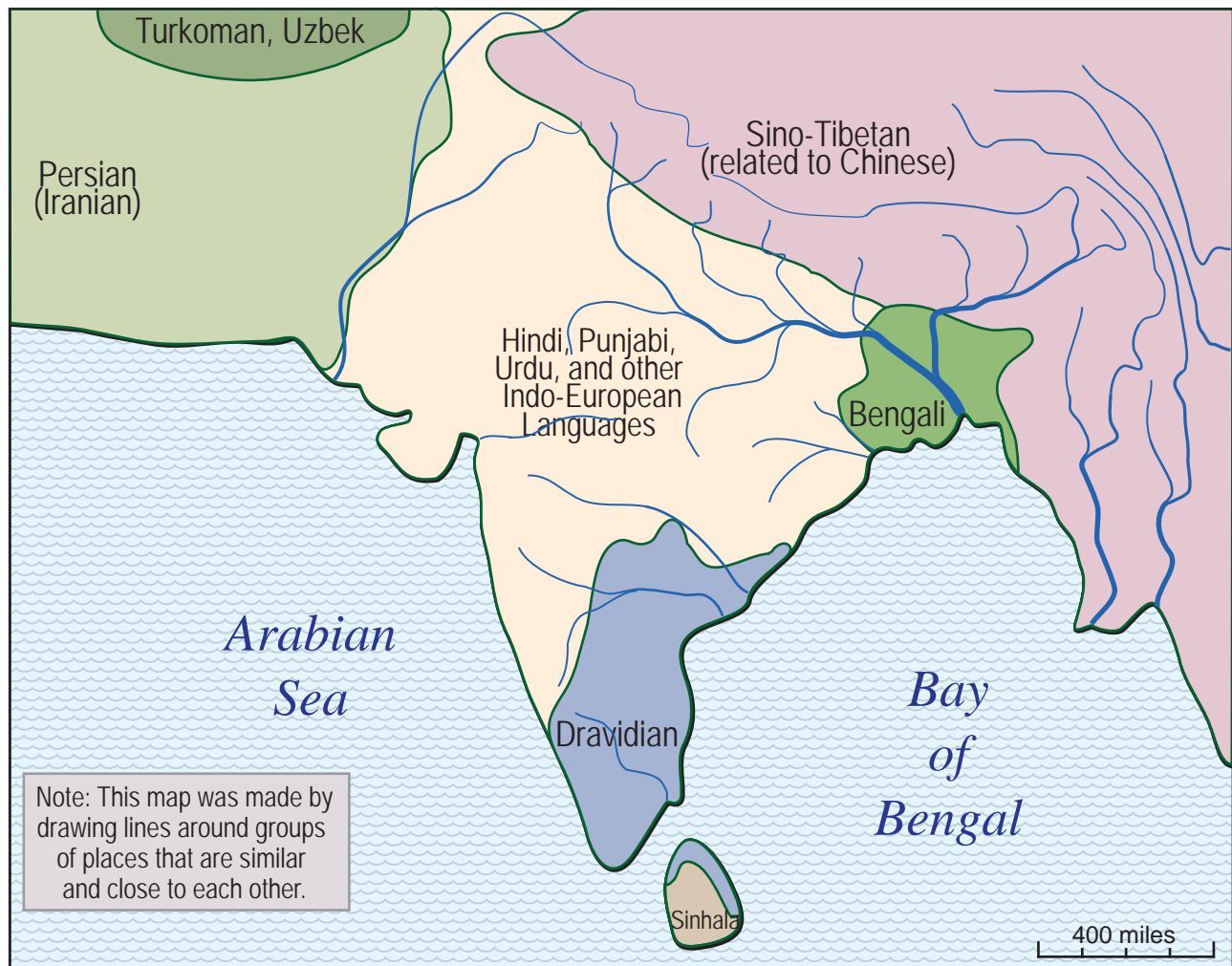
Definition: A **region** is a group of places that have something in common and are close to each other.

