## MODULE OVERVIEW

### GEOGRAPHICAL SKILLS (DAY 3):

**Human Geography Skills**

5.B Explain spatial relationships across various geographic scales using geographic concepts, processes, models, or theories.

3.D Compare patterns and trends in maps and in quantitative and geospatial data to draw conclusions.

### CONTENT (DAY 3):

This content is designed for any High School Social Studies Class. Day 1 is History-centered while Day 2 and 3 are Geography-centered.

AP Human Geography references:

Topic 7.6 Trade and the World Economy
PSO-7.A.4 Global financial crises (e.g., debt crises), international lending agencies (e.g., the International Monetary Fund), and strategies of development (e.g., microlending) demonstrate how different economies have become more closely connected, even interdependent.

## DAY 1

### TO WHAT EXTENT IS THE CORONAVIRUS SIMILAR TO THE SPANISH FLU?

**CLASS ACTIVITY: Making a Claim supported by Evidence**

Students will investigate primary and secondary sources on the Coronavirus/COVID-19 pandemic of 2020 and the Spanish Influenza pandemic of 1918. Students will identify similarities and differences between government responses, geographical diffusion, cultural impact, economic impact, public reaction, and the effects of the diseases themselves.

**CHECK FOR UNDERSTANDING: Thesis Statement**

Students will synthesize comparisons between the Coronavirus and Spanish Influenza pandemics into an argumentative claim backed by document evidence.

## DAY 2

### HOW DO WE SLOW DIFFUSION IN A GLOBALIZED WORLD?

**CLASS ACTIVITY: Analyzing Quantitative Data**

Students will investigate sources on the diffusion of COVID-19. Students will analyze population pyramids for five countries impacted by COVID-19.

**CHECK FOR UNDERSTANDING: Making Predictions**

Students will predict how the diffusion of information regarding COVID 19 impacts the diffusion of the virus.

## DAY 3

### WHAT ARE THE ECONOMIC CONSEQUENCES OF A PANDEMIC?

**CLASS ACTIVITY: Analyzing Quantitative Data**

Students will analyze global economic data showing the impact of the spread of COVID-19. Students will analyze the growth of COVID-19 cases in Italy, South Korea, and the United States to identify current trends and to predict future growth as well as comparing how each country has addressed the spread of COVID-19.

**CHECK FOR UNDERSTANDING: Global Impact of COVID-19**

Students will analyze changes in GDP forecasts for selected countries to demonstrate their understanding of the economic consequences of COVID-19, identify successful approaches to addressing the growth of COVID-19, and finally to discuss global consequences of pandemics.
### Day 1

<table>
<thead>
<tr>
<th>AUTHOR</th>
<th>SOURCE</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>WHDE Authors</td>
<td>Why was the 1918 Flu so Deadly?</td>
<td>March 13, 2020</td>
</tr>
<tr>
<td>WHDE Authors</td>
<td>The Science Behind the Flu</td>
<td>March 13, 2020</td>
</tr>
<tr>
<td>WHDE Authors</td>
<td>Art and the Spanish Flu</td>
<td>March 13, 2020</td>
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<tr>
<td>WHDE Authors</td>
<td>Government Measures to Fight the New Plague</td>
<td>March 13, 2020</td>
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<tr>
<td>WHDE Authors</td>
<td>The Largest Flu Pandemic in History</td>
<td>March 13, 2020</td>
</tr>
<tr>
<td>WHDE Authors</td>
<td>How the Flu Spread Across America</td>
<td>March 13, 2020</td>
</tr>
<tr>
<td>WHDE Authors</td>
<td>Effects of the 1918 Influenza Pandemic</td>
<td>March 13, 2020</td>
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### Day 2

