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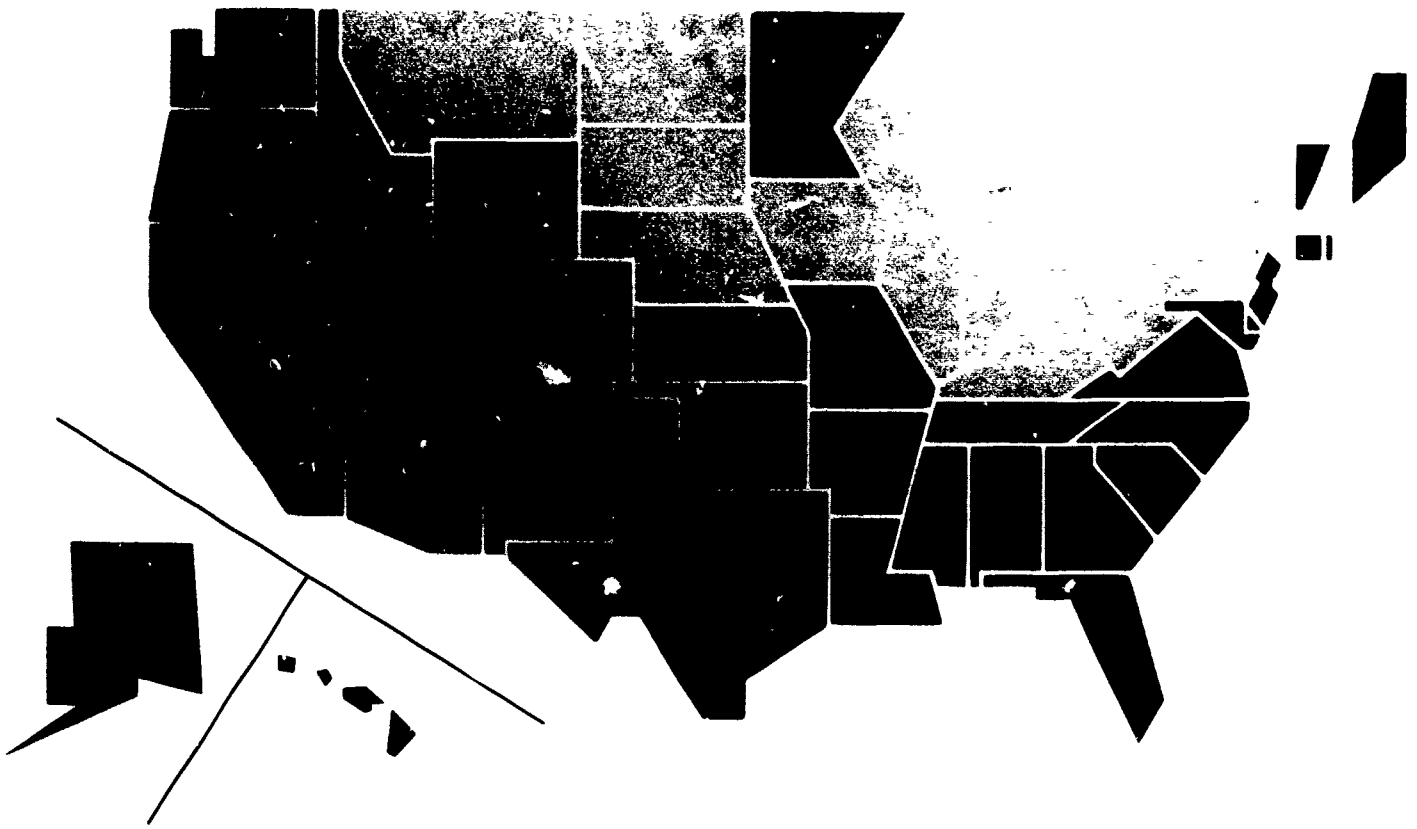
ABSTRACT

This teaching kit is a reusable classroom resource for K-12 teachers in social studies, mathematics, science, and language arts. It contains 10 instructional activities with professionally prepared worksheets, procedural notes, background information, glossary, and samples of census data from the past and present. K-2 students learn about the census and participate in a simulation of the census process. In grades 2-6, students learn the concepts of complete count and undercount, prepare maps, summarize data, and make decisions. In grades 4-7, students learn census terminology and and census history. Students in grades 3-10 participate in and conduct a home and hobby survey. Students in grades 4-8 gain hands-on experience using census-like data to decide about community services and businesses. Changes in population size and distribution are considered in the plan for grades 5-12. In grades 6-12, students examine recent census area and population data to identify extreme cases and study changes over time. Three lessons are included for grades 7-12. Students study the process of designing, conducting, and analyzing survey results; study census data and discuss population diversity, business and community planning, and the housing industry; and examine historical census data and primary sources to gain insight into changing data needs and a sense of the historic nature of the census in this country. Several lessons include materials in English and Spanish. The kit also includes "Suggested School and District Outreach Activities"; "Educator's Guide to the 1990 Census"; and "Census Bureau Teaching Resources Guide." (GEA)

Census Education Project: 1990

U.S. Department of Commerce
Bureau of the Census

Census Education Project: 1990



What We Expect to See in 1990:
Projected Percent Change in Population, 1980 to 1990

Legend

	-5.3% to 4.9%
	5.0% to 9.9%
	10.0% to 43.4%

200 Years of Census Taking

Census Day is April 1, 1990

Table of Contents

Teacher-Ready Activities	Suggested Grades	Suggested Number of Classes	Description
1 Taking a Census	K–2	2–3	Students learn what the census is and roleplay the census process. (Worksheet also in Spanish.)
2 Add! Don't Subtract!	2–6	2	Students learn the concepts of complete count and undercount, prepare a map, summarize data, and make decisions.
3 What Do You Know About the Census?	4–7	1–2	Key vocabulary terms and the history of the census in this country are introduced in a short reading. A quiz about the census and important census data is included. (Quiz and reading also in Spanish.)
4 Where Have We Been? Where Are We Going?	3–10	2–3	Students participate in a home and hobby survey (which may be customized by the class). They conduct the same survey, asking parents or other adults how things were in the past, and compare the results. (Survey also in Spanish.)
5 Would You Sell Snowshoes in Honolulu?	4–8	1	Students gain hands–on experience using census–like data as a basis for decisions about community services and businesses.
6 Lights! Camera! Action!	5–12	1	Students examine how U.S. population size and distribution have changed over twenty censuses. Population density, center of population, and historical causes for population change are considered.
7 Altered States	6–12	1–3	Using a chart of recent census information (area and population) for all 50 states and the District of Columbia, students identify extreme cases and study changes over time.
8 That's Easy for You to Say!	7–12	2–11	Students study the process of designing, conducting, and analyzing the results of a survey and have the option to carry out a survey project.
9 Studying 1980 Census Snapshots	7–12	2–3	Students study a chart of selected 1980 census data for four cities and four counties, and discuss issues related to population density, business and community planning, and the housing industry. Local census data can be added.
10 200 Years and Counting	7–12	2–3	Students examine census data from twenty censuses and primary source documents to gain insight into changing data needs and a sense of the historic nature of the census in this country.

March 1989

UNITED STATES DEPARTMENT OF COMMERCE
Bureau of the Census
Washington, D.C. 20233

OFFICE OF THE DIRECTOR

TO: School Administrators

FROM: Director, Bureau of the Census

The 1990 Census of Population and Housing is fast approaching. You, your staff, and your students have an active role to play in helping make the count of your community complete by participating in the ***1990 Census Education Project.***

One year from now we start counting an expected quarter billion people and over 100 million homes. The 1990 census will be a count of educators, students, their families, neighbors—everyone—in every community across this country. For it to be a complete and accurate accounting of our Nation ***requires*** the full ***participation*** of everyone.

Born in the Constitution, the 1990 census is the bicentennial census of the United States. It is a current national event for and about everyone. Since this census happens only once every 10 years, it is an event easily forgotten and frequently misunderstood by many in this country. ***Its results will affect everyone***, but few know how or why census information is important.

You can help ensure the success of the 1990 census, make sure your school district and community have accurate information to guide decisions into the 21st century, and engage your students in a learning experience by including the census in your curriculum beginning with the 1989-1990 school year.

Through the 1990 Census Education Project, we are providing you the materials to do this. This 1990 teaching kit is a reusable classroom resource for K-12 teachers in ***social studies, mathematics, science, and language arts.*** It contains 10 challenging instructional activities with professionally prepared work sheets, procedural notes, background information, glossary, and samples of census data from the past and today. These materials will help create an understanding of the civic responsibility of responding to the census and the everyday uses of its results. At the same time, they help extend students' skills in citizenship, history, geography, critical thinking, mathematics, and sensitivity to others. The kit also gives ideas for community outreach (such as student poster contests, class exhibits, and school media campaigns) to create awareness of the upcoming census among area residents.

We prepared these materials early to give you ample time to review them with your staff, adapt them to your curriculum, make copies for your teachers, and examine ways of actively involving your students in their community. Please work these activities into your school schedule—preferably the ***last two weeks of March 1990***—when nationwide publicity is reaching its peak.

Immediately after Census Day, April 1, we will conduct an evaluation of the 1990 Census Education Project by surveying a yet-to-be selected sample of superintendents, principals, and curriculum administrators. We will examine usage and quality of the teaching materials, learn about special community awareness projects schools and districts may have done, and get recommendations for improvements in the future.

Thank you for your help. Everyone will benefit because you took an active role in the 1990 census.

D-3300A
(9-88)

1990 Census

Suggested School & District Outreach Activities

Dear Educator:

Outreach is vital to the success of the census of the Nation in 1990. This is because so much rests upon the willingness of the American people to respond promptly, accurately, and completely. Without that willingness, costs can increase, delays can be created, and data quality can suffer. We are working to minimize these problems by calling on community institutions to help.

Your school and district can help ensure that the 1990 census in your area is complete and accurate. You can help generate an awareness of the census and its importance in your community by using the prepared classroom lessons and by performing some of the following suggested school/district census outreach activities. We offer this as a starter list. Ask students and staff for their ideas on special localized 1990 census events and activities. You must decide what is appropriate and reasonable, but whatever your class, school, or district can do will help make this census-your census-as successful as possible. Thank you for your help!

1. **Use the Prepared Lessons.** The **1990 Census Education Project** teaching kit contains 10 teacher-ready K-12 lessons. They introduce students to a variety of concepts about and information from the decennial census. Some of the exercises have classroom extensions which can be performed to complement outreach suggestions found in this leaflet and have a take-home component.

2. **Get the Message Home.** This leaflet contains English and Spanish take-home announcements you can reproduce and give to students to take to their parents/guardians as a reminder. You can use these announcements as guides for ones of your own making for students of other language households.

   The first is an announcement for use BEFORE Census Day, April 1, 1990. The second announcement is a reminder for AFTER Census Day. You can attach either of these announcements or one of your own to report cards, school bulletins, or other items sent home with the students.

3. **Get the Students Involved.** The 1990 census is a count of the population-children and teenagers as well as adults. Your students are part of the census. They will be counted on their parents'/guardians' census forms. As the students grow up and eventually form their own households, they will be participating in future censuses by completing their own questionnaires.

   Motivate the students to actively participate in this census by having them generate community awareness projects such as those listed below. Ask them for their ideas of what they can do to make area residents aware of the census and promote that they, as individuals, a class, or student body, do it. Also in non-English speaking households, older students may actually be completing the 1990 census form for their household.

The Census is Here. There's Nothing to Fear.

A WI. ER created by Emily Hall, Grade 4, Shaw Visual and Performing Arts Center, St. Louis, Missouri.

Example of census poster art from one of 12 finalists in a contest conducted through St. Louis Public Schools during the 1988 Dress Rehearsal Census in that city.

PLEASE DUPLICATE A COPY FOR EACH TEACHER.

4. **Create a Media Campaign.** The 1990 census is a national community event. A variety of school communications vehicles could be used to generate awareness of the forthcoming census among the student body and members of the community. Possibilities include: statements on outdoor marquees, announcements on scoreboards/public address systems at sporting events; posters on school bus exteriors/interiors and in gymnasiums; messages on school cable TV, radio, telephone, or electronic bulletin board systems; school newspaper stories; and classroom bulletin board displays. Challenge the students to become involved, for instance using a spin-off of the theme–"*Put Yourself in the Picture. Answer the Census.*" Have the students create an exhibit for display in the community. The exhibit might incorporate a class/school photo around the slogan, *"We're in the Picture. Are You?"* or *"1990 Census, Put Us in the Picture!"* Students also could experiment with the theme, "Stand Right Up for Who You Are. Answer the 1990 Census."

   Parts of your campaign could be approached as contests. For instance, in art classes, students could create posters, cartoons, and collages that explain the importance of the census and the need for everyone to be counted. Themes can be extracted from the background sections of the **Educator's Guide to the 1990 Census.** Students could participate in a slogan contest. Have them design bumper sticker–sized statements that best describe their importance in the census, such as, *"We Count Too!"* Essay or writing contests are another area to consider. Students could cover census data use, the importance of the census to the community, or historical change in the community, county, region, and so forth. Contests and winners could be reported in the school newspaper. Journalism students also can gain valuable experience in covering a community–wide story. Video projects are another consideration.

5. **Develop Promotion Around Special Events.** If there is a special school or community event occurring around the time of the census (such as a fair, a concert, a dance, or a sporting event), display student census posters or make special announcements.

6. **Produce an Historical Exhibit.** Create library, lobby, and other displays showing historical population changes which have taken place in the community, county, or the state. A combination of photographs, other graphics, and written information can create an effective presentation celebrating these changes. Since a census is much like a snapshot of the population, students might use the theme, *"1990 Census: Put Yourself in the Picture,"* as a portion of such exhibits. Members of local historical societies or genealogical groups make good sources of technical assistance and good speakers for classes or school assemblies. These display projects might be undertaken by history, civics, or political science classes or by the student council.

7. **Have Special Presentations.** Census data are being put to many uses in your state/community. Invite people from your community who use this information to give special presentations in a class or an assembly. Possible sources include: a local, Alaska Native village, county, American Indian reservation, or regional planning office; a chamber of commerce; an education planning office; a market research firm; a county extension agency; a large business; a documents library.

8. **Make School/District Employees Aware.** Nationally, there are more than 4 million school and district employees. Outreach to your employees or colleagues is important. You can help ensure that employees know about the census and the need for them to respond. Include announcements in employee bulletins, with paychecks, and the like. School boards and parent-teacher groups also need to be aware of and involved in the census.

9. **Share Your Ideas.** By no means is this list comprehensive. If you or your students develop some different strategies to encourage community participation in the census, let other educators know. If you create an interesting localization of one of the prepared activities or a new exercise, share it. Communicate your ideas to appropriate education associations and colleagues.

10. **Make Other Community Leaders Aware.** We have developed other 1990 census outreach programs. These are directed toward local governments; American Indian tribes and Alaska Native villages; religious organizations; the media; a large number of community organizations, especially minority ones; businesses; and state offices. All parts of your community have a stake in a complete and accurate census. You can act as a catalyst to the census awareness of these and other influential community institutions by showing your support. You may want to coordinate some of your activities with other community institutions. Let them know you're counting on them!

When Should I Do This? Be sure to allow yourself preparatory time depending upon the project undertaken. The best time to implement these activities is in the 2 weeks before Census Day–April 1, 1990. This will coincide with other national, state, and local activities and events. However, after April 1, people still have time to respond to the census. Using the second reminder in this leaflet or organizing a Post–Census Day Media Campaign can communicate this message.

What If I Want Additional Information? If you have questions about the 1990 census or the Census Education Project, please contact the regional census center nearest you. Addresses and telephone numbers are listed in the inside jacket of the kit folder.

Precensus Day
Take-Home Announcement-for use from March 19-30, 1990

Reproduce this announcement and give it to students to take home to parents/guardians as a reminder. We also have left room for an educator's signature, if you wish. If you prefer, use the text below as a guide for an announcement of your own, especially for students of other language households. This should go out just BEFORE Census Day, April 1.

Census '90: Answer the Census!

Dear Parent/Guardian:

Around March 23 you should receive your official **1990 CENSUS FORM** at your home. Census Day is April 1, 1990. Please complete your form. Our community and our schools depend on a complete count of our population and housing. It helps us plan for the educational needs of students. Census information is used to plan community projects, like highways and health centers. It's used to distribute funds for many services. New jobs and economic growth can also be based upon census totals.

Remember, the census is safe. The information you provide is confidential. By law, your answers **CAN NOT** be used by welfare agencies, the Internal Revenue Service, the Immigration and Naturalization Service, the courts, the police, or the military. Your form can **only** be seen by Census Bureau employees that swear an oath to uphold your privacy. An employee breaking this law can be fined and sent to jail.

We all stand to lose if everyone is not counted. So please fill out your form. If you receive a return envelope with your form, use it to mail back your answers. If not, hold on to the form until a census taker visits you. If you have a problem answering, call the telephone number printed on the outside of your census form. Thank you.

Censo '90: ¡Responde al Censo!

Estimado Padre/Guardián:

Alrededor del 23 de marzo usted deberá recibir en su hogar el cuestionario oficial del Censo de 1990. El Dia del Censo es el 1º de abril de 1990. Favor de completar su cuestionario. Nuestra comunidad y nuestras escuelas dependen de un recuento completo de nuestra población y vivienda. Esto nos ayuda a la planificación de las necesidades educacionales de nuestros estudiantes. La información del censo es utilizada para planificar proyectos para la comunidad, tales como carreteras y centros de salud. Se utiliza en la distribución de fondos para muchos servicios. Además, nuevos empleos y el crecimiento económico dependen de los resultados obtenidos en el censo.

Recuerde, el censo es digno de confianza. La información que usted provee es confidencial. Por ley, sus respuestas **NO PUEDEN** ser utilizadas por agencias de bienestar público, el Servicio de Impuestos Internos (IRS), el Servicio de Inmigración y Naturalización, la corte judicial, la policía o las fuerzas armadas. Su cuestionario sólo puede ser visto por empleados de la Oficina del Censo que hayan prestado juramento de mantener su privacidad. Cualquier empleado que no cumpla con esta ley podrá ser multado y enviado a prisión.

¡Nosotros perdemos si no somos contados todos! Por favor, llene su cuestionario lo antes posible. Si recibe un sobre timbrado acompañando su cuestionario, úselo para devolver sus respuestas. Si no tiene el sobre, guarde su cuestionario hasta que lo visite un enumerador. Si tiene problema con alguna pregunta llame al teléfono impreso en la parte exterior de su cuestionario. Muchas gracias.

Postcensus Day
Take-Home Announcement-for use from April 2-25, 1990

Reproduce this announcement and give it to students to take home to parents/guardians as a reminder. We also have left room for an educator's signature, if you wish. If you prefer, use the text below as a guide for an announcement of your own, especially for students of other language households. This should go out AFTER Census Day, April 1.

Census '90: There's Still Time!

Census Day in our community has come and gone. Census Day was April 1. If you haven't completed your **CENSUS** form, don't panic! There's still time.

Please **ANSWER** all the questions completely. If a postage paid envelope came with your form, use it to **MAIL BACK** your completed questionnaire **RIGHT AWAY!** If no envelope was included, hold on to the completed form until a census taker visits your home.

If you have a problem in answering, call the telephone number printed on the outside of the form or call Directory Assistance for the number of the U.S. Census Bureau District Office nearest you. If you are uncertain about answering, relax! The census is safe. The information you provide is confidential. By law, your answers **CAN NOT** be used by welfare agencies, the Internal Revenue Service, the Immigration and Naturalization Service, the courts, the police, or the military. Your form can **only** be seen by Census Bureau employees that swear an oath to uphold your privacy. An employee breaking this law can be fined and sent to jail.

Remember, you count! We all stand to lose if everyone is not counted! Thank you.

Censo '90: ¡Todavía Hay Tiempo!

El Día del Censo en nuestra comunidad llegó y pasó. El Día del Censo fue el 1º de abril. Si usted no ha completado su cuestionario del **CENSO**, ¡no se preocupe! Todavía hay tiempo.

Por favor, **CONTESTE** todas las preguntas completamente. Si recibió un sobre timbrado con su cuestionario, úselo para **ENVIAR INMEDIATAMENTE** su cuestionario completo. Si no recibió un sobre, guarde el cuestionario hasta que lo visite un enumerador.

Si usted tiene problema con alguna pregunta, llame al teléfono impreso en la parte exterior de su cuestionario o llame a la operadora de información para localizar la Oficina de Distrito del Censo más cercana a su residencia. Si tiene dudas sobre cómo contestar alguna pregunta, ¡no se preocupe! Usted puede confiar en el censo. La información que provee es confidencial. Por ley, sus respuestas **NO PUEDEN** ser utilizadas por agencias de bienestar público, el Servicio de Impuestos Internos (IRS), el Servicio de Inmigración y Naturalización, la corte judicial, la policía o las fuerzas armadas. Su cuestionario **sólo** puede ser visto por empleados de la Oficina del Censo que hayan prestado juramento de mantener su privacidad. Cualquier empleado que no cumpla con esta ley podrá ser multado y enviado a prisión.

Recuerde, ¡usted es importante! ¡Nosotros perdemos si no somos contados todos! Muchas gracias.

Educator's Guide to the 1990 Census

INSTRUCTIONS: PLEASE DUPLICATE A COPY OF THIS GUIDE FOR ALL TEACHERS. This **Guide** is an integral part of the 1990 Census Education Project teaching materials. It contains *information about the census* useful in preparing educators to answer students' questions about various aspects of the census. It also provides *a vocabulary of key words and phrases* students will encounter in the prepared activities. Individual activities provide notations of the specific vocabulary words and phrases and segments of the narrative in this **Guide** useful to that lesson.

April 1, 1990 will mark a special anniversary-***the Bicentennial of the Census of Population in the United States.*** Our national census had its birth in Article I, Section 2 of the Constitution. In keeping with the constitutional mandate, the first census was conducted in 1790 and has been repeated every 10 years since. The 1990 census will complete a 200-year, unbroken span of periodic enumerations of population in the United States. Since 1940, the decennial census also has included the Census of Housing. Together, they will make the 1990 census the single, largest data collection and statistical operation in the Nation.

The ***1990 Census Education Project*** is one part of the Census Bureau's national outreach program for the 1990 census. The project is directed to all of the Nation's elementary and secondary schools and districts. The primary component of the project is this package of K-12 teacher-ready classroom activities, suggested lesson extensions, and recommended census outreach activities. The teaching materials have been developed for primary use in social studies and mathematics, but are useful in a number of other subjects including science and language arts.

The objectives of the project are to provide teachers with innovative, reusable materials useful in their classroom teaching and to introduce educators and students to an important national event in which everyone needs to participate. The materials will help extend students' citizenship, history, geography, multicultural, critical thinking, computational, and statistical skills through a "hands-on" exposure to information and activities with real-world relevance. Likewise, we hope to create an awareness and understanding of the importance of the census, the civic responsibility of responding to the census, the confidential nature of the individual answers, the uses of the summarized census statistics, and, in general, how census data are a real part of everyone's life now and in the future.

By including this package in the 1989-1990 school year, educators and students can take an active part in this special national community event in 1990.

Using the teacher-ready lessons, students can:

Plan and conduct their own census;

- Conduct a survey with their parents/ guardians;
- Analyze their own data;
- Graphically display information and map data;
- Take the roles of community planner and market researcher and perform site evaluations for businesses and for community services;
- Look at changes in the Nation recorded by the decennial census and describe their relation to historic events;
- Examine similarities and differences in national and state growth patterns; and
- Compare census data for their community with other parts of the country.

200 Years of Census Taking

CENSUS DAY IS APRIL 1, 1990

Using the outreach activities listing, classes, schools, and districts might:

- Create their own media campaign,
- Invite local people who use census data (planners, businesspersons, local historians, and others) to make special presentations,
- Include special stories in the school newspaper about population change in the community and the forthcoming census,
- Create special displays/exhibits celebrating the history of the community as recorded by previous decennial censuses.

Using the Census Education Materials

Prepared Activities. There are 10 reproducible activities in this package. Each activity's ***Teacher's Notes*** provides: a lesson overview, suggested grade level and time needed, learning objectives, a listing of materials needed, the vocabulary list, procedures, and suggestions for classroom extensions. Basic information on each activity is provided in the ***Table of Contents*** on the back of the teaching kit folder. The activities generally rise in grade difficulty; you should be the judge of appropriateness for your students. The student worksheets do not have any grade identification.

For School/District Planning Calendars: Key 1990 Census Dates

March 1989	Census Education Project kits mailed to Nation's superintendents and principals
March-August 1989	Schools and districts incorporate project into 1989-90 curricula
October 1989-February 1990	Students and educators plan and initiate community outreach activities
March 19-30, 1990	Peak time to use teaching materials and perform outreach activities
April 1, 1990	Census Day
April 2-25, 1990	Schools and districts conduct any post-Census Day outreach activities
April-May, 1990	Evaluation of Census Education Project via sample survey

See ***Collecting 1990 Census Information*** elsewhere in this Guide, for more information on the timing of various aspects of the 1990 census. See the ***Suggested School and District Outreach Activities***, a separate leaflet elsewhere in the kit, for more information on suggested community awareness activities and timing. A brief statement about the evaluation is contained in the ***Letter from the Director***.

Timing. Census Day is April 1, 1990. The materials are provided now to allow ample time for their inclusion in the 1989-1990 school year curriculum and to make language and local adaptations you consider appropriate. The best time to teach the lessons and perform the outreach activities is in the ***2 weeks before Census Day.*** By focusing on this peak period, the actions taken by schools will coincide with other 1990 census outreach events and activities to be planned by local officials and community leaders and performed nationally.

Census History

Census-taking is a very old practice. Throughout history, many nations have used censuses of their populations to measure occupations and potential military strength and for taxation purposes. On the North American continent, enumeration has a long heritage. For instance, the Comanches of the Great Plains and the Southwest tallied various items of information by using bundles of reeds. Each of five types of bundles represented the number of warriors, young men, women, children, and lodges.

European governments took censuses of persons inhabiting their North American colonial jurisdictions. In New Spain, enumerations of places like St. Augustine, Florida (the oldest permanently inhabited city in the United States founded by Europeans) and San Antonio, Texas and its adjacent province occurred in 1566 and 1783 respectively. The French government saw the need for a detailed census of all New France in 1666. Periodic censuses, which continued in the French colony until 1754, included French settlements along the Mississippi River such as Cahokia, Illinois (founded in 1699).

In the English colonies, about 40 censuses were undertaken. A count was made as early as 1624 in Virginia and 1698 in New York. Censuses of some segments of the population had been taken in all the English colonies before the Declaration of Independence, except Pennsylvania, the Carolinas, and Georgia.

The need for a national census of the new United States arose soon after the thirteen colonies broke their ties with Great Britain. The costs of the Revolutionary War (1775-83) had been high, and the new Nation had to find ways to pay the debt; one way was to divide it equally among the people. Another reason for a census was to establish a truly representative government to sit in the two Houses of Congress. While each state,

regardless of size, would have two Senators in the Senate, the number of Members of the House of Representatives would be apportioned–divided up–among the states according to their population. The only way to find out how many people there were was to count them, so for the first time in history, a nation decided to make a census part of its constitution. As adopted in 1787, the U.S. Constitution included these words in Article I, Section 2:

> *Representatives and direct Taxes shall be apportioned among the several States which may be included within this Union, according to their respective Numbers ....The actual Enumeration shall be made within three Years after the first Meeting of the Congress of the United States, and within every subsequent Term of ten Years, in such Manner as they shall by Law direct.*

Counting for taxation never did follow from the constitutional directive. On the other hand, the constitutional order to apportion (or reapportion) the number of Representatives among the states–by a count of the population at least every 10 years–has been followed (with the exception of the 1920s) since 1790 and is the origin of the decennial census in this country. (NOTE: In 1921, Congress could not decide on an apportionment plan, but later passed a bill making reapportionment automatic. This took effect in 1931.)

The first census recorded very limited information. Under the Census Act of 1790, the count was to ascertain the number of inhabitants in various geographic groupings, *"omitting [American] Indians not taxed, and distinguishing free persons (including those bound to service for a term of years) from all others; the sex and color of free persons; and the number of free males 16 years of age and over."*

From its beginning, the decennial census has been more than a simple "headcount." Gathering information on sex and age in 1790 was done *"undoubtedly, to obtain definite knowledge as to the military and industrial strength of the country."* Through the years, the Nation has changed and so has the decennial census. The size, composition, and distribution of the population; the laws; and the complexity of the country have changed–and with them, the needs for statistical information. To stay in step, the content of the census has varied over time "*in such Manner as they shall by Law direct.*" Since 1940, the decennial census has been limited to items on population and housing.

Collecting and reporting the data in the decennial census have brought about and furthered advances in science, technology, and statistics. To summarize the growing number of census returns, mechanical tallying machines were first introduced in the 1870 census. Despite their presence, publishing all the reports from the 1880 census took nearly a decade. These growing processing problems led directly to the development of the punchcard and an electric tabulating machine by Herman Hollerith, an employee of what was then called the U.S. Census Office. This revolutionary means of coding and tallying information was used to process the 1890 census.

Statistical sampling on some census questions was first introduced in 1940 and has increased with censuses thereafter. The first commercial electronic computer, UNIVAC-1, was used to compile some of the statistics from the 1950 census. To gather information more efficiently, the census-by-mail and self-enumeration (a household completing a form on its own without an enumerator's assistance) were first used in the 1960 census. Dealing with ever-increasing processing complexities, Census Bureau employees created another revolutionary machine known as FOSDIC (Film Optical Sensing Device for Input to Computers) for use in tabulating the 1960 census. After high-speed cameras microfilm census questionnaires, FOSDIC reads the "fill-in-the-dot" answers directly onto computer tape. To enhance accuracy in collecting and tabulating census information, the 1990 census will be marked by the Census Bureau's creation of a new digital mapping and geographic referencing system known as TIGER (Topologically Integrated Geographic Encoding and Referencing).

It was only in 1902 that a permanent census office was established in the Interior Department. In 1903 it was transferred to the new Department of Commerce and Labor. When that department was split in 1913, the Bureau of the Census was placed in the Department of Commerce.

Census population counts for each state must be reported to the President within 9 months after Census Day, which has been April 1 of the census year since 1930. Within 1 week of the opening of the next session of the Congress, the President must send to the Clerk of the House of Representatives the census count for each state

and the number of Representatives to which each state is entitled, following the method of apportionment selected by the Congress. Within 15 calendar days, the Clerk of the House then notifies the Governor of each state how many Representatives that state will be entitled to in the next Congress. By April 1 of the year following the census, the Census Bureau supplies states with census data to use in drawing congressional and legislative district boundaries.

