Molecules of Life Group Worksheet

Person A

1. Describe the difference between organic molecules and macromolecules.

2. What three elements make up carbohydrates and in what ratio?

3. What does the body use carbohydrates for? Where is this "stuff" found in the carbohydrate molecule?

4. What is the chemical formula for glucose?

5. Why would it be important for polysaccharides to be insoluble in water? (think about where they are stored)

6. Where do humans get most of their carbohydrates?

7. What is the storage molecule for glucose in animals?

8. Why can't humans use the carbohydrate cellulose?

Person B

1. List the types of lipids

2. Which is the most important lipid and why? What are the main building blocks that make up this molecule?

3. Explain the difference between saturated fats and unsaturated fats. Give examples of were each is located in our diet.

4. Two jars of peanut butter are sitting on the shelf next to each other. One has a layer of oil on the top and the other doesn't. Your little brother or sister asks you why they aren't the same. Write down your explanation.

5. What are the building blocks of proteins? How many kinds of these building blocks are there?

6. There are thousands and thousands of different kinds of proteins in the body. How are these proteins structurally different?

7. What determines a protein's function?

Person C

1. How is the shape of a protein molecule determined?

2. Explain the 2 major functions of proteins.

3. Give the Acronym and the full name of the two nucleic acid molecules.

4. What are the building blocks of nucleic acids? What is a series of these units, which code for a protein molecule, called in a DNA molecule?

5. Describe the function of RNA and DNA.

6. Name and describe the shape of the DNA molecule.