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>CDC</td>
<td>Map of COVID 19 Cases</td>
<td>March 6, 2020</td>
</tr>
<tr>
<td>UCSUSA</td>
<td>Exponential vs Linear Growth Curves</td>
<td>April 9, 2018</td>
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<tr>
<td>Worldometers</td>
<td>Graph of COVID 19 Cases in Italy</td>
<td>March 17, 2020</td>
</tr>
<tr>
<td>Drew Harris</td>
<td>Flatten the Curve</td>
<td>2020</td>
</tr>
<tr>
<td>Wikimedia Commons</td>
<td>Map of Airline Connections</td>
<td>2009</td>
</tr>
<tr>
<td>CDC</td>
<td>Social Distancing Tweet from CDC</td>
<td>March 16, 2020</td>
</tr>
<tr>
<td>White House</td>
<td>White House Avoid Eating Out Tweet</td>
<td>March 16, 2020</td>
</tr>
<tr>
<td>Wikimedia Commons</td>
<td>World Map of Urbanization Levels</td>
<td>2015</td>
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</table>

### Day 3

<table>
<thead>
<tr>
<th>AUTHOR</th>
<th>SOURCE</th>
<th>DATE</th>
</tr>
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<tbody>
<tr>
<td>WHDE Authors</td>
<td>Top 5 Markets for Motor Vehicle Parts and Accessories produced in China (2018)</td>
<td>March 15, 2020</td>
</tr>
<tr>
<td>WHDE Authors</td>
<td>Estimated Impact of COVID-19 outbreak on global tech shipments in Q1 2020</td>
<td>March 15, 2020</td>
</tr>
<tr>
<td>WHDE Authors</td>
<td>Dow Jones Industrial Average, EURO STOXX 50 Average, NIKKEI 225 Average, SSE Composite Index 2/18/20 - 3/12/20</td>
<td>March 15, 2020</td>
</tr>
<tr>
<td>WHDE Authors</td>
<td>Loss of Revenue for Airlines due to Coronavirus</td>
<td>March 15, 2020</td>
</tr>
<tr>
<td>WHDE Authors</td>
<td>Impact on United Airlines</td>
<td>March 15, 2020</td>
</tr>
<tr>
<td>WHDE Authors</td>
<td>Impact on Royal Caribbean Cruises</td>
<td>March 15, 2020</td>
</tr>
<tr>
<td>WHDE Authors</td>
<td>Total Coronavirus Cases 2/15/20 -3/16/20</td>
<td>March 16, 2020</td>
</tr>
<tr>
<td>WHDE Authors</td>
<td>New Coronavirus Cases in Italy, United States, and South Korea 2/15/20 - 3/16/20</td>
<td>March 16, 2020</td>
</tr>
<tr>
<td>WHDE Authors</td>
<td>South Korea, Italy, and United States Approaches to addressing the spread of Coronavirus</td>
<td>March 16, 2020</td>
</tr>
<tr>
<td>WHDE Authors</td>
<td>Organization for Economic Cooperation and Development (OECD) Changes in GDP Growth Forecast 2020</td>
<td>March 15, 2020</td>
</tr>
</tbody>
</table>
DAY THREE

Based on a 60-minute class

Lesson Question: How do global events such as COVID-19 affect individual countries?

Social Studies Skill: Data Analysis [Geography]

OVERVIEW

Students will analyze economic consequences of economic globalization focusing primarily on the current effects of the COVID-19 on stock markets, manufacturing and trade, tourism, and comparing governmental responses. Finally, students will be able to demonstrate their understanding of the economic consequences of the COVID-19 by explaining the causes for global GDP forecasts for the first quarter of 2020 to be downgraded. Students will have the opportunity to work individually or in groups depending on the needs of your students.

Materials needed:
- In Person - Copies of the activity materials.
- Online - Post the activity materials.

SEQUENCE OF INSTRUCTION

HOMEWORK OVERVIEW

HOMEWORK (Optional) (20 Minutes):
- Using the Day 3 Homework handout students will identify and map the country of manufacture for items in their home.
- Students will analyze the patterns they see on their map and answer questions related to economic globalization as well as impacts if parts of the supply chain are impacted.

Teacher Notes

Depending on your students’ knowledge of economic globalization and interconnected economies you may decide to not assign the homework activity.

