

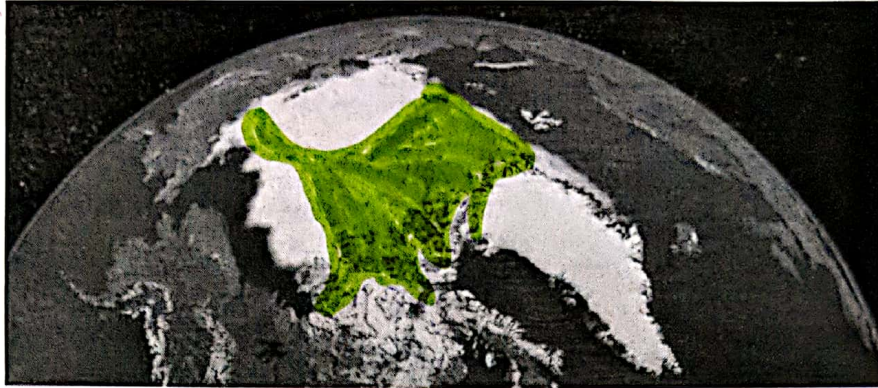
Name: _____ Period: _____

Climate Change

Go to: <https://climate.nasa.gov/interactives/climate-time-machine> Jump Code: **PVRN**

Click on: SEA ICE.

1. The picture below shows what Earth's ice caps looked like in 1979, watch what happens from 1979 until 2016. Then DRAW in COLOR what the ice caps look like in 2016 on top of what was seen in 1979.



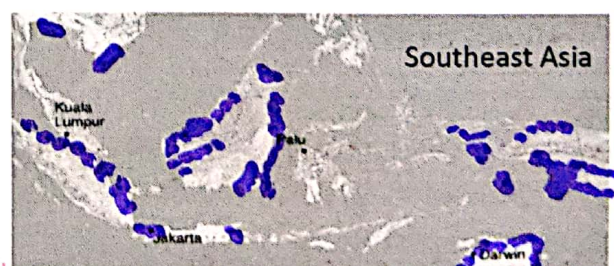
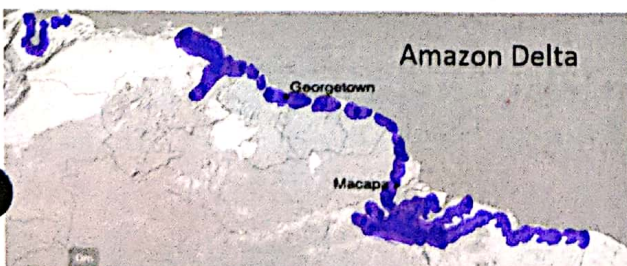
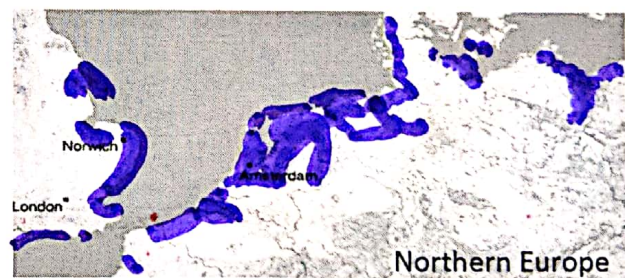
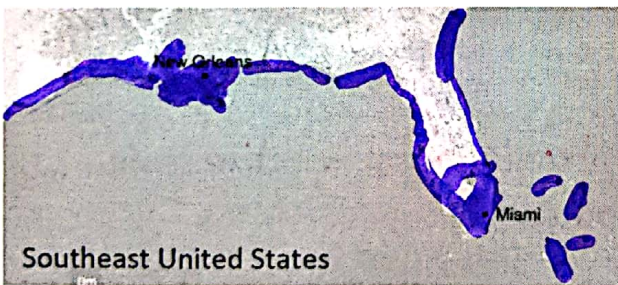
2. What's happening to the perennial ice cover? been steadily decreasing

AT THE TOP → Click on: SEA LEVEL.



3. If the Greenland Ice sheet melted completely, it would raise the sea level by 1 meters & (3 feet)

4. The pictures below show what the coasts look like without sea levels rising. On each picture below please DRAW in COLOR what would be underwater if the sea levels rise by 6m.



Go to: <https://climate.nasa.gov/evidence/> Jump Code: B9GY

CLICK ON: Evidence



5. Scroll down a bit... What are the 9 pieces of evidence for rapid climate change?

1. global temperature rise
2. warming oceans
3. shrinking ice sheets
4. glacial retreat
5. decreased snow cover
6. sea level rise
7. declining arctic sea ice
8. extreme events
9. ocean acidification

CLICK ON: Effects



6. Scroll down a bit... What are the 9 future effects of global climate change?

1. change will continue through this century and beyond
2. temps will continue to rise
3. frost free season will lengthen
4. changes in precipitation pattern
5. more droughts and heat waves
6. hurricanes will become stronger/intense
7. sea level will rise by 1-4 ft by 2100 (2100)
8. Arctic likely to become ice-free
9. U.S. regional effects

7. Under U.S. Regional Effects: What will happen to the Midwest?? extreme heat, heavy downpours and flooding affect infrastructure, health, agriculture, forestry, transportation, air and water quality

CLICK ON: Questions (FAQ)



On the questions below, click on the matching blue question to reveal the answer, then write the answers in your own words.

8. What's the difference between weather & climate? weather is on short timescales (rain, snow, etc); climate is longer-term averages
9. Is the sun causing global warming?? No
10. What is the greenhouse effect? greenhouse gases trap heat close to earth's surface.
11. What do volcanoes have to do with climate change? release less than 2% of the CO₂ released by human activities
12. Which is a bigger methane source: cow belching or cow flatulence? (EXPLAIN WHY!) cow belching, due to enteric fermentation