

300,000,000!

IN THE USA

Concept:

Population issues are related to a significant number of trends and events that we learn about every day in the news media.

Objectives:

Students will be able to:

- Identify news articles that present population-related issues.
- Analyze news articles and diagram their content to determine cause-and-effect relationships and solutions to local challenges.

Subjects:

Social Studies, Environmental Science

Skills:

Research, reading comprehension, diagramming

Method:

Students diagram news articles to discover “300 million reasons” why population issues matter in the United States.

300 Million Reasons

Introduction:

Stories related to our growing U.S. population are often in the news. Sometimes they are straightforward, and speak explicitly about our increasing numbers. Often, though, readers have to carefully analyze stories in order to connect them to population growth. In this activity, students find news articles, and analyze their content to develop a matrix which relates the article to population pressures, examining the causes, effects, and possible solutions. In this way, students can discover “300 Million Reasons” why U.S. population growth matters to them.

Materials:

Newspaper or magazine articles about population issues
Student worksheet - one per student (optional)

Procedure:

1. Ask your students to each collect at least two newspaper or magazine articles that can be related to our growing population. Suggest that they use the local library and the Internet. They may also use a summary of a news show or television documentary. The following topics represent just a few of the many that students may wish to use as guides in their search.

Traffic congestion, commuter time, and “road rage”

Local debates over new development projects

Energy use and the need to find new sources to meet growing demand

Air pollution in fast-growing cities

Suburban sprawl and the loss of rural areas

Overfishing

Overcrowding in schools

Loss of wetlands or other ecosystem

Endangered species

National and local debates about immigration

Teen pregnancy

Supply and demand of affordable housing

Agriculture – overgrazing, erosion, factory farming

Strip mining

Wildlife and human conflicts

Water pollution

2. After allowing a couple of days for students to collect their articles and summaries, pass out copies of the population matrix form, and have students diagram the information from their resources. You may want to chart a sample article with the class so that students understand the concept.

 Environment/Land Use

 Migration

 Physical Geography

 Population

 Quality of Life

For example, the sample chart below was based on an article about water shortages in Las Vegas, Nevada (“A City that Bets on Water,” Washington Post, February 27, 2005). It states that Las Vegas has one of the fastest growing populations in the country (*Cause – Population*). Retirees moving to the Las Vegas area from drought-free areas of the country often plant water-thirsty lawns in their new desert surrounding, greatly increasing the demand for water (*Cause – Resource Consumption*). This is leading to worsening water shortages (*Effect – Environmental*). To try to combat this problem, the local water authority is now paying homeowners \$1 for each square foot of removed grass and they have seen a marked decline in water use as a result (*Solution – Resource Consumption*).

Emphasize that students should include as much information as possible on their chart. While not every category will have something listed, students should be sure that the solutions they include address the causes and effects they have noted. Encourage the students to think of possible solutions that were not necessarily addressed in their articles.

3. Once the students have completed their individual matrices, draw a large population matrix onto the butcher paper or the chalkboard. Use this large matrix to summarize information from the students’ charts. The middle circle can simply be labeled “300 million people,” rather than trying to list all the article titles.

Discussion Questions:

1. Discuss the proposed solutions: Which seem most feasible? Which seem least feasible? What are the barriers to implementing some of the proposed solutions? Can you think of any other solutions, besides those listed in the article?
2. Discuss the similarities and differences that emerge: What differences exist between the types of problems students found in different parts of the country? Are there also differences in the kinds of solutions they seek? What factors contribute to these differences?
3. What effects of growing population do you see in your community? If population grew rapidly, which of the effects in the articles might happen in your community?

Sample Article and Matrix:

A City That Bets on Water

By George F. Will

Sunday, February 27, 2005;

Washington Post, Page B07

LAS VEGAS — In this city of histrionic architecture, the building that matters most may be the bland, low-slung headquarters of the Southern Nevada Water Authority. The general manager since the authority was formed in 1991, the elegant, no-nonsense Pat Mulroy, 52, is determined to prevent a water shortage from inhibiting the growth of this city, which is dedicated to the proposition that inhibitions are sinful.