While the Census Bureau is best known for the national Census of Population and Housing conducted every 10 years, the agency also conducts national agriculture, economic, and governments censuses every 5 years. Besides censuses, the Census Bureau administers about 250 sample surveys each year (many for other Federal agencies) and prepares estimates and projections. These data collection efforts result in thousands of statistical reports each year. All of this has earned the Census Bureau the name ***Factfinder for the Nation.***

Collecting 1990 Census Information

The task of taking the census in 1990 will be more complex than it was in 1790 and any time since. Just under 4 million persons and little more than 1/2 million households were counted in the 1790 census. Since that time, the country has grown dramatically, but the time allowed to complete a census and report its findings is very limited.

The Census Bureau anticipates that the U.S. population will approach 250 million people by 1990. It also is expected that the number of housing units will be about 106 million. Measuring the size of the population, the number of housing units, and their associated characteristics for the Nation is a huge task.

How many people will be needed to take the census? The number of people needed to take the 1990 census is very large. The operation requires hiring approximately 400,000 people for various temporary jobs. To get this number about 1.6 million persons must be tested, interviewed, and selected. Every effort will be made to hire persons who live in the community where they will work. The jobs will be located in about 450 local district (or field) offices and seven processing offices. Jobs will include office managers, assistant managers, administrative assistants, supervisors, clerks, crew leaders and enumerators. The largest percentage of jobs will be crew leaders and enumerators.

All of the district offices will be open by mid-fall 1989 and will remain open to early fall 1990. Although April 1 is Census Day, not everything can happen on that one day. The Census Bureau needs preparatory time but, more importantly, time to follow up with households and persons who do not respond or might have been missed.

How will the 1990 census be taken? Most households in the Nation will receive a census questionnaire in the mail shortly before Census Day. Census enumerators will personally deliver the questionnaire in some rural areas and in some urban multifamily apartment complexes.

All census forms (questionnaires) are to be completed to represent each household's composition and characteristics as of Census Day. Completed forms should include everyone who usually lives in the household but exclude persons only visiting. Babies born on Census Day are included.

Nearly 95% of the Nation's households will be asked to return the completed form in the mail right away. The remainder, residing in sparsely settled rural areas and in special places and what are called group quarters (such as nursing homes, college dormitories, military barracks, and boarding houses), will have a census-taker visit to pick up the completed forms or to complete a form in an interview.

If a household was supposed to return the form by mail but did not, a census enumerator must then go to that home and obtain the information. This increases the cost of taking the census.

What happens then? Once forms are returned, processing begins. They are checked for completeness. If information is missing, illegible, or inconsistent, a census employee must contact that household (by phone or in person) to complete the items. This, too, can increase the expense and cause delays. After these checks are made, the answers to questions on an individual form are tallied along with answers to the same questions from all other census forms. This results in the creation of statistical totals for a variety of geographic areas. These numeric totals are then put to thousands of uses.

What will be asked? Nationwide, most households will receive a short census form asking only a limited number of questions about each house-

hold member (such as race, Spanish origin, age, and marital status) and characteristics about the housing unit (such as owner or renter status). On the average, this form will take about 15-20 minutes to complete.

The remaining households will receive a form that will contain more questions about the members of the household (for example, education, employment, income, occupation, and ancestry) and the housing unit (for example, age of the building, source of water, type of fuel used for heating). The average completion time for this form will be about 45 minutes. These households will be selected by a sampling pattern. Responses from these sample households will be very important, because these answers will statistically depict the total population on items like education. This sampling method will be used to minimize demands made on the public, while producing useful and reliable data.

Uses of Census Summary Data

Only questions that address important policy and program needs are included. For instance, the data from questions on plumbing facilities provide information for Federal studies on housing standards and quality. Likewise, summary statistics from the income questions are widely used by Federal, state, local, American Indian tribal, and Alaska Native village governments in the distribution of funds to communities for a variety of programs, including education. The 1990 population totals will be used to determine congressional, state, and local election district boundaries.

Something for Everyone. The above examples present mandated and legislatively specified uses of census data. But there is a myriad of other applications of census information that in one way or another affect everyone. The number of these applications and the variety of agencies and persons using the data are increasing. Given the increasing size of the Nation's population and the complexity of American society, more decision makers are finding that major plans, especially those involving monetary investments, are facilitated by using census data.

Governments draw heavily on census data in planning and implementing community projects and developments, like planning for new schools. **Business and industry** make use of these statistics, especially those for small geographic areas, in deciding plant/office locations, expansions, and [illegible]. An increasing number of **social service providers** have found that census facts give the kind of assistance they need in reaching and helping their clientele. Through the 1980 Census Neighborhood Statistics Program, census information was made available for approximately 28,000 **neighborhoods**, giving community leaders a better understanding of the areas in which they live. Finally, more **individuals** are using census summary information to guide decisions of personal importance–such as planning a small business or helping choose a new area of a community in which to live. Here are some specific examples of each.

Government

- The Hopi Tribe has a representative form of government. In the Hopi Constitution, Tribal Council representation is based on village population. The number of Council members from a village ranges from one to four based on population size. Accurate village population counts mean appropriate representation on the Tribal Council.

- During a heat wave, public health officials in St. Louis used census data to locate areas with large numbers of elderly people. City workers went door-to-door convincing many of these older persons to go to "cooling centers." Lives were saved.

- In San Francisco, transportation planners used census information to select bus routes, subway stops, and highways that needed widening.

Business and Industry

- A new company wanted sites for a chain of medical clinics in the Northwest. It used census data to narrow the selection to communities with high numbers of families with young children.

- In a southwestern city, an entrepreneur wanting to open a roller skating rink studied small-area age statistics to pinpoint possible sites.

Social Service Providers

- Officials of a child services program in Jackson, Mississippi found census information valuable in program planning by using it to identify numbers of preschool children.

In Newport News, Virginia, a church official employed age data for the community to help plan a new church. Finding a high proportion of elderly meant building a structure of one story, not two.

Neighborhoods

- The large number of working mothers with small children in a low-income neighborhood prompted community officials in a midwestern city to seek and win approval for a day care center.

- Leaders of an Oklahoma City neighborhood examined sewage disposal information from the census to develop a case for improved sewer services in their area.

Individuals

- A Chicago college student investigated socio-economic census information in making a decision to begin a teaching career.

- Planning a move to Alexandria, Virginia, a couple studied data for census tracts (small areas) in that city to better understand the community and as an aid in their housing search.

Everyone Loses When Everyone Is Not Counted

After the 1980 census, the Census Bureau estimated that a small percent of the population was not counted. The undercount was higher among minority populations. Some people were missed because they left themselves out of the census. Some were afraid, some did not care, and some did not recognize they were required to respond.

An undercount of segments of the population can have an adverse effect on decisions. Inaccuracies in the data can alter or halt projects and cause misallocations in the distribution of local funds and services. Some of these are designed for the very people who fail to be counted.

Being missed in the census has an effect on the people missed as well as their neighbors. This is why it is important that people be made aware of the census and complete the census form. Everyone loses if everyone is not counted in the 1990 census.

Answering the Census: Civic Duty, Confidentiality, and the Law

The purpose of the census is to obtain counts–statistical totals. Questions are asked of individuals and households to compile these totals.

Answering census questions is a civic responsibility. It also is the law (as mandated in Title 13 of the U.S. Code since 1954). Failure to comply can result in penalties, including fines of up to $500.

This same law keeps answers given in the census away from welfare agencies, the Immigration and Naturalization Service, the Internal Revenue Service, courts, police, the military ... everyone. The 1990 census records will be held confidential for 72 years–until the year 2062. Only records from 1790 to 1910 now are open to the public.

No one–neither a census taker nor any other employee of the Census Bureau–can reveal information about any individual or family to anyone outside the Census Bureau. Census workers swear an oath to uphold this confidence. Census employees violating this oath are subject to severe penalties of up to 5 years in prison or $5,000 in fines.

The integrity of census confidentiality also has been upheld in court. Legal challenges from outside the Census Bureau for access to actual census forms and other protected material (such as address lists) have all been denied. This tough stand on confidentiality is a hallmark of census-taking in the United States.

Census Bureau Mission

In its best interests, a civilized nation counts and profiles its people and institutions. Doing so ably and objectively is the abiding mission of the United States Census Bureau. We honor privacy, shun partisanship, invite scrutiny, and share our expertise globally. Striving to excel, we chronicle the Nation's past, describe its present, and illuminate its future.

Census Vocabulary

Apartment - A room or set of rooms fitted with a kitchen and a bathroom intended as a separate living quarter in a building containing two or more separate living quarters.

Apportionment - The means of dividing up the number of Members of the House of Representatives among the states according to the population counted in the 1790 census. This process is to be repeated every 10 years and is called reapportionment. Article I of the Constitution, adopted in 1787, provided for apportionment, reapportionment, and the census.

Average Number of Persons per Household - A single number (value) that represents the total population living in housing units divided by the total number of occupied housing units (households).

Bicentennial - The 200th anniversary of an event or person. Here, it refers to the 200th anniversary of the first census in the United States (1790-1990).

Census - A count, or enumeration, of a population in a given area. Such a count also can include things other than population. The decennial census in the United States counts the Nation's population and housing units and their characteristics.

Census Answers - The responses people report on a census form. These responses and other personal information are confidential.

Census Data - The numbers totaled or calculated from individual answers on census forms for a variety of geographic units.

Census Day - The official date of a census. In the United States national Census Day has been April 1 since 1930. The count produced during a census will stand for everyone who usually lives in the country on that date.

Census Division - A statistical census geographic unit comprised of a group of states that is a subdivision of a census region of the United States. (See Census Region.) There are nine geographic divisions, such as New England. The states (and the District of Columbia) that comprise each division are shown in Handout 1 of *Activity 7* in the teaching kit.

Census Enumerator - A person who helps collect the information to be totaled in a census. An enumerator must take an oath swearing not to share any individual answers.

Census Form - A sheet(s) of paper containing the questions that people answer in a census. It also is called a census questionnaire.

Census Geography - The different land units used by the Census Bureau when taking and reporting a census. Some are political units, like a state, a township, a county, an American Indian reservation, or an Alaska Native village. Others are statistical units, such as census tracts, census regions, census divisions. (See other definitions for these terms in this glossary. For a detailed discussion of census geography, request a copy of *Factfinder for the Nation #18: Census Geography–Concepts and Products* listed in the *Teaching Resources Guide*.)

Census Region - A statistical census geographic unit comprised of large groups of states (and the District of Columbia). The four regions are the Northeast, Midwest, South, and West. The census divisions and states included in each region are shown in Handout 1 of *Activity 7* in the teaching kit.

Census Schedule - Another name for a census form (akin to a list or inventory). This term is more often associated with early censuses in this country.

Census Tract - A small statistical census geographic area. It is a unit of land within a county or county equivalent (for instance, a parish in Louisiana). Census tracts are usually small in land area and, on the average, contain about 4,000 people. Census data for census tracts provide a more detailed picture of the characteristics of the population and housing within the larger geographic unit. In 1980, there were about 43,000 tracts in just over 900 counties.

Census Year - The year a census is taken. The decennial census of the United States is taken every 10 years: 1790,...1970, 1980, 1990, 2000, 2010,...

Center of Population - The point at which an imaginary, flat, weightless, and rigid map of the country would balance if weights of identical value were placed on it so that each weight represented the location of each person in the country on the date of the census.

Complete Count - A 100-percent enumeration of every person and every housing unit in the country. It also means that everyone answered all the population and housing questions on the census forms.

Components of Population Change - Births, deaths, and migration (both into and out of an area). At the international level, this migration is referred to as immigration (into) and emigration (out of). In describing movement within a country, like the United States, these are called inmigration and outmigration. The equation for change in population is:
births – deaths + inmigration – outmigration = population change.

Confidential(ity) - Private. In the census, this means no one except sworn U.S. Census Bureau employees can look at identifiable personal information reported in the census. Census confidentiality is maintained for 72 years. This means that 1990 census forms will be confidential until the year 2062.

Constitution of the United States - The written basic principles and laws of this Nation. As adopted in 1787, Article I, Section 2 called for the decennial census.

Decennial Census - A census taken every 10 years. A decennial census has been taken in the United States in years ending in 0 (zero) since 1790.

Enumeration - Another term for a census or count.

Estimate - An approximation of the past or present using data not accurately known. For instance, a population estimate for a state for today can be made by starting with the 1980 census count for the state (as a benchmark), adding known births in the state from 1980 to today, subtracting known deaths from 1980 to today, and adding an estimate of migration. The result is a population estimate of today. (See Projection.)

Family - Two or more persons living in the same household related by birth, marriage, or adoption. A group of unrelated persons living together is not a family by this definition.

Geographic Center - The point at which the surface of the United States would balance if it were a plane with uniform weight homogeneously spread across its surface.

Home - A private place where a family or single person lives. Here, a home is the same as a housing unit.

House - A building intended for people to live in. Here, house refers to a single-family housing unit as pictured in *Activity 1*.

House of Representatives - The lower house of the U.S. Congress. The House reached its present size of 435 Representatives in 1911.

Household - A year-round housing unit with people living in it. In the census, it also is called an occupied housing unit.

Housing Units (Year-Round) - All occupied houses, apartments, mobile homes, tents, vans, and other structures and all vacant units available or intended for people to live in all year. They do not include vacation units intended for seasonal occupancy and vacant units held for migratory labor. The occupant(s) lives and eats separately from all others in the same building and can enter and leave the unit without going through anyone else's home.

Incorporated Place - A political census geographic area. In the census, these include cities, boroughs (except those in Alaska and New York), towns (except those in the New England States, New York, and Wisconsin), and villages. The Alaska exceptions are treated as counties; all the other exceptions are recognized as minor civil divisions, such as a township. Incorporated places are those chartered under the laws of their respective states.

Median Age - The middle value of a ranked group of persons' ages. In the United States in 1980, the median age was 30. This means that half of the U.S. population was younger than 30 and half was older than 30.

Median Family Income - The middle value of a ranked group of family incomes. The median family income for 1979 in the United States (at the time of the 1980 census) was $19,917. Half of the Nation's families had incomes above and half below this value.

Migration - A permanent change of residence into a different geopolitical unit, usually at least across a county line.

Mobile Home - A structure designed to be a year-round housing unit, manufactured in a factory, and capable of being moved from one site to another.

Population - The number of people or inhabitants of an area at a given time.

Population Change - The increase, decrease, or stability in a population from one time to another.

Population Density - The number of people for one unit of land area, such as a square mile. It allows for comparisons between dissimilar areas. In 1980, Virginia and Missouri were similar in population, 5.3 and 4.9 million persons, respectively. Because of differences in area, their population densities were 134.7 persons per square mile and 71.3, respectively.

Projection (Population) - Computation of future changes in population numbers given a set of assumptions about future trends in fertility, mortality, and migration. The starting point for population projections created in recent years has been the 1980 census counts.

Questionnaire - A form containing questions asked, most often, for obtaining statistically accurate information about a group of people.

Sample - A part of a population selected to represent the whole population.

Statistics - A collection of numeric data. In the census, a summary statistic is a number or other value (a percentage) for a population in a geographic area.

Structure - A building containing one or more housing units. A structure can be a single family house, a mobile home, or a building with apartments.

Survey - A way to collect facts or opinions from a portion or sample of a population. Usually the answers from these people or households will be used to represent those of everyone in the population. Since the 1990 census will ask some questions of everyone in the country and other questions of only a portion, the 1990 census includes both a sample survey and a complete enumeration to collect facts for the Nation and its geographic parts.

Undercount - The degree to which people and housing units are missed in the census count.

United States Bureau of the Census - The Federal office created in 1902 to be in charge of taking the decennial census of population and housing, as well as other censuses and surveys. The Census Bureau is a part of the United States Department of Commerce.

Teacher's Notes:
Activity 1

Taking a Census

Overview The purpose of this activity is to introduce students to the concept of a census. Students will participate in a variety of learning activities to help them understand how and why a census is taken in the United States every 10 years. They also will learn that the census taken every 10 years counts people and housing. Students will relate the census to a count of their own family members and to a description of their homes. In addition, they will see how the census is related to a total (or aggregate) description of the people in their classroom, school, and neighborhood. The student handout also is provided in Spanish. NOTE: See the **Educator's Guide to the 1990 Census** (a separate leaflet in the teaching kit) for a background on the 1990 census, a census vocabulary, and other information.

Suggested Grades K–2

Suggested Time 2–3 days

Learning Objectives

Students will:

1. Explain the term CENSUS and name some of the kinds of information gathered when the census is taken;
2. Use counting techniques to take a census of their families, classroom, or neighborhood; and
3. Collect information and organize data into graphs.

Vocabulary

Apartment	House
Census	House of Representatives
Constitution	Mobile Home
Family	Population

Materials Needed

- Copy of **Educator's Guide to the 1990 Census**
- Copies of Handout–*Taking a Census* (Also in Spanish)
- Picture File–
  (for English version) cat, ear, nose, snow, up (arrow pointing up), six
  (for Spanish version) cabeza (head), elefante (elephant), nariz (nose), seis (six), oido (ear)
- Optional Picture File–single family home/house, mobile home, apartment building
- Letter Cards–C E N S U S/O
- Copies of *Take-Home Announcement* from **1990 Census Suggested School and District Outreach Activities** leaflet

Getting Started

1. Tell the students they are going to learn a very important word. Show them the set of letter cards, in jumbled order, that spell this word. Tell them that they are going to find out what the word is by solving a mystery word puzzle.
2. Arrange the pictures in the order shown in the picture list. Show the students the first picture (cat or cabeza) and ask them to name it. Use the mystery word clues below as appropriate. After the picture is identified, ask them to name the first letter of the picture or word and/or simply place the correct letter card on the chalkboard tray, pocket chart, or bulletin board. Repeat the procedure until the word CENSUS (or CENSO) is spelled.

Mystery Clues–English

An animal that meows	= Cat
Part of the body you hear with	= Ear
Part of the body in the middle of your face	= Nose
It's white and falls from the sky in winter	= Snow
The opposite of down	= Up
The number after 5	= Six

Mystery Clues–Spanish

Lo que está sobre tus hombros	= Cabeza
Animal grande que tiene una trompa	= Elefante
Está en medio de tu cara	= Nariz
El número que le sigue al cinco	= Seis
La parte del cuerpo con la cual oyes	= Oido

3. Tell the students that a census is a count. In the United States, a count–a census–of all the people (population) and all the homes (housing units) happens every 10 years. It happens in years ending in zero. We take a census every 10 years because the number of people and homes changes. The reason we need these new numbers is that they are used for big decisions. The Constitution (our basic national laws) says each state will be represented in the House of Representatives using the count of the people. The census totals also are used for other big decisions. Imagine that the people in City Hall wanted to build a new playground. They wanted it to be in a place where most of the children could get to it. By looking at the census numbers for all parts of the city, the city leaders can find out where most of the children live and put the playground in the best spot.

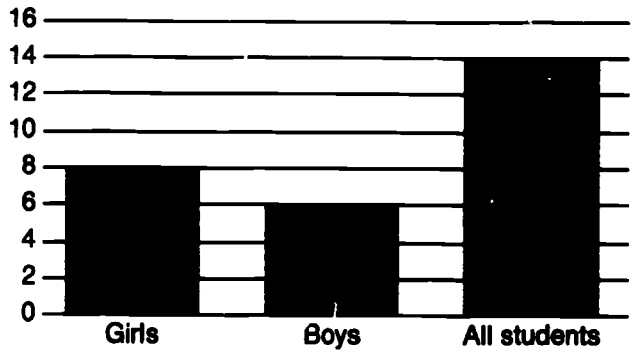
Development

1. Tell the students they are going to take a census. Distribute copies of the Handout. Have the students read the introduction or read it to them. Have them draw a picture of a/their family on the back of the sheet. Tell them that their drawing should include everyone who lives in one/their home. NOTE: If each student draws a picture of his/her family, the totals will vary. You may want to tell the students what to draw.
2. After they have drawn the picture, have them answer Questions 2 to 5. NOTE: Have them include all grownups in their answer to Question 2. After they have answered the questions, call on individuals to show their pictures to the rest of the class. If you had them draw their own family, have them compare and contrast the total size and makeup of different families. If more than one family lives in the student's home, have them draw multiple pictures, make multiple counts, and then a grand total.
3. Explain the different kinds of housing associated with Questions 6 to 9 and/or show them pictures of these. Call on individual students to tell whether they live in a house (like a single family home), an apartment, or a mobile home. Then have them answer Questions 6 to 9. NOTE: If the housing depicted in the Handout is too dissimilar to housing in your community, you may want to draw replacement pictures on a separate sheet of paper, overlay it on the Handout and then reproduce copies for the students.
4. Obtain copies of the *Take-Home Announcement* from the **1990 Census Suggested School & District Outreach Activities** leaflet. Give a copy of it to each student to take home.

Extension/Enrichment Activities

1. Have students do a count of the members of the class and discuss the numbers. Have them count and total the number of boys and girls, their ages, the types of housing they live in, or other characteristics. This could be done by having the students stand and form groups for the characteristic in question (girls on one side, boys on the other). Then have them regroup for the next characteristic and so forth. Expand this activity by designating a few students as "census takers". Their job is to total all the information collected in the census. The totals for each item could be listed on the chalkboard. Then discuss the profile. Other items which you could investigate in this manner are the types of pets students have, their favorite TV shows, favorite colors, and so forth.
2. Develop a human graph by writing the words GIRLS and BOYS in two places on the chalkboard. Have the girls form a straight line in front of the word GIRLS and the boys in front of BOYS. Make a mark with chalk or tape in front of the first person in each line. Draw a bar graph of the information on the chalkboard to demonstrate how real people are depicted in symbolic form. Develop human graphs of other student characteristics.

Our Class Census



3. Take a walking tour near the school and have the students count the different types of housing. From outside observation, students could generate totals for the number of floors in a building, exterior colors, exterior materials (siding, adobe, stucco, brick, stone), and type of housing. Have them distinguish between housing and nonresidential structures (stores, gas stations, and the like). Translate this information into additional bar graphs. While in the field, assist the students in converting what they see into a map.
4. Have the students create a bulletin board collage by collecting pictures/drawings of people and housing from magazines. Tell the students they are conducting a *"people and housing picture census"*. Establish some categories (older persons, young people, apartments, single family homes). Since census counts are associated with geography, further divide the categories into urban and rural. Put these category labels on the bulletin board and have the students add their entries to the correct category. On the last day of your *"picture census,"* have the students sum the people and housing by category and create a grand total of people and of housing.

Activity 1–Handout

Taking a Census

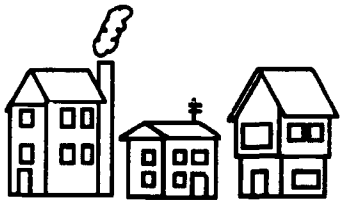
One, two, three, four. You are counting. A CENSUS is a count. A census counts people. It tells us how many people are old. It tells how many people are young. It tells us how many people are girls. It tells how many people are boys.

A census counts the buildings people live in. A census counts homes. It tells us the kinds of homes people have. It tells us how many homes there are.

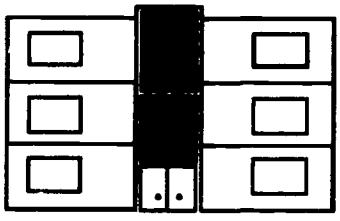
It tells us this and more.

We need counts of people and homes. We need to count everyone. A census answers big questions. Can you count people and homes? Can you add them up? This is what a census does.

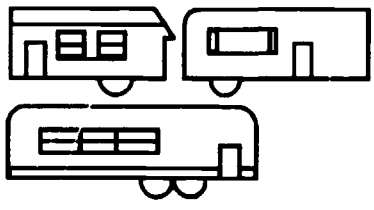
1. Draw a picture of a family. Draw it on the back.
2. How many grown-ups did you draw? _____
3. How many boys did you draw? _____
4. How many girls did you draw? _____
5. How many people are in your picture? _____
   This is what a census does.
6. These are houses.
   How many houses do you see? _____



7. This is an apartment building.
   Each apartment has one window that you can see.
   How many apartments do you see? _____



8. These are mobile homes.
   People live here too.
   How many mobile homes do you see? _____
9. Add the houses, apartments, and mobile homes. How many are there? _____
   This is what a census does.



Actividad 1-Folleto

Tomando un Censo

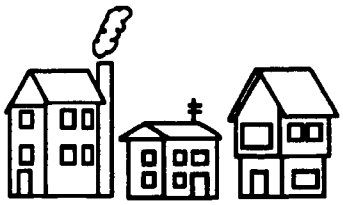
Uno, dos, tres, cuatro. Estás contando. Un CENSO también es un modo de contar. Un censo cuenta las personas. Nos dice cuántas personas son mayores de edad. Nos dice cuántas personas son jóvenes. Nos dice cuántas personas son niñas. Nos dice cuántas personas son niños.

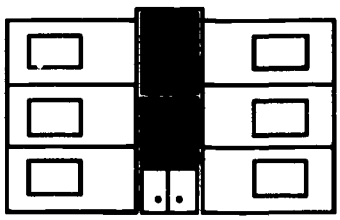
Un censo cuenta los edificios donde vive la gente. Un censo cuenta hogares. Nos dice qué tipos de hogares tienen las personas. Nos dice cuántos hogares hay.

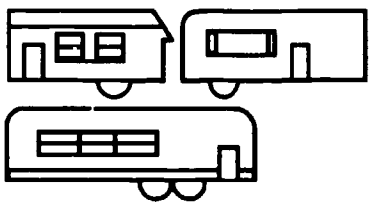
Nos dice esto y más.

Necesitamos contar las personas y los hogares. Necesitamos contar a todos. Un censo contesta preguntas importantes. ¿Puedes contar las personas y los hogares? ¿Puedes sumarlos? Esto es lo que hace el censo.

1. Dibuja una familia. Dibújalo atrás de esta página.
2. ¿Cuántos adultos dibujaste? _____
3. ¿Cuántos niños dibujaste? _____
4. ¿Cuántas niñas dibujaste? _____
5. ¿Cuántas personas hay en tu dibujo? _____
   Esto es lo que hace un censo.
6. Estas son casas.
   ¿Cuántas casas puedes ver? _____
7. Este es un edificio de apartamentos.
   Cada apartamento tiene una ventana que puedes ver.
   ¿Cuántos apartamentos ves? _____
8. Estas son casas móviles. Aquí también viven personas.
   ¿Cuántas casas móviles ves? _____
9. Suma las casas, los apartamentos y las casas móviles. ¿Cuántas hay? _____
   Esto es lo que hace un censo.







Teacher's Notes:
Activity 2

Add! Don't Subtract!

Overview The purposes of this activity are to introduce students to the concepts of census, complete count, and undercount; to show them that answers to the census become useful in decision making when they are totaled and associated with geographic areas; and to demonstrate the effect of an undercount on real-world decisions and the need for a complete count in the decennial census.

Students learn the difference between the concepts of complete count and undercount by participating in a roleplaying activity. They reinforce these concepts by engaging in activities centered around using/drawing a neighborhood map, summarizing a data set about the persons in households in this neighborhood (both as a complete count and an undercount), and making decisions based upon their computations. NOTE: See the **Educator's Guide to the 1990 Census** (a separate leaflet in the teaching kit) for background on the 1990 census, a census vocabulary, and other information.

Suggested Grades 2–6

Suggested Time 2 days

Learning Objectives

Students will:

1. Define the term census;
2. Explain the difference between the terms, complete count and undercount;
3. Prepare/use a map showing residential and nonresidential structures using basic geometric shapes;
4. Summarize and verify a data set;
5. Use a simple model to make a decision;
6. Alter a decision in the face of changing information; and
7. Describe how people depend upon each other by seeing how the individual behavior of some can affect everyone.

Vocabulary

Census	Housing Unit
Complete Count	Population
Decennial	Undercount

Materials Needed

- Copy of **Educator's Guide to the 1990 Census**
- Index cards or small pieces of paper (one per student)
- Copies of Handout 1–*Counting Center Neighborhood*
- Drawing paper or copies of Handout 2–*Map of Center Neighborhood*
- Red pencils
- Copies of *Take-Home Announcement* from **1990 Census Suggested School & District Outreach Activities** leaflet

Getting Started

1. Introduce this activity by having a discussion of the vocabulary. Tell the students they are going to be learning some important words. Begin with the word CENSUS. Write it on the chalkboard. Ask the students if they know the meaning of the word. Tell them a census is a count. (See **Educator's Guide to the 1990 Census** for definitions.)

2. On the chalkboard write the word DE–CEN–NI–AL in syllables just to the left of the word CENSUS. Have the students pronounce the word. Ask them the meaning of this word, but be ready to tell them. Decennial means occurring every 10 years. Have them say the two words DECENNIAL CENSUS together. Ask a student to define this phrase. Tell them that a decennial census happens in the United States in years ending in zero (0). Ask in what year the next decennial census happens. Ask if they know when in 1990. [**Answer**: April 1.]

3. Below these words, write the words POP–U–LA–TION and HOUS–ING U–NIT. Have the students pronounce these words. Ask them to give their meanings. Ask why these are important words to know. Tell them that these are the things counted in the decennial census in this country. Besides a count of people and homes, the decennial census counts other things about people and homes, such as age and sex and type of homes people live in.

4. Write the words COM–PLETE COUNT and UN–DER–COUNT on the chalkboard. Have them say these words. Ask the students if they can explain what these mean. As a hint, tell them they are the opposite of each other. Tell them that complete count means that every person and every housing unit in their neighborhood, in their community, in the entire Nation was counted and all the other questions about every person and housing unit were answered. Tell them that undercount means that some of the people and some of the housing were not counted. This

also means that some of the other information, like age or sex, is missing.

5. Ask the students what they think might happen if there was not a complete count in the decennial census. As a follow-up question, ask why a census is taken in this country. [**Answer**: A census is taken to create totals of the population, housing, and other characteristics. These totals are then used by schools, churches, businesses, and federal, American Indian tribal, Alaska Native village, state and local governments to make decisions that affect everyone and to plan for the future. Draw specific examples from those given in the **Educator's Guide** section on *Uses of Census Data* or use an example of how census totals, data, are used in your community. Have the students offer some suggestions.]

6. Tell the students they are going to participate in an activity that will show them exactly how census totals are used in making decisions and what happens if there is an undercount.

Development

1. Have the students imagine that their classroom is a town or other geographic area of their choosing. Have them name it, for instance OUR TOWN. Tell them that a big national children's clothing store chain has built but not opened a new store in Our Town. The president of the company is waiting for the new census totals for Our Town to find out who lives there. These totals will help him/her decide what kinds of clothes to sell in the new store. Embellish as appropriate.

