

Homework Assignment 1

1. Name 3 sources of sea level rise:

1. _____
2. _____
3. _____

2. Explain the difference between *weather* and *climate*:

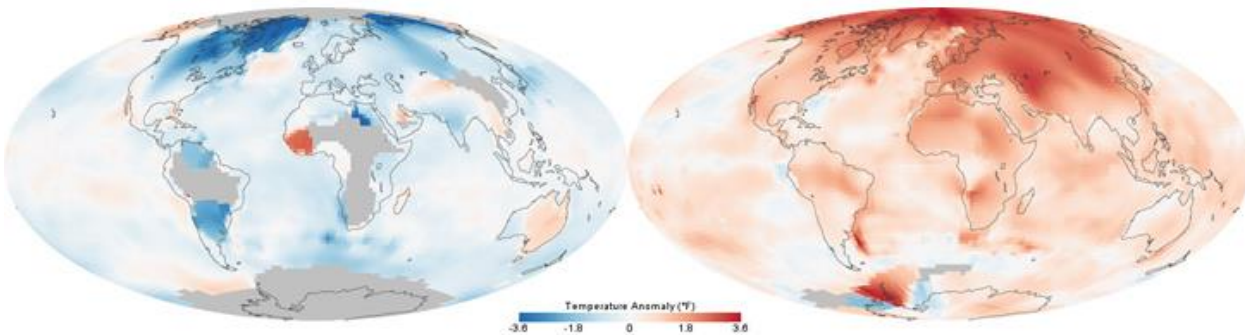
3. Give 2 examples of natural processes that cause climate change:

1. _____
2. _____

4. Human actions have resulted in increasing temperatures over the last half century through increased emissions of greenhouse gases. Name two human activities besides burning fossil fuels that contribute to greenhouse gas emissions:

1. _____
2. _____

5. Explain what is meant by *temperature anomaly* in the image below which compares global temperatures in the 1880s on the left and the 1980s on the right to the global averages from 1951 to 1980.