Each letter on this map represents 2 million followers of Buddhism (B), Hinduism (H), Islam (I), Jainism (J), or Sikhism (S). If people have already drawn maps based on individual religions, this map may be useful in adjusting the borders.

1. **Identify areas** where nearly everyone seems to follow the same religion. You do not want the borders between countries to go through areas like these, because many people might have relatives who end up in different countries.

(You may wish to practice with the page about defining the region of cotton farming. That map is much simpler than this one, but it still clearly illustrates issues about inliers and outliers on regional maps.)

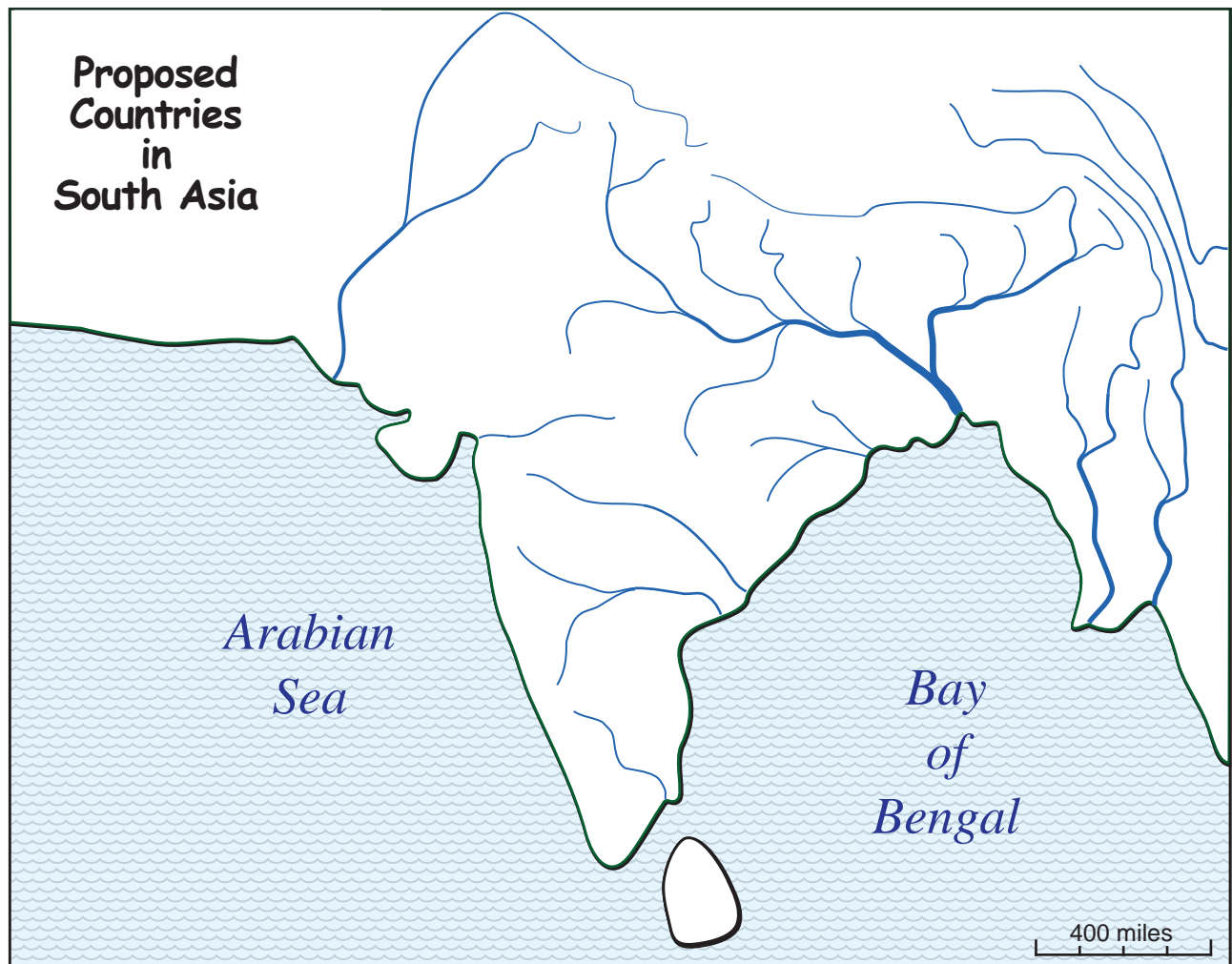
2. **Compare this map** of religious regions with the maps that show other important features about the area, e.g. land use, economy, language, terrain, or river flow.
3. **Adjust the boundaries** of the regions on any or all of these maps. The goal is to reduce future conflicts about religion by dividing the area into two, three, or four countries where the majority of people in each country follow a specific religion and have reasonable control over other important economic and environmental features.



