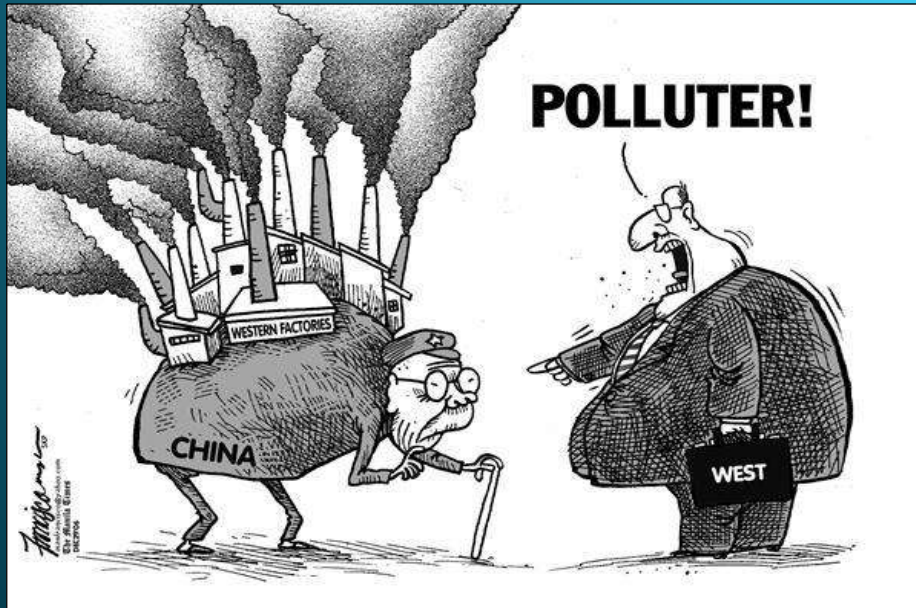


What environmental issues are illustrated in the pictures?



## Causes

- Heavy rainfall
- Storm surge (from hurricanes and tropical storms)
- Tsunami
- Snowmelt
- Deforestation
- Land development
- High tide combined with high river levels

# Flooding

## Effects

- Loss of human life and livestock life
- Damage to property
- Destruction of crops
- Deterioration of health conditions due to waterborne diseases
- Disruption to communication

## Causes

- Emissions (release) of pollutants from cars, trucks, buses, factories, power plants, etc. that use fossil fuels
- Dust from fields, construction sites, and mines
- Natural disasters such as forest fires and volcano eruptions

# Air Pollution

## Effects

- Damages vegetation [plants]
- Harms the atmosphere (hurts the ozone layer that protects us from the Sun's UV radiation; linked to global warming/climate change)
- Harms humans (diseases)
- Emissions release pollutants that combine with moisture in the air to cause acid rain (contaminates drinking water, harms plants and animals, and damages rocks and buildings)

## Causes

- Sewage and wastewater
- Industrial waste
- Marine dumping
- Oil pollution
- Underground storage leaks
- Deposition

## Water Pollution

## Effects

- Health of humans
- Health of organisms living in and around the polluted water
- Disruption of food chains
- Destruction of ecosystems