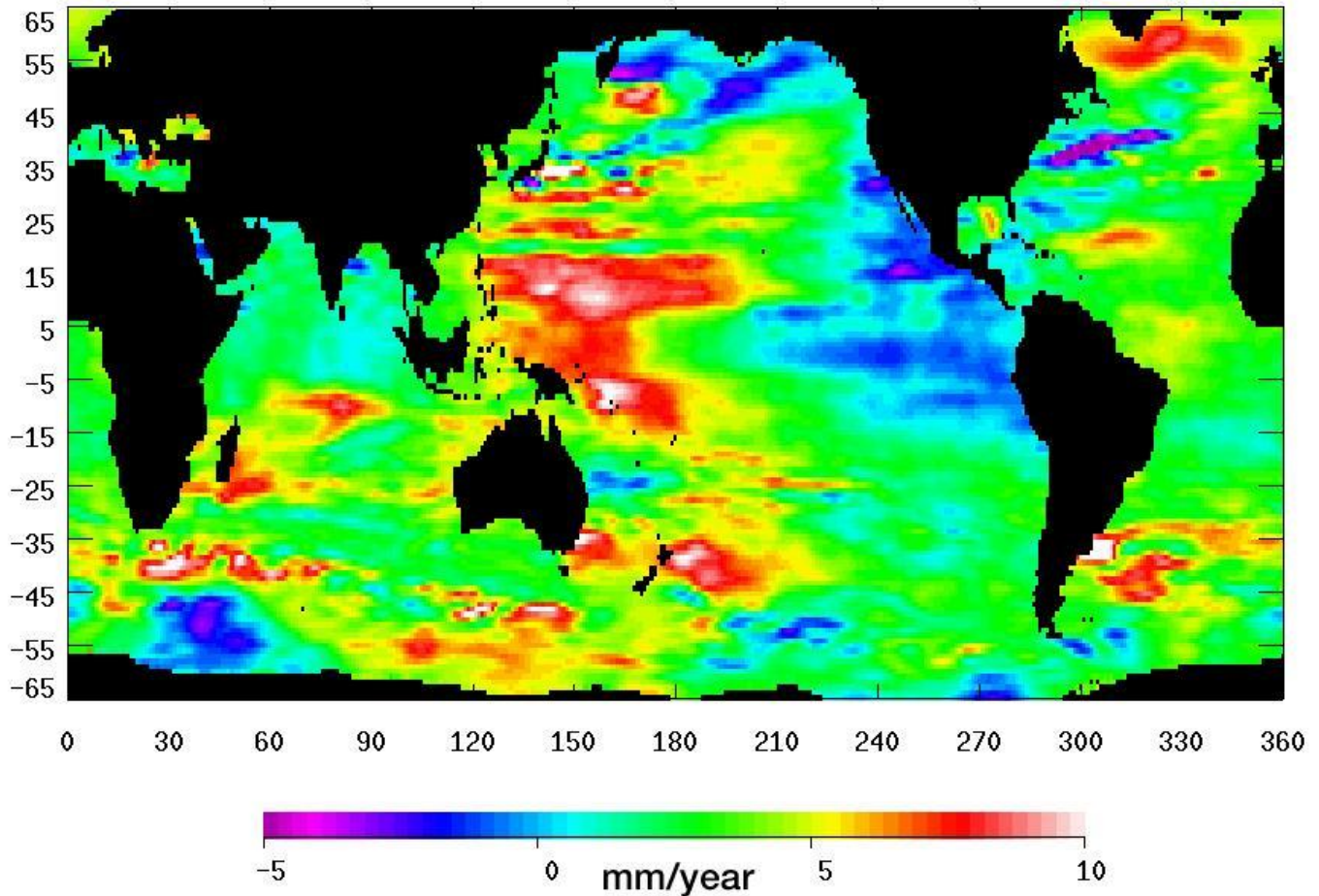


6. Glaciers and ice sheets are the world's largest reservoir of what?

7. How much sea-level rise happened during the 20th century?

8. According to the image provided by NASA below (found at <http://photojournal.jpl.nasa.gov/jpeg/PIA11002.jpg>), what region has experienced the most sea level rise?

Trend of Sea Level Change (1993-2008)



9. How many people world wide live in coastal areas that are less than 10 meters above sea level?

10. Name 2 impacts of rising sea level on coastal environments and infrastructure:

Homework Assignment 2

Use Table 1 to answer the following questions.

1. Which place is larger in population?
2. Which place is larger in area?
3. Which place is more crowded (denser)?
4. Which place is growing in population faster?
5. Both Majuro and Springdale are growing in population, but because of different processes. Which process is more important in Majuro? In Springdale? Look at the graphs labeled Fig. 1.3 and 1.4 below. Do these fit with your explanation?
6. Which place is younger?
7. Which place has higher educational attainment?
8. Given these numbers, which community services might be strained in Majuro and why?
9. Given these numbers, which community services might be strained in Springdale and why?