2. Tell the students they are now going to take the census of Our Town to give the total to the president. Their census will give a count of the population and tell how many boys and girls there are in Our Town. Tell them you are the census taker and you are going to deliver their census forms. (OPTION: In this part of the roleplaying, you may want to create a badge or cap to wear saying OFFICIAL 1990 CENSUS TAKER.) Distribute the index cards. Tell the students they are going to write their sex, BOY or GIRL, on the card. Before they do, tell the boys that they think a census is a dumb idea. They do not care if they are counted. They do not see the reason why. (Depending upon your management style, you may want to elicit a round of "Boos!" from the boys. Don't worry. It will come back to haunt them.) Instruct the boys to write words like **refused, don't care,** or **gone fishing** on their cards or leave them blank, instead of writing in their sex. Make sure the girls write in **girl.** After they write in the appropriate answer, have them fold their cards in half and pass them to the front. Collect all the cards.

3. On the chalkboard, write the phrase, CENSUS OF OUR TOWN (or whatever name was chosen). Below that, write the words, BOYS, GIRLS, and TOTAL POPULATION. Tally the returns. Write the number of girls by the tally of girls. There should be no tally marks and a zero (0) entered in the column marked BOYS. Ask one of the students to perform the arithmetic (0 + ___ = ___) to arrive at the total population.

4. Write that number on the chalkboard under the heading, TOTAL POPULATION. Transfer the counts on the board to a separate piece of paper with an upper heading, OFFICIAL REPORT OF THE CENSUS OF OUR TOWN. (Prepare this sheet ahead of time.) Announce, as the census taker, *"The Census of Our Town is over. The FINAL counts, which cannot be changed for another 10 years, are 0 boys and ___ girls. The total population is ____."* Leave the OFFICIAL REPORT on your desk.

5. Now, change roles. Become the president of the children's clothing store chain in a far, distant city. (A badge or cap with the word PRESIDENT on it may be appropriate.) Seat yourself at your desk and pick up the OFFICIAL REPORT. Say, *"Oh great! The OFFICIAL REPORT OF THE CENSUS OF OUR TOWN just came in. I've been waiting for this. This says the total population is ____ and, that **100 percent** of the population is girls! From this report, I know exactly what kinds of clothes to put in that new store in Our Town: **girls'** clothes!"* Embellish as you wish.

6. Assume your role as teacher. Ask the students for their reaction to the president's decision. Direct the students now to imagine it is several weeks or months in the future. Tell them that the president of the company, in the far distant city has been receiving complaints from the new store in Our Town. (Roleplay this, if you wish.) The store manager says about one half (or the proportion of boys in the class) of the people in Our Town do not like the clothes in the store. The president is not sure what to do but decides to take another look at the OFFICIAL REPORT. It is the only thing the president has to use to make a decision. After looking again at the report, the president decides the problem must be the style of clothes. The president decides to send the latest fashions from Paris, **girls'** clothes of course.

7. Ask for reactions. Again, have them imagine time has elapsed. Tell them, as before, the president is receiving more complaints from the store. But now the president has spent so much money on this one

store, one half of the clothes are not selling, and now the company is losing money. There is only one thing left to do. The president decides to close the store.

8. Ask the students to explain what happened. Tell them that because the boys did not answer the census there was an undercount. The president of the company did not know this and used the census totals to make a decision that affected everyone in Our Town.

   Because of the undercount everyone lost. The boys lost out because there were no boys clothes in the store and the girls lost out because the store closed. The people who worked at the store lost out because they lost their jobs. Tell the students the same kinds of things can happen in the real census of the United States. If there is an undercount everyone loses. This is why it is important that everyone answer the census; that there be a complete count.

9. Copy and distribute the *Census Take-Home Announcement* as a reminder for parents/guardians to respond to the census.

Reinforcing the Concepts

1. In the next class, have the students extend their understanding of the concepts of complete count and undercount and the effect these have on decision making. The students will use or prepare a neighborhood map (Handout 2) depicting the location of housing units and other structures and use data about the people who live in those houses, Handout 1.

2. Decide whether or not to use the prepared map of Center Neighborhood, Handout 2. If Handout 2 is used, duplicate and distribute copies. Describe the map to the students. Tell them that each small square is a house. Point out Center Block, then move to Item 4.

3. If the prepared map is not used, distribute drawing paper and direct them to draw a map similar to Handout 2. Make sure they include Center Block and 20 small squares (houses).

4. Direct them to write a different letter in each house, starting with A and ending with T. (You decide the order.)

5. Present the following story: *"The Mayor of Centerville wants to build a new park. She wants to build it in Center Block which is vacant. The park will be for the people who live in Center Neighborhood. The Mayor decided that if the new census totals showed that one-half or more of the people in Center Neighborhood were young people and older persons she would build the park. The park would have a swimming pool, playground, picnic tables, meeting hall, and other fun things. Using a table of census totals about the age of the people counted in Center Neighborhood, the Mayor wants you to decide whether or not to build the park."*

6. Tell the students they will be totaling counts of young people, grown-ups, and older people living in Houses A-T. NOTE: Grown-ups seemed to be the best word to describe persons in the middle. Three age categories-Persons 19 or Younger, Persons 20-59, and Persons 60 and Older-also are listed in the headings of Handout 1. Copy and distribute Handout 1.

7. Familiarize the students with the table. Emphasize that to answer the Mayor's question the information must be totaled. A decision cannot be made just by looking at the information about the people in individual houses.

8. Direct the students to calculate the total number of people in each house by adding across each row. Have them place each answer in the column titled, TOTAL PEOPLE IN EACH HOUSE. NOTE: There are no people in House O. It is vacant. Next, have them determine the total population in the neighborhood by adding down the TOTAL PEOPLE IN EACH HOUSE column. Have them place this answer [55] in the box above the words TOTAL PEOPLE IN CENTER NEIGHBORHOOD. Finally, have them total the columns marked, YOUNG PEOPLE, GROWN-UP PEOPLE, and OLDER PEOPLE. Have them place their answers in the blanks of the row titled TOTAL PEOPLE BY AGE. These answers are 20, 25, and 10, respectively. Ask them to add these three numbers. Have them compare the sum to TOTAL PEOPLE IN CENTER NEIGHBORHOOD, or 55. The numbers should be the same. They have now verified their arithmetic.

9. Depending upon the grade of the students, ask them which of their totals will solve the Mayor's problem (see Item 5 above). Ask them how they will arrive at an answer. The students only need to use column totals for YOUNG PEOPLE [20], OLDER PEOPLE [10], and TOTAL PEOPLE IN CENTER NEIGHBORHOOD [55]. The question they must answer is, *"Are YOUNG PEOPLE plus OLDER PEOPLE greater than or equal to one-half the TOTAL PEOPLE IN CENTER NEIGHBORHOOD or is 20 plus 10 greater than or equal to 55/2?"* The answer is **YES**. The park can be built. On the students' maps have them draw a park or write the word **YES** in Center Block.

10. Tell the students they are going to repeat the process as if there was an undercount, i.e. not everyone answered the census. Distribute red pencils. Direct the students to remove Houses A, D, E, I, and M from the census. Using new copies of Handout 1 or the ones they have, ask the students to draw a red line through the information for each of these houses and place a red X in the far right column. On their maps have them X out the appropriate squares.

11. Tell them to imagine that in the census of Center Neighborhood some people did not fill out their census forms. The people in Houses A and E did not think they had to answer. The people in Houses D and I did not care about the census. The people in House M refused. Because of these people leaving themselves out of the census, the numbers have changed. But by how much? Does it change the solution to the problem? Does it change the Mayor's decision?

12. Have them generate new totals excluding the data for the undercount houses. If they use their original copy of Handout 1, have them write their new summations in red next to the old numbers. Their answers become: TOTAL PEOPLE IN CENTER NEIGHBORHOOD = 40; YOUNG PEOPLE = 14: GROWN-UPS = 21; OLDER PEOPLE = 5. A recalculation of their model should generate the question, *"Is 19 greater than or equal to 20?"* The answer is **NO**. Because of the undercount not only have the totals changed but also the proportions. Using this information, the Mayor decides **not** to build the park when it, in fact, was really needed. Have the students write the word **NO** in big red letters in Center Block. Discuss with the students how the decisions of a few people who left themselves out of the census affected the entire neighborhood and now the decision affected the people the park was meant to serve.

Extension/Enrichment Activities

1. As an extension of the mapping exercise have the students add street names and the cardinal directions. Have them pretend they are census takers following up on Houses A, D, E, I, and M (the undercount houses). Have them describe the route they would take and direction they would follow in order to personally stop by each house, in alphabetic sequence, to obtain the missing census information.

2. For advanced students, instead of the grouped data in Handout 1, create a new table identical to Handout 1, but use actual ages and have them create the grouped data. List the houses down the left side of the page. Across the top create five headings, PERSON 1, PERSON 2,...PERSON 5. Insert ages into each cell based on the count of persons in the age groups in Handout 1. Use the ages falling into these groups as shown in Handout 1. For example, instead of House A having three OLDER PEOPLE, make them 65, 67, 72 years old. Have students tally the individual ages into the three groups as shown in Handout 1. Next, have them sum each category to obtain a total population for the neighborhood. From this point use the procedures as described.

3. For advanced students, have them perform other computations. For example, calculate the average number of persons per **household**. NOTE: This means occupied housing unit. The students should exclude the vacant house, House O. Have them use the complete count figures [55/19 = 2.89 persons per household], then use the undercount [40/14 = 2.86]. Ask them to compute the percentage of housing units that are vacant or occupied. Use both counts. Have them calculate percentages for the age groups. Use both counts. Have the students calculate the median age using a table of actual ages you may construct. (See Extension Activity 2.) Again, use complete count totals and those from an undercount. Using these figures, have them construct a table which presents these various differences, ask them to calculate the magnitude of the differences, and write an essay about the effects of an undercount of the population and housing of Center Neighborhood.

Activity 2–Handout 1

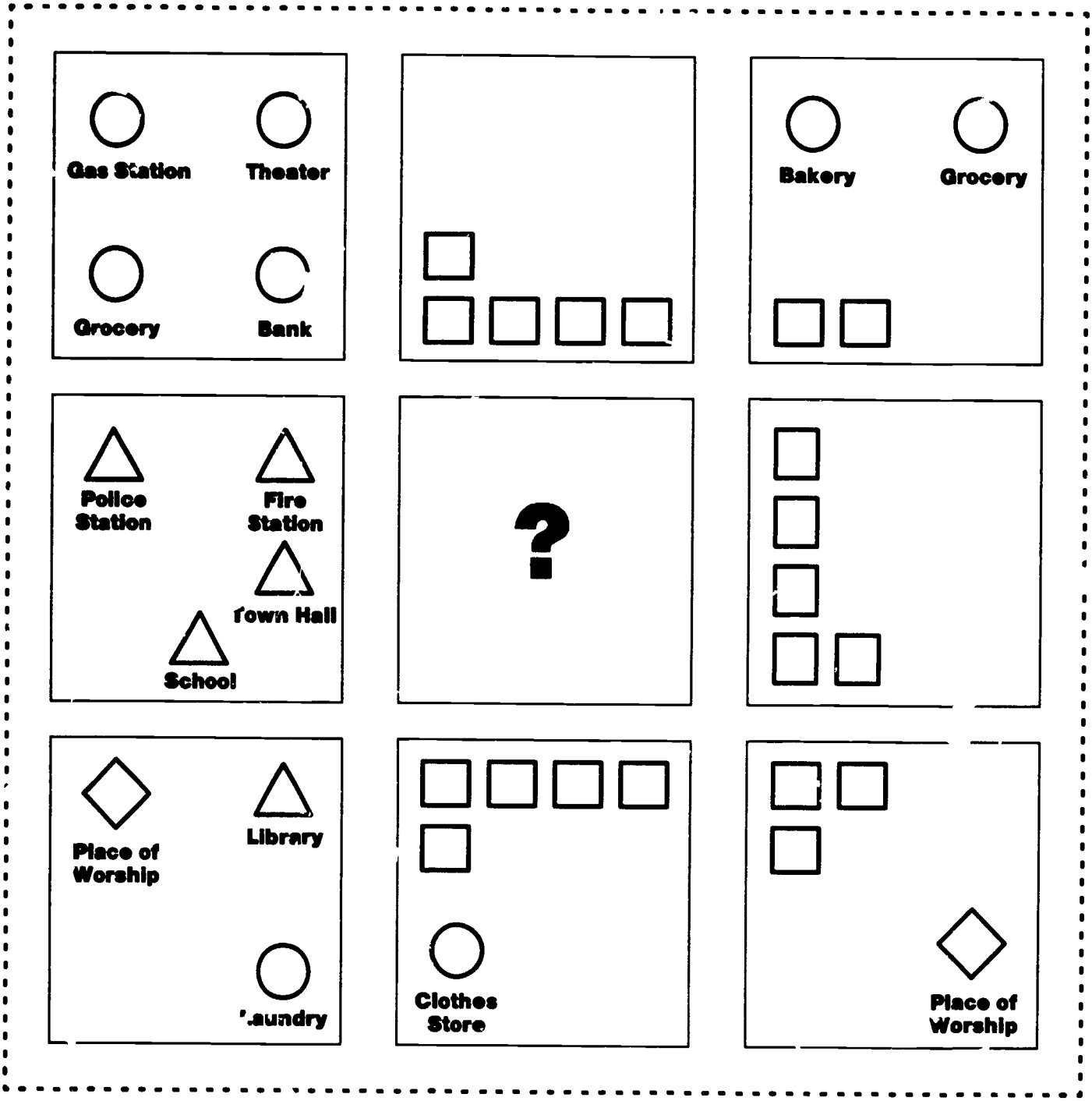
Counting Center Neighborhood

	Number of: Young People (Persons Age 19 or Younger)	Grown-up People (Persons Age 20–59)	Older People (Persons Age 60 and Older)	Total People in Each House
House A	0	0	3	
House B	0	1	0	
House C	3	1	1	
House D	3	2	0	
House E	0	1	0	
House F	0	2	0	
House G	3	2	0	
House H	1	1	0	
House I	2	1	0	
House J	0	1	1	
House K	2	3	0	
House L	0	2	1	
House M	1	0	2	
House N	3	2	0	
House O	0	0	0	
House P	0	1	0	
House Q	1	1	0	
House R	1	1	1	
House S	0	2	0	
House T	+ 0	+ 1	+ 1	+
Total People by Age				

Total People in Center Neighborhood

Activity 2–Handout 2

Map of Center Neighborhood



Legend

- Boundary of Center Neighborhood
- ? Center Block
- □ Houses
- △ Public Buildings
- ○ Businesses
- ◇ Places of Worship

Teacher's Notes:
Activity 3

What Do You Know About the Census?

Overview The purpose of this activity is to provide students with information about the history of the population census in the United States and give examples of some of the data the census produces. Students will read about the origin of the census, the first census in 1790, data generated in the 1980 census, and some basic information on the 1990 census. Factual questions, which also can be used as a pre-test activity prior to the students' reading the written passage, provide a measure of the students' understanding of basic concepts. The reading and quiz also are provided in Spanish. NOTE: See the **Educator's Guide to the 1990 Census** (a separate leaflet in the teaching kit) for background on the 1990 census, a census vocabulary, and other information.

Suggested Grades 4-7

Suggested Time 1-2 days

Learning Objectives

Students will:

1. State key facts about census-taking in this country and
2. Compare information from different censuses.

Vocabulary

Apportion(ment)	Constitution
Bicentennial	Decennial
Census	Enumeration
Census Data	House of Representatives
Complete Count	Population
Confidential	Undercount

Materials Needed

- Copy of **Educator's Guide to the 1990 Census**
- Copies of Handout 1-*What Do You Know About the*
- *Census?* (Also in Spanish)
- Copies of Handout 2-*Facts About Census Factfinding* (Also in Spanish)

Getting Started

1. Ask the students why leaders would want to know the country's population and of the geographic units within it (e.g., counties, cities, American Indian reservations, Alaska Native villages, states).

2. Ask the students if they know how leaders in a country determine the population. Explain the term census. NOTE: Populations can be and are estimated, but estimates are usually based on a census from an earlier time.

Development
(Use either of the following approaches)

1. Distribute copies of Handout 1-*What Do You Know About the Census?* Ask the students to answer the questions individually. When all have finished, introduce vocabulary terms by listing and pronouncing the words. Distribute copies of Handout 2-*Facts About Census Factfinding*. Tell the students to change any incorrect responses on the quiz as they read the passage. Have them also note any other unfamiliar terms as they read.

2. When all have finished reading, have a discussion of the correct answers using the *Teacher's Notes* answer sheet to this activity as a guide. NOTE: The narrative in the **Educator's Guide to the 1990 Census** will supplement the answer sheet.

OR

1. Introduce the vocabulary by listing and pronouncing the words. Distribute copies of Handout 2-*Facts About Census Factfinding*. Tell the students they will be reading about how the census began in this country, some of the kinds of questions asked, some of the summary data obtained through the census, and information about the importance of everyone being counted. NOTE: It may be necessary to read the story to students at the lower end of the suggested grade span. When all have finished reading, distribute Handout 1-*What Do You Know About the Census?* It can be used as a test of comprehension or for class discussion. Use the answer sheet in the *Teacher's Notes* and **Educator's Guide to the 1990 Census** as additional information for class discussion.

Extension/Enrichment Activities

1. Have students survey three family members and/or adults using the questions in Handout 1-*What Do You Know About the Census?* Tell them to keep track of correct and incorrect responses. Discuss the general census awareness of these persons with your students on the following day.

2. Have students locate 1980 census data about their state. The *U.S. Population Data* table in **Activity 7** is a good place to start. Also, check the school library for a copy of the U.S. Census Bureau publication, **Statistical Abstract of the United States**, which is published annually. Have students locate census data about their community or county (parish, borough). The Census Bureau's **1988 County and City Data Book** has a variety of data for these geographic units. (These and other products are listed in the **Teaching Resources Guide**.)

3. Have students locate and read Article 1, Section 2 of the U.S. Constitution for the legal precedent on the census. Also have them read the 13th, 14th, and 16th amendments for constitutional changes affecting the census.

Answers to Activity 3–Handout 1

1. **True.** The U.S. Constitution, adopted in 1787, made the provision for a national census to be taken every 10 years. This was prescribed in Article 1, Section 2. (See the **Educator's Guide to the 1990 Census** section on *Census History* for the wording.)

2. **True.** In keeping with the above noted Article and Section, the first census was taken in 1790. It began in August of that year and took 18 months to complete. Thomas Jefferson directed the first census as Secretary of State. (See the **Educator's Guide to the 1990 Census** section on *Census History* for some information on North American censuses predating 1790.)

3. **True.** The 1790 census results formed the basis for the apportionment of the House, as mandated in the Constitution. All subsequent censuses have been the official basis for reapportionment. (See **Teaching Resources Guide** for information on a useful product that explains these in detail, **The Census and The Constitution: Counting for Representation.**)

4. **True.** The 1990 census will mark the bicentennial of census taking in this country.

5. **True.** The data resulting from a census are used for much more than the reapportionment of the House. The information is the basis for allocating Federal, state, American Indian tribal, Alaska Native village, and local government monies for a variety of programs and has wide applications in everyday business activities. (See discussion on *Uses of Census Data* in the **Educator's Guide to the 1990 Census.**)

6. **True.** Evaluation surveys after the 1980 census indicated that the total population of the country was undercounted by a small percent. On a proportionate basis, the undercount was higher for minority populations.

7. **True.** Maintaining the confidentiality of individual census answers is critical to developing and maintaining the trust of the American public. Statutes that made responding to the census mandatory (with penalties for refusals) and responses confidential (with penalties for disclosure) were codified by Congress in 1954 in Title 13, U.S. Code. Under this law, only sworn Census Bureau employees can look at a specific individual's answers, forms, and related materials. An employee breaking this confidence is subject to stiff fines and imprisonment. Individual census records are held confidential for 72 years and then provided to the National Archives for genealogical/research purposes. The 1990 census forms will not be made public until 2062. (See **Activity 10** for exercises associated with historic census records.)

8. **C.** The figure recorded for 1790 was 3,929,314. Geographically, the 1790 census covered the United States from Maine to Georgia and the territories to the west of them which they claimed.

9. **C.** The final count from the 1980 census was 226,545,805 people. This number represented the population at that time in the 50 states and the District of Columbia. (See **Activity 6**–Handout 2 for U.S. population counts from 1790 to 1980 and **Activity 10**–Handout 2 for state and territory totals from the 1790 census.)

10. **B.** In 1980 California had a population of 23,667,902. It has officially held its number one ranking since the 1970 census. Before then, New York was the most populous state in the country. It maintained this position in each of the censuses from 1810 to 1960. In 1790 and 1800, Virginia led the Nation in population, based on its boundaries at those times. (See the *U.S. Population Data* table associated with **Activity** 7 for the other state information.)

11. **B.** Students should recognize the direct relationship between the size of a population count for a state and its number of seats in the U.S. House of Representatives. The greater the population is, the greater the number of seats in the House (after the guaranteed one seat for each state.) Since California had the largest state population in 1980, it received the largest number of seats. It presently has 45 members in the House.

12. **A.** While Alaska has nearly 1/6 of the country's total area, it had only 401,851 people living in its borders in 1980. As of the 1985 estimate, Alaska moved to 49th, ahead of Wyoming. According to 1990 projections (see **Activity** 7), Alaska will move to 48th, ahead of Wyoming (50th) and Vermont (49th).

13. **B.** Nevada was the fastest growing (percentage) state in the 1970s. With a small population base, it did not have to add that many people to have a high percentage increase. A 1970 population of 488,738 and an increase across the decade of 311,755 gave it a 10 year percentage change of 63.8%. By comparison, Texas added over 3 million people in the 1970s and grew by 27.1%.

14. **Select one.** April 1 has been the date for the decennial census since 1930. Ask the students to consider the date. Challenge them to suggest reasons why they think April 1 is used. **Answer**: Winter is ending/over for most of the country. This is especially important in the sparsely settled parts of the country to be counted by door-to-door enumeration. Most people will be in their usual place of residence. Schools are still open. People are less likely to be traveling on vacation. College students are still on campus, which is where they are counted. April 1 is an easy date to remember. (See **Activity 6**–Handout 2 for census dates and U.S. population totals from 1790 to 1980.)

Activity 3–Handout 1

What Do You Know About the Census?

Circle the correct answer.

	True or False	
1. The Constitution requires that a census be taken in the United States every ten years.	T	F
2. The first census of the United States was taken in 1790.	T	F
3. Census figures are used to decide how many seats (representatives) each state will have in the U.S. House of Representatives.	T	F
4. The next national census of population and housing will be taken in 1990.	T	F
5. The results of a census help guide thousands of decisions that affect everyone.	T	F
6. In the 1980 census, there was an undercount of the Nation's population. This means not everyone was counted.	T	F
7. Only sworn United States Census Bureau workers can look at an individual's or household's 1990 census form (questionnaire).	T	F

	Multiple Choice			
8. The population of the United States in 1790 was about **a)** 63 million **b)** 400,000 **c)** 4 million **d)** 227 million.	a	b	c	d
9. The population of the United States in 1980 was about **a)** 63 million **b)** 150 million **c)** 227 million **d)** 329 million.	a	b	c	d
10. The state with the largest population in 1980 was **a)** Alaska **b)** California **c)** Delaware **d)** New York.	a	b	c	d
11. From the 1980 census totals, the state receiving the largest number of seats in the U.S. House of Representatives was **a)** Alaska **b)** California **c)** Delaware **d)** New York.	a	b	c	d
12. The state with the smallest population in 1980 was **a)** Alaska **b)** Rhode Island **c)** Delaware **d)** New Jersey.	a	b	c	d
13. The state that grew the fastest (by the greatest percentage) between 1970 and 1980 was **a)** California **b)** Nevada **c)** New York **d)** Texas.	a	b	c	d
14. Census Day 1990 is **a)** April 1 **b)** April 1 **c)** April 1 **d)** April 1.	a	b	c	d

Activity 3-Handout 2

Facts About Census Factfinding

Counting its people is one of this country's oldest activities. Enumeration, or counting, of some of the population happened before Independence. Once the country was founded, the leaders attending the Constitutional Convention in Philadelphia in 1787 saw the need for a national census. They decided each state's population would determine the number of members it sent to the House of Representatives. The only way to do this was to take a census. It would tell how many people lived in each of the states. The Constitution required the first census which took place in 1790.

Thomas Jefferson, the Secretary of State in 1790, was responsible for conducting the first census. It took 18 months to complete the census and total all the information. Approximately 4,000,000 people were counted in the area then contained in the borders of the United States.

The Constitution also required that a census be taken every ten years. The next decennial census will be taken in 1990. The 1990 census will be the 200th anniversary of the first census, or the bicentennial. The totals from the census are still used to decide how many members of the House of Representatives each state will receive. The House now contains 435 members. California currently has 45 members because it was the state with the largest population in 1980. Alaska and five other states only have one representative each. Alaska had the smallest population in 1980.

In the most recent census in 1980, the final count for the United States was 226,545,805 people. The United States Census Bureau estimated that a small percentage of the people in the country was not counted. An undercount takes place when everyone is not counted. There are several reasons why people were not counted. Some people did not think they had to answer. Others did not believe the census was important, and some did not receive a census form. Some people refused because they thought their personal information would not be kept secret.

Identifiable information about individuals and families given in the census is not reported to anyone. The answers individuals and families give are confidential, or private, for 72 years. Only persons who work for the United States Census Bureau can look at this information. They cannot share this information with other people. If they did, they could go to jail or pay a large fine. All the individual answers are totaled. Adding everyone's answers together creates census data, or census figures.

Census data tell us many things. Census figures provide information about the total number of people living in geographic areas such as states, townships, and American Indian reservations. It is possible to learn what parts of the country have gained or lost population by comparing data from different censuses. Between 1970 and 1980, Nevada had the greatest percentage gain in population. Other states with large percentage gains during that decade were Arizona and Florida.

Besides counting the population, the census asks questions about how old people are, the homes they live in, the jobs they have, their education, and other important things. All this information is used every day to make decisions important to everyone. School officials use census data to figure out how many classrooms and teachers will be needed in the future. Many businesses use census figures to decide where to locate new stores. Government leaders use them to decide where to put new playgrounds, swimming pools, and other services. It is important that everyone be counted in the 1990 census so the best decisions can be made. Everyone loses if everyone is not counted in the census.

Actividad 3–Folleto 1

¿Qué Sabes Sobre el Censo?

Dibuja un círculo alrededor de la respuesta correcta.

	Verdadero o Falso
1. La Constitución exige que se tome un censo en los Estados Unidos cada diez años.	V F
2. El primer censo de los Estados Unidos se llevó a cabo en 1790.	V F
3. Los resultados obtenidos del censo son utilizados para decidir el número de miembros (representantes) que cada estado tendrá en la Cámara de Representantes.	V F
4. El próximo censo nacional de población y vivienda se llevará a cabo en 1990.	V F
5. Los resultados del censo ayudan a tomar miles de decisiones que nos afectan a todos.	V F
6. En el censo de 1980, hubo una subenumeración de la población nacional. Esto significa que no se contó toda la población.	V F
7. Sólo empleados de la Oficina del Censo de los Estados Unidos que hayan prestado juramento tienen acceso al cuestionario individual de una persona o familia.	V F
	Selección Múltiple
8. En 1790, la población de los Estados Unidos fue de **a)** 63 millones **b)** 400,000 **c)** 4 millones **d)** 227 millones.	a b c d
9. En 1980, la población de los Estados Unidos fue de **a)** 63 millones **b)** 150 millones **c)** 227 millones **d)** 329 millones.	a b c d
10. El estado con la mayor población de los Estados Unidos en 1980 fue **a)** Alaska **b)** California **c)** Delaware **d)** Nueva York.	a b c d
11. De los totales obtenidos del censo de 1980, el estado que recibió el mayor número de miembros en la Cámara de Representantes de los Estados Unidos fue **a)** Alaska **c)** California **d)** Delaware **d)** Nueva York.	a b c d
12. El estado con la menor población en 1980 fue **a)** Alaska **b)** Rhode Island **c)** Delaware **d)** Nueva Jersey.	a b c d
13. El estado que tuvo mayor porcentaje de crecimiento entre 1970 y 1980 fue **a)** California **b)** Nevada **c)** Nueva York **d)** Texas.	a b c d
14. El Día del Censo de 1990 . **a)** 1º de abril **b)** 1º de abril **c)** 1º de abril **d)** 1º de abril.	a b c d

Actividad 3–Folleto 2

Información Sobre el Censo

Contar a nuestra gente es una de las actividades más antiguas de nuestro país. La enumeración o el recuento de una parte de la población ocurrió antes de nuestra independencia. Una vez fundado el país, nuestros líderes vieron la necesidad de tomar un censo nacional. Llegaron al acuerdo de que la población de cada estado determinaría el número de miembros que lo representara en la Cámara de Representantes. Esto sólo se lograría tomando un censo. Este serviría para saber cuántas personas vivían en cada estado. La Constitución exigió el primer censo, el cual se llevó a cabo en 1790. Aproximadamente 4 millones de personas fueron contadas en el área conocida en aquella época como los Estados Unidos.

La Constitución también exigió que se llevara a cabo un censo cada diez años. El próximo censo decenal se realizará en 1990. Los resultados del censo todavía son utilizados para decidir cuántos miembros de la Cámara de Representantes tendrá cada estado. La Cámara está compuesta por 435 miembros. California tiene actualmente 45 representantes ya que es el estado que tuvo mayor población en 1980. El estado de Alaska y cinco estados más, sólo tienen un representante cada uno. Alaska fue el estado con la menor población en 1980.

En el censo de 1980, el recuento final de nuestra población fue de 226,545,805 habitantes. La Oficina del Censo de los Estados Unidos estimó que un pequeño porcentaje de la población no fue contado. Una subenumeración ocurre cuando no somos contados todos. Hubo varias razones por las cuales ocurrió esta subenumeración. Algunas personas pensaron que no era obligatorio contestar el cuestionario. Otras creyeron que el censo no era importante y otras no recibieron el cuestionario. Algunos se rehusaron a contestarlo porque pensaron que su información personal no se mantendría confidencialmente.

La información sobre individuos y familias dada en el censo es estrictamente confidencial. Las respuestas individuales y familiares son mantenidas en secreto por 72 años. Sólo personal empleado por la Oficina del Censo tiene acceso a esta información. Ellos no pueden divulgarla a otras personas. Si así lo hiciesen, irían a prisión o serían multados severamente. Todas las respuestas individuales son sumadas. La suma de estas respuestas crea los datos o las cifras del censo.

