**Science Fair Macromolecule Poster**

Directions:

In a group, you will create a poster illustrating the structure and function for a type of macromolecule

You will show the GENERAL structure and function of your macromolecule on the top of the poster

You will use the remaining space (four squares) of your poster

to describe 4 specific examples of your macromolecule type

Name of macromolecule

Example

Example

Example

Example

Drawing of

Chemical structure

**You poster will follow this format:**

General Macromolecule square:

1. Name of the macromolecule
2. Drawing of chemical structure
3. Definition of macromolecule
4. Function of macromolecule
5. Monomer of macromolecule

Example squares:

1. Name of example molecule
2. Function of example molecule
3. Interesting facts about the example

|  |  |
| --- | --- |
| Team Carbohydrate   1. Sucrose 2. Lactose 3. Chitin 4. Cellulose | Team Lipid   1. Saturated Fat 2. Unsaturated Fat 3. Phospholipid 4. Cholesterol |
| Team Protein   1. Actin 2. Amylase 3. Pepsin 4. Keratin | Team Nucleic Acids   1. D.N.A. 2. R.N.A. 3. m.R.N.A. 4. t.R.N.A. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Macromolecule | Definition | Function | Examples | Draw Structure |
| **Carbohydrates**  Monomer: |  |  |  |  |
| **Lipids**  Monomer: |  |  |  |  |
| **Proteins**  Monomer: |  |  |  |  |
| **Nucleic Acids**  Monomer: |  |  |  |  |

**Macromolecules**

**Macromolecule: Macro-questions!**

1. **A macromolecule is a big molecule made of smaller molecules and atoms. How do smaller molecules make up larger molecules? What keeps them together? How do they fit together?**
2. **The four primary macromolecules of life work together in living organisms just like cells do. How do you think these molecules would work together to complete a function in the human body? For example, how are carbohydrates, lipids, and proteins related to metabolism? Homeostasis?**
3. **Every molecule and macromolecule has a unique shape. Some are long like lipids; others are huge and branch in every direction like proteins. How does the shape of a macromolecule relate to its function?**
4. **How and why are the shapes of the macromolecules determined?**