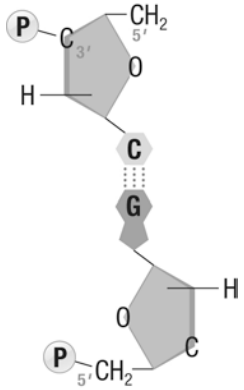
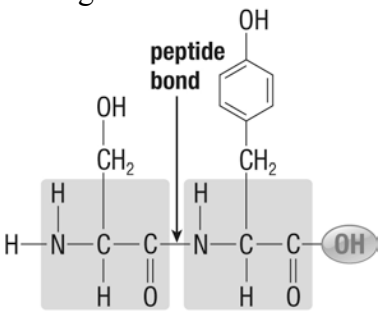
8. Sugar and phosphate groups form the backbone of a nucleic acid molecule.
9. Answers may vary. Sample answer: DNA is double stranded and RNA is a single stranded molecule. Nitrogenous bases in DNA are G (guanine), A (adenine), T (thymine), C (cytosine) Nitrogenous bases in RNA are G, A, U (uracil), and C. DNA almost always forms a double helix while RNA can take on a variety of configurations.
10. Linkage of two nucleotides



Linkage of two amino acids



11. Other macromolecules have a large number of structures and functions. Nucleic acids have only one function – working together to make proteins.