1. Below is a photo of Burham, Rhoades, & McClintock in their graduate student days, taken while they were pollinating maize.

Name <u>one</u> contribution to plant cytogenetics made by each of

$ Burnham

$ Rhoades

$ McClintock.

2. State, in 10 words or less, the Cell Theory. State in 10 words or less, the Chromosome Theory of Heredity. Describe two pre 1925 experiments or observations that were important in supporting the Chromosome Theory of Heredity. Include the name of the researcher, experimental system used, and conclusions.

3. Completely describe a set of procedures or experiments you could do to prove that independent assortment is taking place. However, instead of using a microscope and grasshoppers like Carothers did, you are to use a flow cytometer, and the plant species of your choice

Extra credit:

A) State the scientific contribution made by each. Use the corresponding space in the grid below: