Models

- Cell Model
- DNA Molecule Model
- Eye and Brain Model
- Full Human Torso
- Heart Model
- Liver Model
- Mini Human Torso Models
- Pregnant Human Uterus Models
- Pulmonary System Model
- Urinary Tract Model

Cornell Institute for Biology Teachers
103 Leland Lab
Cornell University
Ithaca, NY 14853-2703
(607) 255-6129
www.cibt.cornell.edu
Thanks to the generous support of the Cornell University Biotechnology Program and the Howard Hughes Medical Institute, CIBT has over 30 kits and models that have been developed for use in classrooms. Teachers who have participated in our summer institutes and in regional workshops can borrow these kits FREE of charge! They are shipped from our Ithaca location to the school and back. Local teachers are encouraged to contact us for pickup before or after school.

Only active CIBT alumni may request kits via our online system. Active alumni are alumni that have participated in a CIBT workshop or Return-to-Campus event within the last three years.

All kits must be reserved two weeks in advance of when you will need them. You can reserve multiple kits, but each individual kit must be reserved separately.

In using the Lending Library, you are taking responsibility for the contents of the kits. Failure to return the kit in good condition, returning it late, or without a survey may result in loss of borrowing privileges. You must fill out the survey and packing list included with each kit.

*Specific training is required in order to borrow the Case of the Missing Diamond Maker, Comparative Animal Skulls, Mystery of the Hominid Skulls, DNA Electrophoresis, and Protein Gel Electrophoresis kits. We offer workshops for equipment training several times a year.

**About the Lending Library**

**High School**

**Microbiology (see above)**

**Mitosis (see above)**

*The Mystery of the Hominid Skulls*

This set of nine skulls includes fossil re-creations of nearly every historical link from the hominid evolutionary tree.

**Pipette Practice**

Provides materials for a complete pipetting lesson, to practice technique before a lab activity. We recommend introducing classes to pipetting with this kit before undertaking DNA Electrophoresis.

**The Plant Game (see above)**

*Protein Gel Electrophoresis*

Students separate a mixture of proteins from skeletal muscle using SDS polyacrylamide gels. While analyzing and comparing protein bands according to their molecular weights on the gel, they try to establish evolutionary relatedness among different groups.

**Relationships & Biodiversity**

Provides the materials necessary to complete the mandatory NYS Living Environment Relationships & Biodiversity Lab.

**Saliva (RSID)**

Four stations present different pieces of evidence that students test for saliva by following a detailed protocol.

**Spice Lab (see above)**

**Wolbachia DNA/PCR**

Includes tubes, pipettes, centrifuges, and chemicals necessary to extract DNA and perform PCR for the CIBT Wolbachia Lab.

* = specific training is required in order to borrow this kit.
High School

**Blood Vessels** Students use models of blood vessels to determine the effects of blood vessel distensibility on the dynamics of blood flow, and investigate the nature of aneurysms.

**Building Blocks of Life (Lego® Lab) (see above)**

**Compound Microscopes** Four Parco LTM-300 Series microscopes. Each has 4x, 10x, and 40x objectives, as well as a 10x monocular eyepiece.

**DNA Electrophoresis** Students perform DNA electrophoresis and examine gels for a mother, baby and possible fathers to determine correct paternity. A separate Pipette Practice Kit, and extra supplies for large classes (“C” Kit) are available upon request.

**Fetal Development (see above)**

**Foot Kit** Using different scales and weights, students investigate the application of physical principles to the mechanics of the "walking" foot.

**Forensic Anthropology** Male and female skulls and pelviseis from various races as well as a series of measuring tools allow you to implement a series of fun and interesting anthropology labs.

**Forensic Odontology (see above)**

**Limnology** Contains a variety of items for teaching students to perform basic biological tests in freshwater ecosystems.

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Kits for All Levels

**Blood Pressure Cuffs and Stethoscopes** Six blood pressure cuffs and six stethoscopes.

**Comparative Animal Skulls** Contains the skulls of eight exciting specimens, such as black bear, beaver, bobcat, raccoon, and horned owl. Students analyze the skulls to determine the habits and characteristics of the animals.

**Fingerprinting** Authentic fingerprint pads, brushes and powders: the same ones used in law enforcement.

**Mollusk Dichotomous Key** Sets of 18 beautiful marine mollusk shells introduce students to the concept of a dichotomous key, then teach them to make their own.

**Rootvue Farm** Create a mini-garden to follow the development of plants from seed germination. Soil, fast-growing seeds, and a “root-viewing” window allow students to study root growth.

**Stadiometers** Two stadiometers and assembly instructions, for use with our Foot-to-Height Forensics lab or on their own.

**Stereomicroscopes** Ten Parco PST Series stereomicroscopes.

**Crime Scene** Set up a realistic "crime scene" using some of the same equipment as professionals in the field.

**World of Crickets** Heating pads, thermometers, color transparencies and desk lamps are provided so students can determine the eating, temperature and light/color preferences of crickets.

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Elementary School

Bat Kit Posters, books, models (a real stuffed bat skin!), fun fact cards, learning activities, DVDs, a notebook with information on anatomy, evolution, echolocation, life cycle, social behavior, and more.

*The Case of the Missing Diamond Maker
A machine that turns coal into diamonds has been stolen from the lab of Dr. Suzy Squeeze! Students must analyze six pieces of evidence found at the crime scene: fingerprints found on glass, chromatography on a note, spilled liquid and powders, a strong smell, and clothing fibers.

Compound Microscopes Two Parco EPS Series Intermediate Compound Microscopes.

Habitat Kit Collection of games, books, animal booklets, and other materials that turn the Habitat & Adaptations Unit into an exciting learning experience.

Metric Measurement Guides students in measuring human hands and feet using the metric system, then comparing their hands to orangutan hands. An articulated model of an orangutan hand is included!

Tooth Kit Teeth and jaws from a variety of animals bring to life the feeding capabilities of different species and illustrate the connection between tooth morphology and function.

Whale Kit Fifteen hands-on activities take students on an undersea tour of whale anatomy, evolution, feeding strategies, migration, communication, behavior, conservation, and cultural tales.

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Middle School

Building Blocks of Life (Lego® Lab) Students use Lego® pieces to illustrate the lock-and-key model of enzymes and how mutations can affect the shape of the enzyme.

*The Case of the Missing Diamond Maker (see above)

Compound Microscopes (see above)

Fetal Development Students measure pictures of developing cow embryos to generate size data, and interpret data from graphs to determine embryos' age & mass. They contrast developmental trends in cows with those of humans.

Forensic Odontology Using their own bite marks on bite plates, students learn about tooth differentiation, how to distinguish an upper from a lower jaw, and how bite marks can be used as evidence in forensics.

Metric Measurement (see above)

Microbiology Alcohol burners, glass spreaders, rubber policemen and reusable inoculating loops are provided for microbiology-related projects.

Mitosis Offers large-scale plastic manipulatives for teachers and students to illustrate the cell cycle, including mitosis.

The Plant Game All the materials needed to implement CIBT’s Plant Game, a fun and exciting activity that shows students how plants grow.

Spice Lab Using agar, petri dishes, inoculating loops, and various spices, students learn that some spices can inhibit bacteria growth.

Tooth Kit (see above)

Whale Kit (see above)

* = specific training is required in order to borrow this kit.