Name: _____ Date: _____

Mitosis Practice

1. Each parent passes on 23 chromosomes to their offspring. These chromosomes are made up of many sections of DNA called genes.
2. Heredity is the transmission of traits from one generation to the next.
3. Variation - exists in populations that reproduce sexually, offspring are not identical to their parents.
4. All of an individual's genes are called their genome,
5. Asexual reproduction is when a single individual gives rise to offspring.
   These offspring are identical to their parent.
   This type of reproduction occurs through the process of mitosis
   Variation can occur through mutations
   Some multi-celled organisms can reproduce this way through cloning (hydra)
6. Genetics is the scientific study of heredity and hereditary variation
7. In animals and plants, reproductive cells called gametes are the vehicles that transmit genes from one generation to the next
8. A gene's specific location along the length of a chromosome is called the gene's locus (loci).
9. Except for small amounts of DNA in the mitochondria and chloroplasts, the DNA of a eukaryotic cell is packaged into chromosomes in the nucleus.
10. One chromosome has between several hundred to a few thousand genes.