INTRODUCTION TO GENETICS

1. Drag and drop the terms below to complete the diagram

Female Gamete:

Number of Chromosomes:

Name of a fertilized egg:

Number of chromosomes:

Number of chromosomes:

Number of chromosomes:

Number of Chromosomes:

2. Mitosis vs Meiosis: Drag and drop the boxes below to match the characteristics of mitosis or meiosis.

	Mitosis	Meiosis		
Purpose				
Number of Cell Divisions				
Number of Daughter Cells & Genetic Similarity to Parent				
Number of Chromosomes in Each Daughter Cell				
Picture				
growth & development of the organism; healing wounds	23	Parent sel		
2; they are genetically identical to the parent	1	DNA replicates		
production of gametes	production of gametes	2 discyster tells 1 6 discyster cells		
	46			
4; they are genetically unique from the parent				

3. Who Has What Number?

Organisms of the same species have the same number of chromosomes, but different species have different numbers of chromosomes. Complete the table below to compare the chromosome numbers in some common species.

Organism	Number of chromosomes in a cell at the end of mitosis	Number of chromosomes in a body cell	Number of chromosomes in a gamete	Number of chromosomes in a zygote	Number of chromosomes contributed by each parent
human			23		
cabbage	18				
black bear					38
peanut	40				