Apportionment

Topic(s):
Apportionment, voting, representative, population, data collection

Grade Level:
3-4

Approx. Time Required:
40 minutes

Learning Objectives:
Students will be able to:

- Incorporate main and supporting ideas into verbal and written communication.
- Use critical thinking skills to organize and use information from a variety of sources.
- Make a prediction based on historical data.
- Interpret data presented in a table.
- Understand how seats are allocated in the House of Representatives.
- Understand the role the decennial census plays in apportionment.

Introduction

The 2020 Census Statistics in Schools (SIS) program is designed to educate students about the decennial census and to teach them educational concepts and skills, such as data literacy, through use of census data in the classroom. Responding to the census helps your community get its fair share of funding. Census data guides how more than $675 billion in federal funding is distributed to states and communities each year. These funds support vital community programs that help children, such as schools, hospitals, housing, and food assistance. By educating students about the 2020 Census, you can help encourage a complete count.

The 2020 Census SIS program can be used with educational standards across the United States. You can use the topics and learning objectives above to determine which subject and unit plan or theme this activity will best fit into.

About the 2020 Census

In addition to the information that is built into instructions for this activity, the following points provide an easy, grade-appropriate way to explain the census to your students.

- The decennial census is a count of every person living in the United States that occurs every 10 years.
- It is important that every person be counted to make sure the government can provide money to each community for things like roads and parks.
- Make sure an adult in your home counts you in the 2020 Census.

Materials Required

- Printed student worksheets
- A board or chart paper to track class survey answers
- A projector or an interactive whiteboard connected to the internet to display *The Amazing Apportionment Machine* video (https://www.census.gov/programs-surveys/sis/resources/videos/apportionment-machine.html).

Worksheet Description

Students will learn how changes in population across cities and states affect how their community is represented in the U.S. House of Representatives and why an accurate count of the population is essential every 10 years. Students will examine the results from the 2000 Census and the 2010 Census and use that information to predict the results of the 2020 Census in their state.

Before the Activity—10 Minutes

1. Begin by showing *The Amazing Apportionment Machine* video (https://www.census.gov/programs-surveys/sis/resources/videos/apportionment-machine.html).

2. Explain to students that the U.S. Census Bureau is responsible for getting an accurate count of all people living in the United States. Ensure that students understand the following concepts:

    - This count is conducted every 10 years through the decennial census, which is a count of all people in the country based on where they live.
    - Data from the decennial census is used to show which areas in the United States have larger populations and therefore should have more representatives in the U.S. House of Representatives.
    - The data is also used to allocate $675 billion in U.S. government funding among states and communities.

3. Review key vocabulary terms with students, as a class:

    - **Decennial census:** A constitutionally required process, occurring every 10 years, that uses a questionnaire to count all U.S. residents at every address in the country (according to where they resided on April 1 of that census year).
    - **Representative:** One person who speaks for a group of people.
    - **Population:** The number of people living in an area.

- **Apportionment:** The process of dividing the 435 seats in the U.S. House of Representatives among the 50 states according to each state's population. The population is determined by the decennial census. At the conclusion of each census, the results are used to calculate the number of House seats to which each state is entitled.
- **U.S. House of Representatives:** One of the two legislative bodies of the U.S. Congress established in Article I of the U.S. Constitution, with its members elected every two years and states allotted one or more seats based on their populations. (The other legislative body is the Senate, in which each state is allotted two seats, regardless of the state's population.)

During the Activity—25 Minutes

1. Divide students into three groups, making the groups intentionally unequal in size. Ask each group to elect **one** leader to represent its members.

2. Tell the class that they are now going to vote on an important issue. As a class, they need to decide whether they would rather have a longer recess with a longer school day or would rather have a shorter recess with a shorter school day.

   Give students two minutes to discuss their thoughts within their groups. Then call the designated leader, or representative, from each group to the front of the room and have these representatives say how they would vote. Record the winning vote on the board for all students to see in a table (such as the following) so students can compare the first vote with the second.

	Long School Day With Long Recess	Short School Day With Short Recess
Random Selection		
Apportionment		

3. Have students return to their seats. Ask the class whether they think this method of voting seems fair. Do all the students feel that they had an equal say in the outcome?

4. Have the students return to their groups. Now tell the students that they are going to vote again, but this time each group will get one representative for every two people in the group (so, for example, a group of two would get one representative; a group of four, two representatives; and so on). Have students select the right number of representatives and have those new representatives come to the front of the room. Repeat the voting process and record the results on the board.

5. Have students return to their seats. Then ask the students if they feel that this second method of voting was more fair or less fair than the method for the first vote? Why or why not?

6. Explain the following points to students (feel free to tailor to your classroom):

   - The second round of voting took into account the population (or size) of each group so that each group got equal representation per person in the second vote.
   - The U.S. government uses population in a similar way to determine how many seats each state gets in the House of Representatives. This is called apportionment, which is dictated by population data collected in the decennial census. The next decennial census is happening in spring 2020.
   - During a presidential election, each state has as many electoral representatives as it has representatives and senators in Congress. For example, if Alabama has seven representatives and two senators, it will have nine electoral representatives.