# Essential Question: How has pollution and flooding affected Southern & Eastern Asia?

**Standard:**

**SS7G10a.** Describe the causes and effects of pollution on the Yangtze and Ganges Rivers.

**SS7G10b.** Describe the causes and effects of air pollution and flooding in India and China.

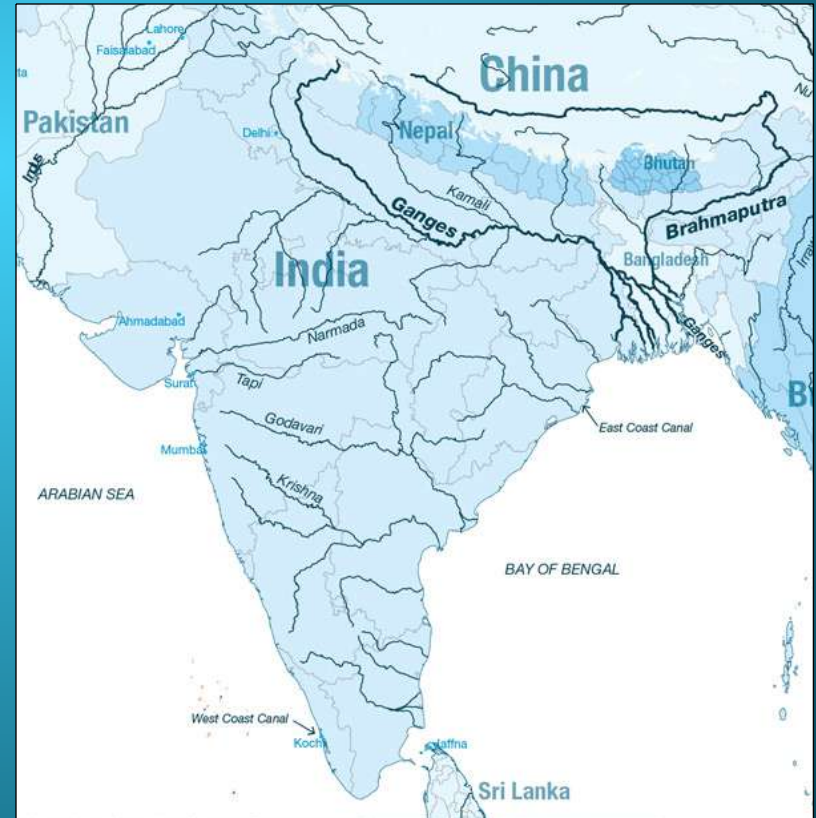




**Flooding in India and China**



Because parts of China and India are located along waterways, they are subject to flooding, which can damage the soil and make areas practically uninhabitable.



**Monsoons cause the majority of flooding in India and China. What are monsoons?**

**A monsoon is a seasonal change in the direction of the strongest winds of a region. Monsoons cause wet and dry seasons. Flooding can occur during the wet season.**



# Monsoons

[select one or two videos below]

## Indian Monsoon Mechanism Animation

[3:08 animation explaining monsoons but there is no audio]

## Monsoon in Kerala, India [1:22]

## Effects of Monsoon Rain on India

[3:25]

# Think, Pair, Share

Why are monsoons a mixed blessing?

Monsoons help farmers because they rely on rainfall. Water from the rainfall can also be used to generate electricity.

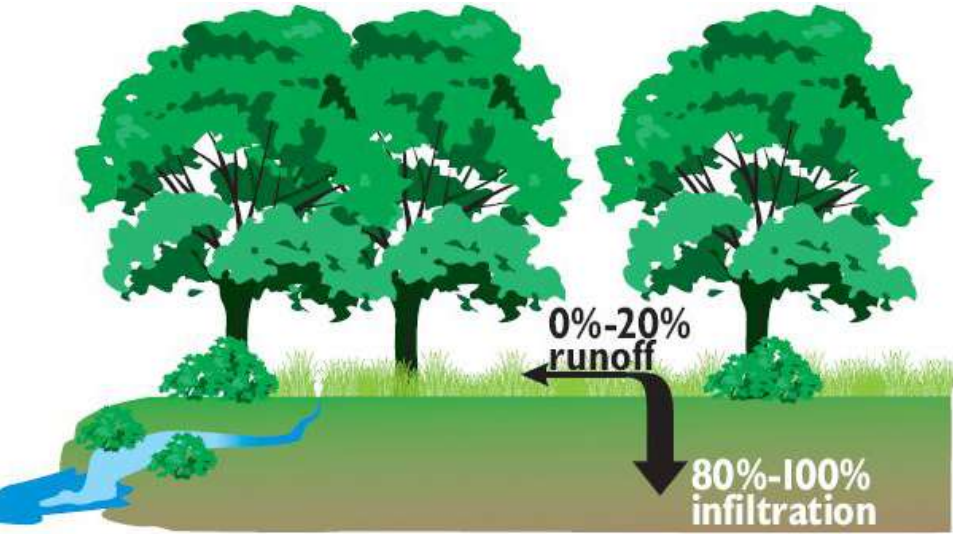
**What types of human activity increase the effects of rainfall during the monsoon season?**

**Deforestation, Land  
Development, Removing  
Wetlands**

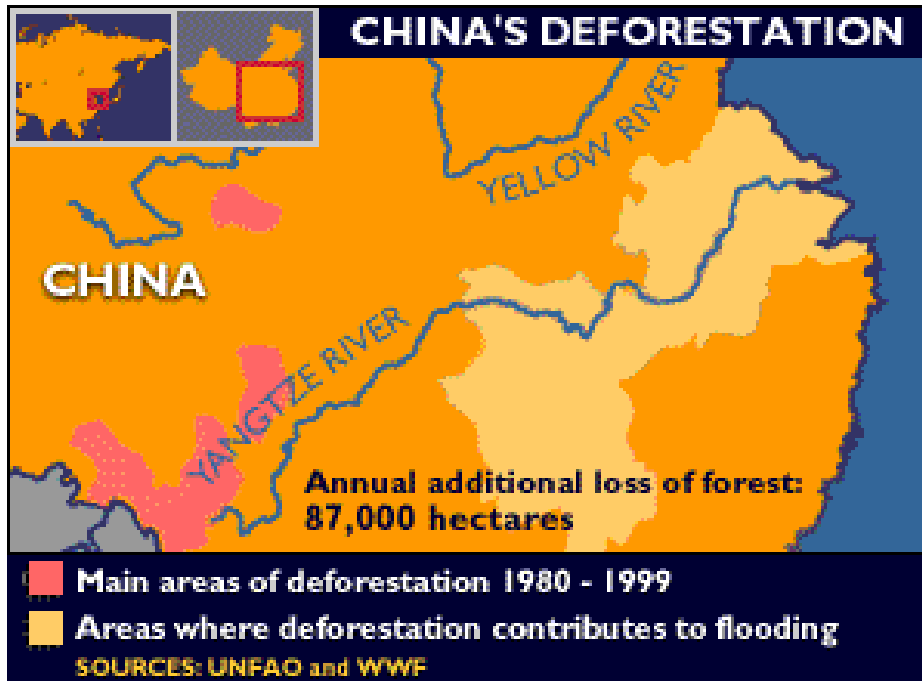


# Human Activities that can Affect Flooding





# Deforestation and the loss of wetlands