• Flash write! 4 min to generate a list of as many people, places, events during the Global Interactions Period! SILENCE!!
How did science affect humans’ conception of the natural world in the 20th century?

Rapid advances in science altered the understanding of the universe and the natural world and led to the development of new technologies. These changes enabled unprecedented population growth, which altered how humans interacted with the environment and threatened delicate ecological balances at local, regional, and global level.
What new scientific technologies developed in the 20th century?

• Theory of Relativity
• Big Bang Theory
• Quantum Mechanics
• Psychology
• Uncertainty Principle: Heisenberg
• Particle accelerator

Researchers made rapid advances in science that spread throughout the world, assisted by the development of new technology.
What new technologies and discoveries affected communication, transportation, and conceptions of the world?

- Telegraph
- Telephone
- Airplane
- Internet

New modes of communication and transportation virtually eliminated the problem of geographic distance.
How did **scientific discoveries** affect humans’ ability to feed and care for themselves?

- **1945- Present**
- Polio Vaccine
- Antibiotics
- Artificial Heart

The Green Revolution produced food for the earth's growing population as it spread chemically and genetically enhanced forms of agriculture. Medical innovations increased the ability of humans to survive.
What new energy technologies affected the 20th century?

- Chernobyl
- Fukushima
- Three Mile Island

Energy technologies including the use of oil and nuclear power raised productivity and increased the production of material goods.
How did humans’ relationship to the environment change in the 20th century?

• Competition for Oil

As the global population expanded at an unprecedented rate, humans fundamentally changed their relationship with the environment. Humans exploited and competed over the earth’s finite resources more intensely than ever before in human history.
Conflict and Competition for Oil

**THE WESTERN FRONT**
China has been busy cutting deals in America’s back yard. In return for cooperation on oil projects, China has lent support to Brazil’s bid for a UN Security Council seat. President Hugo Chávez, of Venezuela, eager to reduce dependence on the United States, has invited Chinese oil companies to explore Venezuela’s oil fields and build refineries, and has proposed new pipelines to the Pacific that would make delivery to Asia cheaper. With an eye toward the vast tar-sand reserves of Canada, which are second only to Saudi Arabia in recoverable oil but with production costs more than ten times as high, China is aggressively negotiating with Canadian oil companies.

**THE RUSSIA FACTOR**
The former Soviet states and much of Eastern Europe depend on Russia for oil and natural gas, and Russia appears jealous of any potential rivals. Some experts believe the Kremlin has worked to undermine the soon-to-be-completed Baku-Tbilisi-Ceyhan pipeline (which will carry oil from the Caspian Sea to the West without going through Russia) by fomenting ethnic discontent along its route in Georgia and Armenia. President Putin has nationalized Russia’s largest oil and gas interest by breaking up and auctioning off the oil company Yukos.

**OIL’S NEW FRONTIER**
The tiny island nation of São Tomé, off the coast of West Africa, symbolizes the importance that the United States places on the oil-rich Gulf of Guinea. As Western oil companies look to tap São Tomé’s newly discovered oil fields, the U.S. military is considering establishing a naval base on the island, from which it could patrol the strategically important waters off West Africa’s major oil producers. Further to the north, U.S. companies are sprinting back to the former pariah nation of Libya. China, meanwhile, is creating new oil-import agreements with Gabon, Chad, and the Republic of the Congo.

**OIL PRODUCTION**
Barrels per day, 2005
- >7.5 million
- 1 million-4 million
- 500,000-1 million
- <500,000

**CHINESE MUSCLE FLEXING**
A dispute with Japan over ownership of natural-gas fields and potential oil reserves in the East China Sea could explain why a Chinese nuclear submarine entered Japanese waters last year. China and other countries have also erected territorial markers around the Spratly Islands, which are rumored to hold billions of barrels’ worth of oil and gas. Its offshore oil claims, and its concern that a conflict over Taiwan could cost it access to the Strait of Malacca (through which 60 percent of Chinese oil imports flow), may partly explain China’s recent naval expansion as well.
What negative consequences in the 20th century accompanied the benefits of industrialization?