Languages are always changing. People may change how they pronounce some words. They may invent new words (like frisbee, megabyte, windfarm, fracking, smartphone). They may change the meaning of old words (like hard drive, gay, far right, heavy metal). When people split into several groups and live without much contact with each other, their languages may change in different ways. In time, you might say they have different dialects (variations, like British and Australian English), or even different languages.

Definition: A **language family** is a group of similar languages that probably started as one language and gradually became different. French, Italian, Portuguese, and Spanish are in a language family that originally came from Latin, the language of the Roman Empire.

1. More than 2000 years ago, Persian armies invaded South Asia as far as the Indus River. What direction did they come from? Circle: north east south west
2. Put an X on the line by the statement that you think is more plausible:
  - Dravidian people occupied most of South Asia until several thousand years ago, when people who spoke Indo-European languages moved in from the northwest.
  - Indo-European people filled South Asia until several thousand years ago, when Dravidian people came on ships from South America and settled here. (There are, of course, always other possibilities. For example, maybe one people lived here and some simply borrowed words from traders.)
3. Bengali is actually part of one of the other language families. Circle one and briefly explain how it might be related: Dravidian Indo-European Persian Sino-Tibetan



You are on a committee to divide the British colony of India into several new countries.

Definition: **Partition** is the process of dividing an area into several independent political entities.

**1. Identify areas** that are likely to be successful as independent countries.

You may want to consider two kinds of geographic features:

**Unifying features** are things that tend to hold an area together.

Examples include common language, successful economy, control over environmental conditions, and cultural heritage (including religion).