Los datos del censo nos dicen muchas cosas. Estas cifras nos proveen información sobre el número total de personas que viven en áreas geográficas tales como estados, pueblos y reservaciones indias. Es posible determinar en qué partes del país ha aumentado o disminuido la población comparando la información de los diferentes censos. Entre 1970 y 1980, el estado de Nevada registró el mayor porcentaje de aumento en la población.

Además de contar la población, el censo hace preguntas tales como la edad de las personas, sus domicilios, sus empleos, su educación y otras cosas importantes. Esta información se usa todos los días para poder tomar decisiones para todos. Funcionarios escolares utilizan los datos del censo para determinar la cantidad de salones de clase y de maestros que se necesitarán en el futuro. Muchas empresas utilizan las cifras del censo para situar nuevos negocios. Los funcionarios del gobierno las utilizan para decidir dónde situar nuevas áreas de recreo, piscinas y otros servicios públicos. Es muy importante que todos seamos contados en el censo de 1990 para que se puedan tomar las mejores decisiones. ¡Nosotros perdemos si no somos contados todos!

Teacher's Notes:
Activity 4

Where Have We Been? Where Are We Going?

Overview The purposes of this activity are to give students experience in conducting a survey, show them the difference between individual answers and grouped data, show them how data for an area change over time, and demonstrate the importance of **current** information in decision making. The survey (answered by both students and their parents/guardians) concerns the home environment and hobbies of the students and of their parents/guardians (**when they were the same age as the students**). The activity may be customized by the addition of questions which interest the class. The survey also is provided in Spanish. NOTE: See the **Educator's Guide to the 1990 Census** (a separate leaflet in the teaching kit) for background on the census, a census vocabulary, and other information.

Suggested Grades 3–10

Suggested Time 2–3 days

Learning Objectives

Students will:

1. Identify changes in data over time,
2. Explain why it is important to have current data;
3. Explain why having only individual answers would be less useful in making decisions than grouped (or summarized) data; and
4. Conduct an interview, organize data, and make joint decisions.

Vocabulary

Census	Survey
Complete Count	Undercount
Confidentiality	

Materials Needed

- Copy of **Educator's Guide to the 1990 Census**
- Copies of Handout-*Home and Hobby Survey-Then and Now* (Also in Spanish)
- Copies of *Take-Home Announcement* from **1990 Census Suggested School & District Outreach Activities** leaflet

Getting Started

1. Present the following story: *"Ms. Mega Bucks has some money to invest and owns a building located near an elementary school and a high school. She has asked this class for advice about what kind of a store (or stores) to place in her building since she is not sure what today's young people are interested in. She knows what products she liked when she was young, but she thinks that tastes have probably changed since then."*

2. Invite the students to suggest the kind of stores that they think might be popular with young people. List these on the chalkboard. Stop when you have ten or more listed. Read the list to the students, then state, *"These are all good ideas, but Ms. Bucks can't open all of these. How can we choose among all of these individual stores? What could we do to be sure we give Ms. Bucks the best possible advice?"* Elicit that a **survey** could be used to determine the best choices. If needed, use the idea of an election to help explain what a survey is.

3. Ask the students who should answer the survey-all persons, young people, older persons? Follow this with, *"What do you think might happen if we asked your parents or adults to choose Ms. Bucks' store(s) for young people?"*

Development

1. Introduce the Handout-*Home and Hobby Survey-Then and Now*, as the way the students will determine the best advice for Ms. Bucks. By getting the "likes and dislikes" of each student and totaling all of those answers, they can say as a **group** what the best advice is. Distribute copies of the Handout and ask them to study the questions.

2. Call attention to the two blank "Class Question" lines on the survey form. Invite the class to compose two questions to add to the survey which will:

   (a) help determine the best advice to give Ms. Bucks and/or

   (b) help them understand the difference between what life was like in the days when their parents were in school and now

   The class might suggest a question such as *"How much spending money (do/did) you have a week?"* or *"Most things I (buy/bought) cost less than _____ (dollars/cents)?"*

   After the class has agreed on the two questions to add, have each student write them in on his/her copy of the survey.

3. Ask the students to answer Questions 1–5, writing their responses in the "You-Now" column. For Question 3, they should put checks next to exactly three items. NOTE: If any of their top three favorite activities are missing, they should name them on the lines marked "Other". Explain that their answers will be **confidential** (no one will know who gave which answers).

4. Explain that each student, as part of the night's homework, will ask a parent or other adult to answer the same questions as a way of describing **what things were like when**

they were young. These answers will be put in the right column "Parent/Adult at Your Age". This information, when summarized, will help them understand how information changes over time and the need for up-to-date information.

5. Explain that tomorrow all of these answers will be **tabulated**; this means that **totals** will be calculated for all responses. The results from column one (student answers) will guide the students' advice to Ms. Bucks. Results from column two (parents'/guardians' answers) will help them understand how things have changed in the last generation and why current information is important in decision making. Remind your students that their answers and those of their parents (or other adult in the household) will be kept **confidential** (private). They should **not** write their names on the surveys.

6. Ask the students to **practice** conducting the survey with their parents/guardians by dividing them into pairs. One student will be the interviewer, while the other takes the role of the interviewee (parent or other adult). The interviewee should answer the way they **think** their parent or an adult might respond. Next, have them reverse roles. Students will discover that it is helpful to preface each question with, ***"When you were my age how would you have answered this question?"***

7. Explain that it is important that they return the questionnaires. If some students do not, it will mean there is an **undercount** and statistics (totals) tabulated from the forms will not be an accurate picture of the class. An inaccurate decision might result. For example, let's say that over half the students favored one particular free-time activity, bicycle riding, but none of them answered and returned their form. The result could be that the class would not decide to open a bicycle shop when really needed. In the census, this is why it is important that everyone complete the census form.

8. The next day collect the survey forms. As the forms are returned, let the students know if there was a 100 percent return or an undercount. It is **not** suggested that you single out students who did not return their forms. Arrange for a tabulation procedure that preserves confidentiality (e.g., tabulate values yourself and present only summary statistics to the class; or read the answers for the first question aloud while one or two students tally them on the chalkboard, then rearrange the order of the forms and repeat for the next question.) If more than one class is involved, you may wish to have a committee of "tabulators" in each class tally the results from the other class. If you select a tabulation method that does involve class time, the continuation of this discussion should take place one day later.

9. Present the summary data of the students' responses (first column). Ask the students what kind of store(s) the summary data suggest Ms. Bucks should open. Ask students to explain how the data guide the decision (e.g., many students enjoy bicycling, therefore a bicycle shop would be a good idea). Ask the students to write a letter to Ms. Bucks, including their top three recommendations in rank order, stressing their data based rationale. This could be done individually or by small committees.

10. Present the summary data for the adults (second column). If Ms. Bucks had used this "adult" data set to decide what kind of store(s) to open in their neighborhood, what store(s) might have been opened? What might happen to the store(s) if the students used their parents/adults data in deciding? Would it/they be successful? Point out an exotic difference between the students' choices and the adults. While not necessarily related to opening a store, answers to Question 1 should provide interesting differences. In discussion, have the students consider the same questions for their grandparents. How do they think their parents' answers would differ from those of their grandparents? With this as a backdrop, emphasize that this is one reason it is important to take a U.S. census on a regular basis Current information is needed to make good plans and decisions that keep up with change. (For examples of change in census data, see **Activity 6 and 7**.) Also, advise the students the exercise they have just conducted is in many ways similar to taking a census. **It is the process of having individuals answer the same set of questions, totaling the individual answers, and using the totals.**

11 Copy and distribute the *Census Take-Home Announcement* as a reminder for parents/guardians to respond to the census.

Extension/Enrichment Activities

1. Ask the students if there are other pieces of information they think might be useful in making a decision on Ms. Bucks' store. In considering this, have the students look through the business section of the local newspaper for stories on local business developments.

2 For advanced students, ask them to prepare a class profile from the results of their survey Some of the items they might include are. average number of children and teenagers per household, average number of pets per household, and so on. Ask them to note numeric differences between the student and adult data sets. Ask them to write an essay based on this profile. Have them graphically present some of the findings to show these differences

3 Have the students create a bulletin board display depicting their community today and in the past. Ask them to collect photographs and drawings of people, buildings, events that show change. Supplement this with population information from past censuses for the community. When assembled, have them write an essay about interesting facts displayed about their community. (See Item 6, *Produce an Historical Exhibit*, in the **1990 Census Suggested School and District Outreach Activities**, a separate leaflet in the teaching kit. See **Activity 10** for other ideas.)

Activity 4-Handout

Home and Hobby Survey–Then and Now

	You-Now	A Parent/Adult at Your Age
1. How many people live in your home?		
Adults	_____	_____
Children and teenagers	_____	_____
Total people	_____	_____
2. How many pets are there in your home?	_____	_____
3. What are your three favorite free-time activities?		
Bicycle riding	_____	_____
Watching television	_____	_____
Reading	_____	_____
Listening to music	_____	_____
Sports	_____	_____
Skating	_____	_____
Video games	_____	_____
Crafts (like painting or sewing)	_____	_____
Collecting things (like rocks or stamps)	_____	_____
Playing checkers, chess cards, etc.	_____	_____
Other _____	_____	_____
Other _____	_____	_____
4. Class Question _____	_____	_____
_____		
5. Class Question _____	_____	_____
_____		

ANSWER THE CENSUS–APRIL 1, 1990.
IT'S IMPORTANT TO YOUR FUTURE.

Actividad 4–Folleto

Encuesta Sobre el Hogar y los Pasatiempos — Antes y Ahora

	Tú-Ahora	Tus Padres/Guardianes Cuando Tenían tu Edad
1. ¿Cuántas personas viven en tu casa?		
Adultos		
Niños y adolescentes		
Total de personas		
2. ¿Cuántos animales domésticos hay en tu casa?		
3. En tus ratos libres, ¿cuáles son tus tres actividades favoritas?		
Andar en bicicleta		
Ver televisión		
Leer		
Escuchar música		
Jugar deportes		
Patinar		
Jugar video-juegos		
Hacer labores manuales (como pintar o coser)		
Coleccionar cosas (como piedras o estampillas)		
Jugar damas, ajedrez, cartas, etc.		
Otro _____		
Otro _____		
4. Pregunta de la clase _____ _____		
_____		
5. Pregunta de la clase _____ _____		
_____		

¡RESPONDE AL CENSO–1º DE ABRIL DE 1990!
ES IMPORTANTE PARA TU FUTURO.

Teacher's Notes:
Activity 5
Would You Sell Snowshoes in Honolulu?

Overview The purposes of this activity are to give students a hands-on experience with census data, introduce them to data for small geographic areas, exercise decisionmaking skills, and demonstrate some of the actual uses of census data. Students will accomplish these by examining sets of imaginary data associated with several community services, by deciding where in the community they would locate those services, and by mapping those areas. NOTE: See the **Educator's Guide to the 1990 Census** (a separate leaflet in the teaching kit) for background on the census, a census vocabulary, and other information.

Suggested Grades 4–8

Suggested Time 1 day

Learning Objectives

Students will:
1. Learn a new geographic concept (census tract),
2. Interpret a table and a map;
3. Sort and rank numeric values;
4. Graphically display information on a map; and
5. Name at least one piece of information collected in the decennial census.

Vocabulary

Census	Census Tract
Census Data	Decennial

Materials Needed

- Copy of **Educator's Guide to the 1990 Census**
- Copies of Handout–*Would You Sell Snowshoes in Honolulu?*
- Transparency of Handout and colored markers (optional)

Getting Started

1. Ask the students to imagine that they are advisors to the mayor of a town in which 75 percent of the families have children below the age of 6. What would be the special concerns of the residents of this community? What special services would they advise the mayor to include in his/her plans? Their answers will vary, but will probably include: schools, day-care centers, playgrounds, health centers Ask them to explain the reason for their recommendations. Elicit from them that knowing that so many families have young children helped them make their decision.

2. Tell them that the source of that statistic is the decennial census, which is conducted by the U.S. government once every 10 years and the next U.S. decennial census is occurring April 1, 1990. Spend time discussing the upcoming census with them, especially how census data are used in everyday life by state, local, Alaska Native village and American Indian tribal governments, businesses, churches, and others. Use the **Educator's Guide to the 1990 Census** as your source. See the sections on *Collecting 1990 Census Information* and *Uses of Census Summary Data.*

3. Tell the students they are going to have a chance to make some of the same kinds of decisions for another imaginary community using the kind of data which is really produced in a census.

Development

1. Distribute the Handout and have a student read the introduction aloud for the class, or read it to them.
2. Explain to the students that they are going to be Sallie's assistants. Their task after reading or hearing her story is to select the parts (census tracts) of the city of Squareton best suited for the five services.
3. The length of this activity may warrant conducting it orally. Depending upon grade level you may want to take the students through Table 1. It would be beneficial to draw the map and the "Service Patterns" and to write the table on the chalkboard. An alternative is to enlarge the student version of Table 2 and the map, then create an overhead transparency Identifying the service patterns and Table 2 answers with different colored markers is another option.
4. Students could work independently, but the exercise lends itself to group work. Divide the students into groups of 3 to 5. Two ways to approach the exercise: Have groups determine solutions for all five services, or establish five separate "Research Groups," e.g., a "Playground Group," a "Bus Route Group," etc. (See *Answers to Activity 5* for solutions.)
5. Once the students have correctly identified each total service area, ask them to pinpoint (using the letters A–E and a solid line in the case of the Bus Route) the best location for each service within the service area. It should be the spot that makes the service most accessible to the people within each service area, the center. The **Answer Map** has these located for you.

   The selection of the "Medical Center" area is both the hardest and the easiest for them. The students must look for high numbers in two table categories–Children and Older People–at the same time. But by solving the "Playground" and "Senior Citizens Center" sections of the exercise and marking the correct patterns for each on **one map**, the "Medical Center" area magically appears. NOTE: Take this into consideration in your use of colored markers. Like the other services, the Medical Center symbol (E) should be placed at the center of this region.

Extension/Enrichment Activities

1 Ask the students to think about other pieces of census data that would be important in locating these kinds of services For instance, older adults drive less than younger adults. Age would be important for determining a bus route.

   Some other important pieces of data are not necessarily census related. Things like availability of land, land prices, street patterns, and/or the present location(s) of similar services can all be important in the selection of a service site.

2. Ask the students to examine their own community or state. What new services have recently come in? Why do they think they are located where they are? Ask the students if they are aware of local businesses which have moved away or stores which have not succeeded. Have them suggest reasons. Are changes in the population part of the reason? Have students start a newspaper file on their community or state. Contact your local, American Indian tribal, or Alaska Native village government; county extension office; or Chamber of Commerce for information about new developments.

3. Have students create files for data they collect on their state or community. Use labels such as population, population characteristics (for example, age), housing, housing characteristics (such as rental housing), employment/labor force, etc. Make these files available as school resources. Establish a geographic hierarchy in the filing system, that is, neighborhood, community, state/region, Nation. Have them apply what they have learned from the prepared activity to things they now know about their own community or state. Where would they put a playground, bus route, and so forth?

Want Something More Difficult?

This activity can be extended and/or replaced with additional exercises analyzing census tract data. There is a series of booklets produced after the 1980 census designed to introduce students, educators, and other users to specific products from the census. These are called **Product Primers**.

Product Primer 10 deals with the report series for census tract data. The primer contains two exercises analyzing data for Wichita, Kansas. The second exercise is most useful in extending **Activity 5**. Through the combination of a narrative profile of the city, explanations of demographic measures, maps, and graphic depictions of selected census tract data, students are asked to match the data to the census tracts they represent.

A similar primer for small geographic units outside areas with census tracts does not exist. **Product Primer 13**, however, introduces students to an annual product on the economic structure of the Nation's counties (or their equivalent). The report series is called **County Business Patterns**. The **Primer** provides two exercises which familiarize students with various industries and has them perform an economic base study for a county.

Data for Small Communities, a part of the **Factfinder for the Nation** series, introduces various Census Bureau data products for a number of geographic areas. It does not include exercises, but provides an overview to specific data items and products available for a variety of political and statistical areas (such as places of less than 1,000 population, school districts, and American Indian reservations). This **Factfinder** describes the various product media and displays product availability across geographic units and by type of data (population, housing, agriculture, economic, and governments).

For a more complete discussion of the wide range of census geographic areas and geographic products available, obtain a copy of **Factfinder for the Nation: Census Geography--Concepts and Products.** It describes and defines these geographic units, illustrates urban and rural geographic relationships using flowcharts and hierarchical map displays, and gives map examples of a number of these areas.

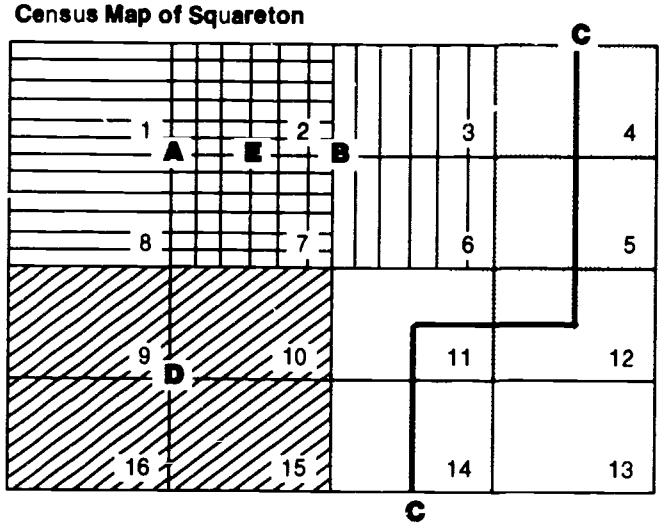
Request a free copy of **Product Primer 10: Census Tracts, Product Primer 13: County Business Patterns, Factfinder for the Nation: Data for Small Communities**, and/or **Factfinder for the Nation: Census Geography-Concepts & Products** from the Customer Services Branch, Data User Services Division, U.S. Census Bureau, Washington, D.C. 20233.

Answers to Activity 5

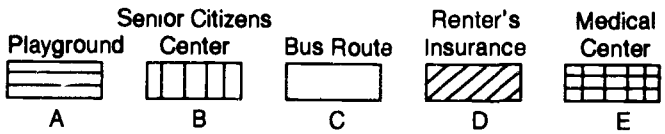
Sallie's Table 2-Census Facts

Census Tract	Children	Older People	No Car	Renters
1	(729)	79	29	111
2	(622)	(571)	75	82
3	42	(822)	57	143
4	119	245	(226)	101
5	225	311	(301)	122
6	179	(619)	99	84
7	(701)	(567)	100	95
8	(695)	82	132	57
9	91	200	87	(320)
10	300	300	139	(458)
11	195	378	(294)	105
12	211	243	(278)	165
13	77	176	99	97
14	111	322	(313)	72
15	321	11	47	(489)
16	210	0	142	(327)

Census Map of Squareton



Patterns and Letters to Use for Best Locations of Each Service



Activity 5-Handout

Would You Sell Snowshoes in Honolulu?

Would you sell snowshoes in Honolulu? This sounds like a crazy question. If you were asked, you would probably say no. Why? The climate is all wrong! If the place were Juneau, Alaska, what would you say? Yes? It does make more sense. How did you know? You might call it common sense, but you were using facts to make a decision. It snows a lot in Juneau. When was the last time you heard of snow in Honolulu? If you want to sell snowshoes, there had better be snow.

The same kinds of decisions are made every day using census data. Many people used to make these kinds of decisions by guessing. Sometimes they would be right. Other times they would be wrong.

In today's world, millions of dollars can be lost on a guess. That is why people find they need facts to help make decisions. They use facts, or data, to help choose new business locations or to add new products, for instance. More and more of these people use census facts.

What if the location of your snowshoe store choices did not seem so strange? What if you had to choose one of the following places: Juneau, Alaska; Sault Ste. Marie, Michigan; or Duluth, Minnesota? How would you choose? Find out which city has the most snowfall? Even if Juneau was still your best choice, where in Juneau would you put the store? Who buys snowshoes, anyway?

This exercise asks you to make choices like those made everyday. Imagine this...

Sallie works for Data Day Company, a research firm. She helps people make decisions using census data. Sallie has just come to her office and her boss runs in with a stack of papers.

"We just got these requests from three different groups of people," he says. "All of them want to find the best location in Squareton for some new services. They all want to know, by this afternoon, where in Squareton to begin looking. I want you to figure out some of the best areas in Squareton for each service." He leaves.

Sallie looks at the papers. One is from the Mayor of Squareton. The City just received money from the state government. It is for building a new playground and a new senior citizens recreation center. The City also got funds to buy one new bus and add one new bus route.

The second request is from Got You Covered Insurance Company. The company sells renter's insurance. Its boss wants to open a new office in Squareton.

The last note comes from Heal You Quick Medical Centers. The company has centers all across the state. The president thinks Squareton is a great place to build the next one. The medical centers specialize in care for older people and children.

"Wow! It's going to be a busy day," Sallie says. "I had better get started." She begins by asking herself, "Who needs or uses all these services?"

She makes some choices. Next, she studies the census report for Squareton looking at all the different kinds of census facts. She picks the ones she thinks best stand for the people who will use each service. Sallie makes Table 1 to show all her work. (Take a minute to study it.)

Sallie's Table 1

Service	Who Needs or Uses It	Best Census Fact
Playground	Children	People Less Than Age 10
Senior Citizens Center	Older People	People Age 65 or Older
Bus Route	People Without a Car	Households With No Vehicle
Renter's Insurance	People Who Rent Their Homes	Renter Households
Medical Center	Older People and Children	People Age 65 and Older People Less Than Age 10

The census report Sallie is using has census facts for different parts of Squareton. Squareton is cut into 16 parts. These parts are called census tracts. They are numbered 1 through 16. The report has information for all 16. Sallie also has a census map of Squareton. It shows where the 16 parts, or tracts, are.

Sallie looks at the information in the report. She decides to make another table. She lists only the numbers for the "Census Facts" she picked to stand for the kinds of people most likely to need or use each service. For her table, she uses short names for each "Census Fact."

She decides that the parts of the city with the highest numbers are the most important. She looks for the highest numbers in each "Census Fact" column to pick the census tracts best for each service. For instance, there are 729 children in Tract 1. Census Tract 1 has the largest number of children of all 16. Tract 1 should be one of the best locations for the playground.

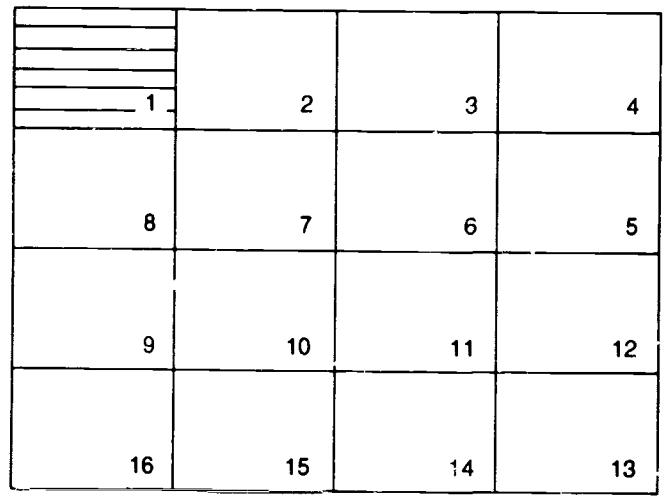
Sallie picks her areas for the five services. She gives her choices to her boss. He is pleased. What do you think Sallie's choices were? See if you can make the same choices using Sallie's Table 2 and the map. (Hint: There are 4 "best" tracts for three services. The medical center only has two. The bus route has five.)

First go down each "Census Fact" column in Table 2. Look for the highest numbers and circle your choices. Match those choices to their tract numbers in the left column of Table 2. Mark the matching tract area on the map for each of your choices. Use the patterns below the map to stand for your choices for each service. (Tract 1 is marked for you.)

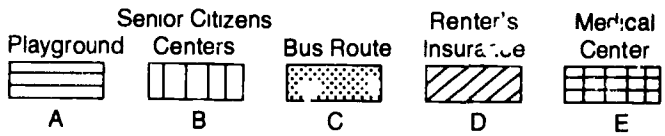
Sallie's Table 2
Census Facts for Squareton Tracts

Census Tract	Children	Older People	No Car	Renters
1	729	79	29	111
2	622	571	75	82
3	42	822	57	143
4	119	245	226	101
5	225	311	301	22
6	179	619	99	84
7	701	567	100	95
8	695	82	132	57
9	91	200	87	320
10	300	300	139	458
11	195	378	294	1[illegible]
12	211	243	278	165
13	77	176	99	97
14	111	322	313	72
15	321	11	47	489
16	210	0	142	327

Census Map of Squareton



Patterns and Letters to Use for Best Locations of Each Service



Teacher's Notes: Activity 6

Lights! Camera! Action!

Overview The purposes of this activity are to help students understand: the historic growth of the U.S. population, the effect of historic events on its growth, the movement of the population (in general from the East and the Midwest), and the expansion into new areas (generally in the South and the West). Students examine U.S population totals from 1790 to 1980 and the geographic location of the "center of population" for each of the 20 previous decennial censuses. NOTE: See the **Educator's Guide to the 1990 Census** (a separate leaflet in the teac' ıg kit) for background on the census, a census vocabulary, and other information.

Suggested Grades 5–12

Suggested Time 1 day

Learning Objectives

Students will:

1. Extract and interpret information from a table and map;
2. Define the geographic center and the center of population of the United States;
3. State one reason why the center of population is moving south and west;
4. State two reasons why the population changes size; and
5. Name one major historic event which had an effect on population change in this country.

Vocabulary

Census Day	Components of Population Change
Census Geography	Decennial Census
Center of Population	Geographic Center

Materials Needed

- Copy of **Educator's Guide to the 1990 Census**
- Copies of Handout 1–*Lights! Camera! Action!* Worksheet
- Copies of Handout 2–*U.S. Population: Frame By Frame*
- Wall map of the United States
- Cardboard square and cardboard scalene triangle
- Straight pins

Getting Started

1. Show students the cardboard square. Ask them to describe the point in the interior at which the square would balance on a pin. [**Answer:** The point where the diagonals intersect.] Have a student demonstrate. Ask another volunteer to experiment with the triangle and pin to discover the corresponding balance point. [**Answer:** Students in higher grades will know this is the intersection point for the triangle's medians.]

2. Display a wall map of the United States which includes Alaska and Hawaii. Ask them to imagine that the land mass of the United States is uniformly flat. NOTE: You may wish to prepare an acetate sheet on which cardboard cutouts of the continental United States, Alaska, and Hawaii are mounted in correct geographic orientation. Also, draw the location of the Mississippi River on the cutout.

   Ask them to imagine that every member of the population is exactly the same size and weight. If such a population were evenly distributed across the land mass of the 50 states, the balance point would be in Butte County, South Dakota. This balance point is the geographic center of the United States. See detailed explanation of this concept in a subsequent section, *Population and Geographic Centers*.

3. Ask the students if, in fact, this is the way the population is distributed in the country. [**Answer:** No. If the population in 1980 were evenly distributed, there would have been, on the average, roughly 64 persons occupying every square mile of land area. This was and is not the case. Portions of major cities far exceed 10,000 persons per square mile. Other areas of the country are without any people at all.]

4. Considering the uneven distribution of the population, ask them to imagine the point at which a flat, weightless, and rigid map of the country would balance if weights of identical value were placed on it so that each weight represented the location of each person in the country on the date of the census. Demonstrate this with the cardboard square. Insert a dozen or more straight pins along one edge of the square. Have a student experiment balancing the square on another pin. After several attempts, point out that the balance point will not be in the center, but is closer to the location of the inserted pins.

5. Direct them back to the imaginary U.S. map with the Nation's population "placed" on it. Ask the students if they think the balance point, or center of population, would be east or west of the Mississippi River. Emphasize this by placing a pointer or yardstick on the wall map on a line approximating the location of the river. [**Answer:** In 1980, the balance point was west of the river. Based on the map and weight assumptions and the location of every person counted in the 1980 census, the center of population was located 1/4 mile west of the city of DeSoto, Missouri in Jefferson County. In 1980 about 63 percent, or 142.4 million, of the population lived in states "east" of the Mississippi. This figure excludes the states of Minnesota and Louisiana from the "east".] See detailed explanation of the concept of the center of population in a subsequent section, *Population and Geographic Centers*.

   A wall map titled **1980 Population Distribution in the United States** provides an excellent way to graphically communicate the location of the U.S. population and discuss this concept. This Census Bureau product, also called the **Night-time Population Map**, is available from the Government Printing Office (Stock # 003-024-06445-6; $2.25). See **Teaching Resources Guide** for description of this and other maps.

6. Have the students consider the location of the center of population in 1790 (the time of the first census). Ask them if they think the center was in a location different than that in 1980. Using the wall map and pointer again, ask them if they think the center was east of the Mississippi River; east west of the Appalachian Mountains. Have them justify the position they take. If needed, ask them where in the Nation the population was located in 1790. [**Answer:** Yes, the center was much further east in 1790. Knowing the

geographic boundaries of the country and the general limits of settlement in 1790. Students should recognize that the population in 1790 was essentially concentrated along the Atlantic seaboard. The center of population should then be close to this concentration. The 1790 center was approximately 23 miles east of Baltimore. NOTE: Do not tell the students this exact location since Question 4a of Handout 1 asks them to name the state of Maryland.] Handout 2 from **Activity 10**-*Summary Data from the 1790 Census* displays state populations and makes a good reference addition here. If available, display a map from a U.S. history text or historical atlas showing the limits of settlement around 1790.

7. Ask them what they think the total population of the country was in 1790. Ask them how that compared with the population in 1980. After a short general discussion of population size, tell the students they will be answering questions about changes in the size of the U.S. population and the movement of the center of population.

Development

1. Duplicate and distribute copies of Handout 1-*Lights! Camera! Action!* worksheet and copies of Handout 2-*U.S. Population: Frame by Frame*, table and map.
2. Ask the students to answer the questions using the information in the table and the map. A group discussion of the answers works well with this activity. However, if you would like to test the students' table reading and analysis skills, postpone discussion of the answers until each student has completed the assignment. [**Answers:** See section *Answers to Activity 6-Handout 1.*] Although the concept of the center of population is more theoretical than real, it will give students a quick graphic depiction of the expansion of the country both in population growth and land area. It is a substitute for a detailed examination of growth/change on a subnational basis or of growth associated with the geographic expansion of the country. **Activity 7** will help students understand the former.
3. Ask the students to consider the dates selected for each census as listed in the table portion of Handout 2. Challenge them to suggest reasons why they think April 1 has been used as Census Day since 1930. [**Answer:** Winter is ending (or over) for most of the country. This is especially important in sparsely settled parts of the Nation where a census taker will stop by to pick up a household's completed census form. Also, most people will be at their usual place of residence, home. Schools are still open and people are less likely to be on vacation. College students are still on campus, which is where they are counted. Finally, April 1 is an easy date to remember.]
4. Ask the students when the next census of the population will be taken. [**Answer:** April 1, 1990.] Tell the students to remind their parents/guardians to fill out their census form. Emphasize that it is important that every household in the country answer the census and every person be counted. See the **Educator's Guide to the 1990 Census** for further information on the 1990 census.

