Name: ­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_ Class: \_\_\_\_\_\_\_\_

Mitosis/Meiosis Worksheet

***General Outcome #3: Describe the role of genetic material and biotechnology.***

* ***Can I describe the role of chromosomes, genes and DNA?***
* ***Can I describe mitosis?***
* ***Can I describe meiosis?***

Corn has 10 chromosome pairs.

1. What is the total number of chromosomes? \_\_\_\_\_\_\_\_\_\_\_\_
2. What is the number of chromosomes in the pollen and ovum? \_\_\_\_\_\_\_
3. What is the number of chromosome pairs in the seeds? \_\_\_\_\_\_\_\_\_\_\_\_\_

The housefly has 12 chromosomes.

1. What is the number of chromosomes that the male fly would give to his offspring? \_\_\_\_\_\_\_\_\_
2. What is the number of chromosomes that the female fly would give to her offspring? \_\_\_\_\_\_\_

**Complete this Chart**

|  |  |  |  |
| --- | --- | --- | --- |
| **Organism** | **# of chromosomes in body (somatic) cells** ***(Diploid number)*** | **# of chromosomes in gametes (reproductive) cells*****(Haploid number)*** | **# of chromosomes in zygote and embryo cells** |
| **bullfrog** | **26** |  |  |
| **mouse** |  | **20** |  |
| **pigeons** |  |  | **80** |
| **rabbits** | **44** |  |  |