- Climate Change
- Rainforest
- Pollution

Climate Change was a major consequence of the release of greenhouse gases and other pollutants into the atmosphere. Pollution threatened the world’s supply of water and clean air. Deforestation and desertification were continued consequences of the human impact on the environment. Rates of extinction of other species accelerated sharply.
What caused some of the major demographic changes in the 20th century?

Human understanding of disease drastically improved in the late 19th century, resulting in vaccinations for "modern plagues" such as typhoid and smallpox. This, along with improvements in hygiene and public sanitation increased the average human lifespan from 31 to 49 years. Along with an accompanying decline in death rates, this increase in life expectancy resulted in one of the highest population growth rates in human history.
What diseases associated with poverty were common in the 20th century?

- Malaria
- Tuberculosis
- Cholera
- Spanish Influenza 1918
- Ebola
- HIV/AIDS
- Diabetes
- Heart Disease
- Alzheimer’s disease

Diseases associated with poverty persisted, while other diseases emerged as new epidemics and threats to human survival. In addition, changing lifestyles and increased longevity led to higher incidence of certain diseases.
Estimated Number of People Living with HIV, 2008

Alzheimer's Disease Worldwide (darker shades indicating more cases)
Diabetes Worldwide (darker shades indicating more cases)
How did the invention of reliable birth control affect gender roles?

• Sexual revolution

More effective forms of birth control gave women greater control over fertility and transformed sexual practices.
How did new military technology affect wartime casualties?

- Tanks
- Airplanes
- Atomic bomb
- Trench warfare
- Firebombing
- Nanjing
- Dresden
- Hiroshima/Nagasaki
- Drones
- Cyberwarfare

Improved military technology and new tactics led to increased levels of wartime casualties.
How has the world’s political order developed since the early 1900s?

- League of Nations
- United Nations

Europe dominated the global political order at the beginning of the century, but both land-based and transoceanic empires gave way to new forms of trans-regional political organizations by the century's end.
Why did older, land-based empires decline and/or collapse?

• Economic hardship
• political and social discontent
• Technological stagnation
• Military Defeat

The older land-based Ottoman, Russian, and Qing empires collapsed due to a combination of internal and external factors.
## Reason for the fall of Ottoman Empire

<table>
<thead>
<tr>
<th>Internal factors</th>
<th>External factors</th>
</tr>
</thead>
</table>
| - From 1566 to 1789 the sultans of the Ottoman Empire were men of little ability and training.  
- Bribery, favors in office, favoritism, nepotism, and corruption spread across the empire. Much like Qing Empire, regional officials often squeezed taxes out of the people for their own personal gain.  
- The investments in military to keep up with Western technology laid a heavy tax burden on the citizens. The *devisirme system* that trained young children to eventually become military leaders was also abandoned.  
- New World silver led to inflation in the Ottoman Empire that resulted in corruption. European trade routes bypassed the Ottomans.  
- Muslim scholars became increasingly conservative and rejected new ideas, seemingly oblivious to Western advancements. | - Commercial expansion overseas gave Western Europe economic superiority.  
- Advancements in technology, industry, and agriculture were synonymous with Western society, branching out from the Renaissance and Reformation and leading into the Enlightenment. These ideas did not make their way into the Ottoman Empire until the 19th century.  
- A the western bourgeoisie model of support from local elites for the emperor was not present in the Ottoman Empire.  
- The previously centralized Ottoman Empire was weakened by other strong empires surfacing along its frontiers as well as those in Western Europe. |
# Reasons for the fall of the Chinese Empire

<table>
<thead>
<tr>
<th>INTERNAL FACTORS</th>
<th>External Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Taiping Rebellion</td>
<td>1. Foreign imperialism</td>
</tr>
<tr>
<td>2. Poverty</td>
<td>2. Opium war</td>
</tr>
<tr>
<td>4 Over population,</td>
<td></td>
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<tr>
<td>5. Addiction (Opium)</td>
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</tbody>
</table>
## Reason for the fall of land empire in Russia

