Cell Functions and Macromolecule Review

Directions: Match the function cards and memory items them write them in the appropriate space in the chart.

For example:

|  |  |  |
| --- | --- | --- |
| **Organelle** | **Function/ Description** | **How can I remember it?** |
| Vacuoles  | Stores food, water, wastes, and other material | I’ll store anything (hint: Vacuum Bags) |
| Endoplasmic Reticulum (ER) | Has passageways that carry proteins and other materials from one part of the cell to another | I’m a transportER |

|  |  |  |
| --- | --- | --- |
| **Organelle** | **Function/Description** | **How can I remember it?** |
| Cell membrane |  |  |
| Cell wall |  |  |
| Cytoplasm |  |  |
| Mitochondria |  |  |
| Chloroplasts |  |  |
| Ribosomes |  |  |
| Nucleus |  |  |
| Nucleolus |  |  |
| Chromatin\* |  |  |

Define macromolecule

Define lipids, carbohydrates, protein, and nucleic acids. Tell its function and where they are located in a cell. Also give a food example that has a high content of each macromolecule you defined.

What is a Basal Metabolic Rate? Calculate your basal metallic rate.

Fill out the chart below. In order to calculate calories multiply grams by given rates

**Proteins (g) x 4**

**Carbs (g) x 4**

**Fats (g) x 9**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Write name of item** **🡪** | **Fav. Drink** | **Fav. Candy** | **Fast food menu item** | **Item of choice** |
| Protein |  |  |  |  |
| Carbs |  |  |  |  |
| Fats |  |  |  |  |
| Serving size |  |  |  |  |
| Total calories |  |  |  |  |
| Calories # on label |  |  |  |  |

Write the equation for photosynthesis. Then tell the main role/purpose of photosynthesis.

Write the equation for cellular respiration. Then tell the main role/purpose of cellular respiration.

Write what you think biotechnology means and provide an example supporting you definition.