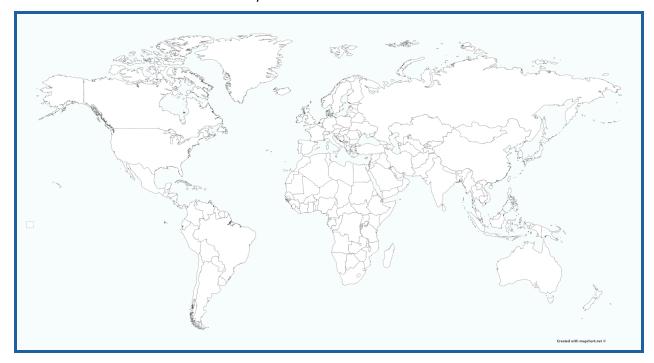


### DAY 3 STUDENT HANDOUTS

Name:	Period:
Name:	Periou:

- 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.



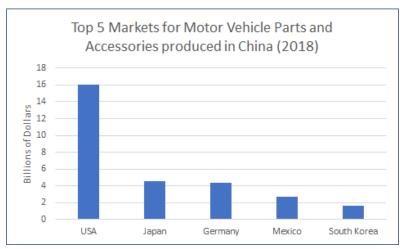
- 3. What patterns did you see on your map?
- 4. What technology and/or innovations in communication and transportation make the manufacturing patterns in the map possible?
- 5. Based on countries involved in these patterns, what could happen to their economies if production in one country was affected?

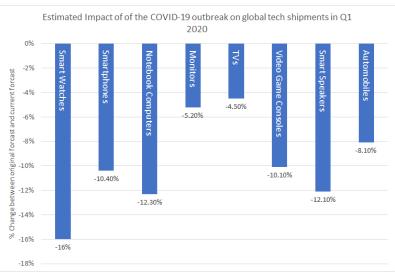


### ACTIVITY 1- Economic Data Set: Manufacturing Impacts

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.

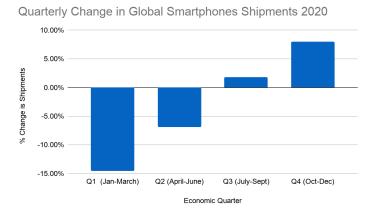
The graph to the right show the impact of the spread of COVID-19 on manufacturing and supply chain for selected products during the first three months of 2020.





https://www.theverge.com/2020/2/18/21141924/coronavirus-tech-industry-impactreport-trendforcehttps://comtrade.un.org/data/

The graph to the right shows an overall look at 2020 with recalculated Quarter 1 data, and data from the rest of the year.



https://www.idc.com/getdoc.jsp?containerId=prUS46264320

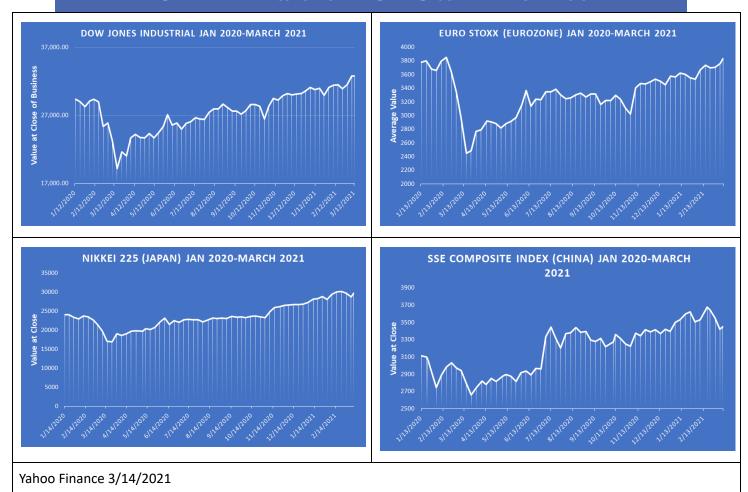


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ารwe	the following questions based on the graphs from the previous page:
1.	What trends can be identified in the data above?
2.	How do the trends demonstrate economic interdependence?
3.	Which country's automobile industry would you predict to be most affected by factory shutdowns in China?
4.	Using the <i>Quarterly Change in Global SmartPhones Shipments 2020</i> graph, predict what COVID-19's impact on other industries such as automobiles or technology products and provide evidence to support your answer.



### ACTIVITY 1 -- ECONOMIC DATA SET: STOCK MARKETS IMPACTS



The graphs above show the value of stocks from Feb 18 - March 12, 2020 following the outbreak of the Coronavirus.

