**Birzeit University**

**Department of Biology and Biochemistry**

**Biology111**

**Sheet Session #3: Cell Division and Genetics**

**Name and ID: Instructor:**

**Cell Division; Mitosis**

1. Fill the table (**SHOW YOUR CALCULATION**):

|  |  |  |  |
| --- | --- | --- | --- |
| Phases | # of cells | % of cells | Time spent |
| Interphase |  |  |  |
| Prophase |  |  |  |
| Metaphase |  |  |  |
| Anaphase |  |  |  |
| Telophase |  |  |  |

1. Fill the blank:
2. why was carnoy used?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
3. Why was HCl used? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
4. Why were root tips used to study mitosis\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
5. Why mitosis is important to life? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**Genetics**

1. Fill the table (**SHOW YOUR CALCULATIONS**):

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Trait | # of individuals with recessive trait | Phenotypic ratio | Frequency of dominant gene | Frequency of recessive allele | Frequency of heterozygous |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |