Biology 1 Name:

**Dehydration Synthesis**  Date:

*Activity* Hour:

Instructions: For each section, you will simulate the dehydration synthesis reaction. In other words, you will be removing water in order to join together two (or more) molecules. Use your book and notes to get an idea of the building block monomers (sugars, fatty acids and amino acids) you are using and the macromolecule polymers (lipid, protein and carbohydrate) you are building.

1. Color the molecules as indicated. Be sure to color the entire shape.
2. Pick a color to start with. You will be building a polymer with the four monomers of the same color.
3. Cut off an “OH” from any molecule.
4. Cut off a “H” from another molecule of the same color
5. The two molecules should fit together like a puzzle.
6. Continue removing “H” and “OH” portions of molecules as needed to build a polymer made of 4 monomers.
7. DON’T FORGET YOUR WATER! The “OH” and “H” pieces cut from the monomers need to be put together to form water.
8. Glue the polymer and the water molecules created during its synthesis in the appropriate spot on the back of this page.
9. Circle and label the monomer as a “sugar/monosaccharide”, “fatty acid” or “amino acid”
10. Label the polymer as a “lipid”, “carbohydrate” or “protein” (on the blank line provided).
11. Repeat steps 3-10 for the reaming colors.