Extension/Enrichment Activities

1. Have the students pinpoint the 1790 and 1980 centers of population on the wall map and calculate the distance the center has moved, both west and south. In 1790, the center was at 39 degrees, 16 minutes, 30 seconds north latitude and 76 degrees, 11 minutes, 12 seconds west longitude. By 1980 the location was 38 degrees, 8 minutes, 13 seconds north and 90 degrees, 34 minutes, 26 seconds west. See section on *Population and Geographic Centers* for further discussion. Note especially the accelerated southward movement in the 1970s because of rapid growth in the South and West. Handout 1 of **Activity 7** shows a continuation of this trend in the 1980s. Have the students discuss the implications of this 1980s pattern on the 1990 center of population.
2. Use this activity as a jumping off point for student research projects on historic population growth and the implications of population growth for the Nation. Possible topics include the importance of immigration in the late 1800s and early 1900s and the effects of the post World War II Baby Boom. See also Handout 3 of **Activity 10** and questions associated with it for other topics.
3. Ask students to examine the history of their state, county, or community. How have historical events been recorded in their population histories? See *Sources of Assistance* section in **Activity 10** for information on accessing historical census data.

Population and Geographic Centers

The center of population of the United States for 1980 was located in Jefferson County, Missouri, about one-fourth mile west of the city of De Soto. The center of population is the point at which an imaginary, flat, weightless, and rigid map of the United States would balance if weights of identical value were placed on it so that each weight represented the location of one person on April 1, 1980. The 1980 center is approximately 50 miles west and 20 miles south of the 1970 site which was near Mascoutah, Illinois. The change during the 1970s reflects the continued westward movement of the population and an accelerated southward movement. Since 1790, when the first census was taken, the center has moved about 750 miles west and 80 miles south of its first location 23 miles east of Baltimore, Maryland.

The center of population differs from the geographic center, which is the point at which the surface of the United States would balance if it were a plane of uniform weight per unit of area. That point is located in Butte County, South Dakota. The geographic center of the coterminous United States (48 states) is located in Smith County, Kansas.

Answers to Activity 6-Handout 1

1a) 3,929,214 or about 4 million persons; **b)** 226,545,805; **c)** 222,616,591; **d)** births and immigration (national population change = births - deaths + immigration - emigration), **e)** students could: calculate the number change from census to census and graph those decade figures, simply graph the actual population, draw 20 circles proportionate in size to the population for each census, and so on.

2a) 23,243,774; **b)** 1790 to 1850.

3a) West and South

4a) Maryland; **b)** 1980, **c)** Missouri, given previous patterns, **d)** It would not move, because the population would still be balanced at its 1980 center.

5a) The Great Depression; **b)** people had fewer children and immigration fell drastically; **c) population growth**-World War I, World War II, **center of population**-Westward expansion, addition of new states and their population to the country, Sunbelt growth of the 1970s.

Activity 6–Handout 1

Lights! Camera! Action!

In a very real sense, a census is like a photograph. It is a picture of a population. In the United States, we have been "snapping" these national pictures at a rate of one every 10 years beginning in 1790. While each census records only a moment in time, together the 20 previous U.S. decennial censuses are something like a motion picture. They give a history of the Nation's population growing and moving. From those frames of the movie, we can see how much we have changed. The table and map on the next page show some of these changes. Use them to answer the questions below.

1. a. In 1790, the population of the country was _____ .
   b. By 1980, _____ people inhabited the United States.
   c. How many people were added to the population between 1790 and 1980? _____
   d. What makes a nation's population grow? _____
   e. How would you show in chart or graph form how the country's population has changed from 1790 to 1980? Give an example on a separate sheet of paper.

2. a. Between 1970 and 1980, the country grew by _____ people.
   b. In what census years was the U.S. population less than the 1970 to 1980 population increase?

   _____

3. The center of population is a kind of summary statistic. It does not tell you by how much any single area of the country grew. The map, however, does give a graphic indication of which way the population has grown.
   a. In what directions has the center of population moved? _____

4. a. In 1790, in what state was the center located? _____
   b. In what census year did the center cross the Mississippi River? _____
   c. In what state do you guess the center will be located in 1990? _____
   d. What if we added another 20 million people to the population by 1990 and every part of the country got an equal share of the growth. Where would the center move? _____

   _____

5. From 1930 to 1940 the United States population grew at its slowest rate (smallest percentage increase). It was only 7.3%.
   a. What major historic event happened during that decade? _____
   b. How did it affect population growth? _____

   _____

   c. What other major historic events might have had an effect on U.S. population growth or the center of population? _____

   _____

Activity 6-Handout 2

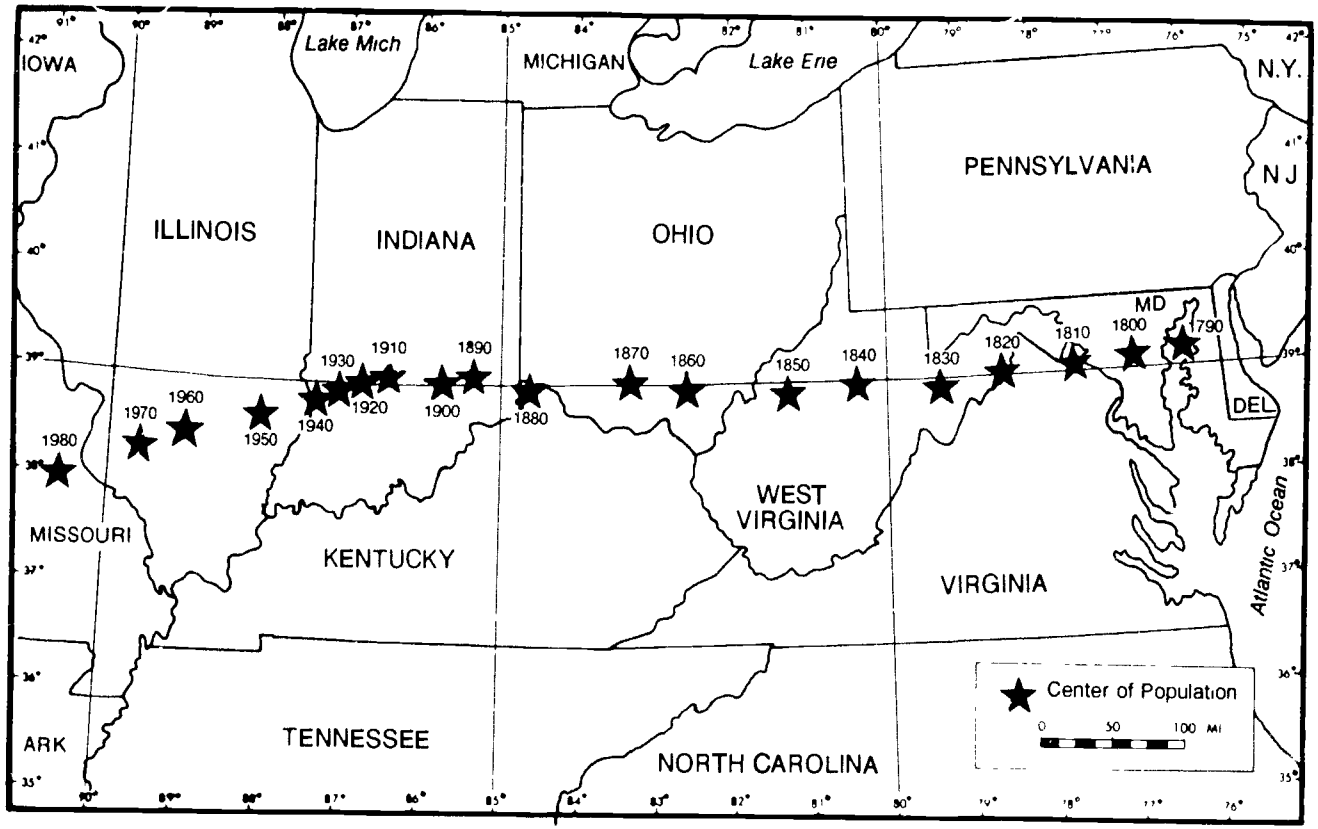
U.S. Population: Frame by Frame

Population

Census Date	Number
*Coterminous U.S.**	
1790 (Aug. 2)	3,929,214
1800 (Aug. 4)	5,308,483
1810 (Aug. 6)	7,239,881
1820 (Aug. 7)	9,638,453
1830 (June 1)	12,866,020
1840 (June 1)	17,069,453
1850 (June 1)	23,191,876
1860 (June 1)	31,443,321
1870 (June 1)	39,818,449
1880 (June 1)	50,155,783
1890 (June 1)	62,947,714
1900 (June 1)	75,994,575
1910 (Apr. 15)	91,972,266
1920 (Jan. 1)	105,710,620
1930 (Apr. 1)	122,775,046
1940 (Apr. 1)	131,669,275
1950 (Apr. 1)	150,697,361
1960 (Apr. 1)	178,464,236
United States	
1950 (Apr. 1)	151,325,798
1960 (Apr. 1)	179,323,175
1970 (Apr. 1)	203,302,031
1980 (Apr. 1)	226,545,805

* Enclosed by a common boundary
Excludes Alaska and Hawaii

Center of Population



The "Center of Population" is that point at which the country would balance perfectly if it were a flat surface and every person on it had an equal weight.

Teacher's Notes:
Activity 7
Altered States

Overview The population of the United States is constantly changing through migration, births, and deaths. The purposes of this activity are to show students population change for different U.S. geographic areas, to help them understand some of the factors influencing population change, to increase their geographic competency, and to give them experience in reading and interpreting a table. NOTE: See the **Educator's Guide to the 1990 Census** (a separate leaflet in the teaching kit) for background information on the 1990 census, a census vocabulary, and other information.

Suggested Grades 5–12

Suggested Time 1–3 days

Learning Objectives

Students will:

1. Prepare a map grouping states into four regions;
2. Locate specific pieces of information in a table;
3. Compare data for different geographic areas and over time;
4. Name two ways population changes over time; and
5. Name and define one census region or census division.

Vocabulary

Census	Estimate
Census Data	Migration
Census Division	Population
Census Geography	Population Change
Census Region	Projection

Materials Needed

- Copy of **Educator's Guide to the 1990 Census**
- Copies of Handout 1-*U.S. Population Data*
- Copies of Handout 2-*Altered States* Worksheet
- Copies of an 8 1/2" x 11" U.S. map showing state boundaries
- Colored pens/pencils

Getting Started

Use Steps 1–6 to introduce the students to two new geographic concepts and to familiarize them with Handout 1 before they answer the questions in Handout 2. If this is too detailed an introduction, skip to *Alternative Approach*.

1. Anytime a person works with census data, he/she is dealing with geography. These data are associated with specific geographic areas. Some of these areas are politically defined, such as the Nation, states, townships, or American Indian reservations. Others are statistically configured, like Alaska Native Village Statistical Areas, census regions, or census divisions. The mention of some specific geographic units will produce a clearer mental picture than others. For instance, the mention of Montana should bring to mind a specific picture of that state, but the mention of the Midwest produces a picture of an area in the mid-section of the country with fuzzy borders. Steps 1–4 give your students a chance to produce a map of such areas.

   Tell the students they will be working with a table of census data for the country, the 50 states, the District of Columbia, and areas called census regions and census divisions. Tell them that before they see the table, you want them to try dividing the country into the same regions that the Census Bureau uses. (Substitute census divisions for census regions if you wish.) Read or explain the following to the students.

   "The Census Bureau has grouped the states and the District of Columbia into four regions–Northeast, Midwest, South, and West–and nine divisions, such as the Mountain States. Regions are large groups of states. Divisions are groups of states which are subdivisions of the four regions. Regional identifications have existed since before the American Revolution, such as the colonies comprising the New England and Middle Atlantic areas. Capsulizing census data in this fashion began in earnest after the 1850 census. At that time, the first regional subdivisions followed river drainage basins, but these regions contained complete states as well as portions of states. Some used politically recognized boundaries, such as the Mason–Dixon line as a North–South divider. In the last half of the 1800s regional shapes, for census purposes, were being set to state boundaries. The present patterns have been in place, since essentially 1880."

2. Divide the class into small working groups (3–5 students). Give each group two copies of an 8 1/2" x 11" map of the United States showing state boundaries (if the District of Columbia is not shown, have them place a dot to mark the location) and four different colored pencils/pens. Using **complete** states, have them color the states that they, as a group, think form the Northeast, Midwest, South, and West. They must use all of the states and the District of Columbia, but only once. Have them use one map as a work copy; the other to show their, mutually agreed upon, final selections.

3. Once completed, have each group designate a spokesperson to show the class their regional definitions and explain how they arrived at their groupings.

4. Now have them check their work. Distribute copies of the 2-page table, Handout 1-*U.S. Population Data*, to each group. Have them look at the far left column for the regional and divisional boundaries in use by the Census Bureau. Have them compare their regions with those in the table. (An easy way for the students to see any differences between the two is to have them draw lines on their final maps marking the borders of the census regions.) NOTE: Keep the final maps for use in *Extension/Enrichment Activity 4*.

5. Familiarize them with the rest of the table by having them play "Census Jeopardy" using their home state for the game. Randomly select data for their state from the table headings and have the groups supply answers in the form of questions. For example, suppose the state is Oklahoma. You announce, *"The category is census data about Oklahoma...And the answer is 26."* The class' response is, *"What was Oklahoma's rank in population among all states in 1980?"* (The District of Columbia does not appear in the rankings since it is not a state.) Using this method the students must find the piece of information and the table heading. Continue this until you have exhausted the categories or you feel they understand the table (Column 5 contains a population projection for July 1, 1990. Column 6 contains a

population estimate for July 1, 1985. Columns 7-9 contain decennial census counts. Have the students explain the difference in these three concepts. See *Census Vocabulary* section of the **Educator's Guide to the 1990 Census** for definitions.) NOTE: If this step is too detailed, use any variation you think is appropriate to familiarize the students with the table.

6. Distribute a copy of Handout 2 to each group.

Alternative Approach If steps 1-6 are more than you have time for, divide the class into small groups and give each group a copy of Handout 1 and Handout 2. Review the categories and some of the data in the table and explain the concepts of census regions and divisions.

Development

1. Review vocabulary words not yet encountered.
2. Have the groups find the answers to the problems posed in the worksheet (Handout 2) using the table. [**Answers** See section *Answers to Activity 7-Handout 2.*]
3. Ask each group to designate a "recorder" to write the correct answers on the worksheet. The other students will search for the answers in the table and compose the short narrative in answer to the last problem.
4. When the groups have completed the worksheet, ask the recorders to report group answers and written descriptions of facts about their state. This will give the groups the opportunity to compare their answers and written descriptions

Extension/Enrichment Activities

1. Handout 1 provides information in tabular form. Another way to display the same data is in map form. Distribute blank U.S. maps showing state boundaries. Ask the students to select one of the characteristics shown and depict (code) it by state on the map using different colors or designs for different ranges of the characteristic. Have them write an essay describing what they see.
2. One of the major factors influencing state population change is migration-people moving into and out of a state. To help students better understand the mobile nature of the population, take a count of the moves (changes of residence) that students have made **across** state boundaries. List the different states on the chalkboard and tally the number of students who have lived in each. Have them create a percentage distribution of the information and map it. Ask them to consider the reasons why people move (such as to be closer to family, change jobs, retire, move to a bigger house, go to college, live in a different climate). Ask them why they moved.

   Assign the study of U.S. migration as a small group research topic. Have the students examine major migration inducing events/phenomena in the Nation's history. Have them look at the social, economic, demographic, political, and/or environmental changes generated by the migration on the geographic areas involved. Some topics to include are: Industrialization, the Decline of Farming, Black Migration to the North, the Trans-Alaska Pipeline, the Dust Bowl, the Formation of the Indian Territory, the California Goldrush
3. Ask the students to calculate the percentage of the total U.S. population found in each of the four regions in each year listed in Handout 1. If they sum the percentages for the South and West, they should see something interesting between 1970 and 1980. 1980 marks the first time in the decennial census that these two regions contained over 50.0% of the Nation's population (52.3% in 1980; 48.0% in 1970). Ask them what implications this shift has on the House of Representatives. NOTE: Make sure they include the extra three zeroes to the population figures in performing any other calculations (such as population density), since the figures are presented in thousands.
4. Using data from Handout 1 have the students create profiles for other groupings of states. Popular geographic groupings to use are the Sunbelt and the Frostbelt (or the Snowbelt). There are many definitions for these. Here's an easy one to use. Draw a "straight" line running east to west, beginning at the Virginia-North Carolina border. States south of the line are in the Sunbelt; those to the north, Frostbelt/Snowbelt. Include the states of Nevada, California, and Hawaii in the Sunbelt. Have them create similar profiles for other areas using whole states, such as the Cornbelt or the Energy States. Have them produce a table using the regional (or divisional) groupings they created in the *Getting Started* section.

Answers to Activity 7-Handout 2

1. Alaska, Texas, California
2. 1960-1970 Nevada, Florida, Arizona, Alaska, California,
   1970-1980 Nevada, Arizona, Florida, Wyoming, Utah,
   1980-1990 Alaska, Arizona, Nevada, Florida, New Mexico.
3. Nevada, Florida, Arizona
4. West and South.
5. California-1960=2, 1970=1, 1980=1, 1985=1, 1990=1
   Texas-1960=6, 1970=4, 1980=3, 1985=3, 1990=3
   Florida-1960=10, 1970=9, 1980=7, 1985=6, 1990=4.
6. California-29,126,000
   New York-17,773,000
   Texas-17,712,000
   Florida-12,818,000
   Pennsylvania-11,827,000

   From these numbers and past trends for these states, have the students speculate about the next change in ranking. [Answer: Texas moves to number 2]
7. Wyoming-502,000,
   Vermont-562,000,
   Alaska 576,000,
   North Dakota-660,000,
   Delaware-666,000

   Have students look at other years for changes in rankings
8. West-1960-1970 24 2% South-1960-1970 14 3%
   1970-1980 23 9% 1970-1980 20 0%,
   1980-1990 21 1% 1980-1990 15.8%
   52,261,000 87,276,000
9. Option: To make group reports different, have groups describe different things, such as comparisons across time and with different states, the Nation, regions, or divisions

NOTE The population figures in Handout 1 are presented in thousands and rounded to the nearest thousand The 1990 figures are projections The 1985 figures are estimates The 1980 census data are the benchmarks for the projections and the estimates The 1990 census, once complete, will either confirm or negate the projections The 1990 census data will then form the basis for future projections (See definitions in the **Educators' Guide to the 1990 Census**)

Activity 7–Handout 1

United States Population Data

Region, division, and state	Area				Population													
					Total persons (1,000)					Rank					Percent change		
					July 1		April 1[5]										
	Total (sq mi)	State rank	Land (sq mi)[1]	Water (sq mi)[2]	1990[3]	1985[4]	1980	1970	1960	1990	1985	1980	1970	1960	1980-1990	1970-1980	1960-1970
(column)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
United States	**3,618,770**	**X**	**3,539,289**	**79,481**	**249,891**	**238,741**	**226,546**	**203,302**	**179,323**	**X**	**X**	**X**	**X**	**X**	**10.3**	**11.4**	**13.4**
Northeast	**168,875**	**X**	**162,745**	**6,130**	**50,577**	**49,827**	**49,135**	**49,061**	**44,678**	**X**	**X**	**X**	**X**	**X**	**2.9**	**0.2**	**9.8**
New England	**66,672**	**X**	**63,012**	**3,660**	**13,078**	**12,657**	**12,348**	**11,848**	**10,509**	**X**	**X**	**X**	**X**	**X**	**5.9**	**4.2**	**12.7**
Maine	33,265	39	30,995	2,270	1,212	1,165	1,125	994	969	38	38	38	38	36	7 8	13 2	2 6
New Hampshire	9,279	44	8,993	286	1,142	999	921	738	607	39	41	42	41	45	24 1	24 8	21 6
Vermont	9,614	43	9,273	341	562	535	511	445	390	49	48	48	48	47	9 9	15 0	14 1
Massachusetts	8,284	45	7,824	460	5,880	5,819	5,737	5,689	5,149	13	12	11	10	9	2 5	0 8	10 5
Rhode Island	1,212	50	1,055	157	1,002	967	947	950	859	43	42	40	39	39	5 8	-0 3	10 6
Connecticut	5,018	48	4,872	146	3,279	3,171	3,108	3,032	2,535	28	28	25	24	25	5 5	2 5	19 6
Middle Atlantic	**102,203**	**X**	**99,733**	**2,470**	**37,499**	**37,170**	**36,787**	**37,213**	**34,168**	**X**	**X**	**X**	**X**	**X**	**1.9**	**-1.1**	**8.9**
New York	49,108	30	47,377	1,731	17,773	17,746	17,558	18,241	16,782	2	2	2	2	1	1 2	-3 7	8 7
New Jersey	7,787	46	7,468	319	7,899	7,561	7,365	7,171	6,067	9	9	9	8	8	7 3	2 7	18 2
Pennsylvania	45,308	33	44,888	420	11,827	11,863	11,864	11,801	11,319	5	4	4	3	3	-0 3	0 5	4 3
Midwest	**766,365**	**X**	**752,093**	**14,272**	**59,777**	**59,204**	**58,866**	**56,589**	**51,619**	**X**	**X**	**X**	**X**	**X**	**1.5**	**4.0**	**9.6**
East North Central	**248,540**	**X**	**243,961**	**4,579**	**42,055**	**41,649**	**41,682**	**40,262**	**36,225**	**X**	**X**	**X**	**X**	**X**	**0.9**	**3.5**	**11.1**
Ohio	41,330	35	41,004	326	10,791	10,747	10,798	10,657	9,706	7	7	6	6	5	-0 1	1 3	9 8
Indiana	36,185	38	35,932	253	5,550	5,500	5,490	5,195	4,662	14	14	12	11	11	1 1	5 7	11 4
Illinois	56,345	24	55,645	700	11,612	11,537	11,427	11,110	10,081	6	5	5	5	4	1 6	2 8	10 2
Michigan	58,527	23	56,954	1,573	9,293	9,088	9,262	8,882	7,823	8	8	8	7	7	0 3	4 3	13 5
Wisconsin	56,153	26	54,426	1,727	4,808	4,776	4,706	4,418	3,952	17	16	16	16	15	2 2	6 5	11 8
West North Central	**517,825**	**X**	**508,132**	**9,693**	**17,722**	**17,556**	**17,183**	**16,327**	**15,394**	**X**	**X**	**X**	**X**	**X**	**3.1**	**5.2**	**6.1**
Minnesota	84 402	12	79,548	4,854	4,324	4,192	4,076	3,806	3,414	21	21	21	19	18	6 1	7 1	11 5
Iowa	56,275	25	55,965	310	2,758	2,881	2,914	2,825	2,758	30	29	27	25	24	-5 3	3 1	2 4
Missouri	69,697	19	68,945	752	5,192	5,035	4,917	4,678	4,320	15	15	15	13	13	5 6	5 1	8 3
North Dakota	70,703	17	69,300	1,403	660	685	653	618	632	47	46	46	45	44	1 1	5 7	-2 2
South Dakota	77,116	16	75,952	1,164	708	708	691	666	681	45	45	45	44	40	2 5	3 7	-2 2
Nebraska	77,355	15	76,644	711	1,588	1,605	1,570	1,485	1,411	37	36	35	35	34	1 2	5 7	5 2
Kansas	82,277	14	81,778	499	2,492	2,449	2,364	2,249	2,179	32	32	32	28	28	5 4	5 1	3 2

(continued on next page)

Activity 7–Handout 1
Page 2

(Column)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
South	**898,575**	**X**	**873,005**	**25,570**	**87,276**	**81,885**	**75,372**	**62,812**	**54,973**	**X**	**X**	**X**	**X**	**X**	**15.8**	**20.0**	**14.3**
South Atlantic	**278,927**	**X**	**266,910**	**12,017**	**43,742**	**40,212**	**36,959**	**30,678**	**25,972**	**X**	**X**	**X**	**X**	**X**	**18.4**	**20.5**	**18.1**
Delaware	2,044	49	1,932	112	666	622	594	548	446	46	47	47	46	46	12 0	8 4	22 9
Maryland	10,460	42	9,837	623	4,729	4,393	4,217	3,924	3,101	18	20	18	18	21	12 1	7 5	26 5
District of Columbia	69	X	63	6	614	623	638	757	764	X	X	X	X	X	-3 8	-15 6	-0 9
Virginia	40,767	36	39,704	1,063	6,157	5,702	5,347	4,651	3,967	12	13	14	14	14	15 2	14 9	17 2
West Virginia	24,231	41	24,119	112	1,856	1,937	1,950	1,744	1,860	34	34	34	34	30	-4 8	11 8	-6 2
North Carolina	52,689	28	48,843	3,826	6,690	6,262	5,882	5,084	4,556	10	10	10	12	12	13 7	15 7	11 6
South Carolina	31,113	[illegible]	30,203	910	3,549	3,335	3,122	2,591	2,383	25	24	24	26	26	13 7	20 5	8 7
Georgia	58,910	21	58,056	854	6,663	5,975	5,463	4,588	3,943	11	11	13	15	16	22 0	19 1	16 4
Florida	58,664	22	54,153	4,511	12,818	11,364	9,746	6,791	4,952	4	6	7	9	10	31 5	43 5	37 1
East South Central	**181,947**	**X**	**178,824**	**3,123**	**15,597**	**15,133**	**14,666**	**12,808**	**12,050**	**X**	**X**	**X**	**X**	**X**	**6.3**	**14.5**	**6.3**
Kentucky	40,409	37	39,669	740	3,745	3,729	3,661	3,221	3,038	24	23	23	23	22	2 3	13 7	6 0
Tennessee	42,144	34	41,155	989	4,972	4,767	4,591	3,926	3,567	16	17	17	17	17	8 3	16 9	10 1
Alabama	51,705	29	50,767	938	4,181	4,022	3,894	3,444	3,267	22	22	22	21	19	7 4	13 1	5 4
Mississippi	47,689	32	47,233	456	2,699	2,614	2,521	2,217	2,178	31	31	31	29	29	7 1	13 7	1 8
West South Central	**437,701**	**X**	**427,271**	**10,430**	**27,937**	**26,540**	**23,747**	**19,326**	**16,951**	**X**	**X**	**X**	**X**	**X**	**17 6**	**22.9**	**14.0**
Arkansas	53,187	27	52,078	1,109	2,427	2,360	2,286	1,923	1,786	33	33	33	32	31	6 1	18 9	7 7
Louisiana	47,751	31	44,521	3,230	4,513	4,486	4,206	3,645	3,257	20	18	19	20	20	7 3	15 4	11 9
Oklahoma	69,956	18	68,655	1,301	3,285	3,306	3,025	2,559	2,328	27	25	26	27	27	8 6	18 2	9 9
Texas	266,807	2	262,017	4,790	17,712	16,387	14,229	11,199	9,580	3	3	3	4	6	24 5	27 1	16 9
West	**1,784,955**	**X**	**1,751,446**	**33,509**	**52,261**	**47,824**	**43,172**	**34,838**	**28,053**	**X**	**X**	**X**	**X**	**X**	**21.1**	**23.9**	**24.2**
Mountain	**863,563**	**X**	**855,194**	**8,369**	**13,995**	**12,799**	**11,373**	**8,289**	**6,855**	**X**	**X**	**X**	**X**	**X**	**23.1**	**37.2**	**20.9**
Montana	147,046	4	145,388	1,658	805	825	787	694	675	44	44	44	43	41	2 4	13 3	2 8
Idaho	83,564	13	82,412	1,152	1,017	1,004	944	713	667	42	40	41	42	42	7 7	32 4	6 9
Wyoming	97,809	9	96,989	820	502	510	470	332	330	50	50	49	49	48	6 9	41 3	0 6
Colorado	104,091	8	103,595	496	3,434	3,234	2,890	2,210	1,754	26	26	28	30	33	18 8	30 8	26 0
New Mexico	121,593	5	121,335	258	1,632	1,451	1,303	1,017	951	36	37	37	37	37	25 3	28 1	6 9
Arizona	114,000	6	113,508	492	3,752	3,193	2,718	1,775	1,302	23	27	29	33	35	38 0	53 1	36 3
Utah	84,899	11	82,073	2,826	1,776	1,645	1,461	1,059	891	35	35	36	36	38	21 6	37 9	18 9
Nevada	110,561	7	109,894	667	1,076	937	800	489	285	41	43	43	47	49	34 4	63 8	71 6
Pacific	**921,392**	**X**	**896,252**	**25,140**	**38,265**	**35,026**	**31,800**	**26,549**	**21,198**	**X**	**X**	**X**	**X**	**X**	**20.3**	**19 8**	**25.2**
Washington	68,138	20	66,511	1,627	4,657	4,408	4,132	3,413	2,853	19	19	20	22	23	12 7	21 1	19 6
Oregon	97,073	10	96,184	889	2,766	2,686	2,633	2,092	1,769	29	30	30	31	32	5 0	25 9	18 3
California	158,706	3	156,299	2,407	29,126	26,358	23,668	19,971	15,717	1	1	1	1	2	23 1	18 5	27 1
Alaska	591,004		570,833	20,171	576	522	402	303	226	48	49	50	50	50	43 4	32 8	34 1
Hawaii	6,471	47	6,425	46	1,141	1 051	965	770	633	40	39	39	40	43	18 2	25 3	21 5

[1]Dry land and land temporarily or partially covered by water
[2]Permanent inland water surface
[3]Projection; not a census count
[4]Estimate; not a census count.
[5]Population enumerated in the census of that year
Note: The figures in columns 5-9 are presented in thousands and rounded to the nearest thousand
Source: U.S. Census Bureau, *State and Metropolitan Area Data Book, 1986,* and Current Population Reports, series P-25, No 1017

Activity 7-Handout 2

Altered States

Boom Town! Ghost Town! Boom-Bust Cycle! These are phrases from the Nation's past and its present. They say something about population change, among other things. **The population of an area rarely is static.** It always is changing in some way. Population change is a product of births, deaths, and migration (both into and out of an area). This, then, means that population change in an area is influenced by natural, social, and economic forces.

