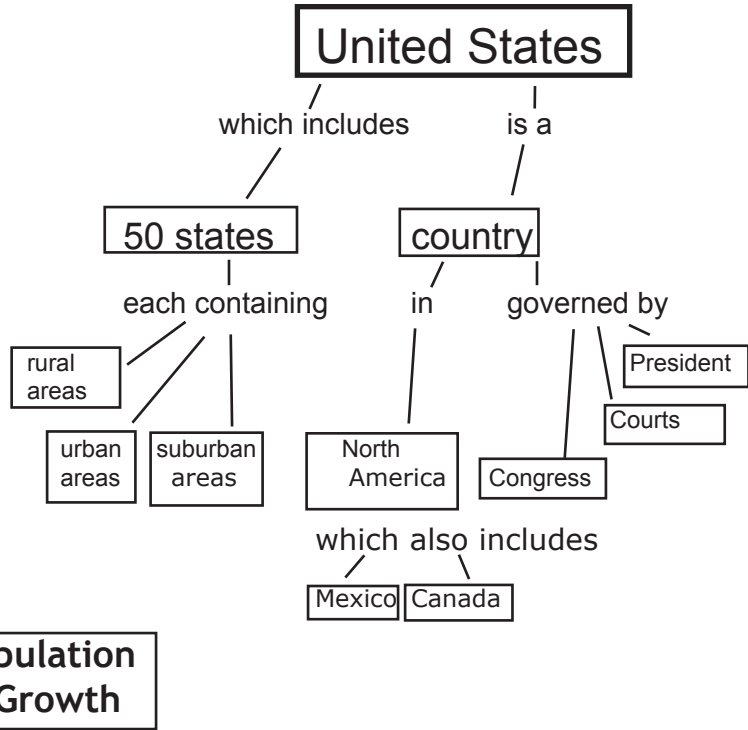


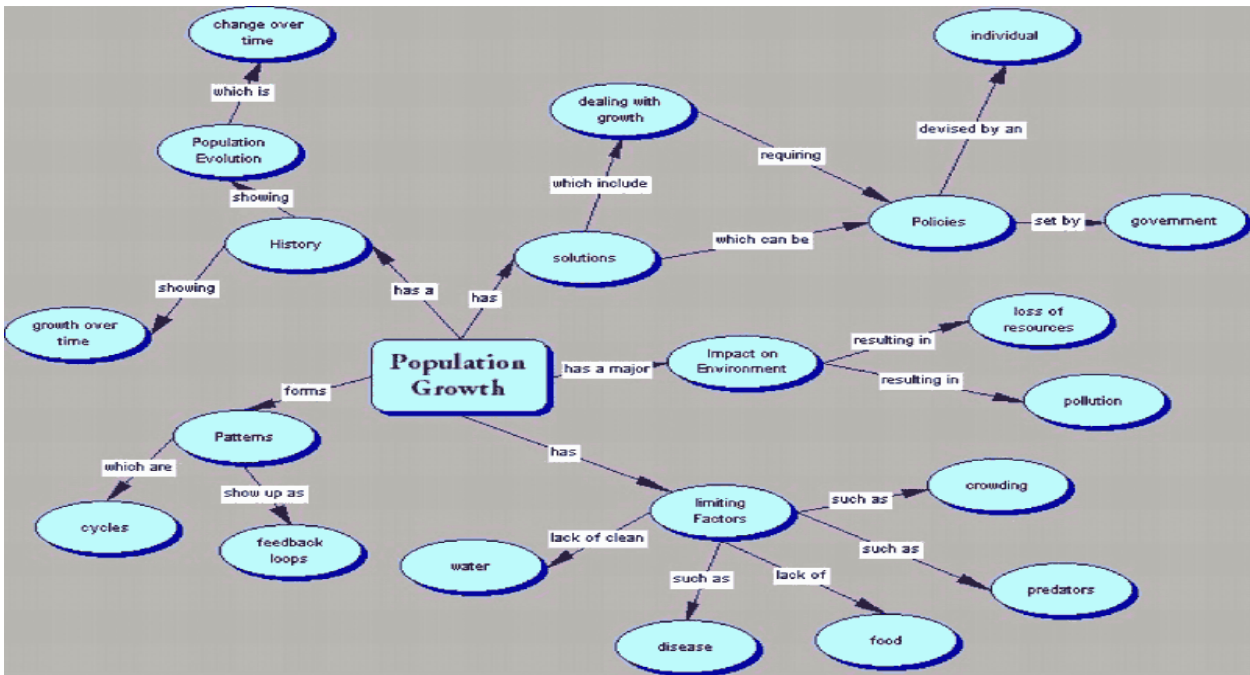
# Population Growth—Concept Map

A concept map is a way of displaying your knowledge about a certain subject area. It consists of a set of words in boxes representing the most important ideas. The boxes are connected by lines and words showing how the ideas in the boxes are related. For example, at right is a concept map about the United States.

Your task is to create a concept map about population growth. Your concept map should show ways of thinking about population changes and what factors can affect them. Start with the phrase "Population Growth" at the top. (If you'd like more space, you can draw your concept map on the back, or on another sheet of paper.)



## Sample Population Growth Concept Map



If students have not had experience in concept mapping, you might want to start them out with a hand-out showing an example (master on p. 7), a general idea of what they are to map, and starting word(s) to help get them started. Once they have had experience with concept maps, they can create them on blank sheets of paper (no photocopying required). Alternatively, they can use concept mapping software such as Inspiration (<http://www.inspiration.com>)

Decision Explorer (<http://www.banxia.com/dexplore/index.html>).

CMap (<http://cmap.ihmc.us/conceptmap.html> - free for noncommercial use).

Compendium (<http://compendium.open.ac.uk/institute/> - free download).

Omnigraffle (<http://www.omnigroup.com/applications/omnigraffle> Mac OSX)

Freemind ([http://freemind.sourceforge.net/wiki/index.php/Main\\_Page](http://freemind.sourceforge.net/wiki/index.php/Main_Page) - open source software for mind-mapping.)

Microsoft Draw (comes with Microsoft Office)

Some possible key words to use: biology, population, endangered, predator, prey, alien, nonnative, feedback, growth, reproduction, exponential, Verhulst, birth rate, family size, abortion, death rate, Malthus, doubling time, population growth, overpopulation, birth control, contraception, pregnancy, population growth, fertility, gene, genetic, Darwin, booby, exponential growth, armadillo, geometric, geometric growth, evolution, trait, sickle-cell, topsoil, depletion, nonrenewable, pollution, migration, refugee, overcrowding, waste.