has increased the effects of flooding in China.





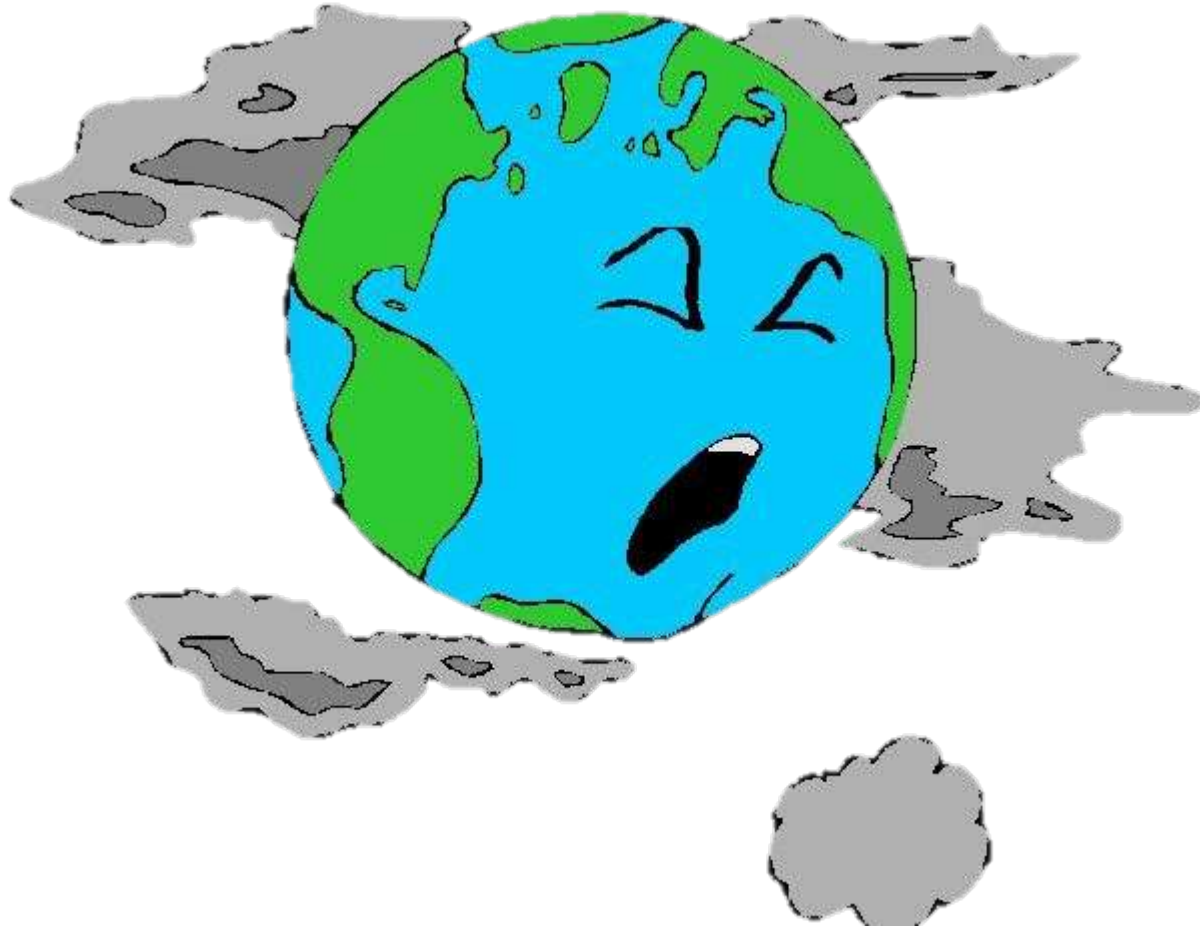
# Summarize the Cause(s) and Effect(s) of Flooding in India and China on your graphic organizer.