<table>
<thead>
<tr>
<th>INTERNAL FACTORS</th>
<th>EXTERNAL FACTORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. non-Russian ethnic groups</td>
<td>1. Afghanistan</td>
</tr>
<tr>
<td>2. Too Much money on “Arms Race”</td>
<td>2. Cold War</td>
</tr>
<tr>
<td>3. Failure of communism</td>
<td></td>
</tr>
<tr>
<td>4. Gorbachev’s plans of &quot;glasnost&quot; and &quot;perestroika&quot; in 1986</td>
<td></td>
</tr>
<tr>
<td>5. Dissent from Baltic regions of Estonia, Latvia, and Lithuania</td>
<td></td>
</tr>
</tbody>
</table>
By what **means** did imperial colonies **achieve independence**?

- India from the British Empire
- The Gold Coast from the British Empire

Some colonies negotiated their independence.

Some colonies achieved independence through armed struggle.
What **new movements** challenged the *status quo* during the age of imperial rule?

- **Indian national Congress**

Emerging ideologies of anti-imperialism contributed to the dissolution of empires and the restructuring of states.
Who helped lead and define these movements?

• Mohandas Gandhi
• Ho Chi Minh
• Kwame Nkrumah

Nationalist leaders in Asia and Africa challenged imperial rule.
What **new** identities were used to **unite** populations spread across national borders?

- Communism
- Slavism
- Pan-Arabism
- Pan-Africanism
- Marcus Garvey
- Muhammad Ali Jinnah
- The Quebecois separatist movement
- The Biafra secession movement

Transnational movements sought to unite people across national boundaries. Regional, religious, and ethnic movements challenged both colonial rule and inherited imperial boundaries.
What ideologies were often used to “undo” imperialism?

- India/Pakistan Partition
- Zionist Jewish settlement of Palestine
- Division of middle east into Mandates

Movements to redistribute land and resources developed within states in Africa, Asia, and Latin America, sometimes advocating communism and socialism.
How were colonial peoples affected by the change of old colonial boundaries? How were relationships between imperial powers and former colonies maintained after the end of those empires?

- South Asians to Britain
- Algerians to France
- Filipinos to the United States

The migration of former colonial subjects to imperial metropoles maintained cultural and economic ties between the colony and the metropoles even after the dissolution of empires.
What circumstances contributed to genocide and mass refugee populations?

- Armenia
- Holocaust
- Rwanda
- Cambodia
- Palestinian
- Darfurian

The proliferation of conflicts led to various forms of ethnic violence and the displacement of peoples resulting in refugee populations.
The Genocide Convention adopted by the United Nations in 1948 was meant as a pledge to ensure the atrocities of the Holocaust would never again be repeated.

The 1994 Rwandan genocide resulted in the systematic killings of 800,000 Tutsis and moderate Hutus in less than 100 days.

1933 The Holocaust 11M
1975 Cambodia 1.7M
1992 Bosnia 100K
1994 Rwanda 800K
2003 Darfur 400K

*The process is not linear. Logically, later stages must be preceded by earlier stages. But all stages continue to operate throughout the process.

**UN Human Rights Council
Other credits include: Genocide Watch, UN High Commissioner for Refugees, Refugees, Save Darfur
How did the World Wars affect the nature of war and the relationship of the government to their populations?

- **Axis**
- **Allies**
- **Great Depression**
- **Gurkha soldiers in India**
- **ANZAC troops in Australia**
- **Military conscription**

The varied sources of global conflict in the first half of the century included: imperialist expansion by European powers and Japan, competition for resources, ethnic conflict, great power rivalries between Great Britain and Germany, nationalist ideologies and the economic crisis engendered by the Great Depression.
What ideologies motivated the World War conflicts?

• Nationalism
• Economic interests
• Versailles
• Anti-Semitism
• Propaganda

• World War I and World War II were the first "total wars."