This country's population is not static. While it may seem that some places in it have not changed, it is safe to say that, across the Nation's various geographic areas, the population changes. This include states. Although there has never been such a thing as a Ghost State, there have been Boom States and states caught in Boom-Bust Cycles. For example, earlier in this decade, Energy States, like Texas and Oklahoma, were called Boom States. Population growth was rapid there, while other parts of the country were having economic slow times and population losses. Later, declining oil prices triggered declines and growth slowdowns in these southwestern states' economies and populations. People moved away as these states lost jobs and services. Some of the New England states have seen the reverse. They went from economic slow times in the 1970s and early 1980s to economic prosperity later in the decade of the 1980's. With that prosperity have come people moving from other parts of the country into New England.

This exercise asks you to look at these and other changes that have happened across the Nation in its states. Answer the following questions using the table entitled **U.S. Population Data**. (NOTE: The 1990 figures in the table are only projections. The 1990 census will tell us if the projections are right or wrong.)

1. Name the three largest states (total square miles). List them in rank order beginning with the largest first.

   a._____ b._____ c._____

2. Name the five states that increased by the biggest percentages (grew the fastest) from 1960 to 1970 and from 1970 to 1980 and have the biggest projected percentages of increase from 1980 to 1990.

1960-1970	1970-1980	1980-1990
a._____	a._____	a._____
b._____	b._____	b._____
c._____	c._____	c._____
d._____	d._____	d._____
e._____	e._____	e._____

3. Which three states were among the top five in each of the above time periods?

   a._____ b._____ c._____

4. From what regions of the country are the top five states in each of the above time periods?

   a._____ b._____

5. In the 1960s and the 1970s, and from the projections for the 1980s, three states have led the Nation in numeric increase in population. These states are California, Texas, and Florida. In the 1970s alone, these 3 added almost 10 million people in total. For the 1980s, they are projected to add over 12 million. These gains have affected their total population ranking among states. Look at Columns 10 through 14 of the data table. Record the rankings for each of these 3 states:

	1960	1970	1980	1985	1990
California					
Texas					
Florida					

6. Name the five most populous states (those having the largest populations) as projected for 1990. Rank them (largest first) and list their projected 1990 populations.

State Name	1990 Population	State Name	1990 Population
a.		d.	
b.		e.	
c.			

7. Name the five least populous states as projected for 1990. Rank them (smallest first) and list their projected 1990 populations.

State Name	1990 Population	State Name	1990 Population
a.		d.	
b.		e.	
c.			

8. In the 1960s and 1970s and from the projections for the 1980s, two of the Nation's four regions (Northeast, Midwest, South, and West) have grown much faster that the other two. Name them and list their percentages of change and projected 1990 populations.

Region	Percent Change 1960–1970	Percent Change 1970–1980	Percent Change 1980–1990	1990 Population

9. Find your state on the data sheet. Study the information across the table. Write two short sentences describing two interesting facts you find.

Teacher's Notes:
Activity 8
That's Easy for You to Say!

Overview The purpose of this activity is to clearly demonstrate to students through a hands-on experience many of the aspects of planning, conducting, and reporting a survey of their own. It will show students what goes into the production of statistical information, how individual responses on a questionnaire are merged to create summary data, and the usefulness of the summarized information. This activity will give students an opportunity to work with personally relevant data.

This activity could take the form of a full-scale enumeration of the student body. If this is too ambitious, a small survey, or an opinion poll, of a sample of the school's population/specific classes may be more appropriate, especially using topics of interest to students and educators. Since Census Day is April 1, 1990 schedule the completion of this activity or parts of it (especially the data collection) to closely coincide with this date. If you intend to actually have the students conduct a survey or a census, remember to allow yourself the lead time necessary to perform the subactivities explained below. NOTE: See the **Educator's Guide to the 1990 Census** (a separate leaflet in the teaching kit) for background information on the 1990 census, a census vocabulary, and other information.

Suggested Grades 7–12

Suggested Time 4–5 days before conducting the survey; 1–2 days collecting the data, and 3–4 days after collecting the information. (Time will vary with the complexity of the questionnaire and size of the group surveyed.)

OR

2–3 days if the activity is restricted to using the included prepared questionnaire (Handout 2) in one or two classes.

Learning Objectives

Students will:

1. Explain the stages of designing, conducting, and processing a survey;
2. Design, conduct, process, and report on a survey of their own;
3. Write a report about the results of a survey; and
4. Work as a team to reach mutually agreed decisions and to resolve issues.

Vocabulary

Census	Questionnaire
Complete Count	Sample
Decennial Census	Survey
Enumeration	Undercount

Materials Needed

- Copy of **Educator's Guide to the 1990 Census**
- Copies of Handout 1–*That's Easy for You to Say!*
- Copies of Handout 2–*Student Survey on Future Plans*

Getting Started

1. Ask the students to write down their estimate of the population of the United States. After giving them a moment to do this, write on the chalkboard:

   "The population of the United States in 1980 was 226,545,805 people."

2. Ask several students to read this sentence aloud. Ask them to comment on how their estimates of the population compare to this. (Projected 1990 population = 249.9 million.)

3. Ask the students whether they believe the current population of the United States is higher or lower than it was in 1980. (Have them justify the position they take.)

4. Ask the students how the 1980 population was determined. [**Answer**: Every ten years, the U.S. government conducts a census, or complete count of the Nation's population. Along with population, other facts about the population (such as age) and the count and the characteristics of the Nation's housing (such as housing value) are collected. (The Census of Housing has been taken on a decennial basis only since 1940.) The Census of Population in the United States was first taken in 1790. The next census will be conducted on April 1, 1990. In 1990, the Census Bureau estimates it will count about 1/4 billion people and over 106 million housing units. The 1990 census will ask some questions of everyone (such as sex) and other questions of only a sample, a portion of the population, (such as occupation). **This data collection effort then combines complete enumeration, a census, with a sample survey.**

5. Ask the class to concentrate again on the 1980 population count. Ask the students to estimate the length of time it took to produce the information in the sentence you placed on the chalkboard. After several students have expressed their opinions, distribute Handout 1, *That's Easy for You to Say!*, for all to read. (NOTE: 1980 data collection began April 1, 1980. The population counts for the Nation, the 50 states, and the District of Columbia were reported to the President on December 31, 1980. Data processing continued from this point and data products for a wide variety of geographic areas were generated on a continuous basis well into the early years of the decade.)

Development

1. Discuss the stages of the survey process listed on the handout. You may wish to show a flow chart such as the one below, listing sub-tasks (the questions in Handout 1) below each stage.

   DEFINE → DESIGN → COLLECT → PROCESS → REPORT

2. This is the point at which the class should decide whether or not it wishes to plan and conduct its own survey or not. If the class will conduct its own survey, the students should examine the full range of questions on Handout 1. Some key questions to consider are:

How big is the project going to be?
Who will be surveyed about what?
How much time will the class invest in conducting, processing, and analyzing the survey?
With whom will the results be shared?

Students should be led to see the interdependence of their answers to the questions and ultimately their decisions. For instance, knowing how they will process the information collected (either manually tallying or using a computer) should be examined when they decide how long the questionnaire will be. Likewise, the size of the group to be surveyed and the complexity of the questionnaire will be related to the amount of time needed to process the results.

If the class decides to conduct its own survey, follow items 3, 5, and 7 in this section. If the class decides NOT to conduct its own survey, the next items in the Development section (3–5 or 3–6) will end the lesson.

3. Distribute Handout 2–*Student Survey on Future Plans*. Allow the class a few minutes to examine its contents.

4. Before they answer the prepared questionnaire, have them discuss how they will process their answers and what they want to report. Ask them to consider what summary information they would like to analyze and how they will produce it. Ask them to identify interesting questions which the summary data could answer. For instance, "Do male and female students in the class have the same career goals?" To answer this question, they must be able to cross-tabulate question 2 with question 7, a tedious job if the processing is done by hand. Manual tallying may limit them to looking at the summary data for single questions, such as "Do you plan to get married?" Access to computer facilities and statistical software packages will provide greater flexibility.

5. Have the students answer the prepared questionnaire. Classes not preparing their own surveys should follow through on their processing and reporting strategies for Handout 2.

6. The class may wish to conduct the same survey with a larger group to learn how they compare with the whole grade or the whole school. How they process the data, what they report, and how much time they have will dictate their response here.

7. If the class prefers to design its own survey, you should guide them to an appreciation of the prepared questionnaire, Handout 2, e.g., concise questions and multiple-choice format. The prepared questionnaire may be used as a model for the survey form the class will design.

   It is suggested that the class be divided into committees to consider the separate aspects of the project, e.g., questionnaire design, data collection, data processing. Each committee should have a decision leader and a scribe

   Each committee may begin by defining the significant questions related to its part of the project (e.g., Data Collection Committee: Will we make any attempt to contact non-respondents?) It is advisable to have students write down their decisions. Some kind of filing system is suggested, use the subactivity headings as a start. Writing down their choices, how they came to these decisions, and who was involved will give them a working history with supporting evidence should decisions come into question later in the process.

   Create blocks of time for the committees to come together to report decisions, discuss problem areas, and resolve issues. The committee structure will clearly demonstrate the interdependency of decisions and the need for team work. For instance, timing will probably be an issue. The Data Processing Committee will not be able to answer some of its questions until the Questionnaire Design Committee has, in fact, designed the questionnaire.

   A variation of the committee structure involves additional classes in different subject areas. For instance, have a sociology class define the research project and construct the questionnaire, have a computer science class perform the data processing, and have journalism students design and print the survey form, publicize the survey, and write stories about the results.

Hints to Teachers

If the students design their own questionnaire, limit the number of questions to about ten. Use questions that have answers that can be circled or checked, not fill-ins. Include two or three "background demographic" items, so students can correlate data and make statements like "The girls were more likely to say..."

Have the students select the research topic(s). An opinion poll may be more interesting to students than a total fact survey, especially one focused on a topic presently being discussed at school, such as an issue before the student government. Other topic possibilities are: music, TV, sports, or a local or national current event.

Once the questionnaire design is complete, have the students role play as different respondents before the questionnaire is reproduced. This will give a test of the questions and indicate to them any changes necessary. The class may wish to test the survey questions with two or three classes before moving on a grand scale, such as the whole school.

If the students use the prepared questionnaire or create one of their own and use it with other classes and/or grades, have them add a question(s) to indicate class/grades.

If the students process the forms with a computer, have them add a unique sequential number for each completed form (record). This will help them identify specific forms should they need to go back because of coding errors or strange values in the processed information.

Activity 8-Handout 1

That's Easy for You to Say!

Say this: The population of the United States in 1980 was 226,545,805 people. That was easy to say. Wasn't it? In a few breaths you have just stated what took years to produce.. What?...That's right, years! Have you ever tried to count 226,545,805 people. It is a big job!

It is difficult to convey the size of the job of taking a census in the United States. A few 1980 census facts and figures about the process may help. For instance, during just a few months of 1980, hundreds of thousands of temporary employees were recruited, trained, equipped, and supervised. The peak employment for these field operations was about 270,000 people–roughly equal to the 1980 population of St. Paul, Minnesota or Tampa, Florida! Here is another one. After all the census information was collected, questionnaires were microfilmed. This operation required about 5,000 miles of microfilm. That is equal to you taking a trip from Acadia National Park in Maine to Des Moines, Iowa... via San Diego, California.

These bits of census trivia give an idea of the scope of a census in one way, but the countless decisions made in the years before Census Day are still hidden as is the time needed to process the millions of questionnaires and report the summary data. A good way to understand the many aspects of planning, conducting, and reporting a census is to tackle one head on. Let us say you want to plan and maybe conduct a school census or, at least, a survey. Below is a checklist of questions that you need to answer before you ever walk up to someone and say, "Hi! I have a few questions to ask you."

Defining the Task

How much time do you have for the whole project?
Is this a class project or something larger?
Will this be a census, collecting information from everyone, or a survey of a portion of the school's population?
Will you collect facts, such as in a national census, or conduct something else, like an opinion poll?
When will you collect the information?
In general, what are the major topics to be researched and why?

Designing the Questionnaire

How many topics do you want to include?
How many questions?
How many possible answers will there be for each question?
Are the questions concise and easy to understand?
Do you want to include "background" questions, like age, sex, grade, where the person lives?
Will the questions provide the information you are seeking?
How are the questions arranged on your form?
How will your forms be printed?
Could the school newspaper print them?

Collecting the Information

Who is supposed to answer the questions?
Are you going have "enumerators", or is this a "hand-out/hand-in" project?
How will you deal with the privacy of answers?
How will you get everyone to respond?
Do you need to publicize?
What will you do if someone is away or does not answer?
How will you make sure everyone is only counted once?
How will you know you got all the forms back?

Processing the Information

How will you check the returned questionnaires for completeness?
How will you process-summarize-the information?
Is the questionnaire designed to make this easy?
Are you using a computer or manually tallying?
How does the use of one or the other affect the amount of time you need or how much you can ask?
How will you check to make sure there were no errors in the processing?
If this processing is performed on a computer, how will you construct the data base?
If it is done by hand, how will you record the information–on a form, on the chalkboard, something else?

Reporting the Data

How will you report the information?
What tables do you want to make?
Do you want to include graphics, like bar or pie charts?
Would percentages help communicate the information better?
Do you want to write a report about the findings?

Activity 8–Handout 2

Student Survey on Future Plans

Directions: For each question, darken the circle next to one choice. Your answers will be completely confidential; only summary data will be reported. THANK YOU for taking the time to complete this survey. Getting your answers and those from others is important to produce accurate information on this important topic.

1. How old are you?

- ○ Less Than 12
- ○ 12
- ○ 13
- ○ 14
- ○ 15
- ○ 16
- ○ 17
- ○ 18
- ○ 19
- ○ Older Than 19

2. What is your sex?

- ○ Male
- ○ Female

3. Do you plan to get married?

- ○ Yes
- ○ No

4. Do you plan to have children?

- ○ Yes
- ○ No (If no, skip to Question 6.)

5. How many children would you like to have?

- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6
- ○ 7 or more

6. After high school, which of the following do you plan to do?

- ○ Attend a 2 year college
- ○ Attend a 4 year college
- ○ Go to a trade or vocational school
- ○ Join the Armed Forces
- ○ Get a full-time job
- ○ None of these

7. Of the following occupations, which *one* would you *most* like to pursue after school?

- ○ Doctor
- ○ Teacher
- ○ Social Worker
- ○ Lawyer
- ○ Computer Programmer
- ○ Stock Broker
- ○ Fire Fighter
- ○ Hairdresser
- ○ Mechanic
- ○ Carpenter
- ○ Truck Driver
- ○ Farmer
- ○ Forest Ranger
- ○ None of these

8. Of the following occupations, which *one* would you *least* like to pursue after school?

- ○ Doctor
- ○ Teacher
- ○ Social Worker
- ○ Lawyer
- ○ Computer Programmer
- ○ Stock Broker
- ○ Fire Fighter
- ○ Hairdresser
- ○ Mechanic
- ○ Carpenter
- ○ Truck Driver
- ○ Farmer
- ○ Forest Ranger
- ○ None of these

Teacher's Notes:
Activity 9
Studying 1980 Census Snapshots

Overview The purposes of this activity are to give students experience in reading and interpreting tables, mathematical calculation, and decision making; to provide an exposure to decennial census data for small geographic areas; to demonstrate the summary nature of census data; to illustrate the importance of a complete count; and to suggest some of the uses of census data This activity also exposes students to three key elements of community studies: people, space, and time. NOTE. See the **Educator's Guide to the 1990 Census** (a separate leaflet in the teaching kit) for background on the 1990 census, a census vocabulary, and other information.

Suggested Grades 7-12

Suggested Time 2-3 days

Learning Objectives

Students will:
1. Locate specified information in a statistical table;
2. Write a paragraph summarizing key facts, similarities, differences, and patterns observed in a statistical table;
3. Name and describe several statistics that are collected in a decennial census and how they are used in real life;
4. Define and calculate population density; and
5. Make decisions based on evaluations of numeric data

Vocabulary

Census Data
Complete Count
Decennial Census
Population Density
Undercount
See other key words in **Activity 9**-Handout 1

Materials Needed

- Copy of **Educator's Guide to the 1990 Census**
- Copies of Handout 1-*Statistical Snapshots From the 1980 Census*
- Copies of Handout 2-*Studying 1980 Census Snapshots*
- Calculators (Optional)

Getting Started

1. Introduce the activity by asking your students: What is the decennial census? Why is a census taken in this country? What are some uses of the data resulting from the census? (See **Educator's Guide to the 1990 Census** for detail on each of these.)

2. Explain that the Census Bureau counts the Nation's population and housing every 10 years (decennial census), in years ending in zero. The problems to be considered in this activity will increase students' understanding of the source of census data (summing of the population's answers to questions on census forms) and how census data are used

3. Explain that the census provides data for a variety of geographic areas (American Indian reservations, Alaska Native villages, states, cities, townships, and so on). For this geographically-tied information to be accurate, everyone must answer the questions on a census form Once the forms are returned, individual answers are summarized and totaled for all geographic areas After the answers are totaled they become useful in making decisions These data are used in decisions ranging from selecting the geographic boundaries for all the seats in the House of Representatives to locating a new school within a community.

4. Conduct a simple counting exercise to help students better understand how individual answers blend together to become a summary statistic. By a show of hands, ask each student how many people live in his or her household. (How many 2 person households, 3, 4, etc.?) Tally these on the chalkboard, calculate the population in each category, sum all the category totals (the total population), and divide that number by the number of students (student households). This figure is the average household size (or average number of persons per household).

   Besides providing clarity between individual and grouped data, it also should help them see how data can differ geographically (Is it likely that the class next door would have the same average household size?) and answer the question of how to interpret an average which includes a "fraction of a person" per household

   Ask them to consider the effect the class average household size figure if some students had refused to participate, such as households with 2 people Would the result have accurately reflected the class? Would it have been as useful? How could the use of this result lead to errors in decision making? Calculate the household size without 2 person households to demonstrate the effect. Option: Carry this example forward and apply it to the community. Assume the class' data represent the community Ask the students to give some suggestions of incorrect decisions which might be made using the inaccurate class data

Development

1 Distribute Handout 1-*Statistical Snapshots from the 1980 Census* and explain that information they are reviewing is a result of the tallying of the answers of the population to the questions on the 1980 census questionnaire. The Census Bureau sums these answers using a computer. The data that result are just like the average household size figure the students just created, that is, they are summary data for a specific geographic area and/or a specific population.

The table gives data from the 1980 census for the Nation and eight areas within it-four counties and four incorporated places; in this case, cities NOTE: Incorporated places are cities, boroughs, towns, and villages chartered under the laws of their states. The areas in this table are specifically included because they have been part of test censuses taken before the 1990 census From 1985 to 1988, the Census Bureau conducted small-scale censuses in preparation for the 1990 census and to help design it

2. Have the students get familiar with the table. Ask if they understand the difference between the two types of geographic areas. Ask them if they can tell why the table is titled *Statistical Snapshots from the 1980 Census* [**Answer**: Each census only captures a picture of the population at a specific moment in time, here April 1, 1980. A census is then very much like a photograph or snapshot.] Ask them to find the **Average Number of Persons per Household** for the United States (2.75) and compare it to the figure they just calculated for the class.

3. Use the table definition section in Handout 1 as a means of helping the students understand various data items. Have them note the difference between the race and Spanish origin definitions. Option: Using the race categories in the table and definitions provided, have the students construct a race profile of the class and graph the results. Have the class compare their percentage breakdowns to that for the United States. Depending upon the composition of the class, you may want them to include detailed categories such as in the Asian and Pacific Islander category. Likewise, have them create a Spanish-origin profile of the class.

4. Option: Localize the remainder of this lesson by adding data for your community or county to Handout 1. The far right column of the table is blank. This is provided for the inclusion of census data for your locality. NOTE: Answers to the questions in Handout 2 may necessarily change by adding these local data. You may wish to add the data before presenting the table to the students or have the students research and add the data as a class activity. See the subsequent section of this Activity, *Localizing Handout 1*, for information on locating these data.

5. Distribute Handout 2-*Studying 1980 Census Snapshots*. Ask the students to fill in the blanks in the partial news story using the information in Handout 1. All of these are read from the table except population density or persons per square mile. This they must calculate as follows:
226,545,805/3,539,289= 64.0 persons per square mile

   After they complete Question 1, discuss the answers as a check of their understanding and ability to read the table. From this point, you may want to:

   a) Divide the class into groups of appropriate size, assigning a different question of those remaining in Handout 2 to each group. Representatives of each group should report their findings and conclusions to the whole class on the following day.

   b) Divide the class into small groups, assigning the same question to each group. Representatives from each group can report their findings at the end of the period.

   c) Guide the whole class through one or more of the questions. The number of days the class spends on this material will vary according to the class management style and number of questions selected.

   See *Answers to Activity 9-Handout 2*, for the question responses.

Extension/Enrichment Activities

1. Have the students do a map exercise. Students can locate each of the cities/counties in Handout 2 on a map of the United States. As a class exercise, place stick pins on a wall map at these locations. (Use the county seat as the pin point for the counties.) Have them locate their community. Next, have them take a trip. Using a road atlas, ask the students to plot and compute the shortest road route from their community to all counties/cities and back home. As variations, have them plot and compute the longest route or have them use air miles. Finally, have them write a story about their trip using some of the data from Handout 1.

2. Have the students closely inspect the race data for Neshoba County, Mississippi and Rolette County, North Dakota. Ask them why they think the percentages in the American Indian, Eskimo, and Aleut category are high. [**Answer:** The majority of the Mississippi Choctaw Reservation and trust tribal land are contained in Neshoba County. The entirety of the Turtle Mountain Reservation and tribal trust land are in Rolette County.] Have them research and discuss American Indian and Alaska Native populations. Are there any reservations or tribal trust lands in their state? Where are they located? What tribes are represented? In their research, have them examine the nation to nation relationship the U.S. Government has with tribes. Have the students examine Alaska Native villages and historic American Indian areas of Oklahoma. A starting point is a publication from the 1980 census, **American Indian Areas and Alaska Native Villages: 1980**. The report contains population and housing counts for these areas across the country and provides a name listing and **geographic locations** for them. It is available from Federal Depository Libraries.

3. Have the students make extensive use of the 1983 or 1988 **County and City Data Book**. (See section on *Localizing Handout 1* for details on these reference documents.) Have them create data profiles and reports of various locations and/or do comparisons between locations. Use counties/cities of interest to them. Ask them to develop profiles of each of the National Football League team locations and have them do comparisons throughout the season as teams play one another. As geographically tied events happen around the country, have the students create special profiles to better understand the event or the people it involves, such as a foreign dignitary visiting a U.S. community.

Localizing Handout 1

The information in Handout 1-*Statistical Snapshots from the 1980 Census* can be obtained from two publications. Land area and population change 1970-1980 were taken from the U.S. Bureau of the Census' **County and City Data Book: 1983**, U.S. Government Printing Office, 1983. For counties or their equivalents, these data can be found in Table B, Items 1 and 4. For cities, boroughs, towns, and villages of 25,000 or more persons in 1980, they are located in Table C, Items 1 and 4. For all places of 2,500 or more persons, the same information is located in Table D, Items 1 and 3. The newer edition of this document, **County and City Data Book: 1988** is set up in the same basic fashion and contains more recent data. It, however, presents population change for 1980 to 1986 and not for the decade of the 1970s.

All other elements in the table, are from a report series from the 1980 Census of Population and Housing, **Summary Characteristics for Governmental Units and Standard Metropolitan Statistical Areas**, U.S. Government Printing Office, 1982. There is one report for each state, the District of Columbia, and Puerto Rico. The series is coded PHC80-3-[2 through 53]. The bracketed number represents the code for each area. The percentages for race, Spanish origin, and owner/renter households shown in this Handout are displayed as raw numbers in the report series. Use total population and total occupied housing units as the denominators for computing your respective per-

centages. The school-age population percentages were generated by subtraction. Use Tables 1, 2, and 5 of the above publication series to locate the remainder of the Handout 1 data items.

If you cannot find these reports, these same data elements can be found in other Census Bureau products from the 1980 census. Using these, however, will require a little more searching.

You can access these and other census documents from a number of sources. *Begin with your school library or a public or university library near you.* Check the Government Documents or Reference sections. If the reports are not there, they should be available through interlibrary loan. The 1,500 Federal and Census Depository Libraries have these volumes. Additionally, the 1,300 agencies that are part of the State Data Center system have copies of these and other census volumes. You can contact the State Data Center lead agency in your state for the data and/or the address of the closest affiliate. The lead agencies are listed in the **Teaching Resources Guide**, which came with this kit. You also can contact one of the Census Bureau's Regional Offices for help; they are listed inside the kit folder and in the **Teaching Resources Guide**.

Answers for Activity 9–Handout 2

1. Fill-in answers are: 226,545,805; 11.4 percent; 64 (NOTE: Students must calculate population density using total U.S. population divided by total U.S. land area.); 30; and 2.75.

2a. Differences can be found in any of the data items. For example, have them look at the "Race" and "Spanish Origin" or the "Year Structure Built" percentages. Have the students look across each data item for differences

2b. For similarities, look at St. Louis' percent "Under 5 Years of Age," Neshoba County's "Median Age," and Jersey City's "Average Number of Persons per Household."

3a. Reading across the table's geographic headings, the population densities are: 64, 6616, 3232, 42, 146, 7428 17195, 13, and 19. (They have been rounded to the nearest whole number.) These are averages for the entire area of each jurisdiction. Densities in portions of each area will be higher or lower than these. A way to illustrate population density is to have the students draw a square. Explain that the square represents an "average" square mile. Have them put 13 dots inside it for Rolette County Next have them draw another square of the **same size** and have them "imagine" placing nearly 17,200 dots inside for Jersey City.

3c. #1 = Jersey City. #2 = St. Louis. They both have high population densities within small land areas. NOTE: This looks at these places in spatial isolation for this exercise Both are part of larger and heavily populated metropolitan areas as are Tampa and Montebello.

4a. In answering this, the students should be looking at the percentages of persons under age 5 (future students) and persons ages 5–17 (present students). If they use the national figures as their breakpoints, the choices are clear

Yes = Rolette County Maybe = Neshoba County, Montebello, and Jersey City. No = all the rest.

The group under 5 years of age represents the population of future school children. Planners would want to know if sufficient space exists in schools and if there would be enough teachers, desks, and so forth to accommodate new students. They also would want to be sure a sufficient number of students would be entering the system to maintain or increase existing capacities Migration into or out of an area will greatly affect school planning.

4b. Because of the high percentages of persons age 65 and older and high population density, the planner would probably change the choices. #1 = St. Louis
#2 = Tampa

5. The students should look for the highest percentages in each category. For extended discussion, have the students examine the race and ethnic category definitions included in Handout 2, especially Asian and Pacific Islander and Spanish Origin. Although not shown here, data specific to these individual race and ethnic populations are available in other census publications. (See **Teaching Resources Guide** for source and assistance suggestions.) Ask the students how having information for these specific populations would further help them target their business plans.

   For example, in Montebello, 28,211 of the 31,387 persons of Spanish origin were Mexican and in Jersey City, 26,830 of the 41,672 persons of Spanish origin were Puerto Rican. Ask them how this information would alter their overall planning for a specific product used almost exclusively by persons of Puerto Rican or Mexican origin.

6a. Best choices. Historic Home Preservers = St. Louis, extremely high percentage of older housing and relatively high proportion of owner-occupied housing. You Rent It-We Rent It = Jersey City, highest proportion of structures with 5 or more housing units and the highest percentage of renter households. Tiny Homebuilders = Tampa, small household size and high percentage of owner-occupied households

6b. Take Me To The Top Services = Rolette and Neshoba Counties, lowest percentage of multifamily housing structures and high percentages of owner-occupied households. We Can Manage It = Boone and Whitman Counties, low percentages of older persons.

7. An undercount of segments of the population can cause problems in decision making. Inaccuracies in the data can alter or halt projects and cause misallocations in the distribution of local funds and services. Some of these are designed for the very people who fail to be counted. Being missed in a census has a negative effect on the people missed as well as their neighbors

Special Bonus Question

Both counties must have high concentrations of young adults Since the median is the midpoint value, this means that 50 percent of the distribution is below the median. In the case of Boone County, this means that half the population is younger than age 24.8. With 22 3 percent of the population less than 18 years old, about 28 percent are younger than median age of 24 8 (25) but older than 17

Both counties contain large universities Similar distributions would be seen in counties containing large military installations

Activity 9-Handout 1

Statistical Snapshots from the 1980 Census

Data Items	United States	Montebello, California	Tampa, Florida	Neshoba County, Mississippi	Boone County, Missouri	St. Louis, Missouri	Jersey City, New Jersey	Rolette County, North Dakota	Whitman County, Washington
Land Area (square miles)	3,539,289	8	84	572	687	61	13	914	2,151
Population	226,545,805	52,929	271,523	23,789	100,376	453,085	223,532	12,177	40,103
Population Change, 1970-1980	11.4%	23.6%	-2.2%	14.4%	24.0%	-27.2%	-14.1%	5.4%	5.8%
Age, Under 5 years	7.2%	8.2%	6.4%	8.5%	6.2%	7.1%	7.7%	11.4%	5.4%
5-17 years	20.9%	19.3%	18.7%	23.6%	16.1%	19.0%	21.7%	28.8%	13.4%
65 years & older	11.3%	10.8%	14.8%	14.0%	7.6%	17.6%	11.8%	9.4%	8.2%
Median Age	30.0	29.5	32.1	30.0	24.8	31.7	29.9	23.7	23.6
Race, White	83.4%	61.4%	73.9%	71.8%	91.4%	53.5%	57.1%	41.9%	93.8%
Black	11.7%	0.6%	23.5%	17.9%	6.4%	45.6%	27.7%	0.1%	1.4%
American Indian, Eskimo & Aleut	0.7%	0.5%	0.2%	10.0%	0.2%	0.1%	0.1%	57.7%	0.6%
Asian & Pacific Islander	1.5%	13.6%	0.7%	0.1%	1.1%	0.4%	4.4%	0.2%	2.8%
Other	2.7%	23.9%	1.7%	0.2%	0.9%	0.4%	10.7%	0.1%	1.4%
Ethnicity, Spanish Origin	6.5%	59.3%	13.3%	0.6%	1.0%	1.2%	18.6%	0.3%	1.6%
Year-Round Housing Units	86,692,823	18,521	113,775	8,859	37,384	201,960	87,948	3,763	14,315
Households	80,389,673	17,905	105,603	8,040	35,296	178,048	80,720	3,425	13,279
Renter Households	35.6%	49.4%	38.9%	19.9%	43.6%	54.8%	72.0%	33.6%	49.4%
Owner Households	64.4%	50.6%	61.1%	80.1%	56.4%	45.2%	28.0%	66.4%	50.6%
Average Number of Persons per Household	2.75	2.92	2.51	2.94	2.51	2.49	2.74	3.44	2.47
Year-Round Housing Units in Structures of 5 or More Units	17.8%	29.6%	21.1%	4.0%	16.2%	21.2%	45.9%	7.0%	24.2%
Year Structure Built: 1970-March 1980	26.2%	23.0%	18.8%	33.0%	38.8%	3.7%	4.6%	37.6%	23.7%
1939 or Earlier	25.8%	8.0%	17.3%	17.1%	14.1%	60.6%	61.0%	23.3%	36.2%

Table Definitions

Land Area–This does not include large rivers, lakes, and other bodies of inland water

American Indian, Eskimo & Aleut–This is a general racial category. It includes Eskimo and Aleut people and persons from hundreds of American Indian tribes

Asian & Pacific Islander–This is a general racial category including a variety of peoples. They are Chinese, Filipino, Japanese, Asian Indian, Korean, Vietnamese, Hawaiian, Samoan and Guamanian

Other–In 1980, this category included Asian and Pacific Islander groups not listed above (e.g., Cambodian, Laotian, Pakistani, Fiji Islander) and other races not separately listed in the questionnaire

Spanish Origin – This is not a racial category. It is a general category of ethnicity (ancestry or nationality group). People who said they were Mexican American, Chicano, Puerto Rican, Cuban or of a similar group are included here. Persons of Spanish origin may be of any race

Year-Round Housing Units–These are all occupied houses, apartments, mobile homes, tents, vans, and other structures and all vacant units available or intended for people to live in all year. They do not include vacation units intended for seasonal occupancy and vacant units held for migratory labor

Households–These are year-round housing units with people in them. They are also called occupied housing units

Structure–A structure is a building with one or more housing units. A structure can be a single family house, a mobile home, or a building with apartments

Activity 9–Handout 2

Studying 1980 Census Snapshots

The decennial census (taken every ten years) provides a statistical snapshot of our population and housing. This portrait tells through numbers who we are, where we live, and generally what we look like as a people. These censuses also allow us to measure differences from one area to another and over time. All these facts are important in making a variety of decisions. Now it's your turn. As student demographers (population experts), see if you can answer the questions below using the data from the **Statistical Snapshots From the 1980 Census**

1. Use Handout 1 to fill in the blanks in this news story. Imagine this newscast from a few years ago....

   "Today the U.S. Department of Commerce's Bureau of the Census reported some of its findings from the 1980 census. With a count of _____ persons, the Nation has grown by _____ percent over the 1970 figure. On the average, there were _____ persons per square mile of land area. (This value must be calculated.) In 1980, the median age for persons in the United States was _____ (The median is the midpoint value. Fifty percent of the population was older than this and fifty percent was younger.) On the average, households in this country contained _____ persons. The average..."