**Divisive features** are things that might promote political instability.

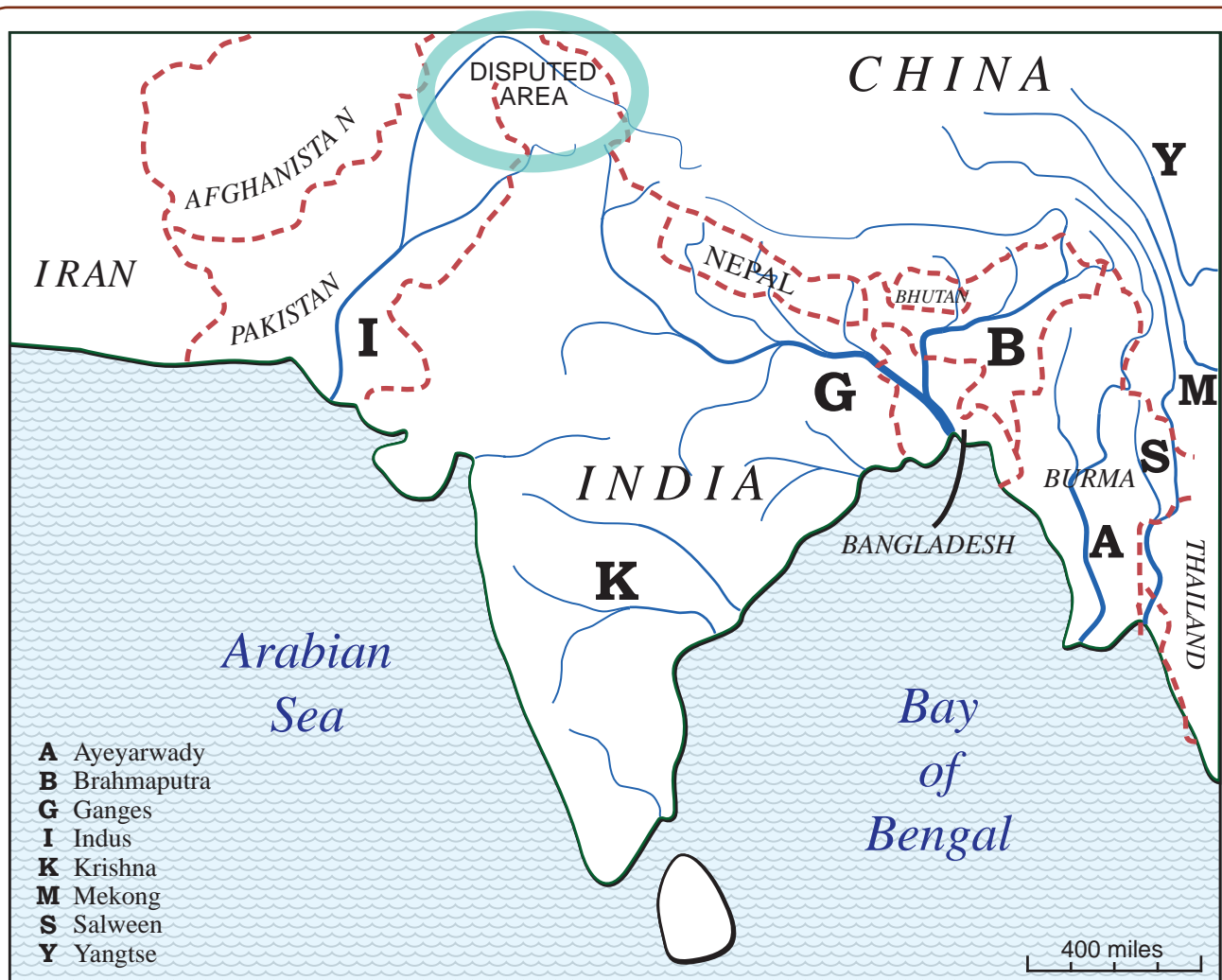
Examples include family feuds, religious conflict, lack of control over conditions upwind or upstream from your location, too much dependence on other countries for key resources, and so forth

**2. Draw borders** between 2, 3, 4, or 5 separate countries. Start with the tentative borders you sketched on the basis of land use, language, religion, or watershed shape.

**3. Adjust the boundaries** between countries until they represent the best compromise that your committee is able to reach in the time allowed. The goal is to reduce future conflicts by dividing the area into two, three, four, or five countries where the majority of people in each country follow a specific religion and have reasonable control over other important economic and environmental conditions.

If your teacher recommends for this activity, you might consult the internet to find maps of other conditions that might affect the future success of your countries.





When they gained independence from the British Empire, the people of South Asia formed several independent countries. They tried to draw borders between areas where people followed different religions. Unfortunately, the borders did not pay much attention to the patterns of language, transportation, crop production, or river flow. The result has been a large number of disputes about control over specific areas.

1. The Indus River flows through one disputed area called Kashmir (outlined by a big oval on this map). Why do you think Pakistan would object to Indian control of this area?
2. The Ganges River starts close to the Indus River. Then it flows south, gathers water from many streams in India and Nepal, and becomes the third largest river in the world. The Ganges is a sacred river for many people. More than 500 million people live near it (that's nearly twice as many people as the United States, living on less than one fourth as much land). How might a large population upstream pose a problem for Bangladesh?
3. The Brahmaputra River starts close to one source of the Indus River. It flows east across the high land of Tibet, and then makes a big curve and flows southwest to join the Ganges River. How might the two rivers joining pose a problem for Bangladesh?

