Building a Protein Molecule from Amino Acid Molecules

All information will be recorded on the bottom half of page 80.

Each person at the table should get one amino acid molecule. As you work look at the diagram on page 78—it has an ERROR on the Reactant side. Can you find it?

1. ***1.*** Write down the chemical formula of an amino acid. ***C_H_O_N_--what do you think the R means?***
2. Google Amino Acid Structure: Images— ***what do you think the R means now***?
3. With the person next to you think about how you could connect the two amino acid subunits by removing a molecule of water. Where would the water molecule come from? Point.
4. Circle lightly in pencil where you think the H_2O atoms will come from.
5. Check with the group across the table from you.
6. When you have agreement raise your hand for Ms. Ruzicka to come check. She will hand you scissors to cut off the ATOMS TO MAKE A WATER MOLECULE—do not cut the rest.
7. Use tape (small piece) to attach the atoms to make a water molecule.
8. Use a scrap of cardstock to make a new bond between the two amino acids. Before you tape it THINK—where does the bond go?
9. ***Write the chemical reaction***, showing all reactants and products.