Southern and Eastern Asia: Environmental Issues

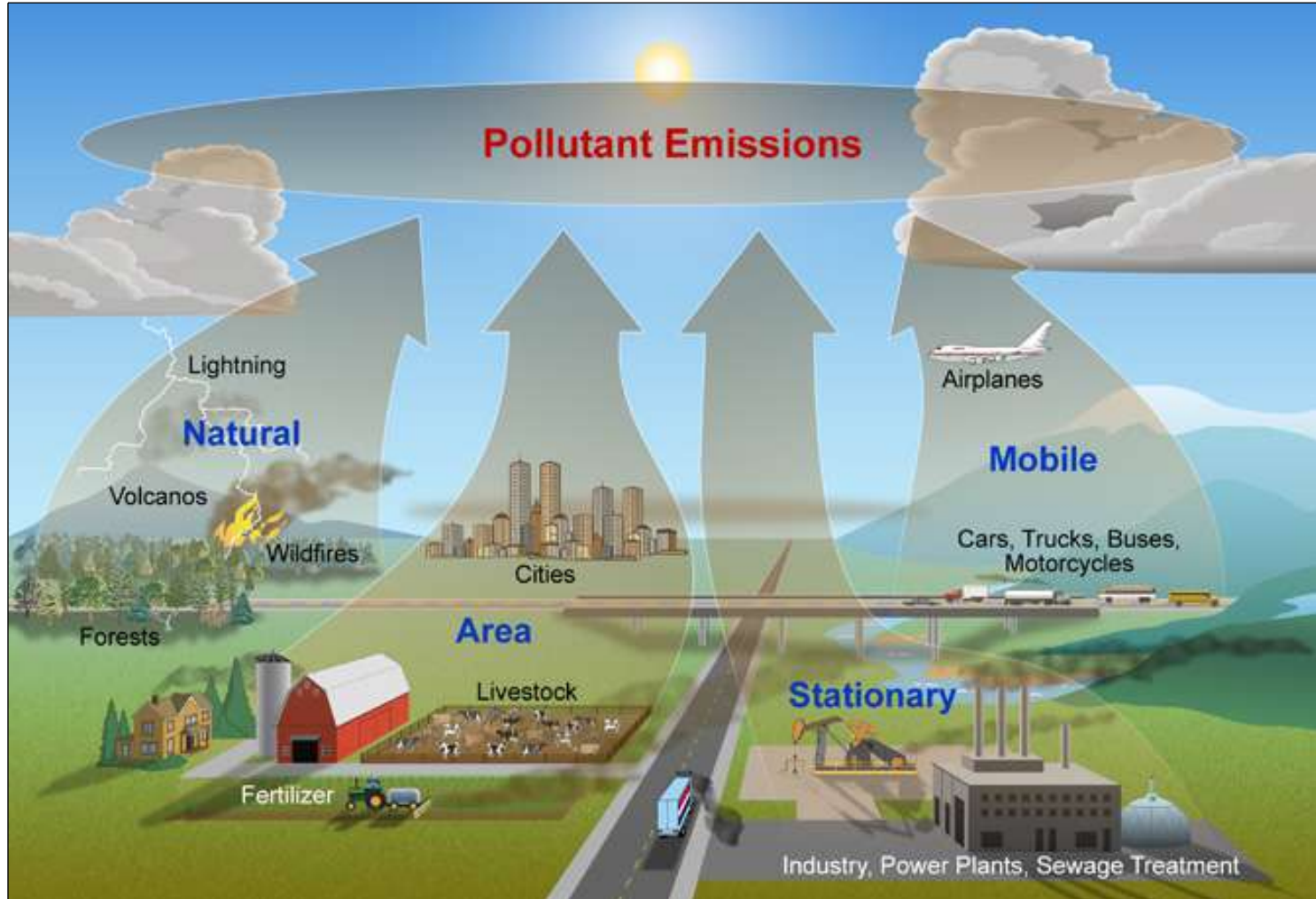
Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_

Country	Problem	Cause(s)	Effect(s)
India	Flooding		
	Air Pollution		
	Ganges River water pollution		
China	Flooding		
	Air Pollution		
	Yangtze River water pollution		