Provide your answers to the remaining questions on the back of this Handout or on a separate sheet of paper.

2a. Study the table and identify eight major differences between the values of the data items for United States and any of the eight geographic areas. For example, in 1980, approximately one quarter of all year-round housing units in the country were in structures built before 1940, but in Montebello, California, only 8.0% were constructed in 1939 or earlier, a difference of 17.8%. Now find eight differences of your own.

2b. Once you have done that, see if you can find any values in the counties or cities that are **identical** or **very close** to those for the United States. Try to find three.

2c. Using these similarities and differences, write a paragraph that describes what you have found.

3. Population density is a measure used to understand population distribution over the land area of different geographic units. It helps you understand, on the average, the concentration of population–how close together or how far apart people live. Population density is generally expressed as the number of people for one unit of land area, like a square mile.

3a. Calculate the population density per square mile for the eight geographic areas as you did for the United States in Question 1.

3b. Compare your density figures for the counties and cities with that for the country. Compare the county values with those for the cities.

3c. Now imagine this...You are a transportation planner wanting to establish a new bus system Using only your population density figures, which of the eight geographic areas would you choose as the primary location? Which would be your second choice? Why?

4. People have different needs at different ages Some products and services required by children will be different from those required by senior citizens Also, the concentration of a particular age group in a locality can have an effect on products and services needed in the future as that group grows older.

4a. Now imagine this. You are a school planner Leaders from each of the eight geographic areas want to know if they should expand their school systems They have asked you for your quick opinion Looking only at the percentages in the various age categories you tell one "definitely yes," three others "maybe," and the other four "no." Can you identify which ones are which? In making your choices, also be sure to look at the proportions in the **youngest** age category. Why would this group be important?

4b. Now imagine you are the transportation planner again. You're still working on your bus system plans, but now you are told that service to older people is as important as is high population density. Have your top two choices changed? If so, what are these choices?

5. The United States is both racially and ethnically diverse. For example, in this country in 1980, the Census Bureau counted 26,495,025 Blacks; 1,420,400 American Indians, Eskimos, and Aleuts; and 3,500,439 Asians and Pacific Islanders. There were also 14,608,673 persons of Spanish origin counted in 1980.

   Imagine you are the director of Speciality Business Consultants, Inc., a private firm that helps persons in the above categories plan and open speciality shops catering to specific racial and ethnic clients. For **each** major racial and ethnic group, name two geographic areas where you would concentrate your efforts?

6a. As a housing analyst, you help a variety of business people market their products and services. For each of the following companies, where might you tell their executive staffs to direct their marketing efforts:

   Historic Home Preservers–a remodeling service for older homes;

   You Rent It–We Rent It-a rental furniture company catering to people who rent apartments; and

   Tiny Homebuilders–a developer specializing in homes sold to smaller households?

6b. Where might you tell the following companies NOT to go:

   Take Me To The Top Services–an elevator installer for high-rise apartments and

   We Can Manage It–a company specializing in managing property rented to senior citizens?

7. Now imagine this...What if some portion of these numbers was grossly underrepresented? How would this undercount affect your decisions?

Special Bonus Question

The populations of Boone County, Missouri and Whitman County, Washington have median ages well below the national average. Since the percentages of their population under age 18 also are lower than that for the Nation, how can their median ages be so low? (Hint: Remember what "median" means.) What do you suppose is special about these counties that would create the high proportion of population in these ages?

Teacher's Notes:
Activity 10
200 Years and Counting

Overview The 1990 census marks the bicentennial of the Nation's population census. The purposes of this activity are to give students an opportunity to learn more about this 200-year anniversary; expose them to primary historical documents; have them examine the historical context surrounding the 1790 census and its questions; show students changes in the types of data collected in the decennial census over 20 decades; and have them investigate changes in American society measured by the 20 previous decennial censuses. NOTE: See the **Educator's Guide to the 1990 Census** (a separate leaflet in the teaching kit) for background on the census, a census vocabulary, and other information.

Suggested Grades 7-12

Suggested Time 2-3 days

Learning Objectives

Students will:

1. Interpret information in tables;
2. Summarize a set of data, produce an estimate, and create a story using this summarization;
3. Associate at least one major change or event in U.S. society/history with census data;
4. Be able to name at least one census data item collected in 1790 that was collected in 1980; and
5. Be able to name at least two data items collected in 1980 that were not collected in 1790.

Vocabulary

Average Number of Persons per Household
Bicentennial
Census
Census Geography
Census Schedule
Decennial Census
Enumeration
Household
Housing Unit
Incorporated Place
Median Age
Median Family Income

Materials Needed

- Copy of **Educator's Guide to the 1990 Census**
- Copies of Handout 1-*1790 Census Schedule, Example from Boston*
- Copies of Handout 2-*Summary Data from the 1790 Census*
- Copies of Handout 3-*Historical Census Data of the United States*
- An Historical Atlas of the United States

Getting Started

1. Introduce the activity by asking the students to address the following questions. Tell them that on April 1, 1990 a special event happens. Ask them what it is. [**Answer**: The Bicentennial of the First Decennial Census of the United States.] Follow this with: What is a census? What is a decennial census? Why is a census taken in this country? How are the data from the decennial census used? (See the **Educator's Guide to the 1990 Census** for detail on each of these.) Explain that over time the U.S. decennial census has provided an historical record of the Nation's people, institutions, and changes in American society.
2. Ask them when the first decennial census was taken in the Nation. With the response 1790, ask them to imagine the year is 1790. Present the following: *"The American Revolution is over. The Constitution has been ratified. The new American government is just getting started. Life is returning to 'normal'...but what is 'normal' for 1790?"* Have them offer some perceptions of what they think life was like in 1790; what the country was like. Some topical areas to include are: the geographic size of the country, the average number of persons in a household, number of large urban centers (50,000+ population), modes of transportation and communications, types of industries and occupations, the total population of the country, other categories from Handout 3, or items of your choosing. List these categories on the chalkboard. Explore the categories with the students. Where appropriate, solicit numbers as responses, and challenge them to give justifications for their positions. Strive for class consensus but accept multiple responses if necessary. List their perceptions briefly on the chalkboard under the heading **1790**. Have the students jump 100 years into the future to **1890** and repeat the categories. Repeat the process one more time under the heading of **Today**. Save these lists, since the students will return to these in their use of the handouts.
3. Explain to the students that while the decennial censuses have not provided information on all the categories on the board, by using some of the data from previous censuses they will be verifying/changing their "perception lists".

Development

1. Ask the students to describe how they think the 1990 census will be conducted/taken? [**Answer**: Mostly by mail. Most households will answer questions to a form they receive at home, complete it, and put it back in the mail. The form is "computer-ready" for ease of processing millions of forms and summing all the answers. For a more complete discussion of how the 1990 Census will be taken see *Collecting 1990 Census Information* in the **Educator's Guide to the 1990 Census**.] Tell them that the first census collected only very limited information about the Nation's people. Ask them how they would have obtained a count of the population in 1790. How would they record the information collected? How many people do they think they would need to count the population in 1790? After some discussion, read the following excerpt from pages 3-4 of **Heads of Families at the First Census of the United States Taken in the Year 1790**. (12 vols.) Washington: U.S. Government Printing Office, 1908.

"...The First Census Act was passed at the second session of the First Congress, and was signed by President Washington on March 1, 1790....Under this law the marshals of the several judicial districts were required to ascertain the number of inhabitants within their respective districts, omitting Indians not taxed, and distinguishing free persons (including those bound over to service for a term of years) from all others; the sex and color of free persons; and the

number of free males 16 years of age and over....The object of the inquiry last mentioned was...to obtain definite knowledge as to the military and industrial strength of the country....The census taking was supervised by the marshals..., who employed assistant marshals to act as enumerators. There were 17 marshals....the number [of assistants] employed in 1790 has been estimated at 650....The schedules [listing forms] which these officials prepared consist of lists of names of heads of families; each name appears in a stub, or first column, which is followed by five columns, giving details of the family [See Handout 1]....For the most part the headings of the schedules were written in by hand....up to and including 1820, the assistant marshals generally used for the schedules such paper as they happened to have, ruling it, writing in the headings, and binding the sheets together themselves. In some cases merchants' account paper was used, and now and then the schedules were bound in wall paper....''

2. Copy and distribute Handout 1-*1790 Census Schedule, Example from Boston*. It contains a portion of one of the actual census listing pages for Boston in 1790 (the left side of the handout) and a complete transcription of the names of the heads of the families and the information about these families (on the right). NOTE: Massachusetts was the only state to print census schedules in 1790. All others were hand written. Familiarize your students with the form then have them search the list for the names, **John Hancock** and **Samuel Adams**. Discuss these persons Select two students to interpret what they see in the list by describing the information about these famous figures. Note Hancock's signature. It was written by an enumerator; not Hancock. Suggest the students search the list further for any other famous figures or familiar surnames. NOTE: Consider blocking out the transcription when photocopying to have the students work only with the primary document.

3. Direct the students to take the role of Assistant Marshals summing the 1790 census. By hand, have them first sum the entries by column for the 25 families, then sum their five column totals to obtain a total population of 173. Option: Time this. Each row entry is a family, but there are only 21 households listed. Each bracketed group of names represents families living together. In 1790, there were about 558,000 households in the country. Using their average time as representative for 1790, have them estimate how long it would take one person to simply sum all the data for the 558,000 households. [**Answer**: 558,000/21 x class average time=estimated minutes.] Once calculated, ask them if they would have wanted to check their work in 1790. Ask them to consider the effect of technology on data processing.

4. Have them calculate the average number of persons per household for this part of Boston. Use total population/ total number of households or (173/21 = 8.24). Have them compare that number with that of their own household size or with the average for the entire class (the national average in 1980 was 2.75 persons per household; see Handout 3). Have them discuss their comparison.

5. Based on what they see in Handout 1 and their calculations, have them write a paragraph about family life in this part of Boston in 1790. They might focus on the historic figures or select other families. Have them consider the families on the list as neighbors.

6. Select a few students to read their essays to the class. Discuss their 1790 depictions of Boston in reference to some of the items in their "1790 perceptions" list on the chalkboard, especially household size Are there any things they would change in the list?

7. Tell them that Handout 1 is only one of thousands of listing pages from 1790 and each page was summed and grand totals were produced for the Nation, the states and territories, counties, and some places (towns and cities) and townships. Handout 2 is one of the summary pages from the rare 56 page volume, **Return of the Whole Number of Persons Within . . . the United States [1790 Census]** published in 1793. Duplicate and distribute copies of Handout 2.

8. Familiarize them with the table beginning with the writing style, lettering differences, and table and print layout. Next move to the geographic areas included. Using an historical atlas of the United States, have them examine the boundaries of the country, its states and territories in 1790. Direct them to place the 1790 state and territory boundaries in context with present day borders. If the atlas shows the location of cities around 1790, have them note these places and their populations. NOTE: In 1790, the three largest places in the country were: New York (49,401), Philadelphia (28,522), and Boston (18,320) Direct them again to their "1790 perceptions" list on this item.

9 Direct them to put the results from the 1790 census in an historical context. Using data from Handout 2, ask them to write a new paragraph on life in the Nation in 1790 or expand on their earlier story placing it in a national context. Have several students share their essays. Return to the list of "1790 perceptions". Ask the students to discuss changes necessary in light of the data in the Handout 2.

10. Direct the students back to the five categories of data collected and reported in Handout 2. Ask them if they would ask the same questions in 1890; in 1990. What would they change? Would they ask more or fewer questions? In trying to understand the complexities of American society today, are the 1790 questions sufficient/appropriate? Elicit that current information on the Nation and its various geographic units is important for that understanding and for decision making. Given its geographic coverage and standardized questions, the decennial census is the main source of that current information and it must stay in step with societal changes and specific national, state, and local needs for statistical data. Tell the students that the next handout will show some of those changes

11 Handout 3-*Historical Census Data for the United States* is a sampler of the information collected and reported in the 20 previous censuses. Given space limits, it is impossible to show the breadth of data from these censuses. Presented are only a few items for only one geographic area to provide a 200 year time series for some items and to give a sense of the changes the census has gone through in others. (See *Sources of Assistance* section for other census data sources.) NOTE: Handout 2 of **Activity 6** is a good addition here

12 Distribute copies of Handout 3. Familiarize the students with the table. Ask them for one of the first things they notice about the table. Elicit that it looks incomplete. Why? [**Answer**: The same information was not collected for all years (such as housing data). Also, the same item may have been asked in a different way in different censuses (see Footnote 1 and the two columns of data under the

heading, "High School Graduates").] Why do they think these differences exist? [**Answer**: The Nation's need for statistical information has changed over the years.] Have them consider the consequences of using old data to make a decision important to today.

13. Have the students scan the table and its footnotes and begin to verbally offer observations, especially in the complete time series categories. What changes do they see? After some discussion of these observations, have them focus their observations associating the data presented with specific changes in American society and/or historical events. Areas for their consideration include: industrialization, the Great Depression, the decline of the farm, urbanization, the Graying of America, the Baby Boom, the Civil War, changes in marital status, child labor laws, compulsory education, the GI Bill and VA Loans, immigration.
14. Using this table, have the students make a final check of their three "perceptions" lists and make changes.

Extension/Enrichment Activities

1. As a homework assignment, have the students write a brief history of the United States as seen through the census and graphically display some of the data in Handout 3.
2. Using Handout 3 as a catalyst, have the students do time series research on one of the table's categories.
3. Have them develop historical data profiles and graphic presentations of data for their community/state using census data and other resources. Have them create an historical exhibit as part of their 1990 census celebration.
4. Have the students examine historical census records for their community and use them in lieu of the page for Boston. NOTE: Only census records from 1790 to 1910 are open to the public. (See section on *Census Confidentiality* in the **Educator's Guide to the 1990 Census**)
5. In conjunction with a census exhibit project, have the students create a local history and publish it in the school newspaper. As an aid, invite a representative from your local historical society or similar group to assist.
6. Ask the students if anyone in their family has produced a family history or genealogy. Invite those family members into the class to share their experiences. Have students research family members in the 1790–1910 census records. Have students use the Handout from **Activity 4** to do some intergenerational research.
7. Have the students research the history surrounding the inclusion of the census in the Constitution and the Great Compromise of July 1787.

Sources of Assistance

Get assistance in finding historical census data from:

1. A government documents librarian at your local or state library;
2. Your local or state historical society;
3. Your local, American Indian tribal, or Alaska Native village government's planning office;
4. Your State Data Center (see list in the **Teaching Resources Guide**); and
5. The Census Bureau Regional Census Center nearest you (See list in the **Teaching Resources Guide**).

Get assistance on historical census records, genealogies, local histories from:

1. Your local or state historical society;
2. The National Archives and Records Administration in Washington or its branches in Atlanta, Boston, Chicago, Denver, Fort Worth, Kansas City, Los Angeles, Philadelphia, San Francisco, and Seattle,
3. The Library of Congress in Washington;
4. The American Association for State and Local History in Nashville;
5. Various genealogical groups and genealogical bookstores and publishing houses.

Some suggested resources from the Census Bureau are:

1. **Historical Statistics of the United States from Colonial Times to 1970**[1];
2. **Statistical Abstract of the United States** (published annually since 1878);
3. **A Century of Population Growth . . . 1790–1900**[2],
4. **1980 Census of Population and Housing** (especially "Number of Inhabitants" volumes)[1];
5. **Factfinder for the Nation–Availability of Census Records About Individuals**;
6. **Factfinder for the Nation–History and Organization** [of the Census and the Census Bureau].

Some suggested resources from the National Archives[3]:

1. **Guide to Genealogical Research in the National Archives** (with specific chapters on records and references on American Indians and Black Americans),
2. **Getting Started: Beginning Your Genealogical Research in the National Archives in Washington**;
3. **Federal Censuses 1790–1890: A Catalog of Microfilm Copies of the Schedules**[4];
4. **1900 Federal Population Census: A Catalog of Microfilm Copies of the Schedules**;
5. **1910 Federal Population Census: A Catalog of Microfilm Copies of the Schedules**;
6. **Our Family, Our Town: Essays on Family & Local History Sources in the National Archives.**

Other suggested resources:

1. Kyvig, David E. and Myron A. Marty. **Nearby History: Exploring the Past Around You**. Nashville: The American Association for State and Local History, 1982.
2. Lichtman, Allan J. **Your Family History**. New York: Vintage Books, 1978.
3. Pennsylvania Ethnic Heritage Studies Center, University of Pittsburgh. **Toward a Better Balance: Curriculum Guide for Multicultural Education,** Harrisburg: House of Representatives, 1988. (see especially sections on family histories and using historical census records to chart ethnicity/ancestry changes.)
4. Rife, Douglas, M. **A Family History Handbook**. Logan, Iowa: The Perfection Form Company, 1985.
5. **The Source: A Guidebook of American Genealogy**. Edited by Arlene Eakle and Johni Cerney. Salt Lake City: Ancestry Publishing Company, 1984. (see especially chapters and listings of references for Blacks, Asian Americans, American Indians, persons of Spanish origin and U.S. population distribution maps for various racial, ethnic, and ancestry groups.)

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[1] These are out of print. Contact the Federal Depository Library, State Data Center, or Regional Census Center nearest you. All other resources are listed in the **Teaching Resources Guide**

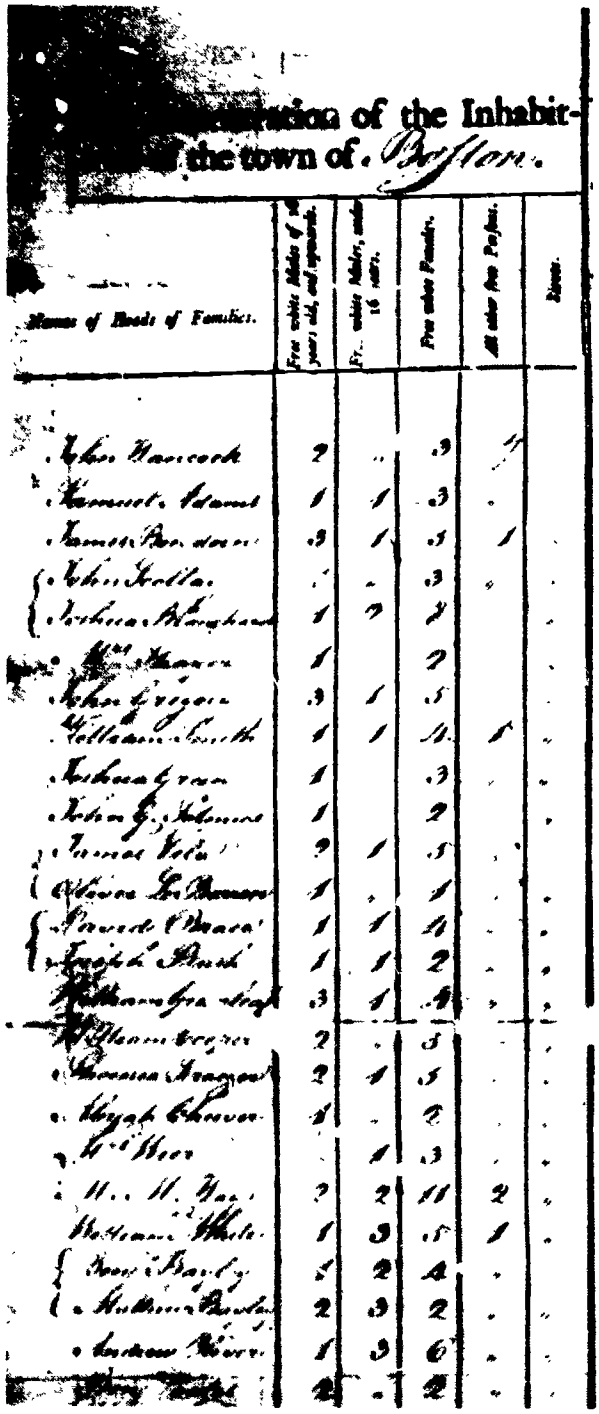
[2] Available from Johnson Reprint Corp., 111 5th Ave., New York, NY 10003

[3] For ordering information on these and other publications write: Publications Division–NEP, National Archives, Washington, D.C. 20408.

[4] Nearly all 1890 records were destroyed by fire in 1921

Activity 10–Handout 1

1790 Census Schedule, Example from Boston



An Enumeration of the Inhabitants of the Town of Boston.

Names of Heads of Families.	Free white males of 16 years and upward [including heads of families]	Free white males, under 16 years.	Free white females [including heads of families].	All other free persons.	Slaves.
John Hancock	2	....	3	7	....
Samuel Adams	1	1	3	...	....
James Bowdoin	3	1	5	1	....
John Scollay	1	....	3	.. .	....
Joshua Blanchard	1	2	8	....	....
Mrs. Thayer	1	...	2	....	....
John Gregory	3	1	5	....	....
William Smith	1	1	4	1	....
Joshua Green	1	....	3	....	....
John G. Potmus	1	....	2	...	....
James Nila	2	1	5	....	....
Oliver Le Barren	1	....	1	....	....
David Brace	1	1	4	....	....
Joseph Bush	1	1	2	....	....
William Greenleaf	3	1	4	....	....
William Cooper	2	....	5	....	....
Phoenix Fraizer	2	1	5	....	....
Abijah Cheever	1	....	2	....	....
Mrs. Wier	..	1	3	....	....
M. M. Hays	2	2	11	2	. ..
William White	1	3	5	1	....
Benjamin Bayley	1	2	4	....	....
Mathew Bayley	2	3	2	....	....
Andrew Oliver	1	3	6	....	....
Benjamin Coates	2	....	2	....	....

Source: National Archives and Records Administration, Manuscript Census Schedule, 1790, State of Massachusetts, County of Suffolk.
Note: All other free persons included American Indians taxed, free blacks, and persons of other races

Summary Data from the 1790 Census

The Return for SOUTH CAROLINA having been made ſince the foregoing Schedule was originally printed, the whole Enumeration is here given complete, except for the N. Weſtern Territory, of which no Return has yet been publiſhed.

DISTICTS	Free white Males of 16 years and upwards, including heads of families.	Free white Males under ſixteen years.	Free white Females, including heads of families.	All other free perſons.	Slaves.	Total.
Vermont	22435	22328	40505	255	16	85539
N. Hampſhire	36086	34851	70160	630	158	141885
Maine	24384	24748	46870	538	NONE	96540
Maſſachuſetts	95453	87289	190582	5463	NONE	378787
Rhode Iſland	16019	15799	32652	3407	948	68825
Connecticut	60523	54403	117448	2808	2764	237946
New York	83700	78122	152320	4654	21324	340120
New Jerſey	45251	41416	83287	2762	11423	184139
Pennſylvania	110788	106948	206363	6537	3737	434373
Delaware	11783	12143	22384	3899	8887	59094
Maryland	55915	51339	101395	8043	103036	319728
Virginia	110936	116135	215046	12866	292627	747610
Kentucky	15154	17057	28922	114	12430	73677
N. Carolina	69988	77506	140710	4975	100572	393751
S. Carolina	35576	37722	66880	1801	107094	249073
Georgia	13103	14044	25739	398	29264	82548
	807094	791850	1541263	59150	694280	3893635

Total number of Inhabitants of the United States excluſive of S. Weſtern and N. Territory.	Free white Males of 21 years and upwards.	Free Males under 21 years of age.	Free white Females.	All other Perſons.	Slaves.	Total
S. W. territory	6271	10277	15365	361	3417	35691
N. Ditto	—	—	—	—	—	—

Source: *Return of the Whole Number of Persons Within the United States [1790 Census]* (Philadelphia, J Phillips, 1793)
Note. All other free persons included American Indians taxed, free blacks, and persons of other races

Activity 10–Handout 3

Historical Census Data of the United States

Year	Population (in thousands)	Places of 50,000 or More Persons	Median Age	Males per 100 Females	Non-Agricultural Workers per 100 Agricultural Workers[1]	High School Graduates		Median Family Income From Previous Year	Housing Units (in thousands)	Percent of Housing Units Owner Occupied	Median Value of Specified Owner Occupied Housing Units	Households (in thousands)	Average Number of Persons per Household
						Percent of Persons Age 17 or over	Percent of Persons Age 25 or over						
1790	3,929	0		104[2]								558	5.79
1800	5,308	1	16.0[2]	104[2]									
1810	7,240	2	16.0[2]	104[2]									
1820	9,638	3	16.7	103									
1830	12,866	4	17.2	103									
1840	17,069	5	17.8	104	29								
1850	23,192	10	18.9	104								3,598	5.55
1860	31,443	16	19.4	105								5,211	5.28
1870	39,818	25	20.2	102	94	2 0						7,579	5.09
1880	50,156	35	20.9	104	125	2.5						9,946	5.04
1890	62,948	58	22.0	105	155	3.5				47.8		12,690	4.93
1900	75,995	78	22.9	104	180	6.3				46.7		15,964	4.76
1910	91,972	110	24.1	106	208	8.6				45.9		20,256	4.54
1920	105,711	145	25.3	104	290	16.3				45.6		24,352	4.34
1930	122,775	192	26.4	103	366	28.8				47.8	$4,800	29,905	4.11
1940	131,669	200	29.0	101	433	49.0	24 5		37,325	43.6	$3,000	34,855	3.67
1950	150,697	233[3]	30.2	99	711	57.4	34.3	$3,073	45,983	55.0	$7,400	42,826	3.37
1960[4]	179,323	333[3]	29.5	97	1,418	63.4	41.1	$5,660	58,326	61.9	$11,900	53,024	3.33
1970	203,302	396[3]	28.0	95	2,684	75 6	52.3	$9,586	68,679	62.9	$17,000	63,450	3.14
1980	226,546	463[3]	30.0	95	3,437		66 5	$19,917	88,411	64.4	$47,200	80,390	2 75

[1] 1840 data included all persons, all ages; 1870–1930, persons age 10 and over, 1940–1960, persons age 14 and over, and 1970–1980, persons age 16 and over.
[2] White only.
[3] Using current urban definition
[4] Denotes first year for which figures here include Alaska and Hawaii

Sources: Bureau of the Census. *Historical Statistics of the United States, Colonial Times to 1970, 1987 Statistical Abstract, 1980 Census of Population, Vol. 1, Chapter A 1960, 1970, 1980 Census of Housing, Vol 1, Chapter A, 1840 Census of Population*

Census Bureau Teaching Resources Guide

The U.S. Census Bureau is known as *The Factfinder for the Nation*. The name is very appropriate because the agency constantly collects data and provides information. The Census Bureau is best known for the national census of population and housing occurring every 10 years, but it also conducts national economic, agriculture, and governments censuses every 5 years. Besides censuses, the Census Bureau administers about 250 sample surveys each year (many for other Federal agencies) and prepares estimates and projections.

This collection of facts results in a wide range of products.

- Statistics are available in printed reports (with tables, charts and maps),
- microfiche,
- computer diskettes,
- magnetic tapes,
- wall maps,
- and through a new online data service–CENDATA

While printed documents provide data primarily in tabular form, many also give descriptive narratives. Different products provide census data for large geographic areas (the Nation, regions, states) and small ones (counties, cities, neighborhoods). Some census publications, such as the *Statistical Abstract of the United States*, also combine facts from many sources into handy statistical references.

Census facts and figures are a vital part of everyday living. They tell us who we are, how and where we live, how we are housed, and what changes are taking place in our Nation These data help guide thousands and thousands of decisions. Government officials, business people, reporters, market analysts, elected officials, and community leaders use census information in their work, and so can you.

Teachers who want their students to expand their CRITICAL THINKING SKILLS, use facts and figures with REAL WORLD RELEVANCE, stay current with important social and economic trends, and gain an understanding of the census' place and its importance in American life, will find census data products invaluable teaching aids.

Tip of the Iceberg

The *Guide* that follows gives an inventory and description of selected products and serves as an aid to finding the most up-to-date census materials, including those for local areas. This resource listing provides limited subject placement suggestions However, the products noted have application in the SOCIAL STUDIES, MATHEMATICS and COMPUTER SCIENCE, LIFE and ENVIRONMENTAL SCIENCES, HOME ECONOMICS, CONSUMER EDUCATION, CURRENT EVENTS, LANGUAGE ARTS, and JOURNALISM.