Teaching Tip

Some students may wish to dive into conspiracy theories or partisan sites that seek to politicize the health emergency. Try to guide students toward categories such as scientific investigations, pop culture, government actions, health, economic impacts, impacts on foreign countries, etc.
CLASS ACTIVITY 1: Economic Data

CLASS ACTIVITY (20 MINUTES):

- Students will analyze economic data to determine global economic impact of the COVID-19 pandemic.
- Background info to share with students: Globalization is a commonly used term that refers to our increasingly connected world. Today, political boundaries do not typically stop interactions from occurring. Globalization is especially seen in regard to business. Increasingly, products that have commodity chains that involve multiple countries. For example, perhaps your t-shirt is made from cotton grown in India, made into fabric in Mexico, sewn in South Africa, and then sold in the United States. A disruption in any part of that process causes issues for ALL of the countries involved.
- Individual Activity or Online Learning
  - If students are working on this activity individually or through an eLearning experience you may want to share with students the following information before they start the activity.
    - Refer back to the optional homework and remind students about how many goods are produced in countries with economic advantages such as lower wages, lesser environmental regulations, government incentives, etc.
    - Many final products contain parts manufactured in multiple countries
    - Stock markets measure the value of stocks measured in their index. Even though they don't give a complete economic picture of a country, they are good at predicting confidence in a country's economy and the impact of events on an economy.
    - Since countries are economically connected or interdependent, a situation in one country or a few countries can quickly impact other countries.

IMPORTANT Teacher Note

Class Activity 1, 2, and 3 could be adapted to group work by having groups of students analyze the graphs, data, and other sources and then answer the accompanying questions. Groups might also do some of the work as individuals and then debrief the questions or work collaboratively to answer the analysis questions. Some of these group strategies are also possible with certain online learning platforms.

CLASS ACTIVITY 2: Coronavirus Data

CLASS ACTIVITY (20 MINUTES):

- Students will analyze data related to the spread of COVID-19 using the Activity 1 - Virus Data Handout
- Individual Activity or Online Learning
  - Students will answer questions 1-3 demonstrating their understanding of the trends shown in the Total Coronavirus Cases.
Students should focus on the exponential growth shown in the United States and Italy graphs and the S-Curve shown in the South Korean Graph.

- Students will answer question 4 demonstrating their ability to predict future trends based on the graphs showing growth of coronavirus cases.
- Based on the graphs students should predict cases in Italy and the United States will continue to grow and cases in South Korea will slow or stop growing.
- Students will answer question 5 by using all four graphs to predict which country they believe will have their number of cases slow in the future.
- Based on the graphs, students should identify South Korea. Evidence could include the S-curve in the total cases or the drop in new cases from 3/2-3/16.

CLASS ACTIVITY 3: Comparing Governmental Approaches to Address the Spread of COVID-19

CLASS ACTIVITY (20 MINUTES):
- Students will analyze data related to the spread of COVID-19
- Individual Activity or Online Learning
  - Using the Activity 3 handouts, students will read the case study for South Korea, Italy, and the United States to determine similarities and differences between each country’s approach.
  - Students will note three important facts for each country and evaluate the effectiveness of each approach.
  - Using the Activity 3 Synthesis handout, students will answer the following question using evidence from Activity 1 and 2.
    - Explain how the response of South Korea, Italy, and the US have contributed to the current and predicted growth of COVID-19 cases in each country.

CHECK FOR UNDERSTANDING: Global Impact of COVID-19
- Using the Check For Understanding handout, students will answer five questions demonstrating their understanding of factors that influence the spread of COVID-19 as well as economic consequences.
DAY 3 HOMEWORK

Name: ___________________________________________  Period: ____________

1. Pick 10 items from your home (items can include items of clothing, technology, etc.) and identify the country they were manufactured.
2. On the map below identify the countries your items were produced. Next label the items manufactured next to the country that manufactured them.

3. What patterns did you see on your map?

4. What technology and/or innovations in communication and transportation make the manufacturing patterns in the map possible?