Fig 1.3 Population of Marshall Islands: Census Figures: 1920-1999

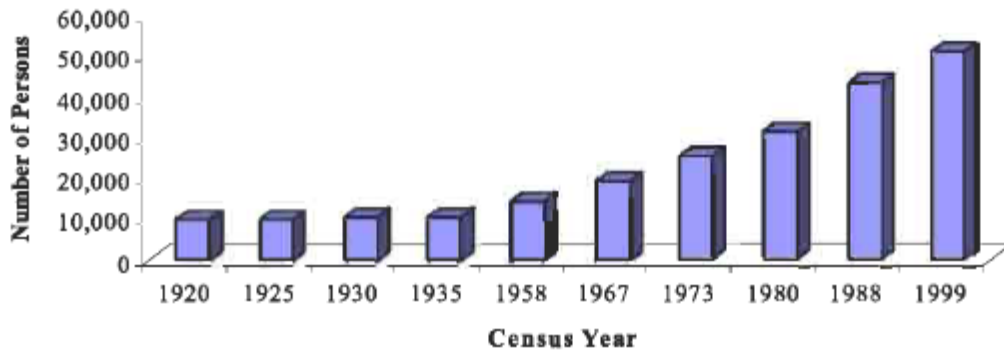


Fig 1.4 Population Growth Rates of RMI

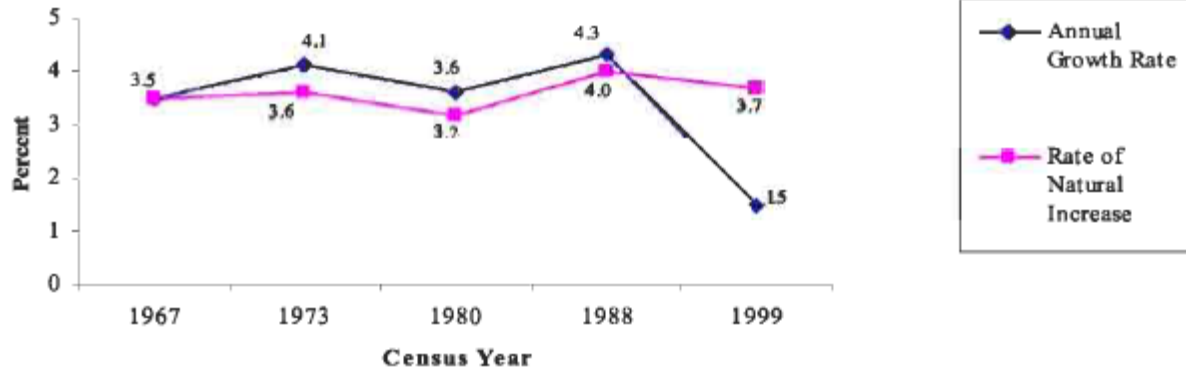


Table 1. Demographic data for Majuro and Springdale, Arkansas

Variable	Majuro	Springdale, AR
<i>Year of data</i>	<i>2011</i>	<i>2012</i>
Land area, square miles	3.75	31.3
Population total	27,797	73,588
Population density (persons per square mile)	7,413	2,336
Percent females	48.8%	50.3%
Population increase since 1999	2,318	22,668
Percentage increase	4.6%	48.1%
Percent children under 5	14.5%	10.3%
Percent people over 65	2.0%	8.8%
Median age of population (years)	20.6	29.1
Average household size	6.7	2.5
Median size of housing unit, square feet	399.0	2184.0
International in-migration (2006-2011)	1,142	2,465
International out-migration (Marshall Islands as a whole) 2013*	9,684	--
Domestic net migration (2006-2011)	598	23,590
Births in past year	1,705	3,205
Deaths in past year	197	1,260
Population 25 years and older, high school graduate	24.8%	69.7%
Population 25 years and older, some college and higher	18.1%	39.8%

Sources:

Republic of the Marshall Islands, 2011 Census Report. 2012. Economic Policy, Planning and Statistics Office, Republic of the Marshall Islands, and the SPC Statistics for Development Programme, Noumea, New Caledonia.