• Governments used ideologies, including fascism, nationalism and communism, to mobilize all of their state's resources, including peoples, both in the home countries and the colonies or former colonies, for the purpose of waging war.

• Governments also used a variety of strategies, including political speeches, art, media, and intensified forms of nationalism, to mobilize these populations.
Major Causes of World War II:

- Treaty of Versailles
- Rise of fascism in Italy
- Japanese expansionism
- Economic depression
- Anti-communism
- Appeasement
- Militarism
- Nationalism
- Rise of Hitler
Causes of World War I - MANIA

Militarism - policy of building up strong military forces to prepare for war

Alliances - agreements between nations to aid and protect one another

Nationalism - pride in or devotion to one's country

Imperialism - when one country takes over another country economically and politically

Assassination - murder of Austrian Archduke Franz Ferdinand
How did the world’s balance of power change during the Cold War?

• Superpowers

• Space race

• Domino theory

• The global balance of economic and political power shifted after the end of World War II and rapidly evolved into the Cold War.

• The United States and the Soviet Union emerged as superpowers, which led to ideological struggles between capitalism and communism throughout the globe.
What were the Cold War’s military consequences?

- Nato
- Warsaw
- Vietnam
- Afghanistan
- Cuban Missile Crisis

The Cold War produced new military alliances, including NATO and the Warsaw Pact, and promoted proxy wars in Latin America, Africa, and Asia.
COLD WAR WORLD

1953

- NATO members
- USSR & Satellite states
- USSR aligned
- Western aligned and/or colonies
What caused the Cold War to end?

• Gorbachev
• Glasnost
• Perestroika
• Berlin Wall

The dissolution of the Soviet Union effectively ended the Cold War.
How did various reactions to the violence of the 20th century compare?

Although conflict dominated much of the twentieth century, many individuals and groups — including states — opposed this trend. Some individuals and groups, however, intensified the conflicts.
How did the anti-war & non-violence movements respond to the century’s many wars?

- Picasso in his Guernica
- The antinuclear movement during the Cold War
- Thich Quang Duc by self-immolation
- Gandhi
- Martin Luther King Jr.

Groups and individuals challenged the many wars of the century, and some promoted the practice of nonviolence as a way to bring about political change.
What alternatives were offered to the economic, political, and social status quo?

- Communist leaders such as Vladimir Lenin and Mao Zedong
- The Non-Aligned Movement
- The Anti-Apartheid Movement in South Africa
- Participants in the global uprisings of 1968
- The Tiananmen Square protesters

Groups and individuals opposed and promoted alternatives to the existing economic, political, and social orders.
How did reactions by governments and militaries affect the degree of conflict during the 20th century?

- Promotion of military dictatorship in Spain, Uganda
- United States promotion of a New World Order after Cold War
- Build-up of Military Industrial Complex and arms trading

Militaries and militarized states often responded to the proliferation of conflicts in ways that further intensified conflict.
Why did some movements use terrorism for political purposes?

- IRA
- ETA
- Al Qaeda

More movements used violence against civilians to achieve political aims.
How was **popular culture** affected by the global conflicts?

- Dada
- James Bond
- Socialist Realism
- Video Games

Global conflicts had a profound influence on popular culture.
What new governmental institutions emerged as a result of the 20th century conflicts?

• Global:
  - United Nations
  - League of Nations
  - European Union
  - World Trade Organization
  - World Health Organization
  - UNESCO
  - UNICEF

• National:
  - USA: “The New Deal”, NASA, various conservation administrations
  - Russia: dissolution of USSR and formation of Russia Federation
What made these new institutions possible?

Various conflicts: World War I and II, Cold War
- Global warming
- New communication technology
- Willingness to cooperate

http://www.solarpowerwindenergy.org
There are multiple lines of evidence that show the climate system is changing:

- Air temperatures increasing
- Glaciers and ice sheets melting
- Arctic sea ice shrinking
- Ocean heat content increasing
- Ocean surface temperatures increasing
- Sea levels rising
- Southern Ocean currents changing
- Ocean acidification

Consequences include:

- Changing rainfall pattern
- Number of hot days per year increasing
- Number of cold days per year decreasing
- Intensity and frequency of extreme weather events (e.g., fires, floods)

Natural systems and human activities contribute to these changes.
What role did they play in the world during the 20th century?