7. Pass out the student worksheets. Review vocabulary, such as "apportionment," or any unfamiliar terms prior to starting the worksheet.

8. Help students find the population for their state in 2000 and 2010 on pages 3 and 4 of their student worksheets. Direct the students to the chart on their student worksheets to fill in the number of U.S. representatives for the state. Then have them complete the questions on the worksheet. If needed, review the definitions of "representative" and "apportionment" with students again.

After the Activity—5 Minutes

To summarize the activity, ask students the following questions and have them answer out loud to facilitate a classroom discussion:

Question #2: Based on the trend in your chart, do you predict that your state's population will increase or decrease in 2020? Why?

Answers will vary by state, but in Virginia, for example, students will likely predict that their population will increase in 2020 because it increased in 2010.

Question #3: Based on your prediction in Question #2, do you think your state's number of representatives will increase, decrease, or stay the same after the 2020 Census?

Answers will vary based on the state and students' answers to Question #1. In Virginia, even though the population increased in 2010, the representatives stayed the same, so students may predict that there is no change in the number of representatives as it will likely follow the same trend.

Question #4: Based on what you learned today, why is it important to get an accurate count of the population?

Answers will vary. For example, "Census data shows which states have increasing populations and should therefore receive more representatives."

Home Extension

Teachers, please read the instructions for the students' homework assignment out loud to the class:

Take your student worksheet home and share it with an adult living in your home. Ask them the following questions:

1. *Do they agree with your prediction about the state population increasing or decreasing?*
2. *How might that change the number of representatives your state has in the U.S. House of Representatives?*

Activity Item: U.S. Apportionment Data

State	2000 Apportionment Population	2000 Number of Representatives	2010 Apportionment Population	2010 Number of Representatives
Alabama	4,461,130	7	4,802,982	7
Alaska	628,933	1	721,523	1
Arizona	5,140,683	8	6,412,700	9
Arkansas	2,679,733	4	2,926,229	4
California	33,930,798	53	37,341,989	53
Colorado	4,311,882	7	5,044,930	7
Connecticut	3,409,535	5	3,581,628	5
Delaware	785,068	1	900,877	1
Florida	16,028,890	25	18,900,773	27
Georgia	8,206,975	13	9,727,566	14
Hawaii	1,216,642	2	1,366,862	2
Idaho	1,297,274	2	1,573,499	2
Illinois	12,439,042	19	12,864,380	18
Indiana	6,090,782	9	6,501,582	9
Iowa	2,931,923	5	3,053,787	4
Kansas	2,693,824	4	2,863,813	4
Kentucky	4,049,431	6	4,350,606	6
Louisiana	4,480,271	7	4,553,962	6
Maine	1,277,731	2	1,333,074	2
Maryland	5,307,886	8	5,789,929	8
Massachusetts	6,355,568	10	6,559,644	9
Michigan	9,955,829	15	9,911,626	14
Minnesota	4,925,670	8	5,314,879	8
Mississippi	2,852,927	4	2,978,240	4
Missouri	5,606,260	9	6,011,478	8
Montana	905,316	1	994,416	1
Nebraska	1,715,369	3	1,831,825	3
Nevada	2,002,032	3	2,709,432	4

Activity Item: U.S. Apportionment Data (Cont.)

State	2000 Apportionment Population	2000 Number of Representatives	2010 Apportionment Population	2010 Number of Representatives
New Hampshire	1,238,415	2	1,321,445	2
New Jersey	8,424,354	13	8,807,501	12
New Mexico	1,823,821	3	2,067,273	3
New York	19,004,973	29	19,421,055	27
North Carolina	8,067,673	13	9,565,781	13
North Dakota	643,756	1	675,905	1
Ohio	11,374,540	18	11,568,495	16
Oklahoma	3,458,819	5	3,764,882	5
Oregon	3,428,543	5	3,848,606	5
Pennsylvania	12,300,670	19	12,734,905	18
Rhode Island	1,049,662	2	1,055,247	2
South Carolina	4,025,061	6	4,645,975	7
South Dakota	756,874	1	819,761	1
Tennessee	5,700,037	9	6,375,431	9
Texas	20,903,994	32	25,268,418	36
Utah	2,236,714	3	2,770,765	4
Vermont	609,890	1	630,337	1
Virginia	7,100,702	11	8,037,736	11
Washington	5,908,684	9	6,753,369	10
West Virginia	1,813,077	3	1,859,815	3
Wisconsin	5,371,210	8	5,698,230	8
Wyoming	495,304	1	568,300	1

Source: U.S. Census Bureau, 2000 Census, 2010 Census

https://www.census.gov/population/www/cen2000/maps/files/tab01.pdf

https://www.census.gov/population/apportionment/files/Apportionment%20Population%202010.pdf