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5. The sequence of nucleotides determines the genetic code.

6. the human genome is a human’s entire set of genes.

7. 1 – base pairs, 2 – nucleotide, 3 – chromatin 4-nucleus

8. a) proteins in the cytoplasm b) amino acids are the building blocks of proteins

9. enzymes are proteins that control chemical reactions in the body.

10. a) Two structural proteins are keratin and collagen b) keratin – hair and fingernails, collagen in skin and bones

11. Three proteins found in blood are fibrinogen (helps clotting), insulin (controls blood sugar levels), hemoglobin (carries oxygen to cells)

12. DNA holds all the information to build any protein. genes are sections of DNA that code for a specific protein.

13. The genetic code is transferred from nucleus to cytoplasm via messenger RNA

14. RNA is different from DNA in that it is single-stranded, contains ribose for a sugar instead of deoxyribose, uses uracil instead of thymine.

15. DNA unzips, RNA forms from a gene, RNA carries message out to cytoplasm to ribosome, (ribosome reads message on RNA), amino acids attach to ribosomes, ribosomes manufacture protein