- Weapon control
- Limits on dangerous emissions from the Kyoto Protocol

- They enabled the world to establish standards
- Attempted to settle conflicts through peaceful negotiation
- Technology race
How did states respond to the 20th century’s economic challenges?

- Five-Year Plans
- Great Leap Forward

States responded in a variety of ways to the economic challenges of the twentieth century. In the Communist states of the Soviet Union and China, governments controlled their national economies.
How did the Great Depression affect governments’ relationship to their economy?

- New Deal
- Fascist Corporatist economy

At the beginning of the century in the United States and parts of Europe, governments played a minimal role in their national economies. With the onset of the Great Depression, governments began to take a more active role in economic life.
How did new international organizations affect the relationship of states and peoples around the world?

- European Union: United the countries of Europe and unified them under one currency

- United Nations: Allowed for intervention of one country into another country’s affairs in an attempt to help the people who may be suffering under a country’s rule

- Globalization: economies as well as culture
What were the economic effects of new international organizations?

- Nasser's promotion of economic development in Egypt
- The encouragement of export-oriented economies in East Asia
- IMF
- World Bank
- WTO

- Promoted more trade relations between nations
- Establishment of one single currency in the European Union
What were the humanitarian effects of new international organizations?

- UNICEF
- The Red Cross
- Amnesty International
- Doctors Without Borders
- WHO

- UNESCO helped to create global goals of erasing poverty and increasing communication across the globe
- UNICEF distributed vaccines to underdeveloped African nations
How did international trade and commerce develop in the 20th century?

- EU
- NAFTA
- ASEAN
- Mercosur

- The collapse of many European states after World War II called for the establishment of a united Europe, which was accomplished by the European Union.
- After World War II, there was an era of superpowers, nations such as US, China, and the Soviet Union, that dominated global trade.
How did these economic developments affect the distribution of world resources?

- The United States beginning with Ronald Reagan
- Britain under Margaret Thatcher
- China under Deng Xiaoping
- Chile under Pinochet
- Royal Dutch Shell
- Coca-Cola
- Sony

- The rise of the superpowers saw that many raw resources were concentrated in the hands of the very powerful nations
- Multinational corporations (Royal Dutch Shell, Coca-cola, Sony) began to challenge state authority and autonomy.
What new social and cultural ideologies developed, and what were the consequences and reactions to these ideologies?

- Negritude
- Xenophobia
- Race Riots
- Citizenship restrictions
- UN Declarations of Human Rights
- Women’s Rights
- White Australia Policy

Increased interactions among diverse peoples sometimes led to the formation of new cultural identities and exclusionary reactions.

The notion of human rights gained traction throughout the world.
How did communities of faith respond to the rapid changes in the 20th century?

- New Age Religions
- Hare Krishna
- Falun Gong
- Scientology
- Boko Haram
- Fundamentalist movements
- Liberation Theology

- The increase in scientific practices and Darwin’s Origin of Species and theories of evolution caused conflict between science and religion
- The factuality of religion was put into question
- In wake of the poor social conditions, some turned to faith
- Gandhi led movements to achieve peace and freedom from the British hold on the Indian colony
How did the global nature of culture affect sports, music, fashions, and the arts?

- World Cup Soccer
- The Olympics
- Cricket
- Regge
- Bollywood

- The increase of an international culture led to the establishment of the Olympics which brought together nations in sports competitions
- The Beatles became a worldwide sensation, which led to globalization of music
- Modernism, cubism, futurism and postmodernism became art movements that were accepted by global community

Silent Generation (1925-1946)
Baby Boomers (1946-1964)
Generation X (1965-1979)
Generation Y (1980-1999)
iGeneration Z (2000 - present)
BRACE YOURSELVES

THE AP TEST IS COMING