Name: _____ Date: _____

Notes: Chromosomal Mutations

What is a **gene**? _____

How is *information* carried in DNA? _____

How big is a *codon*? _____

What is each codon translated into? _____

What other name are codons known by? _____

Define **mutation**: _____

What kind of mutation is caused by *insertions* and *deletions*: _____

What else are substitution mutations called? _____

Describe the key characteristic of each mutation below caused by a point mutation.

Missense mutation: _____

Nonsense mutation: _____

Silent mutation: _____

What do we call the large DNA structures in cells? _____

What is an organism's ***genome***? _____

How long is the DNA found in one human cell? _____

How is this amount of DNA packaged to fit inside a tiny nucleus?

_____

How are chromosomes organized in eukaryotes? _____

Each pair comes from what 2 sources? _____

Define **karyotype**: _____

_____

What is done to chromosomes so they can be identified? _____

Chromosomal mutations often occur while making what? _____

What do we call *male* gamete cells? _____

What do we call *female* gamete cells? _____

What happens to chromosomes during the production of gamete cells?

_____

When is the ***only time*** mutations affect ***offspring***? _____

_____

What two types of mutations that we have already discussed can happen on a large scale?

_____

Describe the key characteristic of each chromosomal mutation below.

Inversion: _____

Duplication: _____

Translocation: _____

_____

When does **nondisjunction** occur? _____

_____

How many chromosomes result in a *trisomy*? _____

How many chromosomes result in a *monosomy*? _____

How many of each chromosome should be in a eukaryotic cell? _____