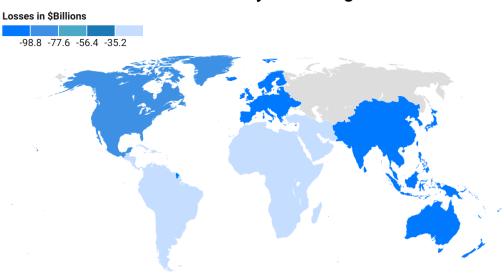
Answer the following questions:

- 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

### Airline Revenue Losses 2020 by World Region



Created with Datawrapper

https://www.icao.int/Newsroom/Pages/2020-passenger-totals-drop-60-percent-as-COVID19-assault-on-international-mobility-continues.aspx

Travel restrictions caused by Covide-19 has caused airline revenues to drop from \$838 billion in 2019 to \$328 billion in 2020 caused by a 66% drop in passenger demand. Airlines hope that easing of restrictions that passenger numbers will grow in 2021, but will continue to be less than in 2019. Even with this hope, pre Covid passenger numbers will not recover until 2024 at the earliest, with domestic markets seeing recovering faster than international markets.

https://www.iata.org/en/pressroom/pr/2020-11-24-01/

The cruise line Royal Caribbean has recently reported that it has experienced its fourth straight ten figure quarterly loss\*. In fact the company lost \$1.4 billion in the just the fourth quarter (Sept-Dec) compared to earning \$273.1 million at the same time in 2019. Even with that bad news, and the fact that U.S. cruises are still not allowed with current Covid-19 restrictions, Royal Caribbean has seen a 30% increase in future bookings in the United States giving hope that the tourist industry will begin to recover from the impact of COVID-19.

https://www.miamiherald.com/news/business/tourism-cruises/article249427065.html

### 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 ANALYSIS**

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 Case 2/15-3/16 to analyze the potential of growth of COVID-19 during the first months of 2020" to answer questions 1-3.

#### 30000 25000 20000 Number of Cases 15000 10000 5000 0 3/2/2020 2/27/2020 2/29/2020 3/1/2020 3/8/2020 /10/2020 3/11/2020 3/3/2020 3/5/2020 3/9/2020 3/4/2020 3/6/2020 3/7/2020 -US ----Italy ----South Korea

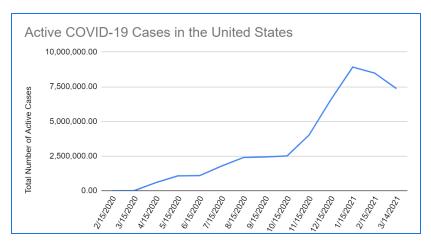
### Total COVID-19 Cases Feb-March 2020

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

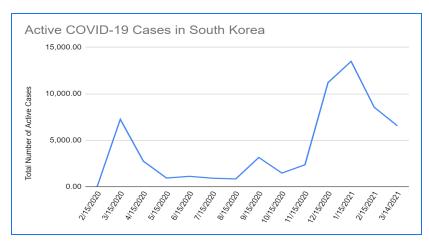
1. Compare and contrast the data for all 3 countries. The growth of cases in Italy and the US would be referred to as what type of growth? Why? The growth of cases in South Korea would be referred to as what type of growth? Why? 3. 4. Based on the graph, which country do you believe will see the number of total cases grow in the immediate Which country do you believe will see the cases slow in the immediate future?



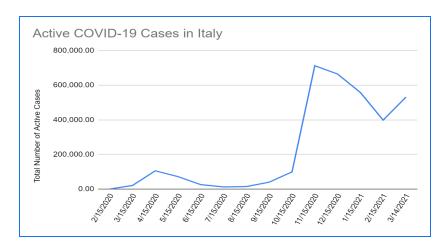
Now that you have examined the data available in the first months of 2020, compare the actual COVID-19 numbers until 3/14/21. Use the graphs below to answer question 5 and 6.



https://www.worldometers.info/coronavirus/country/us/



https://www.worldometers.info/coronavirus/country/



https://www.worldometers.info/coronavirus/country/italy



<ul> <li>5. Analyze all the graphs to complete this task. Write a paragraph in which you argue</li> <li>Which country's growth is similar to what you predicted in the first months of 2020?</li> <li>Which country's growth is most different from what you predicted in the first months of 2020</li> </ul>			
6. Analyze all the graphs to complete this task. Write a paragraph in which you argue			
<ul> <li>Which country do you believe will have the number of cases fall (or continue to fall) in the future?</li> </ul>			



### ACTIVITY 3: GOVERNMENT APPROACHES TO ADDRESS THE SPREAD OF COVID-19

# South Korea Total Cases of Covid-19 96,635 as of 3/16/2021 19 active cases as of 2/15/20 6558 active cases as of 3/14/21

### 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 in 2020. 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, 2020.