5. Based on countries involved in these patterns, what could happen to their economies if production in one country was affected?
ACTIVITY 1- ECONOMIC DATA SET: MANUFACTURING IMPACTS

Globalization is a commonly used term that refers to our increasingly connected world. Today, political boundaries do not typically stop interactions from occurring. Globalization is especially seen in regard to business. Increasingly, products that have commodity chains that involve multiple countries. For example, perhaps your t-shirt is made from cotton grown in India, made into fabric in Mexico, sewn in South Africa, and then sold in the United States. A disruption in any part of that process causes issues for ALL of the countries involved.

The graphs to the right show the impact of the spread of COVID-19 on manufacturing and supply chain for selected products.

Answer the following questions:

1. What trends can be identified in the data above?

2. How do the trends demonstrate economic interdependence?

3. Which country’s automobile industry would you predict to be most affected by factory shutdowns in China?
The graphs above show the value of stocks from Feb 18 - March 12, 2020 following the outbreak of the Coronavirus.

Answer the following questions:

1. What trends can be identified in the data above?

2. How do the trends above demonstrate economic interdependence?

3. What impact has the COVID-19 had on the stock markets? (Consider including COVID-19 data from Activity 1 as part of this answer.)
ACTIVITY 1 -- ECONOMIC DATA SET: TOURISM IMPACT

Loss of Revenue for Airlines due to COVID-19

United Airlines handled a million fewer passengers in the first two weeks of March than last year at the same time and this could lead revenues to fall by $1.5 billion dollars compared to last year according to CEO Oscar Munoz and President Scott Kirby


Even though it is too early to predict, coronavirus has already caused losses of $750 million in the first months of this year. For example, when Royal Caribbean canceled just 18 trips to Asia, the cost to the company was about $130 million. Norwegian Cruises estimates that just halting operations in Asia until April could cost $440 million.


Answer the following questions:
1. What trends can be identified in the data above?
2. How do the trends demonstrate global interdependence?
ACTIVITY 2 - CORONAVIRUS DATA

Total Coronavirus Cases 2/15-3/16

Number of Cases

- US
- Italy
- South Korea

New Coronavirus Cases in Italy

New Coronavirus Cases in the United States

New Coronavirus Cases in South Korea

https://www.worldometers.info/coronavirus/country/
**ACTIVITY 2 - ANALYSIS QUESTIONS**

**Doubling Time** is the amount of time it takes for a phenomenon to double. Doubling time is frequently used to calculate how long it will take for a population to double or how long it will take for an investment to double. In this case, doubling time refers to how long it takes for the number of cases of COVID-19 to double.

Use the graph “Total Coronavirus Cases” to answer questions 1-3.

(Note: use Activity 2 Supplementary Reading on Reading Graphs)

<table>
<thead>
<tr>
<th>1. Compare and contrast the data for all 3 countries.</th>
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<table>
<thead>
<tr>
<th>2. The growth of cases in Italy and the US would be referred to as what type of growth? Why?</th>
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</table>

<table>
<thead>
<tr>
<th>3. The growth of cases in South Korea would be referred to as what type of growth? Why?</th>
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</table>

| 4. Analyze all the graphs to complete this task. Write a paragraph in which you argue... |
|    -which country you believe will see the number of total cases grow in the immediate future |
|    -which country you believe will see the cases slow in the immediate future                |
| Explain using evidence from at least two graphs.                                             |
|                                                                                               |
### ACTIVITY 3: GOVERNMENT APPROACHES TO ADDRESS THE SPREAD OF COVID-19

#### South Korea

<table>
<thead>
<tr>
<th>Tests Per Million (AS 4/13)</th>
<th>4,813</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time for COVID-19 cases to double</td>
<td>11 days</td>
</tr>
</tbody>
</table>

**What has been the government approach?**

South Korea has been very aggressive in response to the spread of COVID-19, especially in testing since the outbreak. This approach can be connected to lessons learned from a MERS outbreak in 2015 that has led to increased government support to analyze samples during any outbreak. One solution has been creating drive-through clinics that increase access as well as limit human contact. This increased level of testing and medical care, including hospitalization, is covered by the South Korean government. To address costs for the health care system, child care, and the economic impacts on small and medium size businesses, the South Korean government proposed an additional spending of $13.7 billion dollars on March 4.