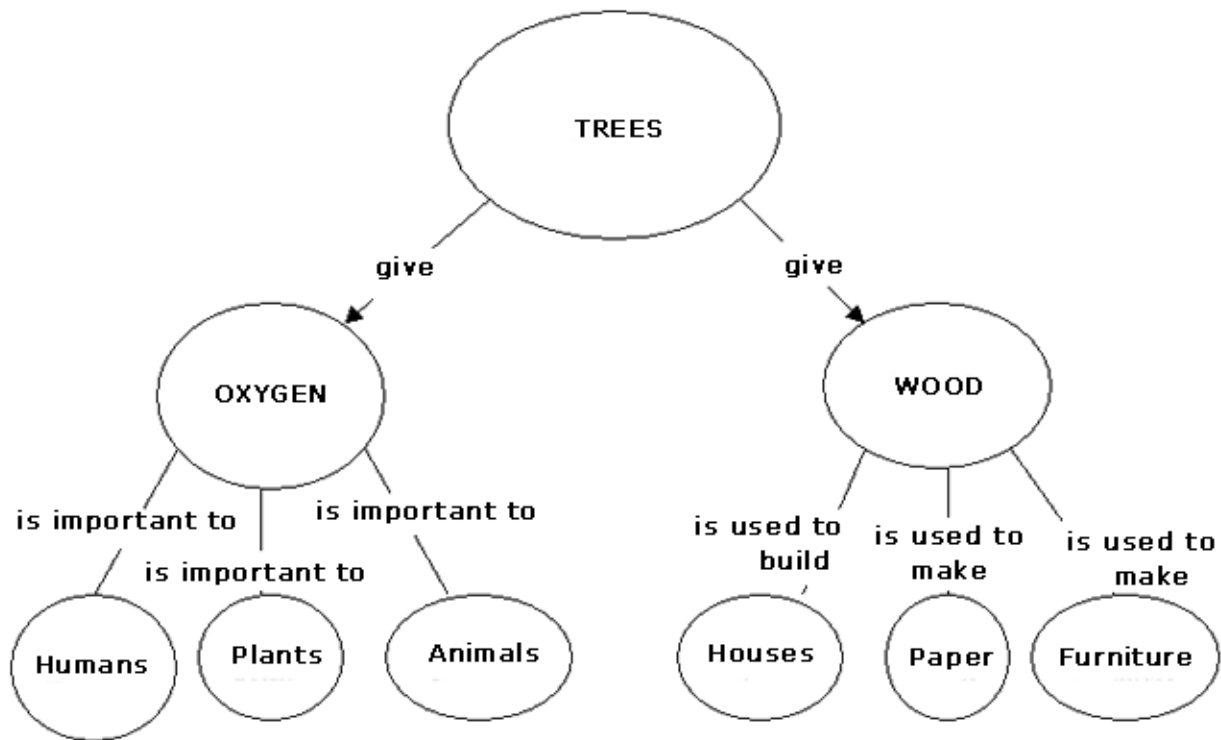
*UNICEF Migration Profile (found at <http://www.un.org/en/development/index.shtml/desa/index.html>)

American Community Survey, 2008-2012, U.S. Census Bureau;
American FactFinder Quick Facts for Springdale, Arkansas

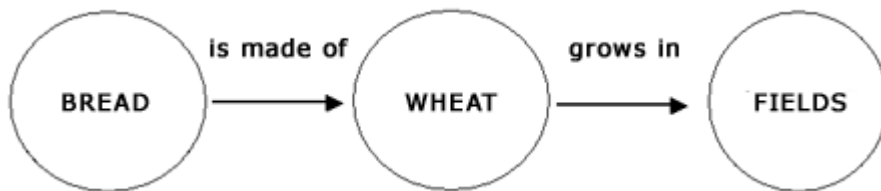
U.S. Census Bureau Median and Average Square Feet of Floor Area in New Single-Family Houses Completed by Location (U.S. South Region value shown)

