Due Date:

Name
Group

## Voting Assignment

In this assignment, you will collect data from your classmates, friends, and/or families and analyze the data based on some of the voting methods we have learned in class (plurality, majority, majority with elimination, Borda count, and Condorcet).

You will check in with the teacher after every step.
Step 1: Choose a topic that interests you.
Ex: hockey
My topic is:
Teacher initials

## Step 2: Develop a question with a list of answers people will rank.

Ex: Put the following list of hockey teams in order from your favorite to your least favorite:
Detroit Red Wings, Ottawa Senators, Montreal Canadiens, Boston Bruins

My question is:
The possible answers are: $\qquad$
$\qquad$
Teacher initials $\qquad$

Step 3: Gather data from classmates, friends, and/or family members. You must ask at least 25 people. Keep track of the rankings each person gives you on the Data Tracking Sheet.

Teacher initials $\qquad$

Step 4: Organize your data into a table based on the responses you received (your table may have many columns).

Make your table on a new sheet of paper. You may type it or draw it. Staple the table to this assignment.
Ex:

|  | 10 | 5 | 3 | 2 | 8 | 12 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| $1^{\text {st }}$ <br> choice | Detroit | Detroit | Ottawa | Boston | Ottawa | Montreal |
| $2^{\text {nd }}$ <br> choice | Ottawa | Montreal | Detroit | Detroit | Detroit | Ottawa |
| $3^{\text {rd }}$ <br> choice | Montreal | Ottawa | Montreal | Ottawa | Boston | Detroit |
| $4^{\text {th }}$ <br> choice | Boston | Boston | Boston | Montreal | Montreal | Boston |

Teacher initials

## Step 5: Use the following methods to analyze your data:

a) Plurality
b) Majority
c) Majority with elimination
d) Borda count
e) Condorcet

Use the Analysis Sheet to show your work.

Teacher initials $\qquad$

Step 6: Using the results from Step 5, which option would you say is the overall winner? Why?
$\qquad$

Data Tracking Sheet

|  | $\mathbf{1}^{\text {st }}$ choice | 2 $^{\text {nd }}$ choice | $3^{\text {rd }}$ choice | $4^{\text {th }}$ choice |
| :--- | :--- | :--- | :--- | :--- |
| Person 1 |  |  |  |  |
| Person 2 |  |  |  |  |
| Person 3 |  |  |  |  |
| Person 4 |  |  |  |  |
| Person 5 |  |  |  |  |
| Person 6 |  |  |  |  |
| Person 7 |  |  |  |  |
| Person 8 |  |  |  |  |
| Person 9 |  |  |  |  |
| Person 10 |  |  |  |  |
| Person 11 |  |  |  |  |
| Person 12 |  |  |  |  |
| Person 13 |  |  |  |  |
| Person 14 |  |  |  |  |
| Person 15 |  |  |  |  |
| Person 16 |  |  |  |  |
| Person 17 |  |  |  |  |
| Person 18 |  |  |  |  |
| Person 19 |  |  |  |  |
| Person 20 |  |  |  |  |
| Person 21 |  |  |  |  |
| Person 22 |  |  |  |  |
| Person 23 |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |


| Plurality | Analysis Sheet |
| :---: | :---: | :---: |
| Majority with elimination |  |
| Borda Count |  |
| Condorcet |  |

