Your name:
Group member names: $\qquad$
$\qquad$
$\qquad$
$\qquad$

## Data resulting from computer simulated crosses for one trait at a time:

| Cross | Leaf color (must total 64) | Stem color (must total 64) |
| :---: | :---: | :---: |
| P1 X P1 | Green $=\ldots \quad$ Yellow $=$ | Purple $=\ldots$ Green $=$ |
| P2 X P2 | Green $=\ldots$ Yellow $=$ | Purple $=\ldots$ Green $=$ |
| P1 X P2 | Green $=$ $\qquad$ Yellow = $\qquad$ | Purple $=\ldots$ Green $=$ |
| F1 X F1 | Green $=$ $\qquad$ Yellow = $\qquad$ | Purple $=\ldots$ Green $=$ |
| P1 X F1 | Green $=\ldots$ Yellow $=$ | Purple $=\ldots$ Green $=$ |
| P2 X F1 | Green $=\ldots \quad$ Yellow $=$ | Purple $=\ldots$ Green $=$ |

## Data resulting from computer simulated crosses for both traits at once:

| Cross |  <br> Purple Stems |  <br> Green Stems | Yellow Leaves <br> \& Purple Stems | Yellow Leaves <br> \& Green Stems |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |


| P1 X P1 |  |  |  |  |
| :---: | :--- | :--- | :--- | :--- |
| P2 X P2 |  |  |  |  |
| P1 X P2 <br> Class data $\rightarrow$ | $100 \%$ |  | $0 \%$ | $0 \%$ |
| F1 X F1 <br> Class data $\rightarrow$ | 881 | 415 | 325 | 121 |
| P1 X F1 |  |  |  |  |
| P2 X F1 |  |  |  |  |

## Challenge crosses

Are all green leafed purple stemmed F2 plants the same? Try crossing 5 different green leafed purple stemmed F2 plants with a P2 plant. What does the outcome of these crosses tell you about how some F2 plants that look the same might not actually be the same "inside"?

| Cross |  <br> Purple Stems |  <br> Green Stems |  <br> Purple Stems |  <br> Green Stems |
| :---: | :--- | :--- | :--- | :--- |
| F2 X P2 |  |  |  |  |
| F2 X P2 |  |  |  |  |
| F2 X P2 |  |  |  |  |
| F2 X P2 |  |  |  |  |
| F2 X P2 |  |  |  |  |