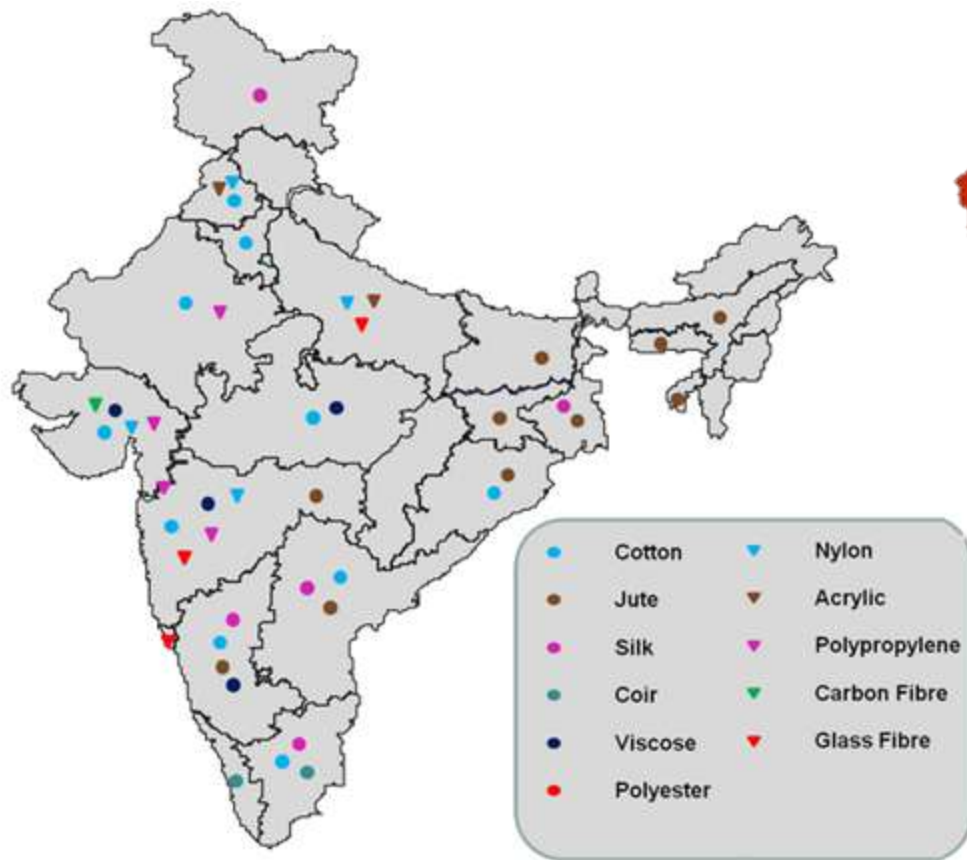
**Air pollution is the introduction  
of harmful materials into the  
Earth's atmosphere.**