Adapted from [NPR report](https://www.npr.org) [Reuters](https://www.reuters.com) and [Haaretz](https://www.haaretz.com)

#### Italy

<table>
<thead>
<tr>
<th>Tests Per Million (AS 4/13)</th>
<th>1420.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time for COVID-19 cases to double</td>
<td>4 days</td>
</tr>
</tbody>
</table>

**What has been the government approach?**

Italy started by testing more aggressively than other European countries but has recently slowed in testing to minimize the number of samples that need to be processed. Testing fewer people meant that infected people not displaying symptoms could still spread the virus. By March 10, the Italian government proposed a $28 Billion dollar stimulus to help workers who have lost jobs, increase funds to small businesses, and potentially offer rent assistance.

Adapted from [NY Times](https://www.nytimes.com) and [Bloomberg](https://www.bloomberg.com)

#### 3 Notes on South Korea’s Approach (and note how effective)

- 
- 
- 

#### 3 Notes on Italy’s Approach (and note how effective)

- 
- 
-
### United States

**Tests Per Million (AS 4/13)** -- 41.8  
**Time for COVID-19 cases to double** - 6 days  

**What has been the government approach?**  
Initial government responses were skeptical of the seriousness of the spread of COVID-19 until March 13, 2020 when a National Emergency was declared. Due to a limited supply of testing kits, early testing has been limited as labs initially performed 40 to 60 tests a day. By March 15th the government stated that 2000 commercial labs would begin to process tests, significantly increasing the number of tests. The Federal government helped to set-up drive through testing facilities similar to those in South Korea. The cost of testing and office or hospital visits remains a significant concern to many Americans without healthcare coverage. The Federal government has approved $8.3 billion to address health care costs such as testing, creating or buying vaccines, and funds to help state and local health departments. Additional funding is also being discussed to provide economic relief for those impacted by COVID-19.  

Adapted from [NY Times](https://www.nytimes.com), [NPR](https://www.npr.org), and [Market Watch](https://www.marketwatch.com)

### 3 Notes on the United States’ Approach (and note how effective)
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**ANALYSIS QUESTIONS**

What are the most important differences in the approaches of these three governments?  

What is similar in all three approaches?
ACTIVITY 3: SYNTHESIS

<table>
<thead>
<tr>
<th>SYNTHESIS QUESTION:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use evidence from</td>
</tr>
<tr>
<td>- the government responses of South Korea, Italy, and the United States in Activity 2</td>
</tr>
<tr>
<td>- COVID-19 data in Activity 1</td>
</tr>
<tr>
<td>Explain how the responses of South Korea, Italy, and the US have contributed to the current and predicted growth of COVID-19 cases in each country.</td>
</tr>
</tbody>
</table>
The Graph above shows preliminary impacts of the COVID-19. Answer the following questions:

A. Describe economic interdependence.

B. Describe the economic data shown in the graph above.

C. Identify and explain two factors that have contributed to the trend shown in the graph.

D. Identify and explain which country’s approach has been most successful in addressing the growth of COVID-19 within their borders?

E. Explain the relationship between local decisions and global economic impacts.

Graphs can help with understanding current conditions and with making predictions. When analyzing a graph here are some key things to consider.

- **Exponential Growth** - Growth that occurs with the doubling of a phenomena. Doubling time is the time it takes for a phenomena to double. Typically doubling time is used when discussing population growth, but it can be applied to the spread of viruses such as the coronavirus. In this case, doubling time refers to the amount of time for the number of cases to double.

- **S-Curve** - shows early exponential growth with a slowing of growth.

- **Trends** - Graphs show us what is currently happening with a data set, but also provide information to make predictions about the future.
1. Using the information for the three countries above complete the Venn diagram below.