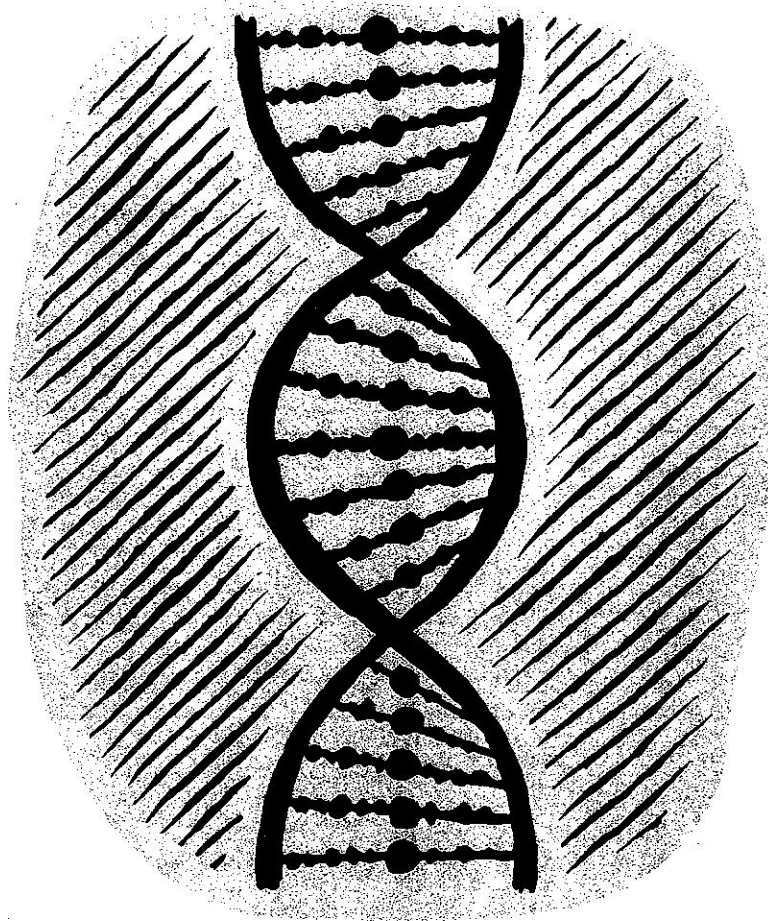


Protein Synthesis



Teacher Manual

Protein Synthesis Teacher Manual

Thank you for the purchase of the Protein Synthesis Manipulative Kit. This kit was designed and developed for use in the science classroom by a science teacher. All of us are aware that abstract concepts can be difficult for our students. I'm confident that this product can make it easier for you to teach, and for your students to learn protein synthesis.

In this manual, I will give you some ideas on how to get started using your new kit. The included CD will also be useful for this purpose. I'm sure, that in time you will discover a host of new applications and situations in which it can be used.

Placement of Magnets

Locate the box of magnets in your kit. Attach them to the back of your manipulatives according to Appendix D. Clean and dry the surface of the magnet and application site before application of glue. Epoxy, hot glue or a good plastic glue will work.

Teacher Kit **Transcription**

The Teacher Demonstration Kit begins with a double stranded DNA Model. Consisting of:

- A 3'-5' DNA strand (sense strand)
- A linear 5'-3' DNA strand (anti-sense) and
- DNA in the double helix that your students are probably most familiar with. The helix is included to prevent the misconception that the entire strand of DNA uncoils and is transcribed.

1. Arrange these three manipulatives on the board

2. Point out the features of the model.

- Backbone (phosphates-Yellow) (DeoxyRibose sugar-Black)
- Nucleotide bases
- Area of hydrogen bonding