

From Brooks/Cole Virtual Biology Laboratory 3.0 by Beneski and Waber

Now more than ever, students need insight into how the work of science is done. While a "wet lab" is often an ideal way to give students an understanding of the scientific process, a virtual lab lets students run and analyze experiments while avoiding the hassle of setting up expensive equipment and waiting for results.

Why VBL 3.0?

Provides an improved design: The new interface is clean and engaging with larger simulations and data displays, making it easier for students to understand the relationship between their actions and the outcome.

Allows you to use your own pedagogy: While we provide guided activities, with step-by-step instructions and auto-graded worksheets for your convenience, instructors can also assign "self-designed activities" in which students plan their procedures around an experimental question and write up their results in the form of a submittable report.

Which VBLs are available?

Brooks/Cole offers you fourteen modules, containing over a hundred activities. Virtual Biology Labs 3.0 (see reverse side for the activities within each).

- *Photosynthesis* revising 10/05
- *Ecology Lab* new 1/06
- *Genetics* revising 10/05
- *Pedigree Analysis* new 1/06
- *Evolution Lab* new 10/05
- *Cell Division* revising 3/06
- *Cell Membrane* revising 1/06
- *Cell Structure* revising 3/06
- *Population Bio* revising 1/06
- *Microscopy* revising 3/06
- *Cell Respiration* revising 1/06
- *Cell Chemistry* revising 3/06
- *Biochemistry* revising 1/06
- *Molecular Biology* new 4/06

VBL 3.0 labs for FREE?

For a limited time, use the activities from the Photosynthesis, Genetics, and Evolution modules for free (14 guided activities and three self-designed activities) with any introductory Brooks/Cole Biology title during your Fall 2005 & Spring 2006 classes.

Or

For a limited time, use the activities from Population Biology and Ecology with any of our Miller, Environmental Science titles during your Spring 2006 classes.

Or

For a limited time, use the activities from Genetics and Pedegree Analysis with our Cummings, Human Heredity 7th Edition book during your Spring 2006 classes.

Ready to see a sample and try it yourself?

To get a look before ordering your Brooks/Cole text with any Virtual Biology Lab, ask your sales rep to help you get an iLrn instructor's account for VBL3 for Free (ISBN **0495063177**). You will receive an email containing a username and password once your instructor status has been verified. See the **Instructor's Quick Start Guide** for more detail.

Ready to order?

If you would like the "Two for Free" or "Three for Free" VBLs passcodes in a bundle with your Brooks/Cole title for January courses use the following bundle ISBNs. An access card will be packaged with each of your books.

Brooks/Cole title	Packaged with FREE VBLS	Bundle ISBN
Starr, Biology Unity & Diversity of Life 11 th Edition	bundled with "3 for Free" card -Photosynthesis, Genetics, and Evolution VBLs	0495-153729
Solomon/Berg/Martin , <i>Biology 7th Edition</i>	bundled with "3 for Free" card -Photosynthesis, Genetics, and Evolution VBLs	0495-054984
Starr, <i>Biology: Concepts and Applications 6th Edition</i>	bundled with "3 for Free" card -Photosynthesis, Genetics, and Evolution VBLs	0495-138010
Miller, Environmental Science 11 th Edition	Bundled with "2 for Free" card Environmental Science Modules -Population Biology and Ecology VBLs	0495-152234
Cummings, Human Heredity 7 th Edition	Bundled with "2 for Free" Genetics Modules -Genetics and Pedegree Analysis VBLs	0495-152242

Need more information on VBL?

See a preview of VBL3 by visiting <http://vbl.brookscole.com> or see the detailed contents below.

1) Photosynthesis

- Action Spectrum
- Chromatography
- CO2 Fixation

2) Cell Respiration

- Effects of Activity
- Effects of Body Temperature
- Effects of Recovery

3) Cell Chemistry

- Standards
- Knowns: content of protein, amino acids, fats, sugar, and starch
- Morphology
- Diets

4) Microscopy

- Microscopes
- Micrographs

5) Cell Structure

- Cells: Explore the differences in cell structure
- Organelles

6) Cell Membranes

- Simple Diffusion
- Osmometer
- Cell Diffusion
- Active Transport

7) Cell Division

- Cell Cycle
- Mitosis
- Meiosis

8) Population Biology

- Population Growth
- Predator-Prey I
- Predator-Prey II

9) Genetics:

- Phenotypes
- Chromatography
- Electrophoresis
- Genotypes

10) Biochemistry

- Biochemistry
- Tutor
- 3-D Molecular Viewer

11) Evolution

- Population
- Genetics
- Evolution in Natural Populations
- Laboratory Tests of Natural Population