She is dealing with a five-year drought, the worst in 100 years of record-keeping and perhaps — tree rings suggest this — the worst in 500 years.

She also is dealing with reverberations from the day in 1877 when Thomas Blythe strode into the Colorado River near the California town now named for him, 100 miles south of the Nevada border, and claimed for California 9 million acre-feet of the river — an acre-foot being about 326,000 gallons.

Because of the principle “first in time, first in right,” California got an abundance. Then, in 1922, six other states — Arizona, Colorado, Nevada, New Mexico, Utah and Wyoming — joined California in the Colorado River Compact. Westerners say whisky is for drinking and water is for fighting over, but the seven states can do pretty much anything they can agree to, such as “banking” water underground to use in trading river entitlements. They cooperate to keep Washington from butting in.

Today California gets 4.4 million acre-feet. Las Vegas’s water needs are supplied mostly from Lake Mead — down to 59 percent of capacity — and, upstream from Mead, Lake Powell, now at 34 percent of capacity, its lowest since it started filling three decades ago.

When Mormon settlers arrived here in 1855 the town was called Las Vegas Springs — an oasis refreshing travelers from Salt Lake City to another community taking root in an arid place, Los Angeles. Today 30 million people from Denver to Salt Lake City, Phoenix, Tucson, Los Angeles and San Diego — almost a tenth of all Americans — depend on the river’s water. But agriculture sops up 90 percent of it. The sprawl of Phoenix onto agricultural land actually decreases water use.

The Strip — the portion of Las Vegas Boulevard that has 15 of the world’s 20 largest hotels — features vast fountains, a sea battle between pirate ships and an 8.5-acre lake in front of the Bellagio Hotel and Casino. However, Mulroy says, the Strip accounts for less than 1 percent of the state’s water use while producing 60 percent of the state’s economic output. The average hotel room uses 300 gallons of water a day, but it is all recycled. The drought has elicited un-Western demands to slow this city’s growth, but Mulroy briskly demurs: “You don’t use a growth moratorium to manage through a drought.” You use, primarily, the market. Most people who move here — there were a record 29,248 new-home sales in 2004, up 16 percent over 2003, which also set a record — come from less arid places, and they use home irrigation systems to reproduce the green lawns they left behind. Retirees, especially — roughly 20 percent of the metropolitan area’s 1.6 million residents are 55 or older — come for the abundance of sunshine and the absence of an income tax. They demand grass.