# Teacher Notes

## Partition of South Asia

(adapted from ARGWorld Activity R – Association of American Geographers)

### Overview

Students draw lines around various kinds of regions: hydrologic, economic, religious, etc. In doing so, they learn about decisions that cartographers have to make when they design regional maps. Then, they combine information from maps in order to divide the British colony of India into separate countries. This helps them become aware that the process of partition may be contributing to some problems in South Asia today, such as border clashes, ethnic conflict within countries, and disputes about water.

### Learner outcomes and curricular links

After doing this Activity, a student should be able to:

- 1) explain how to construct regional maps, and how formal and functional regions are different (Standard 1: how to use maps and other geographic representations);
- 2) describe some of the key physical and human characteristics of South Asia (Standard 4: the physical and human characteristics of places);
- 3) explain how post-colonial partition may be part of the reason for conflicts in South Asia today (Standard 13: forces of conflict and cooperation among people);

This Activity fits in world geography, history, political geography, or the geography or history of Asia. The focus on committee work to draw boundaries and discuss conflicts can help meet Common Core objectives about speaking, listening, and persuasive writing.

### Requirements and resources

Time: one to four class periods, depending on how many maps students are asked to produce and/or whether they investigate “trouble spots” for a presentation

Multimedia units on Regions in Africa (dividing a continent into natural regions, Place-Names in Switzerland (dividing a country into language regions), Law of the Sea (dividing an ocean into jurisdictional regions), Borders and History (dividing Europe into political regions), Pie Graphs (depicting ethnic composition), and Urban Gardens and Making bricks (for images from South Asia)

### Classroom procedures

This lesson has a number of separate parts, in order to provide flexibility.

- 1) Get attention by discussing an issue or threat of war between countries in South Asia (if there has been one), or by discussing the process of dividing land into independent countries.
- 2) Explain that accurate information about resources, languages, etc. is useful for someone trying to draw political lines – badly drawn lines can lead to conflict. The multimedia on Regions in Africa, Place-Names in Switzerland, or Borders and History can help here.
- 3) Have students read about types of regions (or just start the Activity and do definitions as part of the debriefing).

- 4) Have students draw borders around river watersheds (an example of a functional region) and cotton production (an example of a formal region). These activities are provided in two versions – one that emphasizes the partition issue and one with a stronger focus on regions as a “tool” for geographic analysis.
- 5) Have students try to draw borders to divide the subcontinent into religious regions. They can all use the map that shows all religions, or (if you want to emphasize the process of making regional maps), they can start as individuals or groups making separate maps of different religions, and then look at the composite map.
- 6) Discuss the conditions that promote stability in a country and conflict among countries. Then have students combine information from their maps and try to draw borders to separate the mapped area into four, five, or six independent countries. You can assign a number, allow students to choose how many countries to make, or have different groups of students make maps with different numbers of countries and compare their boundaries. (You can also allow students to gather more data from atlases, encyclopedias, or on-line sources).
- 7) Compare the boundaries drawn by students with the borders actually drawn between Afghanistan, Pakistan, India, Bangladesh, and Sri Lanka. Ask students to “predict” what areas might have conflict over cropland, water, transportation, language, religion, or ethnicity. Describe some conflicts in the news recently, or have individual students or groups investigate particular “trouble spots”. (At the time of this writing, these included a war in Afghanistan, territorial claims in Kashmir, disputes about water pollution and flooding between West Bengal (India) and Bangladesh, ethnic conflict in South India and Sri Lanka, and religious persecution in many places; the list might change but the underlying causes of these conflicts are likely to persist as long as political borders do not correspond to environmental or cultural regions as people perceive them).

## **Alternative introductions**

Describe the efforts of Gandhi and others to wrest control of South Asia from British colonial rule. Then ask what kinds of problems people might face when they try to organize a newly independent country that has more than a hundred times as many people as the United States had when it became independent.