In addition to the products listed, there are numerous other publications. The best single source listing of Census Bureau products is the *Census Catalog & Guide* (see page 4).

How to Use This Guide

This *Guide* is divided into seven major sections. The first four are devoted to specific Census Bureau products. The later sections give information on related instructional materials, sources of assistance, and how to order. Where appropriate, the product entries provide an annotated description, publication frequency (*one time, periodically, continuously, monthly, annually, every 5 years, every 10 years*), price, stock number, and order source. Since the *Guide* can only give an overview, some entries will simply say, "Contact CSB for more information". CSB stands for Customer Services Branch, Bureau of the Census and GPO for Government Printing Office, Superintendent of Documents. Reproducible order forms, are on the back page. Addresses and telephone numbers for CSB and GPO also are listed.

Note on Product Availability

The most recent products in each category are listed. All print and many map products are limited in supply. Some are reprinted if the demand warrants; others are replaced by updated editions. Please note a product's publication frequency. Do not assume that the newest edition of a product automatically will be sent as older versions are phased out, for instance the *Statistical Abstract*. Request the newest edition, but recognize that prices and stock numbers will change. When in doubt, contact CSB. Printed products are available for use at or through interlibrary loan from the 1,500 Federal and Census depository libraries. Also, contact sources listed in the *Where to Get Help* Section.

200 Years of Census Taking

Census Day is April 1, 1990

Get involved in the 1990 census. Four ways to help:

Promote census education to your colleagues.
Answer the 1990 census.
Teach your students about this event.
Help others answer the census.

D-3300O
August 1988

Department of Commerce
BUREAU OF THE CENSUS

Printed Materials

Instructional & Reference Materials

1990 Census Education Project Teaching Kit. *One-time publication. One kit sent to all school principals and superintendents Spring 1989. Extra but limited supply available. One to five copies per address FREE; CSB.* This set of innovative, K-12 materials is designed primarily for use during the 1990 census, but is reusable. The kit contains background about the census of population and housing, a census vocabulary, 10 reproducible classroom activities with instructions, examples of data from previous censuses, and suggestions of how classes, schools, and districts can actively participate in the 1990 census.

Census Teaching Resources. *Periodic series. FREE; CSB.* Each resource provides an overview of a specific data product and offers suggestions on how to use that product in the classroom. The companion products must be ordered separately from GPO. See their explanations elsewhere.

Teaching Resource 1-Using the 1980 Population Distribution Map
Teaching Resource 2-Using the 100th Congressional Districts Map and Historical Congressional Districts Maps
Teaching Resource 3-Mapping Data from the Statistical Compendia (forthcoming, late 1988)

Product Primers. *Periodic series. $1.00 each, single copy FREE; CSB.* Most of the *Product Primers* were designed to introduce 1980 census products and were developed primarily for use in college-level courses. However, high school teachers also use them. Each of the *Primers* provides background information for the product, exercises to teach census concepts and data use skills, and the exercise answer key. The *Primers* also can be used for independent study. Information on accessing the products discussed is available from the Census Bureau Regional Office serving your area or your State Data Center (see section, *Where to Get Help*).

Primer 10 is excellent for teaching mapping, graphic display, and data interpretation and introduces students to data for small geographic areas called census tracts. The most useful *Primers* are listed below.

Primer 1-Number of Inhabitants
Primer 2-General Housing Characteristics
Primer 5-General Population Characteristics
Primer 10-Census Tracts
Primer 11-General Social & Economic Characteristics
Primer 13-County Business Patterns

Factfinder for the Nation. *Periodic series. Prices vary, single copies FREE; CSB.* Factfinders give topical overviews and explanations of Census Bureau products, programs and concepts. A partial list follows.

Factfinder 2-Availability of Census Records about Individuals	$0.25
Factfinder 4-History & Organization [of the Census & Census Bureau]	$0.40
Factfinder 5-Reference Sources	$0.40
Factfinder 6-Housing Statistics	$0.25
Factfinder 7-Population Statistics	$0.25
Factfinder 8-Census Geography-Concepts & Products	$0.30
Factfinder 18-Census Bureau Programs & Products	$0.40
Factfinder 22-Data for Small Communities	$0.30

Special Reports

Counting for Representation: The Census & The Constitution. *One time publication. Black & white reproducible, $0.25; 2-color, $0.50; single copy of each FREE; CSB.* This 8-page booklet examines the constitutional origin of the census, apportionment, the Census Bureau's role in this process, and changes that have taken place in apportionment methods. The text also provides background for classroom discussion on topics such as gerrymandering and the size of the House of Representatives. An excellent addition to junior high and high school mathematics and social studies classes. The *100th Congressional Districts Map* (listed with *Maps*) and the booklet make a superb combination.

Population Profile of the United States: 1984-85. *Periodic. Series P-23, No. 150; S/N 803-005-10003-1; $2.75; GPO.* This unique 2-color publication is packed with information in an easy-to-digest format. Topics such as population trends, migration, voting, income, and school enrollment are explored in one- and two-page narratives with appropriate graphics, "bullet" statistics, and sources of further information. Use as a student project resource, a teacher lesson aid, an example of various graphic displays, and a library reference. The 1970 to 1985 summary tables in the appendix make an excellent source for data base construction and time-series analysis.

Projections of the Population for States by Age, Sex, and Race. *Periodic. Series P-25, No. 1017; forthcoming (late 1988); GPO.* This document reports the first state population projections produced by the Census Bureau since 1983. It contains numerous tabular presentations of data including annual projections for states from 1987 to 2000 and for 2005 and 2010. It also shows projections of race by age, detailed age categories, and the components of change (births, deaths, and migration). Besides teaching about change in the country and its states, this is an excellent resource for time-series analysis, data base construction, and experimenting with graphic display of data.

We, the Americans Series. *Every 10 years. Prices vary; GPO.* Based on 1980 census and more recent Census Bureau survey information, these booklets give sweeping profiles of the total population, women, Blacks, and persons of Spanish origin. Forthcoming booklets (late 1988) will examine the American Indian and the Alaska Native and the various Asian & Pacific Islander populations. (Contact CSB or GPO for prices.) With succinct, understandable commentary and effective graphics, they look at topics such as education, income, marital status, and voting participation. The *We, the Americans* series has been designed primarily for high school students and beyond. Also, *Nosotros'* bilingual format makes it an excellent addition to ESL and Spanish language classes.

We 1-We, the Americans	S/N 003-024-05692-5	$1.00
We 2-We, the American Women	S/N 003-024-05694-1	$1.00
We 3-We, the Black Americans	S/N 003-024-05693-3	$1.25
We 4-Nosotros	S/N 003-024-05695-0	$1.50
We 5-We, the Asian and Pacific Islander Americans	forthcoming (late 1988)	
We 6-We, the First Americans	forthcoming (late 1988)	

Statistical Compendia

Statistical Abstract of the United States: 1988. *Annual since 1878. Paper, S/N 003-024-06707-2, $25.00: Cloth, S/N 003-024-06708-1, $30.00; GPO.* The most comprehensive, single volume document produced by the Census Bureau. Summary data on over 30 topics-covering the demographic, social, economic, and political organization of the United States-make this an excellent reference. This edition features

over 1,400 tables and graphic charts, new data on national and state population projections, the elderly, employment projections by industry and occupation, special state rankings for 60 selected data items, and a guide to sources which lists over 1,000 publications for further reference. Use with *Teaching Resource 3* listed earlier.

USA Statistics in Brief: 1988. *Annual. Single copy FREE; CSB.* This folded, pocket-sized product is a sampler from the *Statistical Abstract*. It provides some time-series data. The information presented is primarily for the Nation but selected data appear for all states (and the District of Columbia) and the 75 largest metropolitan areas in the country.

County and City Data Book: 1988. *Every 5 years. Cloth only, S/N 003-024-06709-9; GPO. Contact GPO or CSB for price* The *County and City Data Book* (over 1,000 pages) provides a comprehensive demographic, social, and economic profile for the Nation, the states (and the District of Columbia), 3,139 counties, and 945 cities with 25,000 or more inhabitants. It includes scores of data items (such as climate, crime, population, housing, race, age, employment, land area, personal income) for the above areas, 4 data items for 10,000 incorporated places/minor civil divisions with 2,500 or more population, and maps for each state showing counties and some place locations. Rankings are provided for the top 75 cities and counties by selected characteristics. It is an excellent reference and teaching aid. Use it and its 1983 predecessor with Activity 9 in the *1990 Census Education Project Teaching Kit*. Use with *Teaching Resource 3*. (Both listed earlier.) See the *Computer Products* section of this *Guide* for information on diskettes.

State and Metropolitan Area Data Book: 1986. *Every 5 years. S/N 003-024-06334-4; $28.00; GPO.* This data book contains information on a wide array of topics. Data on birth rates, property taxes, motor vehicle accidents, population, housing, employment, and other subjects are but a sample of the information available. Information is grouped by state (1,873 data items for each state) and metropolitan areas (298 subjects for each metropolitan area and its component counties). There also are 86 data items for the central cities of each metropolitan area. Use with *Teaching Resource 3* listed earlier.

Maps

1980 Population Distribution Map. *(Also known as the Night-time Map.) Every 10 years. 20"x30"; GE-70, No. 6, S/N 003-024-06445-6; $2.25; GPO.* The *Night-time Map* is one of the most popular maps produced by the Census Bureau. Population distribution is depicted across the country using white dots (one dot = 1,000 people) on a blue-black field-as if every household's "lights are on". The map shows no state boundaries or city names. Some mountain ranges and river valleys are evident because of settlement patterns. Use with *Teaching Resource 1* listed earlier. Together, they make a great addition to history, geography, life and earth sciences classes.

1980 Urban and Rural Population Distribution Map. *Every 10 years. 35"x47"; GE-50, No. 83, S/N 003-024-06513-4, $5.00; GPO.* This map shows state and county (or statistical equivalent) boundaries. Through the use of various colors and patterns, the size of the Nation's rural and urban populations are presented by location. It is sometimes called the *Daytime Map* and is an excellent companion to the *Night-time* version.

Metropolitan Statistical Areas: June 30, 1986. *Periodic. 35"x47"; GE-50, No. 84, S/N 003-024-06506-1; $5.00; GPO.* Based on areas established by the Office of Management and Budget, this map displays all metropolitan statistical areas in the United States and Puerto Rico as of June 30, 1986. Four 1980 census population categories are shown and the extent of urbanization in each area is outlined. It is a good companion to the *State and Metropolitan Area Data Book: 1986* (see earlier entry).

Congressional Districts of the 100th Congress of the United States. *Periodic. 35"x47"; GE-50, No. 85, S/N 003-024-06228-3; $4.75 GPO.* Use this map to continue the celebration of the Bicentennial of the Constitution and to celebrate the Bicentennial of the Census of Population. This product commemorates not only the 100th Congress (January 1987-January 1989), but also the 75th, 50th, 25th, and 1st. The front of the map shows boundaries of the districts in the 100th Congress and gives students a graphic picture of equal representation. The number of Representatives by state also is displayed in tabular form. Maps for Puerto Rico and the outlying areas are shown.

The reverse side shows the boundaries of the voting and nonvoting areas of the country and the district borders at the time of the 1st, 25th, 50th, 75th, and 100th Congresses. This side clearly demonstrates the geographic expansion of the country, the formation of the states, district boundary changes, and the effect of population change on representation. The map is an excellent companion to the booklet, *Counting for Representation: The Census and the Constitution* and to *Teaching Resource 2* (see earlier entries). NOTE. Maps of subsequent Congresses will not include the historical map series.

Other Maps. *Prices and ordering source vary. Contact CSB for specific ordering information.* In addition to the statistical maps noted above, for the 1980 census the Census Bureau published outline maps that show the names and boundaries (and streets in many instances) of geographic areas for which census data are produced including counties, places (e.g., cities, villages), county subdivisions (e.g., townships), urbanized areas, census tracts (small subcounty geographic units), census blocks (the smallest unit of census geography; e.g., a city block), and American Indian reservations. For a detailed explanation, obtain a copy of *Factfinder 8: Census Geography-Concepts and Products*.

TIGER Tales *One-time publication. FREE, CSB.* In comic book format, this 14-page document describes the Census Bureau's new automated geographic support system for the 1990 census. The TIGER (Topologically Integrated Geographic Encoding Referencing) System will provide a single, digital, cartographic source of geographic information for 1990 census data collection, products, and services.

Microfiche

Census reports printed since the 1790s are reproduced on microfiche and can be purchased from commercial sources. Microfilm copies of the decennial census records from 1790 to 1910 (with the exception of nearly all of the 1890 census records which were lost to a fire) are available through the National Archives and Records Administration system (see Activity 10 of the *1990 Census Education Project Teaching Kit* for primary document exercises and other sources).

The Census Bureau sells microfiche (4"x6" containing, generally, 98 images) of most reports issued from 1968 forward and also makes available on microfiche several detailed data series

not in print. It also offers paper prints made from microfiche *Contact CSB for more information*

Computer Products

Computer Tapes. *Continuous. Most cost $175.00 per reel; 1600 or 6250 bpi, EBCDIC or ASCII, labeled or unlabeled; CSB.* Numerous census and survey results are issued on magnetic tape. The best single source listing of tape products is the *Census Catalog and Guide* (see subsequent entry).

Diskettes. *Periodic. Prices vary; CSB.* Some report and tape series are being made available on 5-inch diskettes (floppy disks) for the IBM Personal Computer and compatible microcomputers. The diskettes are designed to be used with the PC DOS 2.0 operating system. Data from the *County and City Data Book: 1988* and the *State and Metropolitan Area Data Book: 1986* are among the products available on diskettes (see earlier entries). FREE sampler disks are available for these two products.

CENDATA. *Continuous. Price varies with vendor. Contact DIALOG Information Services on 800-334-2564 or CompuServe on 800-848-8199. Contact CSB for a FREE brochure* CENDATA is the Census Bureau's online information service. It offers current economic and demographic data for the Nation as well as limited demographic data for more than 200 countries. The service contains daily press releases, monthly economic indicators, product ordering information, and socioeconomic, agriculture, business, construction and housing, foreign trade, governments, manufacturing, and population data. Most data are for the country but state and metropolitan area profiles and some county and city estimates are available.

CD-ROM. The Census Bureau is presently testing Compact Disk-Read Only Memory (CD-ROM) as a storage and retrieval medium for large data files. Each *CD-ROM* can hold the equivalent of about 1,500 floppy disks or just under 4 standard magnetic tapes. Two test disks are now available. *Contact CSB for more information.*

Staying Up-to-Date

Census Catalog and Guide: 1988 *Annual. S/N 003-024-06785-4, $19.00; GPO* The best single source of information about Census Bureau products, programs, and services. The *Catalog* provides abstracts of publications, data files, microfiche, maps, diskettes, and items online. The abstracts include the data time, the geographic scope, and the subject content, along with ordering information. It also gives a telephone contact listing for various data/subject matter specialists at the Census Bureau; names and telephone numbers of all 1,300 members of the State Data Center network (see *Where to Get Help* for explanation); and listings of some private data companies and the entire Federal and Census depository library system.

Monthly Product Announcement. *Monthly. FREE; CSB.* Lists Census Bureau publications, maps, data files, etc. that became available in the previous month. Ordering information accompanies each entry. The *Announcement* also gives a "Look Ahead" to products to be released in the near future It is the principal means of updating the *Catalog*. It also is available online through *CENDATA* (see earlier entry).

Census and You *(Previously titled, Data User News.) Monthly. Cite code DUN, $12.00 per year; GPO. Sample copy, FREE; CSB.* This newsletter contains articles describing newly issued reports, data collection efforts being planned (such as the 1990 census), new data files and software, and sources of assistance for data users Besides describing publications, it also highlights (some graphically) and provides some interpretation of selected data from these reports.

Commerce News. *Continuous. FREE; CSB* A good way to quickly learn about new census findings, major trends, and new resources is to receive the same press releases the Census Bureau sends to the Nation's media. These releases present information in a short, easily understood format. Some releases also include summary tables.

Related Instructional Materials

The educational value and importance of census data and, in general demographic information in the classroom are recognized by a number of agencies and commercial vendors of instructional materials outside the Census Bureau. The number of these organizations and products is growing. By summer 1989, the Census Bureau will create an annotated listing of these vendors and products as well as a compilation of any special educational events and media coverage of the 1990 census planned by such groups. This listing will be available from CSB. Instructional materials, known at this time, which teach about the census, population change, demographic characteristics, and related topics are available from:

Active Learning Systems
5365 Avenida Encinas, Suite J
Carlsbad, CA 92008
(619) 931-7784

Software packages One database program is designed to facilitate local community survey research as a class project, the other is a database for the 50 states and District of Columbia which includes census data

American Demographics
P O Box 68
Ithaca, NY 14850
(800) 828-1133
(607) 273-6343

Monthly magazine, slides, charts, reprints of articles, books, and newsletter Provides businesses with demographic, economic and related information so they can plan, manufacture, and market appropriate products Popular writing style and excellent graphic displays

Educational Resources Information Center--Clearinghouses (ERIC)

Science, Mathematics, and Environmental Education
ERIC/SMEAC
Ohio State University
1200 Chambers Road, Third Fl
Columbus, OH 43212
(614) 292-6717

Social Studies/Social Science Education
ERIC/ChESS
Indiana University
Social Studies Development Center
2805 East 10th Street
Bloomington, IN 47405
(812) 335-3838

Some teaching guides and curriculum materials on subjects of census, population, demography, housing Also various Census Bureau products including the 1990 census teaching kit are being included in ERIC A listing of clearinghouse services and fee structures are available upon request Information on ERIC Service Providers across the country also is available Submissions of practitioner generated classroom exercises are sought and welcomed

Pennsylvania Ethnic Heritage Studies Center
University of Pittsburgh
405 Bellefield Annex
Pittsburgh, PA 15260
(412) 648-7420

K-12 curriculum materials for multicultural education involve students in examining their ethnicity and that of the world around them, in part, by performing a class census, constructing neighborhood maps, and analyzing historic census records.

Population Reference Bureau
777 14th St., NW, Suite 800
Washington, DC 20005
(202) 639-8040

Monthly newsletter on population trends, periodic booklets on specific trends and their implications with comparison slides, periodic teaching kits, data and graphic wall charts, student activitybooks, and other teaching resources. Has a film library and conducts teacher-training workshops.

Social Issues Resources Series, Inc
P.O Box 2507
Boca Raton, FL 33427
(800) 327-0513
(407) 994-0079

Annually-updated volume of reprinted materials from newspapers, magazines, government publications and journals focused on population, growth, and demographic trends. Also, specific teaching unit on population using articles on various aspects of this subject.

World Eagle, Inc
64 Washburn Ave
Wellesley, MA 02181
(617) 235-1415

Monthly teacher publication of black-line tables, graphics, and narratives. Many pages are reprints of tabular and graphic Census Bureau data and some are original graphics created using Census Bureau data. A larger, annually-updated, black-line product focuses on U.S. population and geography.

ZPG Population Education Program
1400 16th St., NW, Suite 320
Washington, DC 20036
(202) 332-2200

Quarterly newsletter of population teaching activities and resources, elementary to secondary teaching modules on various aspects of the subject of population, and other publications and resources. Conducts teacher-training workshops on population education.

Where to Get Help

Census Bureau Regional Census Centers

Census Awareness and Products Program Staff in our 12 regional census centers are ready to help you. They can help you locate census information on your community and state, provide you with training and technical assistance, and point you toward other sources of information in your state. Each entry below lists the area served by that center.

Atlanta
1375 Peachtree St., NE
3rd Floor
Atlanta, GA 30309-3112
(404) 347-2274
Alabama, Florida, Georgia

Boston
441 Stuart St., 4th Floor
Boston, MA 02116-5000
(617) 565-7078
Connecticut, Maine, Massachusetts, New Hampshire, New York-Part, Rhode Island, Vermont

Charlotte
3410 St. Vardell Ln.
Charlotte, NC 28217-1371
(704) 371-6144
District of Columbia, Kentucky, North Carolina, South Carolina, Tennessee, Virginia

Chicago
2255 Enterprise Dr.
Suite 5501
Westchester, IL 60153-5800
(312) 409-4619
Illinois, Indiana, Wisconsin

Dallas
6303 Harry Hines Blvd.
Suite 210
Dallas, TX 75235-5228
(214) 767-7105
Louisiana, Mississippi, Texas

Denver
6900 W. Jefferson Ave.
Lakewood, CO 80235-2307
(303) 969-7750
Arizona, Colorado, Nebraska, New Mexico, North Dakota, South Dakota, Utah, Wyoming

Detroit
27300 W. 11 Mile Rd.
Suite 200
Southfield, MI 48034-2244
(313) 354-1990
Michigan, Ohio, West Virginia

Kansas City
10332 NW Prairie View Rd.
Box 901390
Kansas City, MO 64191-1390
(816) 891-7562
Arkansas, Iowa, Kansas, Minnesota, Missouri, Oklahoma

Los Angeles
The Valley Corporate Park
Building #1
16300 Roscoe Blvd.
Van Nuys, CA 91406-1215
(818) 892-6674
California

New York
Federal Office Building
Room 37-130
26 Federal Plaza
New York, NY 10278-0044
(212) 264-4730
New York-Part, Puerto Rico, Virgin Islands

Philadelphia
105 S. 7th St., 1st Fl.
Philadelphia, PA 19106-3395
(215) 597-8313
Delaware, Maryland, New Jersey, Pennsylvania

Seattle
101 Stewart St., Suite 500
Seattle, WA 98101-1098
(206) 728-5314
Alaska, Hawaii, Idaho, Montana, Nevada, Oregon, Washington

State Data Centers

State Data Centers are agencies that provide users with access to census data, training, and technical assistance in specific states. Depending upon the center and the request, services may be free of charge or have an associated cost. Presently, there are State Data Centers in every state plus the District of Columbia, Puerto Rico, and the Virgin Islands. These and State Data Center Affiliates, which total about 1,300, are excellent sources of state and local data. A listing of the lead agencies in charge of all 53 State Data Centers is provided below

Other Sources

Many public libraries; chambers of commerce; city, county, American Indian tribal, Alaska Native village, and regional planning offices; and similar agencies use census data and/or maintain census collections in varying levels. Some of these, especially planning offices, also produce their own demographic data, such as local population and housing estimates These agencies are local data sources. Your State Data Center and/or Census Bureau Regional Census Center can help you quickly pinpoint them.

State Data Center Program Lead Agencies

Alabama
Center for Business and Economic Research
University of Alabama
P.O. Box AK
Tuscaloosa, AL 35487
(205) 348-6191

Alaska
Alaska Department of Labor
Research and Analysis
P O Box 25504
Juneau, AK 99802-5504
(907) 465-4500

Arizona
Arizona Department of Economic Security
1300 West Washington, 1st Fl
P.O. Box 6123-045Z
Phoenix, AZ 85005
(602) 255-5984

Arkansas
State Data Center
University of Arkansas at Little Rock
2801 South University Ave
Little Rock, AR 72204
(501) 371-1970

California
State Census Data Center
Department of Finance
915 L St
Sacramento, CA 95814-3701
(916) 323-2201

Colorado
Division of Local Government
Colorado Dept of Local Affairs
1313 Sherman St, Rm 520
Denver, CO 80203
(303) 856-2156

Connecticut
Comprehensive Planning Division
Connecticut Office of Policy and Management
80 Washington St
Hartford, CT 06106
(203) 566-8285

Delaware
Delaware Development Office
99 Kings Highway
P O Box 1401
Dover, DE 19903
(302) 736-4271

District of Columbia
Data Services Division
Mayor's Office of Planning
Presidential Building, Rm 314
415 12th Street, NW
Washington, DC 20004
(202) 727-6533

Florida
Florida State Data Center
Executive Office of the Governor
Office of Planning and Budgeting
304 Carlton Building
Tallahassee, FL 32301
(904) 487-2814

Georgia
Division of Demographic and Statistical Services
Georgia Office of Planning and Budget
207 Washington St, SW, Rm 608
Atlanta, GA 30334
(404) 656-0911

Hawaii
Hawaii State Data Center
State Department of Business and Economic Development
Kamamalu Building Rm 602A
250 S. King St
P O Box 2359
Honolulu, HI 96804
(808) 548-3082

Idaho
Idaho Department of Commerce
700 W State St
Boise, ID 83720
(208) 334-2470

Illinois
Division of Planning and Financial Analysis
Illinois Bureau of the Budget
William Stratton Building, Rm 605
Springfield, IL 62706
(217) 782-1381

Indiana
Indiana State Library
Indiana State Data Center
140 North Senate Ave
Indianapolis, IN 46204
(317) 232-3735

Iowa
Census Services
Iowa State University Agency
320 East Hall
Ames, IA 50011
(515) 294-8337

Kansas
State Library
State Capitol Building
Rm 343-N
Topeka, KS 66612
(913) 296-3296

Kentucky
Urban Studies Center
College of Urban & Public Affairs
University of Louisville
Louisville, KY 40292
(502) 588-7990

Louisiana
Louisiana State Planning Office
Division of Administration
P O Box 94095
Baton Rouge, LA 70804
(504) 342-7410

Maine
Division of Economic Analysis and Research
Maine Department of Labor
20 Union St
Augusta, ME 04330
(207) 289-2271

Maryland
Maryland Department of State Planning
301 West Preston St
Baltimore, MD 21201
(301) 225-4450

Massachusetts
Massachusetts Institute for Social & Economic Research
University of Massachusetts
117 Draper Hall
Amherst, MA 01003
(413) 545-0176

Michigan
Michigan Information Center
Department of Management and Budget
Office of Revenue and Tax Analysis
P O Box 30026
Lansing, MI 48909
(517) 373-2697

Minnesota
State Demographic Unit
Minnesota State Planning

300 Centennial Office Building
658 Cedar St
St Paul, MN 55155
(612) 296-4886

Mississippi
Center for Population Studies
The University of Mississippi
Bondurant Building, Rm 3W
University, MS 38677
(601) 232-7288

Missouri
Missouri State Library
2002 Missouri Boulevard
Jefferson City, MO 65102
(314) 751-3615

Montana
Census and Economic Information Center
Montana Department of Commerce
1424 9th Ave
Capitol Station
Helena, MT 59620-0401
(406) 444-2896

Nebraska
Bureau of Business Research
200 CBA
The University of Nebraska-Lincoln
Lincoln, NE 68588-0406
(402) 472-2334

Nevada
Nevada State Library
Capitol Complex
401 North Carson
Carson City, NV 89710
(702) 885-5160

New Hampshire
Office of State Planning
State of New Hampshire
2-1/2 Beacon St.
Concord, NH 03301
(603) 271-2155

New Jersey
New Jersey Department of Labor
Division of Planning and Research
CN 388 - John Fitch Plaza
Trenton, NJ 08625-0388
(609) 984-2593

New Mexico
Economic Development and Tounsm Department
1100 St. Francis Dr
Santa Fe, NM 87503
(505) 827-0276

New York
New York Department of Economic Development
1 Commerce Plaza, Rm 905
99 Washington Ave
Albany, NY 12245
(518) 474-8005

North Carolina
North Carolina Office of State Budget and Management
116 West Jones St
Raleigh, NC 27603-8005
(919) 733-7061

North Dakota
Department of Agricultural Economics
North Dakota State University
Morrill Hall, Rm. 224
P.O. Box 5636
Fargo, ND 58105
(701) 237-8621

Ohio
Ohio Data Users Center
Ohio Department of Development
State Office Tower Bldg , 26th Fl
P O Box 1001
Columbus, OH 43266-0101
(614) 466-2115

Oklahoma
Oklahoma State Data Center
Department of Commerce
#5 Broadway Executive Park
6601 Broadway Extension
Oklahoma City, OK 73116-8214
(405) 843-9770

Oregon
Center for Population Research and Census
Portland State University
P.O Box 751
Portland, OR 97207
(503) 229-3922

Pennsylvania
Pennsylvania State Data Center
Institute of State and Regional Affairs
Pennsylvania State University at Harrisburg
Middletown, PA 17057
(717) 948-6336

Puerto Rico
Puerto Rico Planning Board
Minillas Government Center
North Building
Avenida De Diego
P O Box 41119
San Juan, PR 00940-9985
(809) 728-4430

Rhode Island
Rhode Island Statewide Planning Program
265 Melrose St , Rm 203
Providence, RI 02907
(401) 277-2656

South Carolina
Division of Research and Statistical Services
South Carolina Budget and Control Board
Rembert C Dennis Bldg, Rm 337
Columbia, SC 29201
(803) 734-3780

South Dakota
Business Research Bureau
School of Business
414 East Clark
University of South Dakota
Vermillion, SD 57069
(605) 677-5287

Tennessee
Tennessee State Planning Office
John Sevier State Office Building
500 Charlotte Ave., Suite 307
Nashville, TN 37219
(615) 741-1676

Texas
State Data Center
Texas Department of Commerce
9th & Congress Sts.
Austin, TX 78711
(512) 472-5059

Utah
Office of Planning and Budget
State Capitol, Rm 116
Salt Lake City, UT 84114
(801) 538-1036

Vermont
Policy Research and Coordination Office
Pavilion Office Building
109 State St
Montpelier, VT 05602
(802) 828-3326

Virginia
Virginia Employment Commission
703 E Main St
Richmond, VA 23219
(804) 786-8624

Virgin Islands
University of the Virgin Islands
Caribbean Research Institute
Charlotte Amalie,
St Thomas, VI 00802
(809) 776-9200

Washington
Office of Financial Management
Estimation and Forecasting Unit
Insurance Building, Rm 320
AQ-44
Olympia, WA 95804-0202
(206) 586-2504

West Virginia
Community Development Division
Governor's Office of Community and Industrial Development
Capitol Complex
Building 6, Rm. 553
Charleston, WV 25305
(304) 348-4010

Wisconsin
Demographic Services Cent
Department of Administratio
101 South Webster St , 6th Fl
P O Box 7868
Madison, WI 53707-7868
(608) 266-1927

Wyoming
Institute for Policy Research
University of Wyoming
P O Box 3925
Laramie, WY 82071
(307) 766-5141

How to Order

Use photocopies of the forms below The Census Bureau and the Government Printing Office offer a 25% discount for orders of 100 copies or more of a single publication sent to a single address

Use the Customer Services form to order items marked CSB or FREE-CSB; any publication not in stock or out-of-print at GPO; or information about microfiche, computer products, and geographic products Call Customer Services at (301) 763-4100 for ordering information

Use the Government Printing Office (GPO) order form for all other publications or call (202) 783-3233 when using your Master Card, Visa, or GPO Deposit Account

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