Protein Set
Teach abstract concepts in concrete ways

Learn about protein structure and function using our unique manipulatives
Appropriate for secondary school and higher education

About the models
Our models are designed to teach function, in addition to structure. They are made to be manipulated, so learners can fold proteins into specific shapes.

Lessons are appropriate for middle school, high school, AP Biology, and adult levels. Diverse populations including English language learners, nurses, and judges have all found the lessons an engaging way to learn difficult concepts.

Additionally, teachers can use the models to illustrate key proteins in human body systems, such as the immune and digestive systems.

About the curriculum

Booklet 1 Activities:
• Name the parts of an amino acid
• Compare amino acid side chains
• Assemble your own proteins
• Fold a protein using hydrophobic and hydrophilic interactions
• Construct a channel protein
• Convert one protein into another by changing the amino acid order

Booklet 2 Activities:
• Model all 4 levels of protein structure
• Assemble alpha helices and beta pleated sheets
• Create disulfide bonds and salt bridges in proteins
• Build and fold:
  - Trypsin and Chymotrypsin
  - Insulin
  - Antibody
  - Actin and Myosin

Classroom Set: $800
14 Protein Kits
14 Booklet 1
14 Booklet 2
14 Protein Card Packs
14 Cell Membrane Mats
14 Trypsin Mats
14 Chymotrypsin Mats
28 Actin Filament Mats
Storage Crate

Price includes shipping to continental U.S. only. Shipping to additional destinations will require additional costs.

DNA Classroom Set: $1200
tRNA Classroom Set: $200
See flyers for additional information

Download Teacher Guide and additional materials online:
http://edgerton.mit.edu/DNA-proteins-sets

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