Because of the decisions made in the early days of the pandemic, South Korea was able to quickly test and identify those infected with Covid-19. Tracing efforts included hundreds of epidemiologists as well as using a wide variety of data sources such as credit-card purchases and closed-circuit video footage. To help with the economic impact to individuals, those who were quarantined received support from the government. South Korea's experience with Covid-19 has not been without spikes, but the systems in place at the beginning of the pandemic have made such spikes short-lived.

support from the government. South Korea's experience with Covid-19 has not been without spikes, but the systems in place at the beginning of the pandemic have made such spikes short-lived.			
Adapted from NPR report Reuters, Haaretz, and Our World in Data			
3 Notes on South Korea's Approach (and note how effective)			
<del>-</del>			
-			



	Italy
Total Cases of Covid-19	3,223,142 as of 3/14/2021
Active Covid-19 Cases	3 active cases as of 2/15/20 531,251 active cases as of 3/14/21

### 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.

Even with these approaches, many scientists believe that the Italian government did not act quickly enough to stop the spread of Covid-19. In addition, debates over the economic and social impacts of lockdowns. Italy found that loosening restrictions and ending lockdowns led to spikes in infections. These spikes coupled with the introduction of new variants of the Covid-19 virus have caused a recent growth in cases.

From March 8th to March 14th of 2021, Italy saw over 150,000 new infections. Because of this growth, Italy has reinstated a lockdown which includes a three tiered system which will leave half of Italy's twenty regions, including the cities of Rome, Milan, and Venice, with different levels of limitations of movement based on level of infections in a region. These measures extend to all of Italy during Easter weekend in hopes of slowing the spread of this current wave of infections.

during Easter weekend in hopes of slowing the spread of this current wave of infections.		
	Adapted from <u>NY Times</u> and <u>NY Times</u> and <u>Bloomberg</u>	
3 Notes on Italy's Approach (and note how effective)		
-		
-		



l	Jnited States
Total Cases of Covid-19	29,269,590 (3/16/2021)
Active Covid-19 Cases	12 active cases as of 2/15/20 7,365,186 active cases as of (3/14/21)

### 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 was limited as labs initially performed 40 to 60 tests a day. By March 15th, 2020 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 remain a significant concern to many Americans without healthcare coverage.

Today the role of limiting public gatherings, school closures, and restaurant closings have been left up to individual states, counties, cities, and school districts. Vaccine development has been a major focus on the federal government's approach to addressing the pandemic with goals of vaccinating most Americans by the end of May 2021. Just as the reaction to the pandemic differs, testing practices and current vaccines distribution also differ widely, leading to some confusion about who can receive vaccines and where these vaccines are available.

The federal government has provided some financial relief during the pandemic, with the passing of the \$1.9 trillion Covid Relief bill as the most recent example which includes direct payments to individuals and help for businesses, and state and local governments impacted by Covid-19.

Adapted from NV Times and NDD	2020 Data - Adapted from <u>NY Times</u> , <u>NPR</u> , and <u>Market Watch</u>
3 Notes on the United States' Approach (and note	e how effective)
5 Notes on the office States Approach (and not	e now enceuvey
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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?

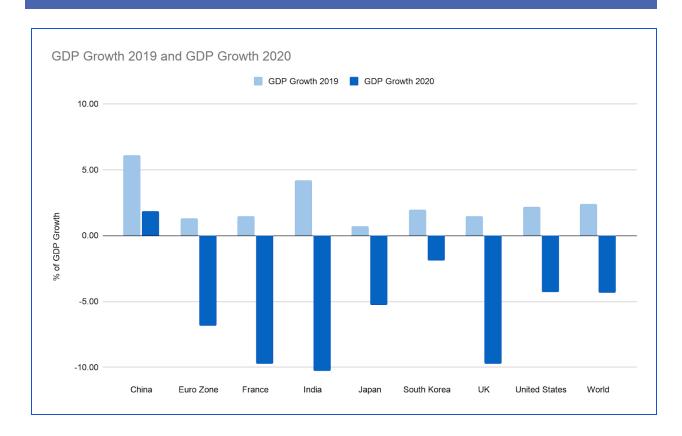


## **ACTIVITY 3: S**YNTHESIS

SYNTHESIS QUESTION:
Use evidence from
-the government responses of South Korea, Italy, and the United States in Activity 2
-COVID-19 data in Activity 1
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.



### CHECK FOR UNDERSTANDING - GLOBAL IMPACT OF COVID-19



 $\frac{https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG}{https://statisticstimes.com/economy/countries-by-projected-gdp-growth.php}$ 

The Graph above shows preliminary impacts of the COVID-19. Answer the following questions:

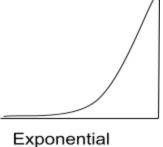
- A. Describe economic interdependence.
- B. Describe the economic data shown in the graph above.
- C. Identify and explain two factors that have contributed to the trend shown in the graph.
- D. Identify and explain which country's approach has been most successful in addressing the growth of COVID-19 within their borders?
- E. Explain the relationship between local decisions and global economic impacts.



## OPTIONAL / SUPPLEMENTAL ACTIVITY 2 HANDOUT: READING GRAPHS

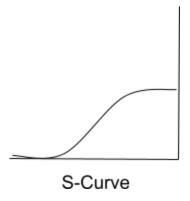
Graphs can help with understanding current conditions and with making predictions. When analyzing a graph here are some key things to consider.

■ 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.



Exponential Growth

■ **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



# OPTIONAL / SUPPLEMENTAL ACTIVITY 3 HANDOUT

1. Using the information for the three countries above complete the Venn diagram below.

