

Answer Key – Why California?



The Electoral College is a group of citizen delegates who cast votes for the president of the United States. The candidate who gets the most votes wins the election. The number of voters in the Electoral College, or electors, varies from state to state. In this activity you will investigate both what these differences are and what they mean to a presidential candidate.

1. Gather data on the number of electors for each state. Record the state population and the number electors in the table. Calculate how many votes each state has out of the total. Record this as a decimal rounded to the nearest thousandth and a percentage rounded to the nearest tenth.

STATE	POPULATION	ELECTORS	DECIMAL	PERCENTAGE
Alabama	[4,779,736]	[9]	[0.015]	[1.5%]
Alaska	[710,231]	[3]	[0.002]	[0.2%]
Arizona	[6,392,017]	[11]	[0.021]	[2.1%]
Arkansas	[2,915,918]	[6]	[0.009]	[0.9%]
California	[37,253,956]	[55]	[0.121]	[12.1%]
Colorado	[5,029,196]	[9]	[0.016]	[1.6%]
Connecticut	[3,574,097]	[7]	[0.012]	[1.2%]
Delaware	[897,934]	[3]	[0.003]	[0.3%]
District of Columbia	[601,723]	[3]	[0.002]	[0.2%]
Florida	[18,801,310]	[29]	[0.061]	[6.1%]
Georgia	[9,687,653]	[16]	[0.031]	[3.1%]
Hawaii	[1,360,301]	[4]	[0.004]	[0.4%]
Idaho	[1,567,582]	[4]	[0.005]	[0.5%]
Illinois	[12,830,632]	[20]	[0.042]	[4.2%]
Indiana	[6,483,802]	[11]	[0.021]	[2.1%]
Iowa	[3,046,355]	[6]	[0.010]	[1.0%]
Kansas	[2,853,118]	[6]	[0.009]	[0.9%]
Kentucky	[4,339,367]	[8]	[0.014]	[1.4%]
Louisiana	[4,533,372]	[8]	[0.015]	[1.5%]

Maine	[1,328,361]	[4]	[0.004]	[0.4%]
Maryland	[5,773,552]	[10]	[0.019]	[1.9%]
Massachusetts	[6,547,629]	[11]	[0.021]	[2.1%]
Michigan	[9,883,640]	[16]	[0.032]	[3.2%]
Minnesota	[5,303,925]	[10]	[0.017]	[1.7%]
Mississippi	[2,967,297]	[6]	[0.010]	[1.0%]
Missouri	[5,988,927]	[10]	[0.019]	[1.9%]
Montana	[989,415]	[3]	[0.003]	[0.3%]
Nebraska	[1,826,341]	[5]	[0.006]	[0.6%]
Nevada	[2,700,551]	[6]	[0.009]	[0.9%]
New Hampshire	[1,316,470]	[4]	[0.004]	[0.4%]
New Jersey	[8,791,894]	[14]	[0.028]	[2.8%]
New Mexico	[2,059,179]	[5]	[0.007]	[0.7%]
New York	[19,378,102]	[29]	[0.063]	[6.3%]
North Carolina	[9,535,483]	[15]	[0.031]	[3.1%]
North Dakota	[672,591]	[3]	[0.002]	[0.2%]
Ohio	[11,536,504]	[18]	[0.037]	[3.7%]
Oklahoma	[3,751,351]	[7]	[0.012]	[1.2%]
Oregon	[3,831,074]	[7]	[0.012]	[1.2%]
Pennsylvania	[12,702,379]	[20]	[0.041]	[4.1%]
Rhode Island	[1,052,567]	[4]	[0.003]	[0.3%]
South Carolina	[4,625,364]	[9]	[0.015]	[1.5%]
South Dakota	[814,180]	[3]	[0.003]	[0.3%]
Tennessee	[6,346,105]	[11]	[0.021]	[2.1%]
Texas	[25,145,561]	[38]	[0.081]	[8.1%]
Utah	[2,763,885]	[6]	[0.009]	[0.9%]
Vermont	[625,741]	[3]	[0.002]	[0.2%]
Virginia	[8,001,024]	[13]	[0.026]	[2.6%]
Washington	[6,724,540]	[12]	[0.022]	[2.2%]

West Virginia	[1,852,994]	[5]	[0.006]	[0.6%]
Wisconsin	[5,686,986]	[10]	[0.018]	[1.8%]
Wyoming	[563,626]	[3]	[0.002]	[0.2%]
TOTAL	[308,745,538]	[538]	[1]	[100.0%]

2. Make two observations about the data in the table..

Answers will vary. A good answer will include observations of the following:

- wide range in the number of electors
- the higher the population, the more electoral votes
- wide range in populations among states with equal popular votes
- California is an outlier

Note: There are many other good observations possible.

3. How many total electoral votes are there? A candidate must have more than half of the votes from the Electoral College to win the presidency. Calculate how many votes the candidate must have to win. Show how you arrived at your solution.

There are 538 electoral votes. A candidate must have 270 electoral votes to win.

4. Is it possible to have a tie between two candidates? When there are 3 candidates, can there be a 3-way tie? Explain your reasoning.

Yes, a tie is possible — 269 votes for each candidate.

An example could be one candidate winning Virginia, New Jersey, North Carolina, Michigan, Ohio, Illinois, Pennsylvania, Florida, New York, Texas, and California, while the other candidate wins all the other states.

A 3-way tie is not possible; 538 is not divisible by 3.

5. The 50 states and Washington, D.C. comprise 100% of the electoral votes. That means each state has an average of about 2% of the electoral votes. How many states have fewer than 2% of the electoral votes? How many have greater than 2% of the electoral votes? Make an observation about these results.

34 states are below the “average,” and 17 states are above. There are twice as many states below as above, which contradicts our expectation that half would be above and half below.

6. Find the mean number of electoral votes for all states.

Mean 10.55

7. Find the median number of electoral votes for all states.

Median 8

8. Find the mode number of electoral votes for all states.

Mode 3

9. The mean, median, and mode are all measures of central tendency. Which best represents this data? **Hint:** Imagine your answer to the question, “On average, how many electoral votes does each state have?” Explain your reasoning.

Arguments can be made for each measure of central tendency:

Mode: 8 states have 3 electoral votes, which is a notably greater number of states than any other number of electors.

Median: This is the best answer, since California is an outlier and outliers have less effect on median than on mean.

Mean: While it is impossible to have 10.5 electors, this can still be a good measure of central tendency because it takes into account all the values.

10. How many electoral votes does your state have? Is the number greater than or less than the *median* number of electoral votes? How far above or below the median is it? Is your state “average”? Explain.

Answer will vary according to your state.

11. Presidential candidates often spend a great deal of time campaigning in California. Why do you think this is? What other states do you think are popular campaign stops?

California has 55 electors, far more than any other state, and more than 10% of the total electors in the country. Other states with large numbers of electors would logically also be popular campaign destinations.

12. Do you think your state is a popular campaign stop? Do you think it should be? Explain.

Answers will vary, but should reflect the number of electors your state has.

13. Describe how a presidential candidate might use the information in this activity sheet and the conclusions you have made to plan a campaign.

Answers will vary. A possible answer might be that the candidate should concentrate on the 12 most populous states.