# Causes of Air Pollution







**The growth of industry has increased air pollution in India and China (burns fossil fuels).**



**Population growth has increased air pollution in India and China.**



**Vehicle emissions has increased air pollution in India and China.**



# Indoor Air Pollution is an increasing problem in India and China.

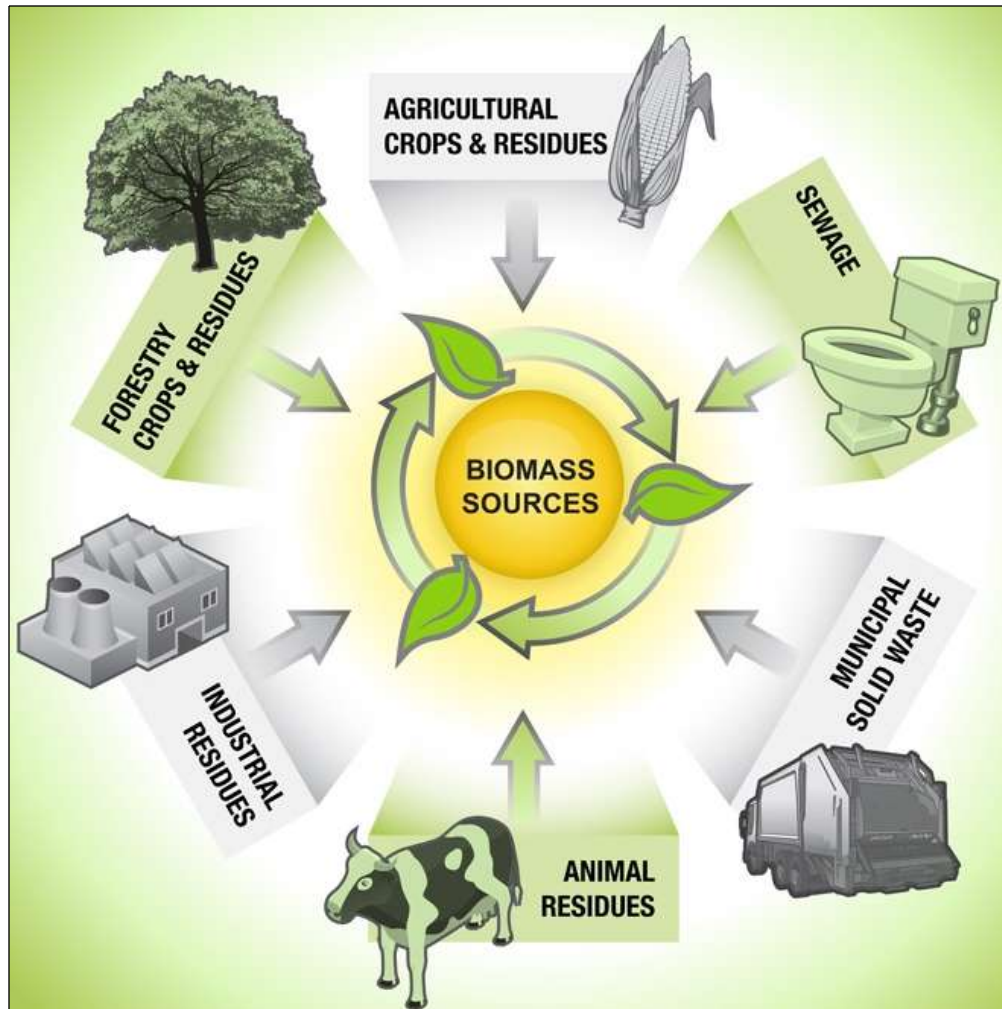




**Many Chinese people use coal (fossil fuel) to heat their homes which increases air pollution.**



**The use of biomass fuels for cooking has increased indoor air pollution.**



**Biomass is biological material derived from living, or recently living organisms**





Cooking that  
Kills [3:00]

# Think, Pair, Share

What are the causes of air pollution in India and China?

What are some of the effects of air pollution?

# Watch one of the video clips below about air pollution in China:

- Air Pollution becoming life-and-death Issue in China [1:56]
- 4,000 People in China Die Every day from Air Pollution [44 seconds]
- China Pollution Levels Hit 20 Times Safe Limit [59 seconds]



# Water Pollution

Dumping sewage and industrial and agricultural wastes cause river pollution, which in turn threatens plant and wildlife species.





# Water Pollution in India

- ▣ Water pollution only worsens India's water shortage problems.
- ▣ Artificial fertilizers from farming and industrial waste from factories seep into India's rivers and pollute them.
- ▣ India's Ganges River has been heavily polluted by industrial waste, sewage, and even human remains.



