Replication, Transcription, Translation, and Mutations

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| **Across**  **2.** Type of mutation that changes the entire sequence of DNA following the mistake (2 words)  **5.** tRNA and mRNA are involved in \_\_\_\_\_ (2 words)  **8.** A mutation can change the \_\_\_\_\_ and be replicated when forming new cells (2 words)  **10.** DNA replication is \_\_\_\_\_  **12.** After transcription, mRNA leaves the nucleus and attaches itself to a \_\_\_\_\_  **13.** \_\_\_\_\_ carries amino acids to the site of protein synthesis  **14.** The bases are often abbreviated to \_, \_, \_ and \_  **15.** \_\_\_\_\_ joins the Okazaki fragments  **18.** Unwound DNA  **19.** A mutation can be \_\_\_\_\_, beneficial, or harmful  **22.** DNA polymerase replicates one strand \_\_\_\_\_ and one not  **24.** A mutagen is a(n) \_\_\_\_\_, such as radiation, chemicals, high temperatures, or UV light  **27.** A purine —> purine or pyrimidine —> pyrimidine mutation  **28.** A(n) \_\_\_\_\_ is a sequence of three bases in a tRNA molecule  **29.** Passed on from parents to offspring  **32.** \_\_\_\_\_ connect the bases (2 words)  **33.** Part of a chromosome, passed on from parents to offspring  **34.** \_\_\_\_\_ adds nucleotides and checks to make sure the new copy is correct (2 words)  **36.** Ribosomes are located on the \_\_\_\_\_ (2 words)  **38.** Because it only makes 5'-3', DNA polymerase makes little sections for the other side called \_\_\_\_\_ (2 words)  **39.** One base is placed incorrectly  **40.** One base is added  **41.** \_\_\_\_\_ creates a primer on the DNA strand by adding RNA nucleotides  **42.** DNA is shaped like a twisted ladder, or \_\_\_\_\_ (2 words)  **43.** Mutations can be \_\_\_\_\_ | **Down**  **1.** In DNA, adenine pairs with \_\_\_\_\_  **3.** One base is deleted  **4.** A purine —> pyrimidine or pyrimidine —> purine mutation  **6.** The message from the mRNA will be translated into an \_\_\_\_\_ sequence (2 words)  **7.** A(n) \_\_\_\_\_ is a sequence of three bases that codes for an amino acid  **9.** The sides of DNA are made of \_\_\_\_\_ and phosphate.  **11.** Transcription happens in the \_\_\_\_\_  **16.** DNA replication does not happen when the cell \_\_\_\_\_  **17.** DNA is \_\_\_\_\_  **20.** A change that takes place in DNA  **21.** A and G are both \_\_\_\_\_  **23.** RNA has \_\_\_\_\_ instead of thymine  **25.** Translation occurs in the \_\_\_\_\_, specifically on the ribosomes  **26.** \_\_\_\_\_ contain nitrogen (2 words)  **30.** Transcription is the process of making \_\_\_\_\_  **31.** T and C are \_\_\_\_\_  **35.** \_\_\_\_\_ are made in the ribosomes  **37.** Helicase \_\_\_\_\_ DNA |