Use the multimedia unit on Cyberabad (or note how many people of South Asian origin are involved in software development around the world). Ask what might cause many people to migrate to foreign areas.

## **Progress check** (a non-intrusive way to see whether students are on the right track)

If you start with the watershed and cotton maps, it is fairly easy to check whether students have the right idea about drawing lines to separate river watersheds or make borders around a crop region. In both cases, the task calls for a certain amount of judgment, because drawing a line around a region is not a right-or-wrong issue. On the other hand, their watershed lines should not cross rivers, and their crop-region lines should include areas with a reasonably high density of dots and exclude areas that have no dots at all.

## **Concluding the activity**

Try for a balanced tone: students should conclude that political borders are human-drawn lines around “fiat regions” (regions established by decree) and that country borders are more likely to be successful if they generally follow lines between other formal or functional regions in the area. Understanding of the process by which people draw regional maps is therefore useful in trying to understand conflict areas of the world, such as Palestine, Afghanistan, Indonesia, Iraq, Sudan, Chad, etc. (Your list may be different!)

## Extension and enrichment

One straightforward extension is to have students do research and prepare presentations or posters on specific trouble spots, in South Asia and elsewhere in the world. The presentations should include maps that show environmental, cultural, economic, linguistic, and/or religious regions, as well as the political borders that people have drawn in order to separate countries or provinces in the area. Places where political borders do not correspond to other regional boundaries (e.g. between languages, economic systems, or religions) may be highlighted as possible trouble spots.

Here is a sample assignment paragraph:

Make an illustrated report, in which you identify specific places in South Asia where you think problems might occur as a result of the borders that people drew at the end of the British Empire. On a separate sheet of paper (or a poster or web site), list four of those “trouble spots” in rough order of importance, and briefly describe the kind of problem that you think might occur. For example, if a large river flows from one country to another, mention the fact that the people in the downstream country might object if people in the upstream country pollute the water or build a large dam to divert some of the water away from the river.

## Additional information

Barnes and Hudson, *The History of South Asia*, Macmillan, 1998.

Schwartzberg, Joseph ed., *Historical Atlas of South Asia*, University of Chicago

Tharoor, *India From Midnight to the Millennium*, New York: Arcade Publishing, 1998.

Some useful web sites found by entering the country names and the word “data” or “statistics” into an internet search engine.

[www.mapsofindia.com](http://www.mapsofindia.com)

[www.censusindia.net](http://www.censusindia.net)

[www.statpak.gov.pk](http://www.statpak.gov.pk)

[www.nadra.gov.pk/history.html](http://www.nadra.gov.pk/history.html)

[directory.aamibangali.com/geography\\_and\\_history/](http://directory.aamibangali.com/geography_and_history/)

[www.virtualbangladesh.com/history](http://www.virtualbangladesh.com/history)

[www.worldrover.com/vital/countryprofiles](http://www.worldrover.com/vital/countryprofiles)

## Frequently asked questions about regions: a sample dialog

Student: I can't decide whether to make four or five countries.

(Mistaken response: "Look at an atlas and see how other map makers might have divided that area." Studying other maps can definitely be useful, but at this stage it is probably better NOT to put the atlas in the role of expert. The purpose of the Activity is to help students learn that drawing lines around regions is a human activity, and that one person's boundaries can be as "correct" as another's, if they base their boundaries on reasonable data and inferences.)

Redirection: What are your lines supposed to mean? Let's put on our critical thinking hats and try to figure out how we might recognize if a part of this area is like another part or different. For example, look at this highway map of Pennsylvania (or this landform map of Alabama or Colorado, this map of towns and cities in Austria, these maps of endangered species in Belize, or any other state or country map that might seem intuitively important to your student and at the same time shows distinctive patterns in different areas). Are there any differences in pattern that seem to make one fairly big area distinctively different from the rest of the state?

Student: Yeah, most of the birds seem to live on the western side of the area (or whatever response might be appropriate with a given map).

