## Four friends buy a tub of ice cream

Our community is made up of four friends. Their names are Tom, Jerry, Matilda, and Snow White. The group of friends wants to choose a flavor of ice cream to buy. As a group, they can only choose one flavor. They have four options: chocolate, vanilla, strawberry, and coconut.

Here is a summary of what we know:
Voters: Tom, Jerry, Matilda, Snow White.
Candidates: chocolate, vanilla, strawberry, coconut.
Personal rankings:
Tom: Chocolate > Strawberry > Vanilla > Coconut.
Jerry: Coconut > Strawberry > Vanilla > Chocolate.
Matilda: Vanilla > Chocolate > Strawberry > Coconut.
Snow White: Coconut > Chocolate > Strawberry > Vanilla.
How could the students decide which flavor of ice cream to buy?

## Plurality

Plurality: Each voter gives one point to their favorite candidate, and zero points to all other candidates. The number of points each candidate gets is counted. The candidate with the most points is the winner.

Fill out the tables below to determine who wins the election under plurality.
Voter Table:

|  | Chocolate | Vanilla | Strawberry | Coconut |
| :---: | :---: | :---: | :---: | :---: |
| Tom |  |  |  |  |
| Jerry |  |  |  |  |
| Matilda |  |  |  |  |
| Snow White |  |  |  |  |

Point Tally Table:

|  | Number of points |
| :---: | :---: |
| Chocolate |  |
| Vanilla |  |
| Strawberry |  |
| Coconut |  |

Results Table:

|  | Candidate(s) |
| :---: | :---: |
| First Place |  |
| Second Place |  |
| Third Place |  |
| Fourth Place |  |

Note: There may be ties.

## Antiplurality

Antiplurality: Each voter gives zero points to their least favorite candidate, and one point to all other candidates. The number of points each candidate gets is counted. The candidate with the most points is the winner.

Fill out the tables below to determine who wins the election under antiplurality.
Voter Table:

|  | Chocolate | Vanilla | Strawberry | Coconut |
| :---: | :--- | :--- | :--- | :--- |
| Tom |  |  |  |  |
| Jerry |  |  |  |  |
| Matilda |  |  |  |  |
| Snow White |  |  |  |  |

Point Tally Table:

|  | Number of points |
| :---: | :---: |
| Chocolate |  |
| Vanilla |  |
| Strawberry |  |
| Coconut |  |

Results Table:

|  | Candidate(s) |
| :---: | :---: |
| First Place |  |
| Second Place |  |
| Third Place |  |
| Fourth Place |  |

Note: There may be ties.

## Borda Count

Borda Count: For the case where there are 4 candidates, each voter gives 3 points to their favorite candidate, 2 points to their second favorite candidate, 1 point to their third favorite candidate, and 0 points to their fourth favorite candidate. The number of points each candidate gets is counted. The candidate with the most points is the winner.

Fill out the tables below to determine who wins the election under the Borda Count.
Voter Table:

|  | Chocolate | Vanilla | Strawberry | Coconut |
| :---: | :--- | :--- | :--- | :--- |
| Tom |  |  |  |  |
| Jerry |  |  |  |  |
| Matilda |  |  |  |  |
| Snow White |  |  |  |  |

Point Tally Table:

|  | Number of points |
| :---: | :---: |
| Chocolate |  |
| Vanilla |  |
| Strawberry |  |
| Coconut |  |

## Results Table:

|  | Candidate(s) |
| :---: | :---: |
| First Place |  |
| Second Place |  |
| Third Place |  |
| Fourth Place |  |

Note: There may be ties.

