DNA/RNA Set
Teach abstract concepts in concrete ways

Learn about DNA and RNA using our unique manipulatives

Appropriate for secondary school and higher education

About the models

Our models are designed to teach processes, in addition to structure. They are made to be manipulated, so learners can perform cellular functions with their own hands.

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.

About the curriculum

**Booklet 1 Activities:**
- Name the parts of a nucleotide
- Assemble the double helix structure
- Discover the base pairing rule
- Complete basic DNA replication
- Copy DNA into mRNA messages
- Decode messages in DNA and RNA
- Compare genes and amino acid sequences

**Booklet 2 Activities:**
- Discover 3’ and 5’ DNA structure
- Assemble triphosphate nucleotides
- Replicate DNA with leading and lagging strands
- Damage DNA using free radicals
- Repair oxidative DNA damage
- Create 4 kinds of mutations: missense, nonsense, silent, and frameshift

Classroom Set: $1200

14 DNA/RNA Kits
14 Booklet 1
14 Booklet 2
14 Gene Strips
14 Codon Card Sets
Storage Crate
Teacher Guide (online)

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

Protein Classroom Set: $1000

tRNA Classroom Set: $200

See flyers for additional information

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

Curriculum questions: kathymv@mit.edu

Purchasing questions/Ordering: edgerton-k12-info@mit.edu