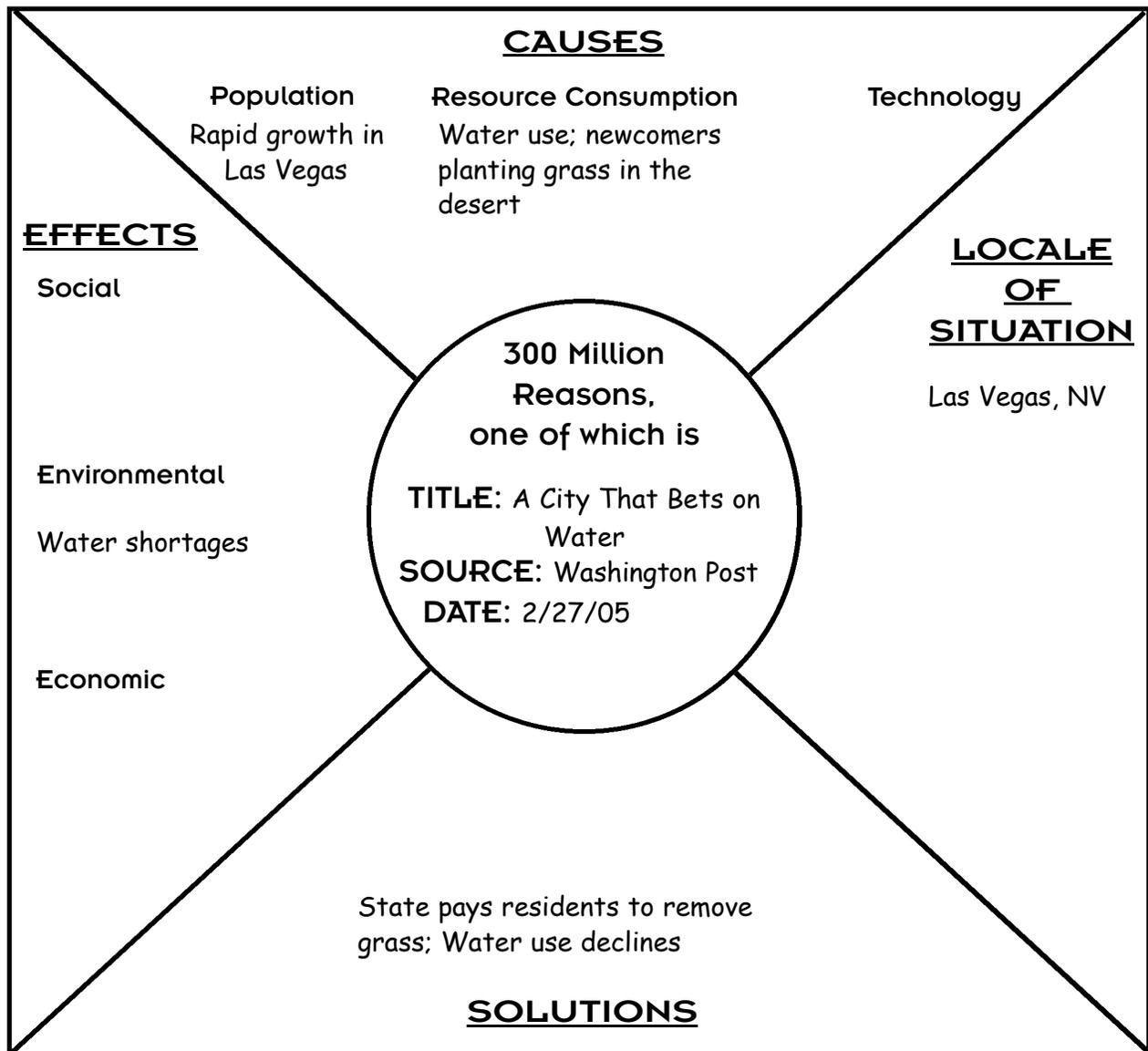
“It is,” Mulroy says, “mind-boggling: They move to the desert and plant Kentucky bluegrass” — a particularly

thirsty kind. “We were,” she says, “putting grass on *medians*.” It was, she says, “like moving to Alaska and walking down the street in a bathing suit in January.”

The city got little response paying 40 cents a square foot for removed grass. But Nevadans understand pricing: \$1 a square foot has bought the removal of turf to 50.9 million square feet, for annual savings of 2.8 billion gallons of water. Now garden stores stock desert plants for “water-smart landscaping,” so lawns do not need to look like a Georgia O’Keeffe painting — a cactus and a dead cow’s skull.

Americans, passionate subduers of nature, are surpassing themselves here. Having built the nation’s fastest-growing city in a desert, they are now bringing the desert back to town. While population was growing 5,000 a month, water consumption declined from 318,000 acre-feet to less than 272,000 from 2002 to 2003 and was even less in 2004.

Today Mulroy is worrying about snow. Falling in the Rockies, it should melt and flow into Lake Powell. But when mountain winds pick up, “sublimated” snow evaporates. The moisture goes into clouds “and rains on Nebraska. Mulroy is not amused. If she decides to stop this indignity, this betting town would not bet against her.



Name _____

Date _____

Student Worksheet

