**Gene Deletion Phenotypes**

**YEAST FITNESS DATABASE**

**Section 1: Phenotypes. Gene-Drug Relationships:**

**Drug 1**

**Name:**

**Fitness Defect Z-score:**

**P-value:**

**Mechanism of Action:**

**Citation:**

**What do you think it could mean for the function of your protein, that cells without your protein are sensitive to this drug?**

**Drug 2**

**Name:**

**Fitness Defect Z-score:**

**P-value:**

**Mechanism of Action:**

**Citation:**

**What do you think it could mean for the function of your protein, that cells without your protein are sensitive to this drug?**

**Drug 3**

**Name:**

**Fitness Defect Z-score:**

**P-value:**

**Mechanism of Action:**

**Citation:**

**What do you think it could mean for the function of your protein, that cells without your protein are sensitive to this drug?**

**Look at the different mechanisms of action for the three drugs you have researched. When you combine this information what do you think it could mean for the function of your protein?:**

**Section 2: Co-fitness Interactions. Gene-Gene Relationships:**

**[For students will little other data about their possible gene function please complete this section about gene interaction descriptions.]**

**Gene Name #1:**

**Description (from SGD):**

**Gene Name #2:**

**Description (from SGD):**

**Gene Name #3:**

**Description (from SGD):**

**Gene Name #4:**

**Description (from SGD):**

**Gene Name #5:**

**Description (from SGD):**

**Gene Name #6:**

**Description (from SGD):**

**Gene Name #7:**

**Description (from SGD):**

**Gene Name #8:**

**Description (from SGD):**

**Gene Name #9:**

**Description (from SGD):**

**Gene Name #10:**

**Description (from SGD):**

**Look at the different functional descriptions for the 10 genes you have researched. When you combine this information what do you think it could mean for the function of your protein?:**

**Gene Ontologies**

**Enriched GO terms of interactors**

**Process:**

**Function:**

**Component:**

**Based on these results – what role do you believe your protein might be playing in the cell?**