



About the models

Our models are designed to teach molecular processes, as well as structure. This Health Pack extends the use of the Protein Sets. Now learners can model the molecular basis of health conditions with the models.

About the curriculum

Booklet 3 Activities:

There are several topics in this booklet

PART I: Oxygen Transport

- Model how hemoglobin changes shape when bound to oxygen
- Demonstrate why sickle hemoglobin proteins stick together

PART II: Drug and Toxicant Metabolism

- Simulate metabolism of drugs and toxicants with CYP450 proteins
- Understand how genetic variants affect smoking behaviors and cancer risk

PART III: Cell Signaling and Cancer

- Model how phosphorylation affects protein activation
- Understand how overactive protein kinases can cause cancer

PART IV: COVID-19

- Discover mechanisms for coronavirus spike protein binding
- Learn how COVID-19 removes surface receptors that regulate inflammation

Classroom Set: \$850

14 Protein Booklet 3
84 Hemoglobin Mats
42 CYP Active Site Mats
70 Substrate Cards
14 Kinase Mats
14 ATP Cards
14 ACE2 Receptor Mats
42 Spike Cards
Teacher Guide (online)

NOTE: Protein Set must be purchased separately!*

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

***Protein Classroom Set: \$1550**
See website for additional information



Paxton

CYP Protein Active Site