Population Estimates 2013, Deaths, Births and Migration, U.S. Census Bureau

Sample concept maps



Found at <http://ecrp.uiuc.edu/v8n2/birbili.html>

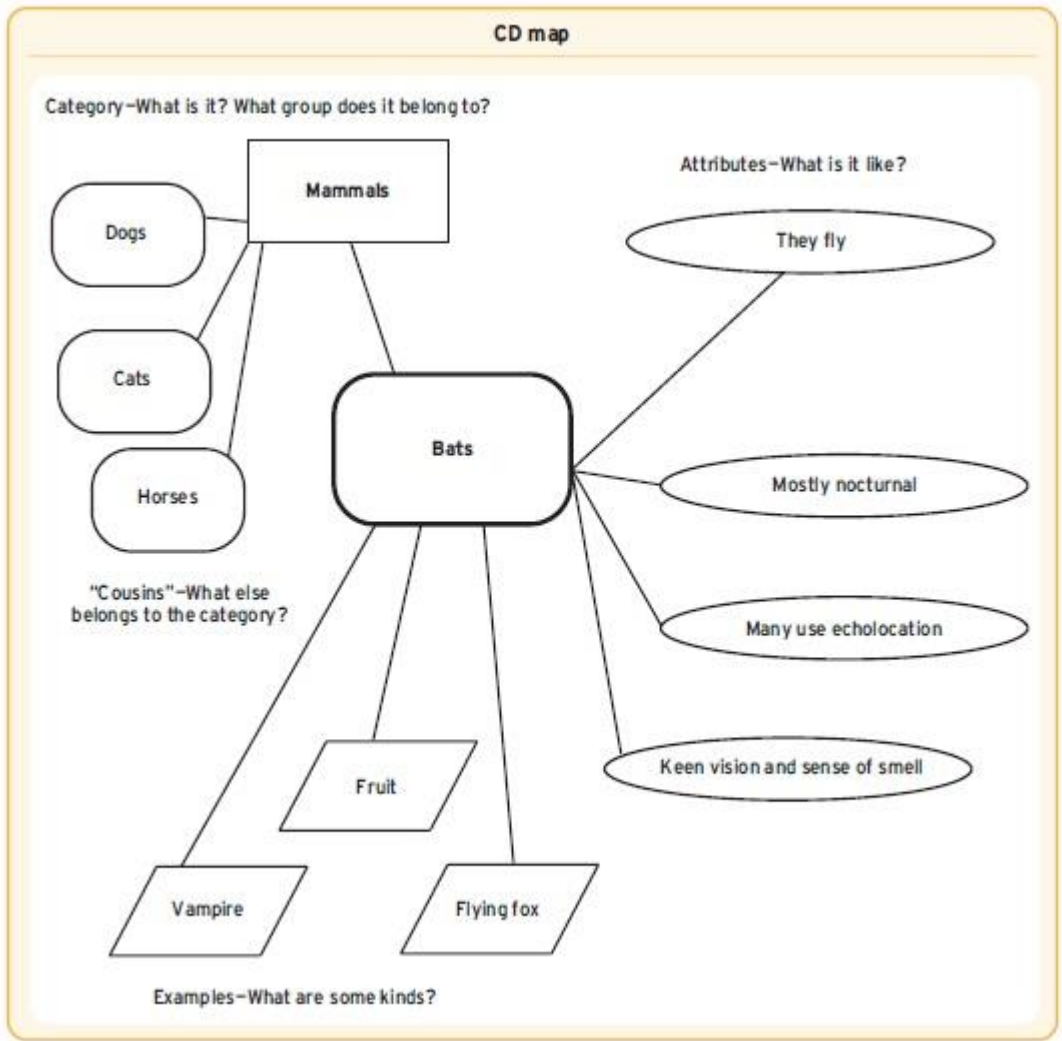


Found at <http://ecrp.uiuc.edu/v8n2/birbili.html>

Mind Map: A Brainstorming Tool



Found at <http://www.clark.edu/Library/iris/start/topics/images/mindmap.gif>

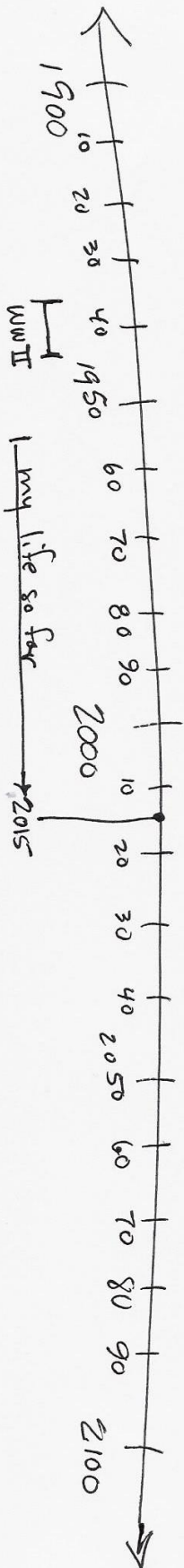
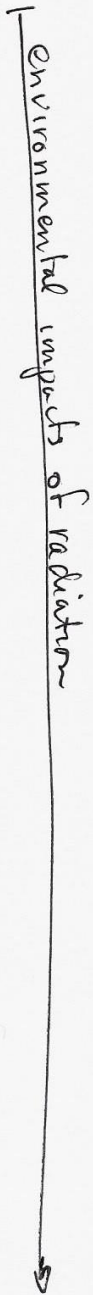


Found at <http://strategiesforthesoul.files.wordpress.com/2012/10/concept-map-example-2.jpg>

Sample timeline



health impacts of radiation →



Atomic testing in RMI

WWII

Compact of Free Association

pres Obama

rapid emigration of Marshallese to US (Springdale)

Timeline Sample - Marshallese case study

Boa Moon, 2015