**17.5 MUTATIONS**

Gene mutation is a change in the base sequence of an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

The changed base sequence may produce a different \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ sequence in the protein translated.

The changed base sequence may not change the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ because of the degenerate nature of the genetic code.

The expression of the mutated gene may or may not be beneficial to the organism.

Substances that cause mutation are called \_\_\_\_\_\_\_\_\_\_\_\_\_ and include chemicals and radiation.



**Missense:**

**Nonsense:**

**16.3 (see: http://www.youtube.com/watch?v=9kQpYdCnU14&noredirect=1)**

**Packaging 6 meters of DNA into a nucleus……how is it done?**