

## B 1.2 Proteins SL

1. Proteins are composed of long chains of \_\_\_\_\_ bonded together.

Draw a diagram of a generalized one:

The reason we add the \_\_\_\_ group is that there are \_\_\_\_\_ different \_\_\_\_\_ used by most living organisms. It would be far too complex to learn all of them.

2. These basic units, \_\_\_\_\_, are linked together in cells by \_\_\_\_\_, which is why these sub-cellular structures are referred to as the site of protein \_\_\_\_\_. The sequence of the \_\_\_\_\_ is coded for by our \_\_\_\_\_. Everyone has a unique \_\_\_\_\_, which is the name for all the proteins in your body, because the code on our \_\_\_\_\_ is not entirely the same.
3. Proteins are formed by \_\_\_\_\_ reactions, which are named this way because they release \_\_\_\_\_. When two \_\_\_\_\_ are bonded together, the new molecule is called a \_\_\_\_\_. Draw this process here:

When 3 or more are connected, they are called \_\_\_\_\_. This is because the bond between them is called a \_\_\_\_\_ bond. Label it on your diagram.

4. Since proteins can be made with any number of \_\_\_\_\_, in any \_\_\_\_\_, there is an \_\_\_\_\_ variety of \_\_\_\_\_ possible. Some examples include \_\_\_\_\_, which is a \_\_\_\_\_ that controls blood sugar, and \_\_\_\_\_ such as \_\_\_\_\_ that breaks down the sugar in milk called lactose.
5. We get our \_\_\_\_\_ from our diet. There are two types: \_\_\_\_\_ and \_\_\_\_\_ - \_\_\_\_\_. The former cannot be \_\_\_\_\_ by our bodies, so must be obtained from our \_\_\_\_\_. People who follow a \_\_\_\_\_ diet must be cautious to get enough of this type. The latter can be \_\_\_\_\_ by our bodies from other \_\_\_\_\_.
6. Proteins can be \_\_\_\_\_ by changes in \_\_\_\_\_ and in \_\_\_\_\_. They function best at their \_\_\_\_\_, because outside of that range, \_\_\_\_\_ in the proteins can break, resulting in a change in the 3D shape.