Teacher: Good. Now, can we draw a line around something that we might call the numerous-bird area? (Or whatever example you are comfortable with!) Then, let's look at your other maps to see what might be unique about a particular area.

Are regional maps just for academic purposes? Do they have any practical value?

Regional maps are often used to make practical decisions – what areas to set aside for parks, where to allow heavy industry, what parts of the city to designate for low-interest home-improvement loans, what areas should be in a particular school district, and so forth. The validity of those "practical" maps depends greatly on the accuracy of the underlying regional maps that were used to make them. For example, a map of areas where people can get low-interest loans after a hurricane might be based on a map of damaged housing, which is based on drawing lines around groups of structures that are sound but some investment is needed to repair the damage.

Where can we get regional maps?

About three-fourths of the states have a state atlas, with hundreds of maps that show all kinds of regions, including (but hardly limited to) geology, crops, forests, languages, religions, income, etc. The National Atlas of the United States is starting to show its age, but newer maps are being posted on-line at regular intervals (regions of Republican vote in the most recent election, etc.)

What about for a more local area?

City and county planning agencies have maps that can serve as either starting points or assessments of student maps. For example, students could work out a form for recording information about house size and quality, traffic congestion, noise, etc. Make observations at a hundred locations (it seems like a daunting task, until one realizes that this is just three or four observations per student in a typical class, and then they have a hundred data points that they can use to draw lines around regions). The key is to make sure that the observation form includes at least one extremely simple and concrete thing – e.g., do people live in houses, apartments, or a mixture on this block? Do houses have garages in front or in back? Students can add other things to observe, but at least one should have an extremely obvious pattern (like the map of cotton in South Asia!)



# Partition of South Asia

## Glossary of key terms

- Colonial Era:** a period in history when many European countries claimed colonies in many other places around the world. During the Colonial Era, for example, Britain colonized much of South Asia, Australia, and North America
- era:** a term that historians use to refer to periods of time that have something in common; it's like a historian's temporal version of a geographer's spatial region!
- ethnic group:** people who share a common ancestry, language, culture, and/or religion
- fiat regions:** areas that have been declared as regions by people in authority (for example, countries, states, voting precincts, school districts, or areas that have a particular speed limit; see the multimedia unit on Law of the Sea for one form of fiat region)
- formal regions:** area that have conditions or features in common (for example, areas with the same kind of underlying rock, areas with cold winters, or areas where people speak the same language; see the multimedia unit on Regions in Africa)
- functional regions:** areas that are connected in some way (for example, areas drained by a single river system, areas connected by bus lines, or areas served by the same TV tower; see the multimedia unit on Store Territory)
- Gandhi:** a man who led the resistance against British colonial rule in India, ultimately leading to India's independence; Mohandas (sometimes called Mahatma) Gandhi is famous for advocating peaceful resistance as an effective weapon against violence
- homogeneous:** sameness, being the same ; a homogenous region has the same of something; the opposite of homogenous is heterogeneous, which means it has different things
- hydrologic:** referring to water or water systems; "hydro" means "water"
- Indus River:** a river in modern Pakistan that was also the site of one of the oldest civilizations in the world; do an internet search on the keywords Harappa or Mohenjo-Daro
- irrigation:** artificial watering of the land, using water diverted from rivers and lakes or pumped from underground (see the multimedia unit on Farm Life in Namibia)
- map symbols:** the elements of a map; symbols that are used to represent the features on a map; basic symbols include points, lines, and areas (see the multimedia unit on Choosing Map Symbols)
- permanent rivers:** rivers that flow year-round, almost always
- region:** a term that geographers use to refer to areas that have something in common; an area that has similar climate, land use, culture, or other characteristic
- regionalization:** the process through which regions are created
- tributary:** a river that flows into a larger river, rather than directly to the ocean
- watershed:** a functional region that contains all the area drained by a single river and its tributaries (see the multimedia units on Water Budgets in Mesopotamia and Battle Creek)