# Water Pollution in India



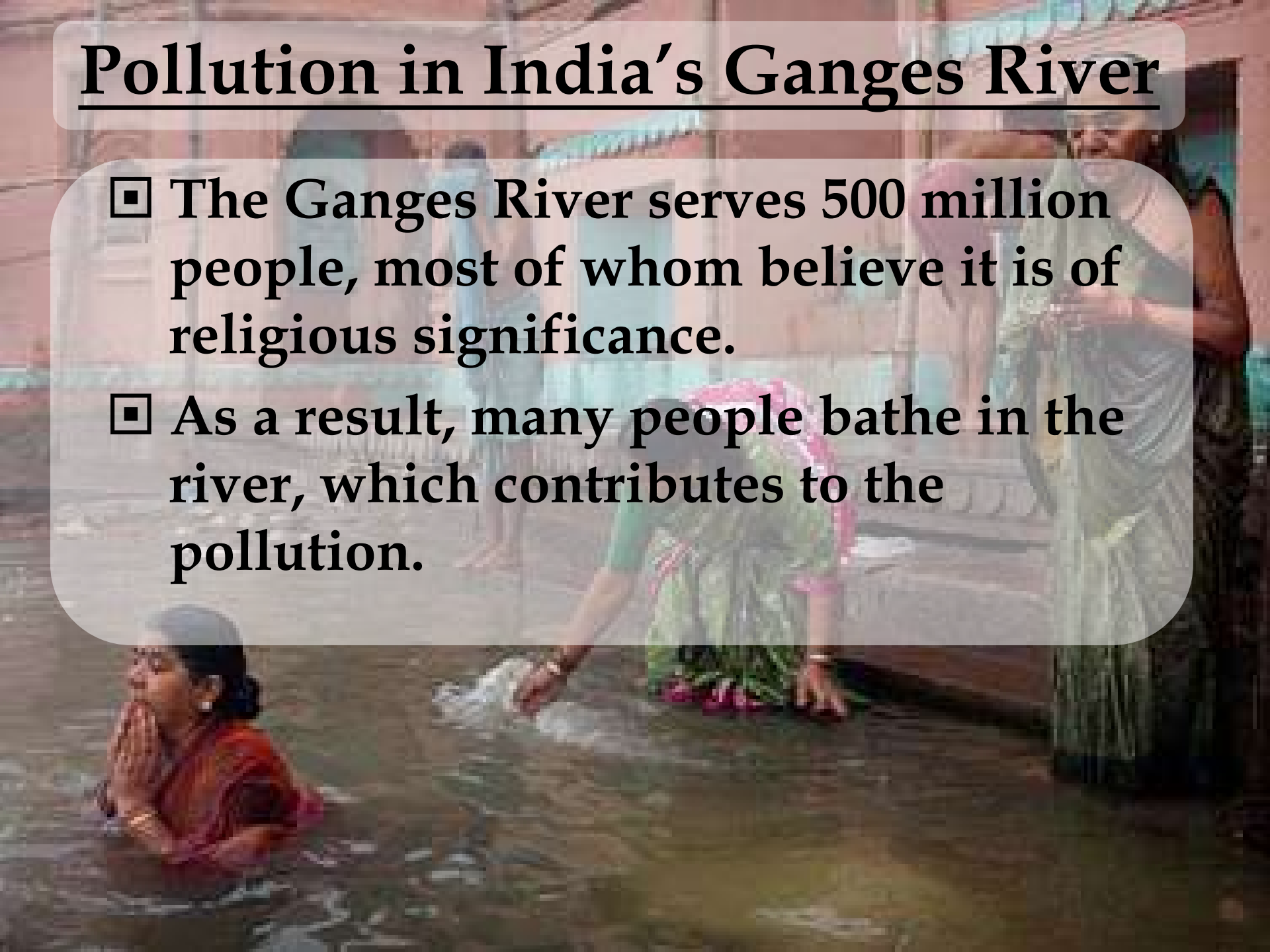


# Pollution in India's Ganges River



# Pollution in India's Ganges River

- ▣ The Ganges River serves 500 million people, most of whom believe it is of religious significance.
- ▣ As a result, many people bathe in the river, which contributes to the pollution.





# Pollution in China's Yangtze River



# Water Pollution in China

- ▣ Pollution in the river has increased over 73% in the past 50 years.
- ▣ Most agree the pollution is caused by large-scale industrial and domestic development, as well as agricultural runoff.
- ▣ Hundreds of cities located along the river contribute to the pollution.

# Pollution in China's Yangtze River





# Pollution in China's Yangtze River





# Think, Pair, Share

What are the causes of water pollution in India and China?

What are some of the effects of water pollution?

# Summarize the Cause(s) and Effect(s) of Water Pollution in India and China on your graphic organizer.

Southern and Eastern Asia: Environmental Issues

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_

Country	Problem	Cause(s)	Effect(s)
India	Flooding		
	Air Pollution		
	Ganges River water pollution		
China	Flooding		
	Air Pollution		
	Yangtze River water pollution		

# Watch the video clips below about water pollution in India and China:

- Move Over Smog: China's Water Pollution Off the Charts  
[3:45]
- India's Polluted Water Systems  
[4:53]

# Summarizer

- ▣ Identify the causes of air pollution in India and China.
- ▣ Identify the effects of air pollution.
- ▣ Identify the causes of water pollution in the Ganges River.
- ▣ Identify the causes of water pollution in the Yangtze River.
- ▣ Identify the effects of water pollution.